

CITY OF NEWPORT

ORDINANCE NO. 2175

**AN ORDINANCE AMENDING THE NEWPORT URBAN GROWTH BOUNDARY AND
COMPREHENSIVE PLAN MAP TO FACILITATE A LAND EXCHANGE
ADDING 43.4 ACRES AND REMOVING 71.4 ACRES
(Newport File No. 1-UGB-20/1-CP-20)**

WHEREAS, Boston Timber Opportunities, LLC, Terrance M. Lettenmaier, and Laurie A. Weitkamp, owners, submitted an application to the City of Newport on May 29, 2020 to adjust the City of Newport Urban Growth Boundary (UGB) to include a 43.4 acre parcel ("Site A") in the UGB and to remove a 71.4 acre parcel ("Site B") from the UGB; and

WHEREAS, the application will further establish a Newport Comprehensive Plan Map designation of "High Density Residential" for the property being added to the UGB. The 71.4 acre parcel being removed from the UGB similarly carried a Comprehensive Plan Map designation of "High Density Residential;" and

WHEREAS, Site A to be brought into the UGB is identified as Tax Lot 101 of Assessor's Map 10-11-33, owned by the City of Newport, being 3.56 acres in size, and the southerly 39.84 acres of Tax Lot 100 of Assessor's Map 10-11-33, as described with County Survey Record No. 20889, being owned by Boston Timber Opportunities, LLC. The City property, identified as Parcel 1 in the deed recorded in Book 384, at Page 1283 of the Lincoln County Records, is developed as NE Harney Street. Property owned by Boston Timber Opportunities, LLC, identified as Parcel 181 in the deed recorded under Instrument No. 2004-6962 of the Lincoln County records is undeveloped forest land; and

WHEREAS, Site B to be removed from the UGB is 71.4 acres in size, is identified as Tax Lot 801 of Assessor's Map 12-11-05, and is described in a deed recorded under Instrument No. 2011-06639 as modified by property line adjustment conveyances in Instrument Nos. 2016-10536 and 2016-10537 of the Lincoln County Records. The property is owned by Terrance and Laurie Weitkamp, is forested, and is developed with a single-family residence; and

WHEREAS, the property being added to the UGB is readily serviceable and suitable for the construction of much needed, urban scale housing at price points affordable to Newport residents, whereas, the property being removed from the UGB cannot be readily served and is unlikely to ever be developed at urban densities; and

WHEREAS, Boston Timber Opportunities, LLC plans to construct up to 200 single-family detached and attached units on Site A, which is permissible under City zoning designations that fit within a "High Density Residential" Comprehensive Plan Map designation. City has sufficient tools at its disposal to address housing affordability objectives and to ensure that transportation related impacts attributed to future development are adequately mitigated at such time as the property is zoned and annexed; and

WHEREAS, the Lincoln County and City of Newport Planning Directors' evaluated the application and concur that it qualifies as a major UGB boundary line adjustment considering the acreage involved and development potential of the property being added to the UGB; and

WHEREAS, the submitted application, and a supplemental memorandum prepared by city staff, contain findings of compliance with the policies and standards set forth in the "Urbanization" and the "Administration of the Plan" elements of the Newport Comprehensive Plan and applicable elements of Chapter 660, Division 24 of the Oregon Administrative Rules for a UGB boundary line adjustment of this nature; and

WHEREAS, Newport Planning Commission held a quasi-judicial public hearing on December 14, 2020 for the purpose of reviewing the application for compliance with applicable state and local policies and standards and to provide a recommendation to the Newport City Council; and

WHEREAS, the Planning Commission's public hearing, above, was duly held in accordance with all applicable state and local laws; and, after due deliberation and consideration of the proposed changes, the Planning Commission did recommend that the application be approved; and

WHEREAS, the Newport City Council held a quasi-judicial public hearing on January 19, 2021 to consider the amendments to the Newport UGB and Comprehensive Plan Map proposed in the application and voted in favor of the changes, after considering the recommendation of the Planning Commission and evidence and argument in the record; and

WHEREAS, information in the record, including affidavits of mailing and publication, demonstrate that appropriate public notification was provided for both the Planning Commission and City Council public hearings; and

WHEREAS, The Newport Comprehensive Plan requires that any amendment to the Urban Growth Boundary approved by the City must also be adopted by Lincoln County before it becomes final, and the applicants have not yet obtained County approval.

THE CITY OF NEWPORT ORDAINS AS FOLLOWS:

Section 1. The findings set forth above and in the attached Exhibits "A" and "B" are hereby adopted in support of the amendments to the Newport Urban Growth Boundary and Comprehensive Plan Map adopted by Sections 2, and 3 of this Ordinance.


Section 2. The Urban Growth Boundary as established on the Comprehensive Plan Map of the City of Newport is hereby amended to include the real property identified as Parcel 1 in the deed recorded in Book 384, at Page 1283 of the Lincoln County Records, and the southerly 39.84 acres of Parcel 181 in the deed recorded under Instrument No. 2004-16962 and further described with County Survey Record No. 20889. The subject properties, graphically depicted in Exhibit "C" to this Ordinance, are hereby given a "High Density Residential" designation on the Comprehensive Plan Map.

Section 3. The Urban Growth Boundary as established on the Comprehensive Plan Map of the City of Newport is hereby amended to remove the real property described in a deed recorded under Instrument No. 2011-06639, as modified by property line adjustment conveyances in Instrument Nos. 2016-10536 and 2016-10537 of the Lincoln County Records. The subject property is graphically depicted in Exhibit "D" to this Ordinance.

Section 4. This Ordinance shall take effect on the date the Lincoln County Board of Commissioners adopts corresponding amendments acknowledging this revision to the City of Newport's Urban Growth Boundary.


Date adopted and read by title only: January 19, 2021.

Signed by the Mayor on January 20, 2021.



Dean H. Sawyer, Mayor

ATTEST:



Margaret M. Hawker, City Recorder

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- Attachment A – Land Use Application
- Attachment B – County Assessor’s Tax Map
- Attachment C – County Assessor’s List of Surrounding Property Owners
- Attachment D – Traffic Impact Analysis
- Attachment E – Exhibit Maps

GENERAL INFORMATION

Property Owner and Applicant: **Hancock Forest Management, Inc.**
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Vancouver, WA 98683
Contact: Casey Fisher
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Email: cfisher@hnrg.com

Applicant's
Planning Representative: **3J Consulting, Inc.**
9600 SW Nimbus Ave, Suite 100
Beaverton, OR 97008
Contact: Andrew Tull
Phone: 503-545-1907
Email: andrew.tull@3j-consulting.com

Applicant's
Legal Representative: **Schwabe, Williamson and Wyatt**
1211 SW 5th Avenue Suite 1900
Portland, OR 97204
Contact: Mike Robinson
Phone: 503-796-3756
Email: mrobinson@shwabe.com

SITE INFORMATION

SITE A

Parcel Number: 10s11w33 100 and 10s11w33 101
Size: 43.36 acres
Current Zoning Designation: Lincoln County Timber Conservation (T-C)
Existing Use: Vacant Timber Land

SITE B

Parcel Number: 12s11w05 801
Size: 71.39 acres
Current Zoning Designation: Lincoln County Rural Residential (RR-10)
Newport Comprehensive Plan High Density Residential
Designation:
Existing Use: Vacant

INTRODUCTION

APPLICANT'S REQUEST

Hancock Forest Management is requesting an adjustment to the urban growth boundary (UGB) map to include a 43.4-acre parcel (SITE A) in the UGB and to remove a 71.4-acre parcel (SITE B) from the UGB. Upon annexation into the City of Newport. The Applicant's intent for the subject site is to process subsequent applications for annexation along with requests to amend the City's Comprehensive Plan maps to show the site as High Density Residential and on the City zoning map as High Density Residential (R-4). The parcel to be removed from the UGB is intended to retain its zoning designation on the Lincoln County Comprehensive plan map as RR-10.

SITE DESCRIPTION/SURROUNDING LAND USE

The 43.36-acre subject site (SITE A) is outside the UGB and is zoned Commercial-Timber (T-C) in the Lincoln County Comprehensive Plan. The TC zone is a forest resource zone compliant with the Statewide Planning Goal 4 (Forest Lands) and is reserved for forest operations or forest practices per Section 1.1375(1) of the Lincoln County Zoning Ordinance consistent with ORS 527.722.

The 71.4-acre parcel (SITE B) is located within the UGB and is designated as High-Density Residential (HDR) in the Newport Comprehensive Plan. The site has a Lincoln County zoning designation of Rural Residential (RR-10).

Under the Oregon land use system, the justification for a UGB adjustment is a two-step process: (1) demonstrate land need; and (2) analyze potential boundary locations. This proposal includes an amendment to the Newport Comprehensive Plan Map and Lincoln County Comprehensive Plan Map, which amends the Newport UGB, adding approximately 43.4-acre and removing approximately 71.4-acres. As proposed, the subject site (SITE A) would be retain its existing zoning designation. Site B would be removed from the UGB and retain its designation as Rural Residential (RR-10).

APPLICABLE CRITERIA

The following sections of Newport's Zoning and Development Ordinance, the Newport Comprehensive Plan and the Statewide Planning Goals have been extracted as they have been deemed to be applicable to the proposal. Following each **bold** applicable criteria or design standard, the Applicant has provided a series of draft findings. The intent of providing code and detailed responses and findings is to document, with absolute certainty, that the proposed development has satisfied the approval criteria for an Urban Growth Boundary Adjustment and Comprehensive Plan Map Amendment.

OREGON STATEWIDE PLANNING GOALS

Goal 1: Citizen Involvement

Applicant's Finding: The intent of Goal 1 is to ensure that citizens have meaningful opportunities to participate in land use planning decisions. The stated purpose of the goal is:

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Goal 1 has five stated objectives that are applicable to the proposed UGB adjustment:

1. *Citizen Involvement – To provide for widespread citizen involvement.*
2. *Communication – To assure effective two-way communication with citizens.*
3. *Citizen Influence – To provide the opportunity for citizens to be involved in all phases of the planning process.*
4. *Technical Information – To assure that technical information is available in an understandable form.*
5. *Feedback Mechanisms – To assure that citizens will receive a response from policy-makers.*

This land use application is subject to a City of Newport Type IV land use review, which includes a significant citizen involvement component. This process has been established by the city and determined to be consistent with this goal. The mandatory public notice of the action and decision, and the hearing on this case before the Newport Planning Commission and City Council are all avenues of citizen participation satisfying the applicable objectives listed above.

Goal 2: Land Use Planning

Applicant's Finding: Goal 2 requires that all incorporated cities establish and maintain comprehensive land use plans and implementing ordinances and that land use decisions must be made in accordance with these plans and ordinances. It also requires cities to coordinate with other affected government entities in legislative land use processes. The stated purpose of the goal is:

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The review of this application will follow the process established in the Newport Comprehensive Plan and Zoning Ordinance. The findings presented in this application provide an adequate factual basis for decisions and actions by the Newport Planning Commission and City Council. In the process of developing the UGB adjustment proposal and findings, the City complied with Goal 2.

Goal 3: Agricultural Lands and 4: Forest Lands

Applicant's Finding: As stated in 660-024-0020(b), Goals 3 and 4 are not applicable when establishing or amending an urban growth boundary.

Goal 5: Open Spaces and Historic Areas & Natural Resources.

Applicant's Finding: Goal 5 requires local governments to inventory and protect natural resources. The subject site does not fall within any lands designated as open spaces, historic areas, or natural resource areas. A resource delineation will be provided at the time of the development of the property.

Goal 6: Air, Water and Land Resources Quality

Applicant's Finding: Goal 6 requires local comprehensive plans and implementation measures to be consistent with state and federal regulations. By complying with applicable air, water and land resource quality policies in the Newport Comprehensive Plan, Goal 6 will be properly addressed.

Goal 7: Areas Subject to Natural Disasters and Hazards

Applicant's Finding: Goal 7 requires that jurisdictions apply appropriate safeguards when planning development in areas that are subject to natural hazards such as flood hazards. The subject site does not fall within any identified natural hazard areas.

Goal 8: Recreational Needs

Applicant's Finding: Goal 8 requires jurisdictions establish policies and procedures for the planning and zoning of state and local parks in order to address the needs of the citizens of the state. The City of Newport has addressed the Goal 8 requirements in the Newport Parks System Master Plan.

While the site is not located within the UGB and was not analyzed as part of the planning effort, it is identified as the location of a potential future trail connecting to Big Creek Reservoir Open Space. Big Creek Open Space is a 536-acre natural area adjacent to the subject site. The proposed trail connection can be incorporated in the future development of the site.

A Level of Service Analysis was provided in the Newport Parks System Master Plan. The existing park system was analyzed using seven park categories for the 2017

population as well as the 2035 projected population. Per the SCORP 2013-2017 suggested standards, the level of service of park acres per 1,000 residents within the City is met or exceeded for each park category.

The destination resort siting requirements are not applicable to the proposed development.

Goal 9: Economy of the State

Applicant's Finding: The proposal does not involve employment lands; therefore, Goal 9 is not applicable.

Goal 10: Housing

Applicant's Finding: The purpose of Goal 10 is to provide for housing needs for communities throughout the state. This goal requires jurisdictions to inventory developable lands to accommodate housing of a variety of types, densities, and prices commensurate with the financial capabilities of Oregon households. When there is a deficiency of buildable land to accommodate residential development within a city's UGB, that city is required to address the deficiency either through policy change within the UGB or through a UGB expansion.

According to the City's 2011 Housing Needs Analysis, the City has an adequate supply of high-density residential land. The proposed removal of approximately 70 acres of high-density residential land from the UGB will not result in a shortfall of high-density residential land, based on the City's 20-year projected growth. Additionally, much of the land proposed for removal has significant development constraints that would impact the total number of units the parcel could support. Attached to this application is a more detailed analysis of Site B with an estimate of the total number of units the parcel could support.

Site A is proposed for inclusion within the UGB with an assumption that upon annexation, it will receive a high density residential (R-4) designation. This would allow the development of the parcel at a net density of approximately 200 total homes (i.e. 1 unit per 5,000 SF for single-family homes).

Therefore, while there may be a change in the total gross acreage as a result of the UGB Adjustment, the overall outcome in terms of units produced will be substantially similar. Additionally, the inclusion of Site A into the UGB will result in development of needed housing in a much shorter timeframe than Site B due to the relative feasibility and economic efficiency of serving Site A with public facilities and services and its proximity to retail, employment opportunities, services, and transportation linkages.

The addition of 43.4-acre acres of high-density residential land into the UGB will provide an addition of land available for residential development within proximity to City services. Newport's Housing Needs Analysis identifies an increased need for workforce housing.

Goal 11: Public Facilities and Services

Applicant's Finding: The purpose of Goal 11 is to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. The goal requires that public facilities and services in urban areas are provided at levels necessary and suitable for existing and future urban uses. It also requires jurisdictions to adopt public facilities plans in coordination with urbanization.

Transportation

The City adopted a Transportation System Plan in 2012, which meets the requirements of Goal 11 and OAR 660-011. As detailed in the Site A transportation analyses of Goals 12 and 14 as well as the attached Transportation Impact Study (Attachment D), adequate transportation facilities can be made available to serve Site A with the provision of identified improvements.

Water

The City adopted a Water System Master Plan in 2008, which meets the requirements of Goal 11 and OAR 660-011.

Site A falls within the City's main pressure zone (Main Storage Tanks) which can serve elevations up to 183 feet above sea level. Dwellings within the development above 183 feet will be served via a booster pump station. A pressure tank will be installed near the highest site elevation to serve homes including fire protection. As shown in the attached Boundary Location Analysis (Attachment E), adequate water system facilities exist adjacent to Site A and can be served with the provision of appropriate system development charges, facilities, and connections.

Sanitary Sewer

The City recently adopted a Sanitary Sewer Master Plan (SSMP) in 2018, which meets the requirements of Goal 11 and OAR 660-011.

Wastewater is anticipated to be conveyed to the existing PVC gravity line located near the north west corner of Site A. Flow will then be conveyed through the gravity system, beneath Highway 101 and discharge into the Big Creek Pumpstation. The anticipated flow from the proposed development was determined to be approximately 32,000 gpd or 0.032 mgd. This calculation was adopted in accordance with an assumed 2.19 people per household in accordance with the SSMP – High Density Residential, Medium Density Residential and Low Density Residential, average calculation.

Table 5.1 of the SSMP identifies the existing peak flow of Big Creek PS to be 2.60 mgd with a maximum capacity of 3.50 mgd or a net capacity of 0.9 mgd.

Table 5.2 of the SSMP identifies the 20-year Conditions Planning Scenario and peak flow of Big Creek Pumpstation to be 3.00 mgd with a maximum capacity of 3.5 mgd or a net capacity of 0.5 mgd.

Adequate sanitary sewer system facilities exist to serve Site A with the provision of appropriate system development charges, facilities, and connections.

Stormwater

The City does not have an adopted Stormwater Master Plan, but the proposed inclusion of Site A into the UGB and future development will require the provision of a surface drainage and storm sewer system pursuant to Section 13.05.040 of the Newport Municipal Code. It is anticipated that stormwater runoff from Site A will be collected, detained and released to match the pre-developed site runoff condition using surface water ponds, weirs and flow control manholes.

Goal 12: Transportation

Applicant's Finding: Goal 12 encourages the provision of a safe, convenient, and economic transportation system and implements provisions of other statewide planning goals related to transportation planning in order to plan and develop facilities in coordination with urban and rural development.

The Transportation Planning Rule (TPR), OAR 600-012-0060, requires that, where an amendment to a comprehensive plan would significantly affect an existing or planned transportation facility, the local government shall put in place measures that assure that allowed land uses are consistent with the function, capacity, and performance standards of the facility. This application is for an amendment to the comprehensive plan and urban growth boundary and, as such, the proposed changes must comply with the TPR.

This application includes a Transportation Impact Study (TIS) completed by Kittelson & Associates on October 18, 2019. The TIA measures impacts to the transportation system by estimating the change in vehicle trips, resulting from this proposed UGB and comprehensive plan designation change. The analysis compares the transportation system performance under the current comprehensive plan designation reasonable worst-case scenario to the performance under the proposed comprehensive plan designation reasonable worst-case scenario.

As detailed in the submitted Transportation Impact Study (TIS), the following table shows the requisite reasonable worst-case scenario analysis.

	Comprehensive Plan Designation	Zoning	Land Use (ITE Code)	Units	Daily Trips	PM Trips Entering	PM Trips Exiting
Existing	N/A	T-C	-	-	-	-	-
Proposed	Low Density Residential	R-2	210	200	1,968	125	73
Change				+200	+1,968	+125	+73

While the Applicant may or may not construct 200 dwelling units, this is the reasonable worst-case scenario and therefore must be analyzed as the comparison to the existing reasonable worst-case scenario. Based on the above table, 1,968 additional daily trips are forecast to be generated by the comprehensive plan change under reasonable worst-case scenario development assumptions. This number exceeds the threshold of 400 daily trips per the TPR to trigger a significant impact, and requires intersection operational analysis.

The following intersections were analyzed for impacts based on this proposed adjustment:

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major	0.01 (SBLT)	8.78 (SBLT)	0.03 (SBLT)	11.5 (SBLT)
	0.90 minor	0.59 (WB)	54.5 (WB)	0.72 (WB)	123.0 (WB)
US 101 / NE 31 st Street	0.80 major	0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
	0.90 minor	0.61 (WB)	72.3 (WB)	0.79 (WB)	182.2 (WB)
US 101 / NE 25 th Street	0.80 intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)

The analysis included in the submitted TIA concludes that based on the long-term traffic impact detailed in the report, the proposed land exchange will result in a significant impact on the surrounding transportation system that will require mitigation. The report recommends the following improvements:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects
 - Widen the westbound NE 36th Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional Projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under the 30th

highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane.
- Alternative to meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under the 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Conditions
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions of maintain the existing target under other than peak season conditions.

While the Applicant has detailed a series of potential improvements to address capacity at the identified intersections, the preference would be for the City and ODOT to consider alternative mobility targets at the specified intersections as the City updates their Transportation System Plan.

The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Goal 13: Energy

Applicant's Finding: Goal 13 requires land and uses developed on the land to be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles. Energy consequences of the proposed urban growth area adjustment have been considered in the Goal 14 alternatives analysis ESEE process.

Goal 14: Urbanization

Applicant's Finding: Goal 14 requires cities to establish and maintain urban growth boundaries to provide land for urban development needs and separate urban and urbanizable land from rural land. The stated purpose of the goal is:

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

The goal provides two "Land Need" factors and four "Boundary Location" factors in evaluating changes to the urban growth boundary. Goal 14 and related statutes and administrative rules establish a specific method and hierarchy for boundary review. Findings for the proposed UGB adjustment are organized according to that hierarchy.

Land Need Criteria

Goal 14 requires that changes to the UGB shall be based on the following:

1. *Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments.*
2. *Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection. In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.*

However, OAR 660-024-0070 (3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential), and designated as “High Density Residential” on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2 (Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates annexing Site A with a “High Density Residential” Comprehensive Plan designation and R-4 Zoning Designation. Site A is approximately 28 acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High-Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 28 acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers. The applicant provides a more detailed analysis of Site B later in this narrative to confirm that the inclusion of Site A would meet a substantially equivalent need.

Boundary Location Criteria

OAR 660-024-0040 requires conducting a boundary location analysis evaluating alternative boundary locations in order to determine any change to a city’s UGB. These analyses must be conducted in a manner consistent with ORS 197.298 and consider the following four factors:

1. *Efficient accommodation of identified land needs*
2. *Orderly and economic provision of public facilities and services*
3. *Comparative environmental, energy, economic and social consequences*
4. *Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside of the UGB.*

The section below describes boundary location analysis factors for the purpose of comparing the site proposed for inclusion to the UGB to other viable sites.

Site A

General Description

Site A is a 43.4-acre site located east of the existing Newport UGB. The parcel is zoned Commercial-Timber (T-C) in the Lincoln County Comprehensive Plan. The TC zone is a forest resource zone compliant with the Statewide Planning Goal 4 (Forest Lands) and is reserved for forest operations or forest practices per Section 1.1375(1) of the Lincoln County Zoning Ordinance consistent with ORS 527.722. The parcel is largely wooded with young Douglas fir and two seasonal streams draining to the southwest corner of the site. The parcel is moderately sloped with approximately 12 acres of containing slopes that would prohibit development, whereas the remaining 28 acres have slopes that could accommodate development.

Efficient accommodation of identified land needs

The anticipated inclusion of Site A into the UGB, designation as high density residential (R-4), and subsequent development of housing on this site provides an effective response to the regional issue of limited housing supply and increasing housing costs affecting the City of Newport and Lincoln County. According to the 2013-2017 American Community Survey, median monthly housing costs total \$869 and 37.5% of households pay 30 percent or more of their household income in housing costs. Among households with a mortgage, 33.4% have household costs exceeding 35 percent of their household income. Compounding this issue is the prevalence of housing units that are utilized as second homes or vacation homes. The vacancy rate of households in Newport is 21 percent, suggesting a large proportion of needed housing to serve Newport residents are owned by non-residents. This further constrains supply and exacerbates the affordability crisis Newport faces.

The inclusion of Site A would provide a large site that has minimal development constraints, is easily serviceable by existing public facilities and services, and is located near existing development and economic opportunities in Newport. Additionally, because the site is not currently parcelized, the associated return on investment for the development of the tract is much greater than alternative locations, making development significantly more likely in the near future than sites with high parcelization. The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

Orderly and economic provision of public facilities and services

Transportation

Site A is currently adjacent to a developed collector, NE Harney Street, and it is located adjacent to existing development. According to the attached Transportation Impact Analysis (Attachment D), the proposed amendment to the City's UGB and

affiliated comprehensive plan/zone designation for the 43.4-acre site has the potential to create a significant effect on the surrounding transportation network. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2039 with the implementation of mitigation measures identified in the TIA.

Capacity of existing facilities to serve areas already inside the UGB

Operational analyses outlined in the Traffic Impact Analysis (Attachment D) indicate that all of the study intersections currently operate at acceptable mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The attached TIA estimates background traffic volumes for the 2039 planning horizon year using an 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. With the proposed UGB adjustment, assuming that the 43.4-acre site is zoned under the City of Newport's R-2 Medium Density Single Family Residential zone, the TIA determined the site could support up to 200 single family homes in a reasonable worst case scenario. This has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips

Impacts to existing facilities that serve nearby areas already inside the UGB

Operations of the study intersections under the 2039 R-2 Medium Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets.

The eastbound approach to the unsignalized US 101/NE 36th Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. This represents a significant impact to the operations of the intersection. Rather than addressing these impacts through this application, the applicant proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Water

According to a City map of existing water services in Newport, a 12-inch water main runs along NE Harney Street as well as two hydrants located along this main adjacent to Site A. This would allow for the extension of water service to the parcel once it develops.

Capacity of existing facilities to serve areas already inside the UGB

Sections 5 and 6 of the 2008 Newport Water System Master Plan describe the existing water system and water demand. The City holds water rights allowing for a maximum of 19.24 cfs from six streams, but can only utilize 16.54 cfs from three due to location constraints. The City stores water from these streams in the Big Creek reservoir to draw from during the dry and high-water-demand summer months. The plan estimates that the average monthly water consumption for a typical dwelling ranges between 3,695 gallons in winter months to 6,270 gallons in summer months with an average demand of 4,600 gallons per month. During the summer months, the maximum daily demand (MDD) can reach a total 6.27 cfs, but the average daily demand (ADD) throughout the year is 3.33 cfs. In instances where the City's demand exceeded water available from streams, supply drew from the Big Creek reservoir to meet demand.

The plan projects this demand to increase to a MDD 8.99 cfs and an ADD of 4.72 cfs by 2030. Based on the capacity of the Big Creek reservoir during its driest year on record, it is possible to support the anticipated maximum demand in 2030 by diverting water from the Siletz River to recharge the reservoir, but following that, the City will need to consider alternatives to provide sufficient water supply. The Capital Improvement Plan (Section 9) identifies a \$12 million upgrade to the existing Big Creek Water Treatment Plant that will allow for the sufficient accommodation of water needs as development continues.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Assuming the average monthly water consumption outlined in the Newport Water System Master Plan, the inclusion of Site A into the UGB and development could result in a total increase in water demand of 1,254,000 gallons per month (0.06 cfs) during peak months and 920,000 gallons per month (0.05 cfs) on average. While significant, the capacity to serve Site A currently exists, and the Capital Improvement Plan identifies improvements that will ensure the adequate provision of water well into the future. Therefore, with the provision of appropriate system development charges and water line extension, the existing water system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing 12-inch water main along NE Harney Street will result in additional water demand on the pipe and local distribution network however these impacts should be able to be accommodated without significant impacts upon the surrounding system.

Sanitary Sewer

The City recently updated their Sanitary Sewer Master Plan (SSMP) in order to update wastewater elements of the Comprehensive Plan and develop a priority for

capital improvement projects. According to the SSMP dated February 9, 2018, there is a gravity sewer extending to the northwest corner of Site A, which would allow for the extension of sanitary sewer to Site A once it develops. The line was constructed circa 1990 and is composed of Polyvinyl Chloride (PVC). This gravity main connects to a Vance Avery Wastewater Treatment Facility located in South Beach.

Capacity of existing facilities to serve areas already inside the UGB

The City provides sanitary sewer collection system services to approximately 10,000 people spread across an area of approximately 11.2 square miles. The City oversees over 62 miles of gravity pipelines ranging in size from approximately 3 to 36 inches in diameter, 1,400 manholes, 9 major pump stations, 16 minor pump stations, and 12 miles of sanitary force mains. The plan identifies minor deficiencies in the sanitary sewer system, but provides a series of recommended improvements prioritized by assessed risk of overflow to ensure that there will be sufficient capacity to accommodate new development.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The Master Plan models buildout scenarios over a 20-year period to identify possible surcharging and flooding during large storm events (i.e. a 1-in-10 year storm). The plan uses these scenarios to provide recommended improvements to ensure the existing system will be able to accommodate new development as it occurs, prioritizing the most critical facilities for improvement. Therefore, with the provision of appropriate system development charges and sanitary sewer extension, the existing sanitary sewer system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing gravity sewer will result in an increase demand on the existing capacity of the pipe however the system is believed to be adequately sized to handle the demands associated with a new subdivision. These demands can be evaluated in detail and the system may be upsized in order to enable the development.

Stormwater

The Applicant has sufficient room on the property to treat and detain stormwater consistent with the City's applicable regulations. The impacts to stormwater management will be evaluated and managed at the time of development of the property.

Comparative environmental, energy, economic and social consequences

Economic

As discussed earlier in this analysis, the full development of Site A with housing will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

While a T-C designation on Site A will result in the preservation of resource land, the R-4 land use provides a greater economic benefit to the community through increased housing options. The proposed adjustment and future use promote more efficient and coordinated use of land and minimizes urban sprawl.

Social

There are developed neighborhoods to the north and the west of Site A, and the development of housing on what was originally resource land would result in a change of character for existing residents, most notably a loss of rural lifestyle or low-density residential development. Additionally, forest and natural areas can provide people with access to nature and stress relief, though the anticipated loss would be minimal in this case as this land is managed forest with no public access.

There is the potential to dedicate future park space and scenic areas as development occurs. Specifically, in areas that have topographical constraints that make development infeasible, dedicated natural open space and scenic vistas can be provided to serve as an essential resource to Newport communities. Additionally, the provision of trails connecting to the existing Ocean to Bay Trail network to the southwest could mitigate loss of forested area by providing access to nature and other recreational amenities to Newport residents.

Environmental

There are no identified wetlands on Site A. However, just south of the parcel is a City designated wetland that extends from the property line to NE Harney Street. The development of Site A could impact this wetland as the increase in impervious surface increases runoff and flow rates downstream.

The development of Site A will require the clearing of trees, which will have associated erosion, air quality, and greenhouse gas impacts. These impacts can be mitigated through the careful provision of open space in areas that are not suitable for development. These areas could be planted with native vegetation and trees that would provide better environmental services than the current timber plantation. This would offset some of the environmental impact associated with the clearing of trees to accommodate development.

Additionally, the exclusion of Site B and will offset the development of Site A by precluding development on Site B and preserving the area for forest land uses. Site B is currently included in the UGB and zoned for rural residential development,

which would result in much larger development footprints and disturbance to the surrounding area should they be developed. Therefore, the proposed adjustment provides the opportunity to limit the future clearing of trees and sprawling patterns of development on Site B and provide more compact residential development with a lower environmental footprint per unit through the development of Site A.

Energy

The inclusion of Site A into the UGB is expected to result in new housing replacing areas currently used as timber resource land except where topography constrains development. There is a power transmission line and transformer to the north of Site A, but it is unlikely to be impacted by residential development. Within the site, redevelopment could support as many as 200 dwelling units, which would have an increased energy impact in the form of construction, dwelling unit energy use, and transportation.

There is a bus stop along Hwy 101 that is approximately a ten minute walk from the western periphery of Site A, and an existing Ocean to Bay Trail network that can provide options for non-automobile travel, reducing some of the energy impacts associated with transportation.

Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The proximity of single-family dwellings to adjacent forest lands creates the potential for conflict between the two uses in the form of noise, pollution from logging equipment, truck and automobile traffic, and hazards associated with forest lands such as falling or windthrown trees and wildfire. Additionally, the proximity of new housing may present challenges to active forest management if those activities are a nuisance to adjacent uses. The key towards mitigating these conflicts is separation and buffering. The power transmission line located north of Site A provides an excellent buffer area in which felling is less likely to occur to avoid damage to the lines. This allows trees to grow in this buffer, providing additional shielding and impacts associated with forest activity to the north of the power line. In addition to this, Chapter 14.18 requires buffering between residential and non-residential uses, providing an opportunity to increase the separation between residential and forest uses and mitigate potential conflicts.

Alternative UGB Expansion Areas

ORS 197.298 establishes a priority of land to be included within an urban growth boundary that Boundary Location Analyses must consider:

- 1) Designated urban reserve land
 - * Note: Areas around Newport do not contain Urban Reserves as defined in OAR 660-021
- 2) Acknowledged exception area or nonresource land

- 3) Marginal land
 - * Note: Areas around Newport do not contain Marginal land as defined in ORS 197.247
- 4) Designated agriculture or forestry land

This section also permits the inclusion of lower priority land in the following circumstance:

- 3) *Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:*
 - a) *Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;*
 - b) *Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or*
 - c) *Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands*

Policy 15 under Goal 14: Urbanization of the Comprehensive Plan encourages land use patterns and development plans which take advantage of density and location to reduce the need for travel and dependency on the private automobile, facilitate energy-efficient public transit systems, and permit building configurations which increases the efficiency of energy use. The subject property to be brought into the UGB is located directly adjacent to the City Limits and developed residential land. The subject property to be removed from the Urban Growth Boundary is not located near existing services or major transportation facilities.

Site B is located at the southeastern periphery of the Newport UGB. It is far from existing development and features several constraints that limit the provision of public services including wetlands, a creek at the southern area of the parcel, and fairly steep slopes. These factors result in lands that would be prohibitively expensive to develop at higher densities in the near future.

Goal 15: Willamette River Greenway

Applicant's Finding: Goals 15 is related to the Willamette Greenway. The subject site is not located along the Willamette Greenway; therefore, this goal is not applicable and no further analysis is required.

Goal 16: Estuarine Resources

Applicant's Finding: Goal 16 is related to estuaries. The subject site is located inland and is not located near any identified estuaries; therefore, this goal does not apply to the subject site and no further analysis is required.

Goal 17: Coastal Shorelands

Applicant's Finding: Goal 17 is related to lands bordering estuaries, ocean shores and coastal lakes. The Newport Comprehensive Plan Ocean Shorelands Map identifies areas within the City that are within the Ocean Shorelands boundary. The subject site is not located within the area identified by the City as Ocean Shorelands. This goal does not apply to the subject site and no further analysis is required.

Goal 18: Beaches and Dunes

Applicant's Finding: Goal 18 is related to the beaches and dune resources. The Newport Comprehensive Plan identifies ocean beaches and dunes within the City. The subject site is located inland and is not located near any identified beaches or dunes; therefore, this goal does not apply to the subject site and no further analysis is required.

Goal 19: Ocean Resources

Applicant's Finding: Goal 19 addresses issues related to open ocean resources. The subject site is located inland and is not located near open ocean resources; therefore, this goal does not apply to the subject site and no further analysis is required.

STATE ADMINISTRATIVE RULES OAR CHAPTER 660

660-006-0020

Plan Designation Within an Urban Growth Boundary

Goal 4 does not apply within urban growth boundaries and therefore, the designation of forest lands is not required.

Applicant's Finding: The proposed site for inclusion into the UGB (Site A) would be redesignated by the City of Newport as "High Density Residential" in the Comprehensive Plan and zoned "High Density Residential" (R-4) upon annexation into the City.

Division 12 – Transportation Planning

660-012-0060

Plan and Land Use Regulation Amendments

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

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

Applicant's Finding: The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application

does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

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

Applicant's Finding: The proposed land exchange will not result in any changes to the standards that implement the functional classification system.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Applicant's Finding: The proposed land exchange of the 43.4-acre site would result in future traffic volumes that are consistent with the functional classifications of the roadways in the study area.

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Applicant's Finding: The proposed land exchange of the 43.4-acre site would not result in the degradation of any of the operations of the US 101/NE 36th Street and US 101/NE 31st Street intersections below their respective mobility targets. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Applicant's Finding: Without any mitigation measures in place, the proposed land exchange would result in further degradation of failing operations at the US 101/NE 31st Street intersection, the US 101/NE 25th Street intersection and US 101/NE 20th Street intersection. As the City is updating their TSP, the Applicant has suggested that the City consider the adoption of alternative mobility standards which would potentially remedy this issue prior to the rezoning of the subject property. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-

012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

- (2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility measured at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed in (a) through (e) below, unless the amendment meets the balancing test in subsection (2)(e) of this section or qualifies for partial mitigation in section (11) of this rule. A local government using subsection (2)(e), section (3), section (10) or section (11) to approve an amendment recognizes that additional motor vehicle traffic congestion may result and that other facility providers would not be expected to provide additional capacity for motor vehicles in response to this congestion.**
- (a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.**
 - (b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or mechanism consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.**
 - (c) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.**
 - (d) Providing other measures as a condition of development or through a development agreement or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements. Local governments shall, as part of the amendment, specify when measures or improvements provided pursuant to this subsection will be provided.**
 - (e) Providing improvements that would benefit modes other than the significantly affected mode, improvements to facilities other than the significantly affected facility, or improvements at other locations, if:**
 - (A) The provider of the significantly affected facility provides a written statement that the system-wide benefits are sufficient to balance the significant effect, even though the improvements would not result in consistency for all performance standards;**
 - (B) The providers of facilities being improved at other locations provide written statements of approval; and**
 - (C) The local jurisdictions where facilities are being improved provide written statements of approval.**

Applicant's Finding: The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

The applicant acknowledges the responsibility of the City for amending the current adopted TSP to reflect the proposed improvements in accordance with the provisions listed above.

(3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility where:

- (a) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;**
- (b) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures;**
- (c) The amendment does not involve property located in an interchange area as defined in paragraph (4)(d)(C); and**
- (d) For affected state highways, ODOT provides a written statement that the proposed funding and timing for the identified mitigation improvements or measures are, at a minimum, sufficient to avoid further degradation to the performance of the affected state highway. However, if a local government provides the appropriate ODOT regional office with written notice of a proposed amendment in a manner that provides ODOT reasonable opportunity to submit a written statement into the record of the local government proceeding, and ODOT does not provide a written statement, then the local government may proceed with applying subsections (a) through (c) of this section.**

Applicant's Finding: The proposed land exchange of the 43.4-acre site would result in future traffic volumes that are consistent with the function, capacity and performance standards of the roadways in the study area. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB. Therefore, the requirements of this section do not apply.

- (4) Determinations under sections (1)–(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.
- (a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.
- (b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:
- (A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.
- (B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or mechanism is in place or approved. These include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.
- (C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.
- (D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.
- (E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.
- (c) Within interstate interchange areas, the improvements included in (b)(A)–(C) are considered planned facilities, improvements and services, except where:
- (A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the

Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or

(B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.

(d) As used in this section and section (3):

(A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;

(B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and

(C) Interstate interchange area means:

(i) Property within one-quarter mile of the ramp terminal intersection of an existing or planned interchange on an Interstate Highway; or

(ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.

(e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)–(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

Applicant's Finding: The applicant acknowledges the authority of the City of Newport to render a determination regarding the anticipated effect of the proposed UGB amendment on the transportation network.

(5) The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028.

Applicant's Finding: The applicant does not propose an exception to allow development on rural lands under this division.

(6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in sections (1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in subsections (a)–(d) below;

(a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-

friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrian-friendly development. The 10% reduction allowed for by this section shall be available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;

- (b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in subsection (a) above;
- (c) Where a local government assumes or estimates lower vehicle trip generation as provided in subsection (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixed-use, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in OAR 660-012-0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 660-012-0045(3) and (4) or through conditions of approval or findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and
- (d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to subsection (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

Applicant's Finding: The applicant does not propose a mixed-use development. Therefore, the requirements of this section do not apply.

- (7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria listed in subsections (a)–(c) below shall include an amendment to the comprehensive plan, transportation system plan the adoption of a local street

plan, access management plan, future street plan or other binding local transportation plan to provide for on-site alignment of streets or accessways with existing and planned arterial, collector, and local streets surrounding the site as necessary to implement the requirements in OAR 660-012-0020(2)(b) and 660-012-0045(3):

- (a) The plan or land use regulation amendment results in designation of two or more acres of land for commercial use;
- (b) The local government has not adopted a TSP or local street plan which complies with OAR 660-012-0020(2)(b) or, in the Portland Metropolitan Area, has not complied with Metro's requirement for street connectivity as contained in Title 6, Section 3 of the Urban Growth Management Functional Plan; and
- (c) The proposed amendment would significantly affect a transportation facility as provided in section (1).

Applicant's Finding: The site, at the time of development, would only propose the creation of a local street network. No update to the City's TSP or future streets plan is required as part of this application.

(8) A "mixed-use, pedestrian-friendly center or neighborhood" for the purposes of this rule, means:

- (a) Any one of the following:
 - (A) An existing central business district or downtown;
 - (B) An area designated as a central city, regional center, town center or main street in the Portland Metro 2040 Regional Growth Concept;
 - (C) An area designated in an acknowledged comprehensive plan as a transit oriented development or a pedestrian district; or
 - (D) An area designated as a special transportation area as provided for in the Oregon Highway Plan.
- (b) An area other than those listed in subsection (a) above which includes or is planned to include the following characteristics:
 - (A) A concentration of a variety of land uses in a well-defined area, including the following:
 - (i) Medium to high density residential development (12 or more units per acre);
 - (ii) Offices or office buildings;
 - (iii) Retail stores and services;
 - (iv) Restaurants; and
 - (v) Public open space or private open space which is available for public use, such as a park or plaza.
 - (B) Generally include civic or cultural uses;
 - (C) A core commercial area where multi-story buildings are permitted;
 - (D) Buildings and building entrances oriented to streets;
 - (E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;

- (F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;
- (G) One or more transit stops (in urban areas with fixed route transit service); and
- (H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

Applicant's Finding: The applicant does not propose a mixed-use development. Therefore, the requirements of this section do not apply.

- (9) Notwithstanding section (1) of this rule, a local government may find that an amendment to a zoning map does not significantly affect an existing or planned transportation facility if all of the following requirements are met.
- (a) The proposed zoning is consistent with the existing comprehensive plan map designation and the amendment does not change the comprehensive plan map;
 - (b) The local government has an acknowledged TSP and the proposed zoning is consistent with the TSP; and
 - (c) The area subject to the zoning map amendment was not exempted from this rule at the time of an urban growth boundary amendment as permitted in OAR 660-024-0020(1)(d), or the area was exempted from this rule but the local government has a subsequently acknowledged TSP amendment that accounted for urbanization of the area.

Applicant's Finding: The applicant acknowledges that the proposed land exchange would not significantly affect the existing transportation network. Therefore, the requirements of this section do not apply.

- (10) Notwithstanding sections (1) and (2) of this rule, a local government may amend a functional plan, a comprehensive plan or a land use regulation without applying performance standards related to motor vehicle traffic congestion (e.g. volume to capacity ratio or V/C), delay or travel time if the amendment meets the requirements of subsection (a) of this section. This section does not exempt a proposed amendment from other transportation performance standards or policies that may apply including, but not limited to, safety for all modes, network connectivity for all modes (e.g. sidewalks, bicycle lanes) and accessibility for freight vehicles of a size and frequency required by the development.
- (a) A proposed amendment qualifies for this section if it:
 - (A) Is a map or text amendment affecting only land entirely within a multimodal mixed-use area (MMA); and

- (B) Is consistent with the definition of an MMA and consistent with the function of the MMA as described in the findings designating the MMA.
- (b) For the purpose of this rule, “multimodal mixed-use area” or “MMA” means an area:
 - (A) With a boundary adopted by a local government as provided in subsection (d) or (e) of this section and that has been acknowledged;
 - (B) Entirely within an urban growth boundary;
 - (C) With adopted plans and development regulations that allow the uses listed in paragraphs (8)(b)(A) through (C) of this rule and that require new development to be consistent with the characteristics listed in paragraphs (8)(b)(D) through (H) of this rule;
 - (D) With land use regulations that do not require the provision of off-street parking, or regulations that require lower levels of off-street parking than required in other areas and allow flexibility to meet the parking requirements (e.g. count on-street parking, allow long-term leases, allow shared parking); and
 - (E) Located in one or more of the categories below:
 - (i) At least one-quarter mile from any ramp terminal intersection of existing or planned interchanges;
 - (ii) Within the area of an adopted Interchange Area Management Plan (IAMP) and consistent with the IAMP; or
 - (iii) Within one-quarter mile of a ramp terminal intersection of an existing or planned interchange if the mainline facility provider has provided written concurrence with the MMA designation as provided in subsection (c) of this section.
- (c) When a mainline facility provider reviews an MMA designation as provided in subparagraph (b)(E)(iii) of this section, the provider must consider the factors listed in paragraph (A) of this subsection.
 - (A) The potential for operational or safety effects to the interchange area and the mainline highway, specifically considering:
 - (i) Whether the interchange area has a crash rate that is higher than the statewide crash rate for similar facilities;
 - (ii) Whether the interchange area is in the top ten percent of locations identified by the safety priority index system (SPIS) developed by ODOT; and
 - (iii) Whether existing or potential future traffic queues on the interchange exit ramps extend onto the mainline highway or the portion of the ramp needed to safely accommodate deceleration.
 - (B) If there are operational or safety effects as described in paragraph (A) of this subsection, the effects may be addressed by an agreement between the local government and the facility provider regarding traffic management plans favoring traffic movements away from the interchange, particularly those facilitating clearing traffic queues on the interchange exit ramps.

- (d) A local government may designate an MMA by adopting an amendment to the comprehensive plan or land use regulations to delineate the boundary following an existing zone, multiple existing zones, an urban renewal area, other existing boundary, or establishing a new boundary. The designation must be accompanied by findings showing how the area meets the definition of an MMA. Designation of an MMA is not subject to the requirements in sections (1) and (2) of this rule.
- (e) A local government may designate an MMA on an area where comprehensive plan map designations or land use regulations do not meet the definition, if all of the other elements meet the definition, by concurrently adopting comprehensive plan or land use regulation amendments necessary to meet the definition. Such amendments are not subject to performance standards related to motor vehicle traffic congestion, delay or travel time.

Applicant's Finding: The applicant does not propose an exemption to the provision of performance standards related to motor vehicle traffic congestion within this application. Therefore, the requirements of this section do not apply.

- (11) A local government may approve an amendment with partial mitigation as provided in section (2) of this rule if the amendment complies with subsection (a) of this section, the amendment meets the balancing test in subsection (b) of this section, and the local government coordinates as provided in subsection (c) of this section.
 - (a) The amendment must meet paragraphs (A) and (B) of this subsection or meet paragraph (D) of this subsection.
 - (A) Create direct benefits in terms of industrial or traded-sector jobs created or retained by limiting uses to industrial or traded-sector industries.
 - (B) Not allow retail uses, except limited retail incidental to industrial or traded sector development, not to exceed five percent of the net developable area.
 - (C) For the purpose of this section:
 - (i) "Industrial" means employment activities generating income from the production, handling or distribution of goods including, but not limited to, manufacturing, assembly, fabrication, processing, storage, logistics, warehousing, importation, distribution and transshipment and research and development.
 - (ii) "Traded-sector" means industries in which member firms sell their goods or services into markets for which national or international competition exists.
 - (D) Notwithstanding paragraphs (A) and (B) of this subsection, an amendment complies with subsection (a) if all of the following conditions are met:
 - (i) The amendment is within a city with a population less than 10,000 and outside of a Metropolitan Planning Organization.
 - (ii) The amendment would provide land for "Other Employment Use" or "Prime Industrial Land" as those terms are defined in OAR 660-009-0005.

(iii) The amendment is located outside of the Willamette Valley as defined in ORS 215.010.

(E) The provisions of paragraph (D) of this subsection are repealed on January 1, 2017.

(b) A local government may accept partial mitigation only if the local government determines that the benefits outweigh the negative effects on local transportation facilities and the local government receives from the provider of any transportation facility that would be significantly affected written concurrence that the benefits outweigh the negative effects on their transportation facilities. If the amendment significantly affects a state highway, then ODOT must coordinate with the Oregon Business Development Department regarding the economic and job creation benefits of the proposed amendment as defined in subsection (a) of this section. The requirement to obtain concurrence from a provider is satisfied if the local government provides notice as required by subsection (c) of this section and the provider does not respond in writing (either concurring or non-concurring) within forty-five days.

(c) A local government that proposes to use this section must coordinate with Oregon Business Development Department, Department of Land Conservation and Development, area commission on transportation, metropolitan planning organization, and transportation providers and local governments directly impacted by the proposal to allow opportunities for comments on whether the proposed amendment meets the definition of economic development, how it would affect transportation facilities and the adequacy of proposed mitigation. Informal consultation is encouraged throughout the process starting with pre-application meetings. Coordination has the meaning given in ORS 197.015 and Goal 2 and must include notice at least 45 days before the first evidentiary hearing. Notice must include the following:

(A) Proposed amendment.

(B) Proposed mitigating actions from section (2) of this rule.

(C) Analysis and projections of the extent to which the proposed amendment in combination with proposed mitigating actions would fall short of being consistent with the function, capacity, and performance standards of transportation facilities.

(D) Findings showing how the proposed amendment meets the requirements of subsection (a) of this section.

(E) Findings showing that the benefits of the proposed amendment outweigh the negative effects on transportation facilities.

Applicant's Finding: The applicant does not propose a partial mitigation of anticipated transportation impacts. Therefore, the requirements of this section do not apply.

Division 18 – Post-Acknowledgement Amendments

660-018-0020

Notice of a Proposed Change to a Comprehensive Plan or Land Use Regulation

- (1) Before a local government adopts a change to an acknowledged comprehensive plan or a land use regulation, unless circumstances described in OAR 660-018-0022 apply, the local government shall submit the proposed change to the department, including the information described in section (2) of this rule. The local government must submit the proposed change to the director at the department’s Salem office at least 35 days before holding the first evidentiary hearing on adoption of the proposed change.**
- (2) The submittal must include applicable forms provided by the department, be in a format acceptable to the department, and include all of the following materials:**
 - (a) The text of the proposed change to the comprehensive plan or land use regulation implementing the plan, as provided in section (3) of this rule;**
 - (b) If a comprehensive plan map or zoning map is created or altered by the proposed change, a copy of the relevant portion of the map that is created or altered**
 - (c) A brief narrative summary of the proposed change and any supplemental information that the local government believes may be useful to inform the director and members of the public of the effect of the proposed change;**
 - (d) The date set for the first evidentiary hearing;**
 - (e) The notice or a draft of the notice required under ORS 197.763 regarding a quasi-judicial land use hearing, if applicable; and**
 - (f) Any staff report on the proposed change or information that describes when the staff report will be available and how a copy may be obtained.**
- (3) The proposed text submitted to comply with subsection (2)(a) of this rule must include all of the proposed wording to be added to or deleted from the acknowledged plan or land use regulations. A general description of the proposal or its purpose, by itself, is not sufficient. For map changes, the material submitted to comply with Subsection (2)(b) must include a graphic depiction of the change; a legal description, tax account number, address or similar general description, by itself, is not sufficient. If a goal exception is proposed, the submittal must include the proposed wording of the exception.**
- (4) If a local government proposes a change to an acknowledged comprehensive plan or a land use regulation solely for the purpose of conforming the plan and regulations to new requirements in a land use statute, statewide land use planning goal, or a rule implementing the statutes or goals, the local government may adopt such a change without holding a public hearing, notwithstanding contrary provisions of state and local law, provided:**
 - (a) The local government provides notice to the department of the proposed change identifying it as a change described under this section, and includes the materials described in section (2) of this rule, 35 days before the proposed change is adopted by the local government, and**

(b) The department confirms in writing prior to the adoption of the change that the only effect of the proposed change is to conform the comprehensive plan or the land use regulations to the new requirements.

(5) For purposes of computation of time for the 35-day notice under this rule and OAR 660-018-0035(1)(c), the proposed change is considered to have been “submitted” on the day that paper copies or an electronic file of the applicable notice forms and other documents required by section (2) this rule are received or, if mailed, on the date of mailing. The materials must be mailed to or received by the department at its Salem office.

Applicant’s Finding: For the Post Acknowledgement Plan Amendment associated with the UGB Adjustment, the City of Newport and Lincoln County shall jointly submit all of the required elements listed above within the specified timeframe.

660-018-0021

Joint Submittal of Notices and Changes

(1) Where two or more local governments are required by plan provisions, coordination agreements, statutes or goals to agree on and mutually adopt a change to a comprehensive plan or land use regulation, the local governments shall jointly submit the notice required in OAR 660-018-0020 and, if the change is adopted, the decision and materials required by OAR 660-018-0040. Notice of such proposed changes must be jointly submitted at least 35 days prior to the first evidentiary hearing. For purposes of notice and appeal, the date of the decision is the date of the last local government’s adoption of the change.

(2) For purposes of this rule, a change to a comprehensive plan or land use regulation that requires two or more local governments to agree on and mutually adopt the change includes, but is not limited to, the establishment or amendment of an urban growth boundary or urban reserve by a city and county in the manner specified in Goal 14.

Applicant’s Finding: For the Post Acknowledgement Plan Amendment associated with the UGB Adjustment, the City of Newport and Lincoln County shall jointly submit all of the required elements listed above within the specified timeframe.

Division 24 – Urban Growth Boundaries

660-024-0020

Adoption or Amendment of a UGB

(1) All statewide goals and related administrative rules are applicable when establishing or amending a UGB, except as follows:

(a) The exceptions process in Goal 2 and OAR chapter 660, division 4, is not applicable unless a local government chooses to take an exception to a particular goal requirement, for example, as provided in OAR 660-004-0010(1);

(b) Goals 3 and 4 are not applicable;

- (c) Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB, except as required under OAR 660-023-0070 and 660-023-0250;
 - (d) The transportation planning rule requirements under OAR 660-012-0060 need not be applied to a UGB amendment if the land added to the UGB is zoned as urbanizable land, either by retaining the zoning that was assigned prior to inclusion in the boundary or by assigning interim zoning that does not allow development that would generate more vehicle trips than development allowed by the zoning assigned prior to inclusion in the boundary;
 - (e) Goal 15 is not applicable to land added to the UGB unless the land is within the Willamette River Greenway Boundary;
 - (f) Goals 16 to 18 are not applicable to land added to the UGB unless the land is within a coastal shorelands boundary;
 - (g) Goal 19 is not applicable to a UGB amendment.
- (2) The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.

Applicant's Finding: The applicant acknowledges the applicability of goals and administrative rules as listed above. Attached to this application are proposed revised maps showing the existing and proposed UGB in detail.

660-024-0040

Land Need

- (1) The UGB must be based on the appropriate 20-year population forecast for the urban area as determined under rules in OAR chapter 660, division 32, and must provide for needed housing, employment and other urban uses such as public facilities, streets and roads, schools, parks and open space over the 20-year planning period consistent with the land need requirements of Goal 14 and this rule. The 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision. Local governments in Crook, Deschutes or Jefferson Counties may determine the need for Regional Large-Lot Industrial Land by following the provisions of OAR 660-024-0045 for areas subject to that rule.
- (2) If the UGB analysis or amendment is conducted as part of a periodic review work program, the 20-year planning period must commence on the date initially scheduled for completion of the appropriate work task. If the UGB analysis or amendment is conducted as part of a sequential UGB approval, the 20-year planning period will be established in the work program issued pursuant to OAR 660-025-0185. If the UGB analysis or amendment is conducted as a post-acknowledgement plan amendment under ORS 197.610 to 197.625, the 20-year planning period must commence either:

- (a) On the date initially scheduled for final adoption of the amendment specified by the local government in the initial notice of the amendment required by OAR 660-018-0020; or
 - (b) If more recent than the date determined in subsection (a), at the beginning of the 20-year period specified in the appropriate coordinated population forecast for the urban area as determined under rules in OAR chapter 660, division 32, unless ORS 197.296 requires a different date for local governments subject to that statute.
- (3) A local government may review and amend the UGB in consideration of one category of land need (for example, housing need) without a simultaneous review and amendment in consideration of other categories of land need (for example, employment need).
- (4) The determination of 20-year residential land needs for an urban area must be consistent with the appropriate 20-year coordinated population forecast for the urban area determined under rules in OAR chapter 660, division 32, and with the requirements for determining housing needs in Goals 10 and 14, OAR chapter 660, division 7 or 8, and applicable provisions of ORS 197.295 to 197.314 and 197.475 to 197.490.

Applicant's Finding: OAR 660-024-0070(3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

As detailed later in this narrative, the inclusion of Site A meets these requirements; therefore, the City may utilize its current 20-year population forecast and housing needs analysis for the purposes of this UGB Adjustment.

- (5) Except for a metropolitan service district described in ORS 197.015(13), the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9 and OAR chapter 660, division 9, and must include a determination of the need for a short-term supply of land for employment uses consistent with OAR 660-009-0025. Employment land need may be based on an estimate of job growth over the planning period; local government must provide a reasonable justification for the job growth estimate but Goal 14 does not require that job growth estimates necessarily be proportional to population growth. Local governments in Crook, Deschutes or Jefferson Counties may determine the need for Regional Large-Lot Industrial Land by following the provisions of OAR 660-024-0045 for areas subject to that rule.
- (6) Cities and counties may jointly conduct a coordinated regional EOA for more than one city in the county or for a defined region within one or more counties, in conformance with Goal 9, OAR chapter 660, division 9, and applicable provisions of ORS 195.025. A

defined region may include incorporated and unincorporated areas of one or more counties.

- (7) The determination of 20-year land needs for transportation and public facilities for an urban area must comply with applicable requirements of Goals 11 and 12, rules in OAR chapter 660, divisions 11 and 12, and public facilities requirements in ORS 197.712 and 197.768. The determination of school facility needs must also comply with 195.110 and 197.296 for local governments specified in those statutes.

Applicant's Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

- (8) The following safe harbors may be applied by a local government to determine housing need under this division:

- (a) A local government may estimate persons per household for the 20-year planning period using the persons per household for the urban area indicated in the most current data for the urban area published by the U.S. Census Bureau.
- (b) If a local government does not regulate government-assisted housing differently than other housing types, it is not required to estimate the need for government-assisted housing as a separate housing type.
- (c) If a local government allows manufactured homes on individual lots as a permitted use in all residential zones that allow 10 or fewer dwelling units per net buildable acre, it is not necessary to provide an estimate of the need for manufactured dwellings on individual lots.
- (d) If a local government allows manufactured dwelling parks required by ORS 197.475 to 197.490 in all areas planned and zoned for a residential density of six to 12 units per acre, a separate estimate of the need for manufactured dwelling parks is not required.
- (e) A local government outside of the Metro boundary may estimate its housing vacancy rate for the 20-year planning period using the vacancy rate in the most current data published by the U.S. Census Bureau for that urban area that includes the local government.
- (f) A local government outside of the Metro boundary may determine housing needs for purposes of a UGB amendment using the combined Housing Density and Housing Mix safe harbors described in this subsection and in Table 1, or in combination with the Alternative Density safe harbor described under subsection (g) of this section and in Table 2. To meet the Housing Density safe harbor in this subsection, the local government may Assume For UGB Analysis that all buildable land in the urban area, including land added to the UGB, will develop at the applicable average overall density specified in column B of Table 1. Buildable land in the UGB, including land added to the UGB, must also be Zoned to Allow at least the average overall maximum density specified as Zone To Allow in column B of Table 1. Finally, the local

- government must adopt zoning that ensures buildable land in the urban area, including land added to the UGB, cannot develop at an average overall density less than the applicable Required Overall Minimum density specified in column B of Table 1. To meet the Housing Mix safe harbor in this subsection, the local government must Zone to Allow the applicable percentages of low, medium and high density residential specified in column C of Table 1.
- (g) When using the safe harbor in subsection (f), a local government may choose to also use the applicable Alternative Density safe harbors for Small Exception Parcels and High Value Farm Land specified in Table 2. If a local government chooses to use the Alternative Density safe harbors described in Table 2, it must:
- (A) Apply the applicable Small Exception Parcel density assumption and the High Value Farm Land density assumption measures specified in the table to all buildable land that is within these categories, and
 - (B) Apply the Housing Density and Mix safe harbors specified in subsection (f) of this section and specified in Table 1 to all buildable land in the urban area that does not consist of Small Exception Parcels or High Value Farm Land.
- (h) As an alternative to the density safe harbors in subsection (f) and, if applicable, subsection (g), of this section, a local government outside of the Metro boundary may assume that the average overall density of buildable residential land in the urban area for the 20-year planning period will increase by 25 percent over the average overall density of developed residential land in the urban area at the time the local government initiated the evaluation or amendment of the UGB. If a local government uses this Incremental Housing Density safe harbor, it must also meet the applicable Zoned to Allow density and Required Overall Minimum density requirements in Column B of Table 1 and, if applicable, Table 2, and must use the Housing Mix safe harbor in Column C of Table 1.
- (i) As an alternative to the Housing Mix safe harbor required in subsection (f) of this section and in Column C of Table 1, a local government outside the Metro boundary that uses the housing density safe harbor in subsection (f), (g) or (h) of this section may estimate housing mix using the Incremental Housing Mix safe harbor described in paragraphs (A) to (C) of this subsection, as illustrated in Table 3:
- (A) Determine the existing percentages of low density, medium density, and high density housing on developed land (not “buildable land”) in the urban area at the time the local government initiated the evaluation or amendment of the UGB;
 - (B) Increase the percentage of medium density housing estimated in paragraph (A) of this subsection by 10 percent, increase the percentage of high density housing estimated in paragraph (A) of this subsection by five percent, as illustrated in Table 3, and decrease the percentage of low density single family housing by a proportionate amount so that the overall mix total is 100 percent, and

- (C) Zone to Allow the resultant housing mix determined under subparagraphs (A) and (B) of this subsection.
- (j) Tables 1, 2 and 3 are adopted as part of this rule, and the following definitions apply to terms used in the tables:
 - (A) “Assume For UGB Analysis” means the local government may assume that the UGB will develop over the 20-year planning period at the applicable overall density specified in Column B of Tables 1 and 2.
 - (B) “Attached housing” means housing where each unit shares a common wall, ceiling or floor with at least one other unit. “Attached housing” includes, but is not limited to, apartments, condominiums, and common-wall dwellings or row houses where each dwelling unit occupies a separate lot.
 - (C) “Average Overall Density” means the average density of all buildable land in the UGB, including buildable land already inside the UGB and buildable land added to the UGB, including land zoned for residential use that is presumed to be needed for schools, parks and other institutional uses.
 - (D) “Coordinated 20-year Population Forecast” and “20-year Population Forecast” under Column A of the Tables refers to the appropriate population forecast for the urban area determined under rules in OAR chapter 660, division 32.
 - (E) “Density” means the number of dwelling units per net buildable acre.
 - (F) “High Value Farm Land” has the same meaning as the term defined in ORS 195.300(10).
 - (G) “Required Overall Minimum” means a minimum allowed overall average density, or a “density floor,” that must be ensured in the applicable residential zones with respect to the overall supply of buildable land for that zone in the urban area for the 20-year planning period.
 - (H) “Single Family Detached Housing” means a housing unit that is free standing and separate from other housing units, including mobile homes and manufactured dwellings under ORS 197.475 to 197.492.
 - (I) “Small Exception Parcel” means a residentially zoned parcel five acres or less with a house on it, located on land that is outside a UGB prior to a proposed UGB expansion, subject to an acknowledged exception to Goal 3 or 4 or both.
 - (J) “Zone To Allow” or “Zoned to Allow” means that the comprehensive plan and implementing zoning shall allow the specified housing types and densities under clear and objective standards and other requirements specified in ORS 197.307(4) and (6).

Applicant’s Finding: The applicant acknowledges the permitted safe harbors listed above.

- (9) The following safe harbors may be applied by a local government to determine its employment needs for purposes of a UGB amendment under this rule, Goal 9, OAR chapter 660, division 9, Goal 14 and, if applicable, ORS 197.296.

- (a) A local government may estimate that the current number of jobs in the urban area will grow during the 20-year planning period at a rate equal to either:
 - (A) The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department; or
 - (B) The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under rules in OAR chapter 660, division 32.
- (b) A local government with a population of 10,000 or less may assume that retail and service commercial land needs will grow in direct proportion to the forecasted urban area population growth over the 20-year planning period. This safe harbor may not be used to determine employment land needs for sectors other than retail and service commercial.
- (10) As a safe harbor during periodic review or other legislative review of the UGB, a local government may estimate that the 20-year land needs for streets and roads, parks and school facilities will together require an additional amount of land equal to 25 percent of the net buildable acres determined for residential land needs under section (4) of this rule, and in conformance with the definition of “Net Buildable Acre” as defined in OAR 660-024-0010(6).

Applicant’s Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

660-024-0050

Land Inventory and Response to Deficiency

- (1) When evaluating or amending a UGB, a local government must inventory land inside the UGB to determine whether there is adequate development capacity to accommodate 20-year needs determined in OAR 660-024-0040. For residential land, the buildable land inventory must include vacant and redevelopable land, and be conducted in accordance with OAR 660-007-0045 or 660-008-0010, whichever is applicable, and ORS 197.296 for local governments subject to that statute. For employment land, the inventory must include suitable vacant and developed land designated for industrial or other employment use, and must be conducted in accordance with OAR 660-009-0015.
- (2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:
 - (a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;

- (b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.
- (3) As safe harbors when inventorying land to accommodate industrial and other employment needs, a local government may assume that a lot or parcel is vacant if it is:
 - (a) Equal to or larger than one-half acre, if the lot or parcel does not contain a permanent building; or
 - (b) Equal to or larger than five acres, if less than one-half acre of the lot or parcel is occupied by a permanent building.
- (4) If the inventory demonstrates that the development capacity of land inside the UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040, the local government must amend the plan to satisfy the need deficiency, either by increasing the development capacity of land already inside the city or by expanding the UGB, or both, and in accordance with ORS 197.296 where applicable. Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB. If the local government determines there is a need to expand the UGB, changes to the UGB must be determined by evaluating alternative boundary locations consistent with Goal 14 and applicable rules at OAR 660-024-0060 or 660-024-0065 and 660-024-0067.
- (5) In evaluating an amendment of a UGB submitted under ORS 197.626, the director or the commission may determine that a difference between the estimated 20-year needs determined under OAR 660-024-0040 and the amount of land and development capacity added to the UGB by the submitted amendment is unlikely to significantly affect land supply or resource land protection, and as a result, may determine that the proposed amendment complies with section (4) of this rule.

Applicant's Finding: The proposed UGB Adjustment would result in the inclusion of Site A, a 43.4-acre parcel of vacant timber land zoned Timber Conservation (T-C) and the exclusion of Site B, a 71.4 acre parcel of unincorporated lands within the UGB. Site B is zoned for Rural Residential (RR-10) and designated as High Density Residential in the Newport Comprehensive Plan. As the County has no deficiencies of land identified for Timber Conservation, the conversion of these lands to an urban designation will have no net negative impacts.

- (6) When land is added to the UGB, the local government must assign appropriate urban plan designations to the added land, consistent with the need determination and the requirements of section (7) of this rule, if applicable. The local government must also apply appropriate zoning to the added land consistent with the plan designation or may maintain the land as urbanizable land until the land is rezoned for the planned urban uses, either by retaining the zoning that was assigned prior to inclusion in the boundary or by applying other interim zoning that maintains the land's potential for planned urban development. The requirements of ORS 197.296 regarding planning and zoning also apply when local governments specified in that statute add land to the UGB.

- (7) Lands included within a UGB pursuant to OAR 660-024-0065(3) to provide for a particular industrial use, or a particular public facility, must be planned and zoned for the intended use and must remain planned and zoned for that use unless the city removes the land from the UGB.**
- (8) As a safe harbor regarding requirements concerning “efficiency,” a local government that chooses to use the density and mix safe harbors in OAR 660-024-0040(8) is deemed to have met the Goal 14 efficiency requirements under:**
 - (a) Sections (1) and (4) of this rule regarding evaluation of the development capacity of residential land inside the UGB to accommodate the estimated 20-year needs; and**
 - (b) Goal 14 regarding a demonstration that residential needs cannot be reasonably accommodated on residential land already inside the UGB, but not with respect to:**
 - (A) A demonstration that residential needs cannot be reasonably accommodated by rezoning non-residential land, and**
 - (B) Compliance with Goal 14 Boundary Location factors.**

660-024-0070

UGB Adjustments

- (1) A local government may adjust the UGB at any time to better achieve the purposes of Goal 14 and this division. Such adjustment may occur by adding or removing land from the UGB, or by exchanging land inside the UGB for land outside the UGB. The requirements of section (2) of this rule apply when removing land from the UGB. The requirements of Goal 14 and this division [and ORS 197.298] apply when land is added to the UGB, including land added in exchange for land removed. The requirements of ORS 197.296 may also apply when land is added to a UGB, as specified in that statute. If a local government exchanges land inside the UGB for land outside the UGB, the applicable local government must adopt appropriate rural zoning designations for the land removed from the UGB prior to or at the time of adoption of the UGB amendment and must apply applicable location and priority provisions of OAR 660-024-0060 through 660-020-0067.**
- (2) A local government may remove land from a UGB following the procedures and requirements of ORS 197.764. Alternatively, a local government may remove land from the UGB following the procedures and requirements of 197.610 to 197.650, provided it determines:**
 - (a) The removal of land would not violate applicable statewide planning goals and rules;**
 - (b) The UGB would provide a 20-year supply of land for estimated needs after the land is removed, or would provide roughly the same supply of buildable land as prior to the removal, taking into consideration land added to the UGB at the same time;**

- (c) **Public facilities agreements adopted under ORS 195.020 do not intend to provide for urban services on the subject land unless the public facilities provider agrees to removal of the land from the UGB and concurrent modification of the agreement;**
- (d) **Removal of the land does not preclude the efficient provision of urban services to any other buildable land that remains inside the UGB; and**
- (e) **The land removed from the UGB is planned and zoned for rural use consistent with all applicable laws.**

Applicant's Finding: The applicant proposes a UGB adjustment by exchanging land inside the UGB for land outside the UGB. The proposed exchange would result in the inclusion of a 43.4-acre parcel currently zoned Timber Conservation (Site A) and the exclusion of a 71.4-acre parcel currently zoned Rural Residential (Site B). The removal of Site B follows the procedures and requirements of ORS 197.764 as detailed in this narrative.

Site B is proposed for removal from the UGB. It is currently zoned for rural residential use (RR-10).

The lands proposed for removal from the UGB are located on the southeastern perimeter of the Newport UGB near other undeveloped lands designated for high-density residential use. Due to the parcel's location on the periphery of the UGB and north of a stream and wetland, it is unlikely that the removal of Site B from the UGB will significantly impact the provision of urban services to other buildable lands inside the UGB.

- (3) **Notwithstanding sections (1) and (2) of this rule, a local government considering an exchange of land may rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided:**
 - (a) **The amount of buildable land added to the UGB to meet:**
 - (A) **A specific type of residential need is substantially equivalent to the amount of buildable residential land removed, or**
 - (B) **The amount of employment land added to the UGB to meet an employment need is substantially equivalent to the amount of employment land removed, and**
 - (b) **The local government must apply comprehensive plan designations and, if applicable, urban zoning to the land added to the UGB, such that the land added is designated:**
 - (A) **For the same residential uses and at the same housing density as the land removed from the UGB, or**
 - (B) **For the same employment uses as allowed on the land removed from the UGB, or**
 - (C) **If the land exchange is intended to provide for a particular industrial use that requires specific site characteristics, only land zoned for commercial or industrial use may be removed, and the land added must be zoned for the**

particular industrial use and meet other applicable requirements of ORS 197A.320(6).

Applicant's Finding:

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential) and designated as "High Density Residential" on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2 (Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates the eventual designation for Site A with a "High Density Residential" Comprehensive Plan designation and R-4 Zoning Designation. Site A is approximately 28-acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High-Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 28-acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers.

To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent
 - Slopes between ten and twenty five percent are considered "partially constrained" and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-4 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction approximately 200 single family homes, which is substantially equivalent to the estimated buildout of Site B.

660-024-0080

LCDC Review Required for UGB Amendments

A metropolitan service district that amends its UGB to include more than 100 acres, or a city with a population of 2,500 or more within its UGB that amends the UGB to include more than 50 acres shall submit the amendment to the Commission in the manner provided for periodic review under ORS 197.628 to 197.650 and OAR 660-025-0175.

Applicant's The proposed UGB adjustment will include an additional 43.4-acres to the UGB.
Finding: Therefore, the requirements for this section do not apply, and the reviewing body will be the Department of Land Conservation and Development (LCDC).

OREGON REVISED STATUTES

197.298 Priority of land to be included within urban growth boundary.

- (1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary of Metro except under the following priorities:**
 - (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.**
 - (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.**
 - (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).**
 - (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.**
- (2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.**

- (3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
- (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;
 - (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or
 - (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.
- (4) When a city includes land within the urban growth boundary of the city pursuant to ORS 197.295 to 197.314, the city shall prioritize lands for inclusion as provided in ORS 197A.320.

Applicant's Finding: UGB adjustments must comply with applicable local criteria as outlined in the City of Newport Comprehensive Plan and Development Code.

The process for expanding the UGB has been described under Policy 4 (Urbanization) of the Newport Comprehensive Plan. Newport categorizes UGB Amendments as minor or major. The City and County Planning Director are responsible for assigning a designation to the proposed application. The City and County have categorized the proposed adjustment as a minor UGB Amendment.

The proposed UGB adjustment and comprehensive plan map amendment has been initiated by the property owners of each parcel. Consistent with Statewide Planning Goal 14 and Policy 4.4 of the Newport Comprehensive Plan, both the city and county governing bodies are required to hold public hearings, and both must agree for an amendment to become final.

Chapter 8 of the Newport Comprehensive Plan specifies three types of procedures for map amendments. The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this land use narrative.

The Urbanization Element requires that changes to the Comprehensive Plan map shall be considered by Planning Commission and City Council at public hearings. Notices and other procedural requirements shall be made in accordance with Section 2-6-1 of the Newport Zoning Ordinance. The Urbanization Element also requires findings of fact be developed in support of the decision and outlines the requirements for findings.

197.626 Submission of land use decisions that expand urban growth boundary or designate urban or rural reserves.

- (1) A local government shall submit for review and the Land Conservation and Development Commission shall review the following final land use decisions in the

manner provided for review of a work task under ORS 197.633 and subject to subsection (3) of this section:

- (a) An amendment of an urban growth boundary by a metropolitan service district that adds more than 100 acres to the area within its urban growth boundary;
- (b) An amendment of an urban growth boundary by a city with a population of 2,500 or more within its urban growth boundary that adds more than 50 acres to the area within the urban growth boundary;
- (c) A designation of an area as an urban reserve under ORS 195.137 to 195.145 by a metropolitan service district or by a city with a population of 2,500 or more within its urban growth boundary;
- (d) An amendment of the boundary of an urban reserve by a metropolitan service district;
- (e) An amendment of the boundary of an urban reserve to add more than 50 acres to the urban reserve by a city with a population of 2,500 or more within its urban growth boundary; and
- (f) A designation or an amendment to the designation of a rural reserve under ORS 195.137 to 195.145 by a county, in coordination with a metropolitan service district, and the amendment of the designation.

Applicant's Finding: The proposed UGB amendment will not result in an addition to the UGB exceeding 100 acres. Therefore, the requirements of this section do not apply.

197.764 Application to remove property from within urban growth boundary

1) A local government may approve an application to remove a lot or parcel from within an urban growth boundary if:

a) The application is submitted by the owner of the lot or parcel;

Applicant's Finding: The proposed UGB Adjustment application has been initiated by both property owners of Sites A and B. The requirements of this section are met.

b)

A) The lot or parcel is adjacent to the edge of the urban growth boundary; or

B) The lot or parcel is adjacent to another lot or parcel that is removed under this section;

Applicant's Finding: Site B, the parcel proposed for removal from the urban growth boundary, is located at the edge of the existing urban growth boundary. The requirements of this section are met.

c) The lot or parcel is assessed under ORS 308A.050 (Legislative intent) to 308A.128 (Certain district assessments inapplicable to exclusive farm use zone farmland) for its value for farm use;

Applicant's Finding: Neither parcel has been assessed under ORS 308A.050 to 308A.128.

d) The lot or parcel is not within the boundaries of a city; and

Applicant's Finding: The parcel proposed for removal is not located within the Newport City Limits. The requirements of this section are met.

e) The lot or parcel is not included in an area identified for urban services under ORS 197.754 (Land identified for urban services).

Applicant's Finding: The parcel proposed for removal is not included in an area identified for urban services. The requirements of this section are met.

2) A local government, in deciding whether to approve an application under subsection (1) of this section, shall consider:

a) The projected costs and other consequences of extending urban services to the affected lot or parcel;

Applicant's Finding: Site B is located at the southeastern periphery of the Newport UGB in the area identified as the "Wolf Tree Destination Resort". While this parcel and much of the surrounding area was designated for High Density Residential use in the Newport Comprehensive Plan, the area remains largely undeveloped and without public facilities and services.

The site has several features that would make the extension of urban services infeasible. Because the site is on the periphery of the UGB and far from developed urban areas, the costs associated with extending these services from the nearest development to the north would be infeasible. Additionally, the site has several geographic constraints to the installation of public facilities, including varying slope and the presence of wetlands and a creek that would greatly increase the costs to serve the parcel.

b) The potential value in the investment of providing urban services to the affected lot or parcel;

Applicant's Finding: The southern portion of the UGB designated for High Density Residential use remains largely undeveloped today due to the costs associated with providing urban services to the area as well as the area's location far from services, retail, and transportation linkages. This issue is identified in the Housing element of the Newport Comprehensive Plan.

c) Any requirement for expanding the urban growth boundary in other areas to compensate for any loss in buildable lands; and

Applicant's Finding: To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent

- Slopes between ten and twenty five percent are considered “partially constrained” and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-4 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction of 200 units, which is substantially equivalent to the estimated buildout of Site B.

d) The projected costs and other consequences of providing urban services to other areas brought in under an expanded urban growth boundary.

Applicant's Finding: The costs associated with the development of both properties is likely to be extremely similar. Both properties will require the extension of urban services, new roadways, and franchise utilities to be delivered.

3)

a) Land that is removed from within an urban growth boundary pursuant to an application approved under this section shall be removed from any inventory of buildable lands maintained by the local government.

Applicant's Finding: The inventory of buildable lands maintained by the City of Newport will be revised to reflect the changes associated with the proposed UGB Adjustment. The requirements of this section are met.

b) A local government that approves an application under this section shall either expand the urban growth boundary to compensate for any resulting reduction in available buildable lands or increase the development capacity of the remaining supply of buildable lands. [1999 c.503 §1; 2001 c.104 §70]

Applicant's Finding: The reduction in buildable lands from the removal of Site B from the UGB will be offset by the buildable land brought into the UGB via the inclusion of Site A. While these two lands share different acreages and Comprehensive Plan designations, they would produce a similar type and quantity of residential dwellings.

Site B is currently zoned for rural residential use (RR-10), but designated for High Density Residential Use in the Newport Comprehensive Plan. If incorporated, it is unlikely that the site would be assigned either a Medium Density Multi-Family Residential (R-3) or High Density Multi-Family Residential (R-4) zoning designation due to their siting criteria. Specifically, the stated intent of these zones outline the following:

R-3/"Medium Density Multi-Family Residential." This district is intended for medium density multi-family residential development. It is planned for areas that are able to accommodate the development of apartments. New R-3 zones should be near major streets, on relatively flat land, and near community or neighborhood activity centers.

R-4/"High Density Multi-Family Residential." This district is intended to provide for high density multi-family residential and some limited commercial development. New R-4 zones should be on major streets, on relatively flat land, and near commercial centers.

Multifamily development would face significant challenges on Site B due to the steep slopes and topography of the site. City staff has suggested the land would be zoned High Density Single-Family Residential (R-4) with a stated intent to serve as a transitional area between low density and higher density residential districts. Based on the 2011 housing needs assessment ECONorthwest completed for the City in 2011, R-4 would be the appropriate zoning for Site B.

Therefore, the anticipated zone of Site B would be identical to the anticipated zoning for Site A and the anticipated scopes of development would be the similar in yield and impact.

Another potential concern is regarding the imbalance of acreage between the two sites. The applicant has provided an analysis in this narrative comparing the expected net density of each site confirming that each parcel would produce a substantially similar number of dwellings.

NEWPORT COMPREHENSIVE PLAN

URBANIZATION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

Goal: To promote the orderly and efficient expansion of Newport's city limits.

Policy 4: The development of land in the urban area shall conform to the plans, policies, and ordinances of the City of Newport.

Implementation Measure 4b: Amendments to UGB Boundaries or Policies. This subsection delineates the procedure for joint city and county review of amendments to the urban growth boundary or urbanization policies as the need arises.

1) Major Amendments:

- a) Any UGB change that has widespread and significant influence beyond the immediate area. Examples include:**

- (1) Quantitative changes that allow for substantial changes in the population or development density.
- (2) Qualitative changes in the land use, such as residential to commercial or industrial.
- (3) Changes that affect large areas or many different ownerships.
- b) A change in any urbanization policy.
- 2) **Minor Boundary Line Adjustments:** The city and county may consider minor adjustments to the UGB using procedures similar to a zone change. Minor adjustments focus on specific, small properties not having significant impact beyond the immediate area.

Applicant's Finding: The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this section.

- 3) **Determination of Major and Minor Amendments:** The planning directors for the city and county shall determine whether or not a change is a minor or major amendment. If they cannot agree, the planning commissions for the city and county shall rule on the matter. The request shall be considered a major amendment if the planning commissions cannot agree.

Applicant's Finding: The applicant acknowledges the authority of the city and county planning directors and commissions to determine whether a change is a minor or major amendment.

- 4) **Initiation, Application, and Procedure:** Individual or groups of property owners, agencies that are affected, the planning commissions, or the city or county governing bodies may initiate amendments. Applicants for changes are responsible for completing the necessary application and preparing and Submitting the applicable findings with the application. The planning commissions for the city and county shall review the request and forward recommendations to the Newport City Council and the Lincoln County Board of Commissioners. The city and county governing bodies shall hold public hearings on the request. Amendments become final only if both bodies approve the request.

Applicant's Finding: The purpose of this application is to provide all necessary information and findings for the approval of the proposed UGB Adjustment. The requirement of this section is met.

- 5) **Findings shall address the following:**
 - a) **Land Need:** Establishment and change of urban growth boundaries shall be based on the following:
 - (1) **Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and**

Applicant's Finding: As discussed in greater detail under Goal 14 of this narrative, the proposed UGB Adjustment will serve an estimated population over the planning period specified in the City's housing element of the Comprehensive Plan by providing needed housing.

(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks and open space, or any combination of the need categories in this subsection;

Applicant's Finding: The proposed inclusion of Site A into the UGB, eventual designation as high density residential (R-4), and subsequent development of housing on this site provides an effective response to the regional issue of limited housing supply and increasing housing costs affecting the City of Newport and Lincoln County. According to the 2013-2017 American Community Survey, median monthly housing costs total \$869 and 37.5% of households pay 30 percent or more of their household income in housing costs. Among households with a mortgage, 33.4% have household costs exceeding 35 percent of their household income. Compounding this issue is the prevalence of housing units that are utilized as second homes or vacation homes. The vacancy rate of households in Newport is 21 percent, suggesting a large proportion of needed housing to serve Newport residents are owned by non-residents. This further constrains supply and exacerbates the affordability crisis Newport faces.

The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents.

b) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

(1) Efficient accommodation of identified land needs;

Applicant's Finding: The inclusion of Site A would provide a large site that has minimal development constraints, is easily serviceable by existing public facilities and services, and is located near existing development and economic opportunities in Newport. Additionally, because the site is not currently parcelized, the associated return on investment for the development of the tract is much greater than alternative locations, making development significantly more likely in the near future than sites with high parcelization. The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

(2) Orderly and economic provision of public facilities and services;

Applicant's Finding:

The proposed UGB Adjustment would provide for a more orderly and economic provision of public facilities and services in comparison to existing conditions. Site A is located at the periphery of the Newport UGB and City Limits. The site is currently adjacent to a developed collector, NE Harney Street, and it is located to adjacent development.

Transportation

Site A is currently adjacent to a developed collector, NE Harney Street, and it is located adjacent to existing development. According to the attached Transportation Impact Analysis (Attachment D), the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 43.4-acre site has the potential to create a significant effect on the surrounding transportation network. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2039 with the implementation of improvements identified in the TIA.

Capacity of existing facilities to serve areas already inside the UGB

Operational analyses outlined in the Traffic Impact Analysis (Attachment D) indicate that all of the study intersections currently operate at acceptable mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The attached TIA estimates background traffic volumes for the 2039 planning horizon year using an 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. With the proposed UGB adjustment, assuming that the 43.4-acre site is zoned under the City of Newport's R-4 High Density Single Family Residential zone, the TIA determined the site could support up to 200 single family homes in a reasonable worst-case scenario. This has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Impacts to existing facilities that serve nearby areas already inside the UGB

Operations of the study intersections under the 2039 R-4 High Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Water

According to a City map of existing water services in Newport, a 12-inch water main runs along NE Harney Street as well as two hydrants located along this main adjacent to Site A. This would allow for the extension of water service to the parcel once it develops.

Capacity of existing facilities to serve areas already inside the UGB

Sections 5 and 6 of the 2008 Newport Water System Master Plan describe the existing water system and water demand. The City holds water rights allowing for a maximum of 19.24 cfs from six streams, but can only utilize 16.54 cfs from three due to location constraints. The City stores water from these streams in the Big Creek reservoir to draw from during the dry and high-water-demand summer months. The plan estimates that the average monthly water consumption for a typical dwelling ranges between 3,695 gallons in winter months to 6,270 gallons in summer months with an average demand of 4,600 gallons per month. During the summer months, the maximum daily demand (MDD) can reach a total 6.27 cfs, but the average daily demand (ADD) throughout the year is 3.33 cfs. In instances where the City's demand exceeded water available from streams, supply drew from the Big Creek reservoir to meet demand.

The plan projects this demand to increase to a MDD 8.99 cfs and an ADD of 4.72 cfs by 2030. Based on the capacity of the Big Creek reservoir during its driest year on record, it is possible to support the anticipated maximum demand in 2030 by diverting water from the Siletz River to recharge the reservoir, but following that, the City will need to consider alternatives to provide sufficient water supply. The Capital Improvement Plan (Section 9) identifies a \$12 million upgrade to the existing Big Creek Water Treatment Plant that will allow for the sufficient accommodation of water needs as development continues.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Assuming the average monthly water consumption outlined in the Newport Water System Master Plan, the inclusion of Site A into the UGB and development could result in a total increase in water demand of 1,254,000 gallons per month (0.06 cfs) during peak months and 920,000 gallons per month (0.05 cfs) on average. While significant, the capacity to serve Site A currently exists, and the Capital Improvement Plan identifies improvements that will ensure the adequate provision of water well into the future. Therefore, with the provision of appropriate system development charges and water line extension, the existing water system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing 12-inch water main along NE Harney Street will result in additional water demand on the pipe and local distribution network. Any significant

demands upon the City's existing water network can be addressed by the developer at the time of development.

Sanitary Sewer

The City recently updated their Sanitary Sewer Master Plan (SSMP) in order to update wastewater elements of the Comprehensive Plan and develop a priority for capital improvement projects. According to the SSMP dated February 9, 2018, there is a gravity sewer extending to the northwest corner of Site A, which would allow for the extension of sanitary sewer to Site A once it develops. The line was constructed circa 1990 and is composed of Polyvinyl Chloride (PVC). This gravity main connects to a Vance Avery Wastewater Treatment Facility located in South Beach.

Capacity of existing facilities to serve areas already inside the UGB

The City provides sanitary sewer collection system services to approximately 10,000 people spread across an area of approximately 11.2 square miles. The City oversees over 62 miles of gravity pipelines ranging in size from approximately 3 to 36 inches in diameter, 1,400 manholes, 9 major pump stations, 16 minor pump stations, and 12 miles of sanitary force mains. The plan identifies minor deficiencies in the sanitary sewer system, but provides a series of recommended improvements prioritized by assessed risk of overflow to ensure that there will be sufficient capacity to accommodate new development.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The Master Plan models buildout scenarios over a 20-year period to identify possible surcharging and flooding during large storm events (i.e. a 1-in-10 year storm). The plan uses these scenarios to provide recommended improvements to ensure the existing system will be able to accommodate new development as it occurs, prioritizing the most critical facilities for improvement. Therefore, with the provision of appropriate system development charges and sanitary sewer extension, the existing sanitary sewer system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

(3) Comparative environmental, energy, economic, and social consequences; and **Applicant's Finding:**

Economic

As discussed earlier in this analysis, the full development of Site A with housing will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

While a T-C designation on Site A will result in the preservation of resource land, the R-4 land use provides a greater economic benefit to the community through increased housing options, and the loss of resource land will be offset through the movement of Site B out of the urban growth boundary. The proposed adjustment and future use promote more efficient and coordinated use of land and minimizes urban sprawl.

Social

There are developed neighborhoods to the north and the west of Site A, and the development of housing on what was originally resource land would result in a change of character for existing residents, most notably a loss of rural lifestyle or low-density residential development. Additionally, forest and natural areas can provide people with access to nature and stress relief, though the anticipated loss would be minimal in this case as this land is managed forest with no public access.

There is the potential to dedicate future park space and scenic areas as development occurs. Specifically, in areas that have topographical constraints that make development infeasible, dedicated natural open space and scenic vistas can be provided to serve as an essential resource to Newport communities. Additionally, the provision of trails connecting to the existing Ocean to Bay Trail network to the southwest could mitigate loss of forested area by providing access to nature and other recreational amenities to Newport residents.

Environmental

There are no identified wetlands on Site A. However, just south of the parcel is a City designated wetland that extends from the property line to NE Harney Street. The development of Site A could impact this wetland as the increase in impervious surface increases runoff and flow rates downstream.

The development of Site A will require the clearing of trees, which will have associated erosion, air quality, and greenhouse gas impacts. These impacts can be mitigated through the careful provision of open space in areas that are not suitable for development. These areas could be planted with native vegetation and trees that would provide better environmental services than the current timber plantation. This would offset some of the environmental impact associated with the clearing of trees to accommodate development.

Additionally, the exclusion of Site B will offset the development of Site A by precluding development on Site B and preserving the area for forest land uses. Site B is currently included in the UGB and zoned for rural residential development, which would result in much larger development footprints and disturbance to the surrounding area should they be developed. Therefore, the proposed adjustment provides the opportunity to limit the future clearing of trees and sprawling patterns

of development on Site B and provide more compact residential development with a lower environmental footprint per unit through the development of Site A.

Energy

The inclusion of Site A into the UGB is expected to result in new housing replacing areas currently used as timber resource land except where topography constrains development. There is a power transmission line and transformer to the north of Site A, but it is unlikely to be impacted by residential development. Within the site, redevelopment could support as many as 200 dwelling units, which would have an increased energy impact in the form of construction, dwelling unit energy use, and transportation.

There is a bus stop along Hwy 101 that is approximately a ten minute walk from the western periphery of Site A, and an existing Ocean to Bay Trail network that can provide options for non-automobile travel, reducing some of the energy impacts associated with transportation.

(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Applicant's Finding: The proximity of single-family dwellings to adjacent forest lands creates the potential for conflict between the two uses in the form of noise, pollution from logging equipment, truck and automobile traffic, and hazards associated with forest lands such as falling or windthrown trees and wildfire. Additionally, the proximity of new housing may present challenges to active forest management if those activities are a nuisance to adjacent uses. The key towards mitigating these conflicts is separation and buffering. The power transmission line located north of Site A provides an excellent buffer area in which felling is less likely to occur to avoid damage to the lines. This allows trees to grow in this buffer, providing additional shielding and impacts associated with forest activity to the north of the power line. In addition to this, Chapter 14.18 requires buffering between residential and non-residential uses, providing an opportunity to increase the separation between residential and forest uses and mitigate potential conflicts.

c) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement.

Applicant's Finding: As detailed earlier in this narrative, the proposed UGB Adjustment demonstrates substantial compliance with applicable Statewide Planning Goals. The requirement of this section is met.

SUMMARY AND CONCLUSION

Based upon the materials submitted herein, the Applicant respectfully requests approval from the City's Planning Department of this application for an Urban Growth Boundary Adjustment.



City of Newport Land Use Application

Applicant Name(s):	Property Owner Name(s) <i>if other than applicant</i>
Boston Timber Opportunities, LLC	Contact: Casey Fisher
Applicant Mailing Address:	Property Owner Mailing Address:
17700 SE Mill Plain Blvd, Suite 180	Vancouver, WA 98683
Applicant Phone No.	Property Owner Phone No.
360-260-4594	
Applicant Email	Property Owner Email
cfisher@hnr.org	
Authorized Representative(s): <i>Person authorized to submit and act on this application on applicant's behalf</i>	
3J Consulting, Inc. Contact: Andrew Tull	
Authorized Representative Mailing Address:	
9600 SW Nimbus Ave, Suite 100	
Authorized Representative Telephone No.	
503-545-1907	
Authorized Representative Email. andrew.tull@3j-consulting.com	

Project Information

Property Location: <i>Street name if address # not assigned</i>	
NE Harney St	
Tax Assessor's Map No.: 10s11w33	Tax Lot(s): 100
Zone Designation: Timber Conservation (T-C)	Legal Description: <i>Add additional sheets if necessary</i>
Comp. Plan Designation: Timber Conservation	Lincoln County
Brief description of Land Use Request(s):	
<i>Examples:</i> 1. Move north property line 5 feet south 2. Variance of 2 feet from the required 15-foot front yard setback	
UGB Amendment to incorporate the subject property (Site A) to the UGB. A currently rural residential parcel (Site B - 12s11w05 801) will be exchanged.	
Existing Structures: if any	
N/A	
Topography and Vegetation:	
Forested	

Application Type (please check all that apply)

- | | | |
|--|---|--|
| <input type="checkbox"/> Annexation
<input type="checkbox"/> Appeal
<input type="checkbox"/> Comp Plan/Map Amendment
<input type="checkbox"/> Conditional Use Permit
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<input type="checkbox"/> Design Review
<input type="checkbox"/> Geologic Permit | <input type="checkbox"/> Interpretation
<input type="checkbox"/> Minor Replat
<input type="checkbox"/> Partition
<input type="checkbox"/> Planned Development
<input type="checkbox"/> Property Line Adjustment
<input type="checkbox"/> Shoreland Impact
<input type="checkbox"/> Subdivision
<input type="checkbox"/> Temporary Use Permit | <input checked="" type="checkbox"/> UGB Amendment
<input type="checkbox"/> Vacation
<input type="checkbox"/> Variance/Adjustment
<input type="checkbox"/> PC
<input type="checkbox"/> Staff
<input type="checkbox"/> Zone Ord/Map
<input type="checkbox"/> Amendment
<input type="checkbox"/> Other |
|--|---|--|

FOR OFFICE USE ONLY

File No. Assigned:		
Date Received:	Fee Amount:	Date Accepted as Complete:
Received By:	Receipt No.	Accepted By:
City Hall 169, SW Coast Hwy Newport, OR 97365 541.574.0629		



City of Newport Land Use Application

I understand that I am responsible for addressing the legal criteria relevant to my application and that the burden of proof justifying an approval of my application is with me. I also understand that this responsibility is independent of any opinions expressed in the Community Development and Planning Department Staff Report concerning the applicable criteria.

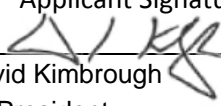
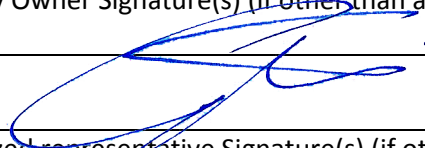
I certify that, to the best of my knowledge, all information provided in this application is accurate.

Boston Timber Opportunities, LLC

By Hancock Natural Resource Group, Inc.

Its Manager

March 20, 2020

Applicant Signature(s)	Date
By: 	
Name: David Kimbrough	
Title: Vice President	
Property Owner Signature(s) (if other than applicant)	Date
	
	3/27/2020
Authorized representative Signature(s) (if other than applicant)	Date

Please note application will not be accepted without all applicable signatures.

Please ask staff for a list of application submittal requirements for your specific type of request.



City of Newport Land Use Application

Applicant Name(s):	Property Owner Name(s) <i>if other than applicant</i>
Terrance Lettenmaier	Terrance Lettenmaier
Applicant Mailing Address:	Property Owner Mailing Address:
PO Box 550 South Beach, OR 97366	853 SE 98th St. South Beach, OR 97366
Applicant Phone No.	Property Owner Phone No.
541-961-5833	541-961-5833
Applicant Email	Property Owner Email
lett@peak.org	lett@peak.org
Authorized Representative(s): <i>Person authorized to submit and act on this application on applicant's behalf</i>	
3J Consulting, Inc. Contact: Andrew Tull	
Authorized Representative Mailing Address:	
9600 SW Nimbus Ave, Suite 100	
Authorized Representative Telephone No.	
503-545-1907	
Authorized Representative Email. andrew.tull@3j-consulting.com	

Project Information

Property Location: <i>Street name if address # not assigned</i>	
853 SE 98th Street	
Tax Assessor's Map No.: 12s11w05	Tax Lot(s): 801
Zone Designation: RR-10	Legal Description: <i>Add additional sheets if necessary</i>
Comp. Plan Designation: High Density Res.	Lincoln County
Brief description of Land Use Request(s):	
Examples:	
1. Move north property line 5 feet south	
2. Variance of 2 feet from the required 15-foot front yard setback	
UGB Amendment to remove the subject property from the UGB	
Existing Structures: if any	
One existing dwelling	
Topography and Vegetation:	
Forested	

Application Type (please check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Interpretation | <input checked="" type="checkbox"/> UGB Amendment |
| <input type="checkbox"/> Appeal | <input type="checkbox"/> Minor Replat | <input type="checkbox"/> Vacation |
| <input type="checkbox"/> Comp Plan/Map Amendment | <input type="checkbox"/> Partition | <input type="checkbox"/> Variance/Adjustment |
| <input type="checkbox"/> Conditional Use Permit | <input type="checkbox"/> Planned Development | <input type="checkbox"/> PC |
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| <input type="checkbox"/> Staff | <input type="checkbox"/> Shoreland Impact | <input type="checkbox"/> Zone Ord/Map |
| <input type="checkbox"/> Design Review | <input type="checkbox"/> Subdivision | <input type="checkbox"/> Amendment |
| <input type="checkbox"/> Geologic Permit | <input type="checkbox"/> Temporary Use Permit | <input type="checkbox"/> Other |

FOR OFFICE USE ONLY

File No. Assigned:

Date Received:	Fee Amount:	Date Accepted as Complete:
Received By:	Receipt No.	Accepted By:

City Hall
169, SW Coast Hwy
Newport, OR 97365
541.574.0629



City of Newport Land Use Application

I understand that I am responsible for addressing the legal criteria relevant to my application and that the burden of proof justifying an approval of my application is with me. I also understand that this responsibility is independent of any opinions expressed in the Community Development and Planning Department Staff Report concerning the applicable criteria.

I certify that, to the best of my knowledge, all information provided in this application is accurate.



Applicant Signature(s)

March 16, 2020

Date

Property Owner Signature(s) (if other than applicant)

Date



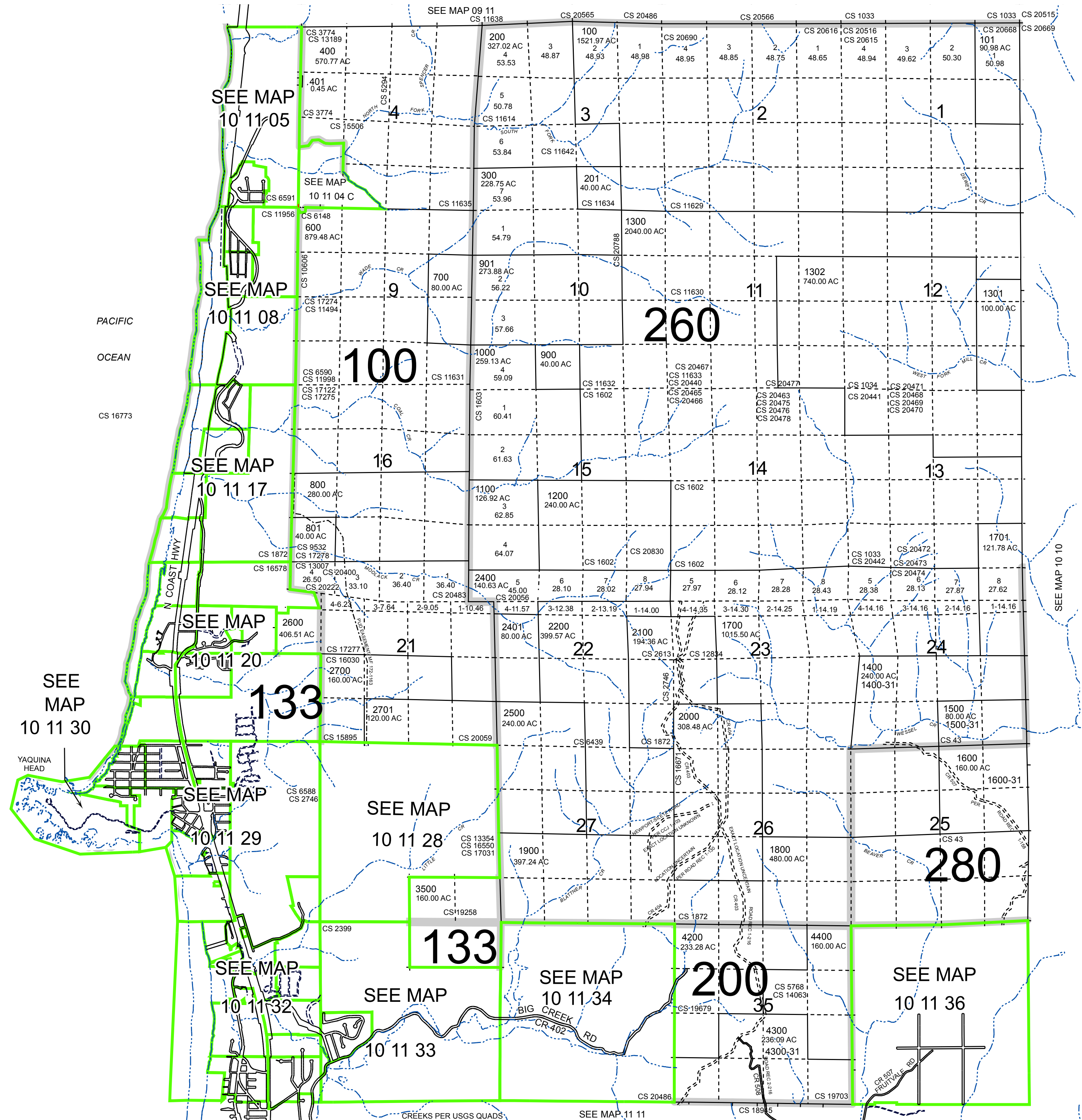
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Authorized representative Signature(s) (if other than applicant)

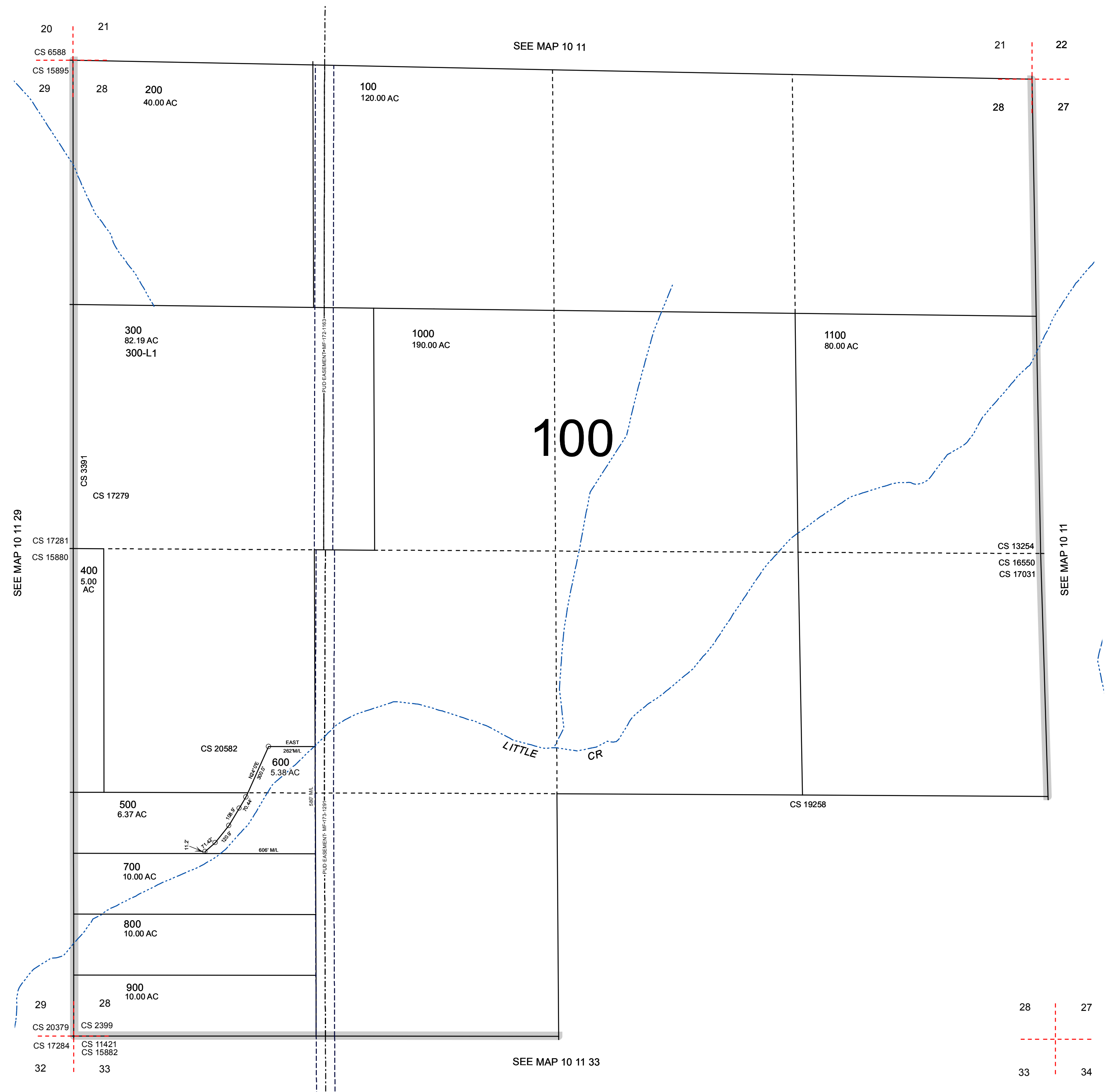
Date

Please note application will not be accepted without all applicable signatures.

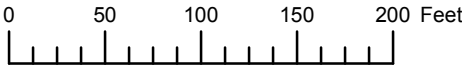
Please ask staff for a list of application submittal requirements for your specific type of request.



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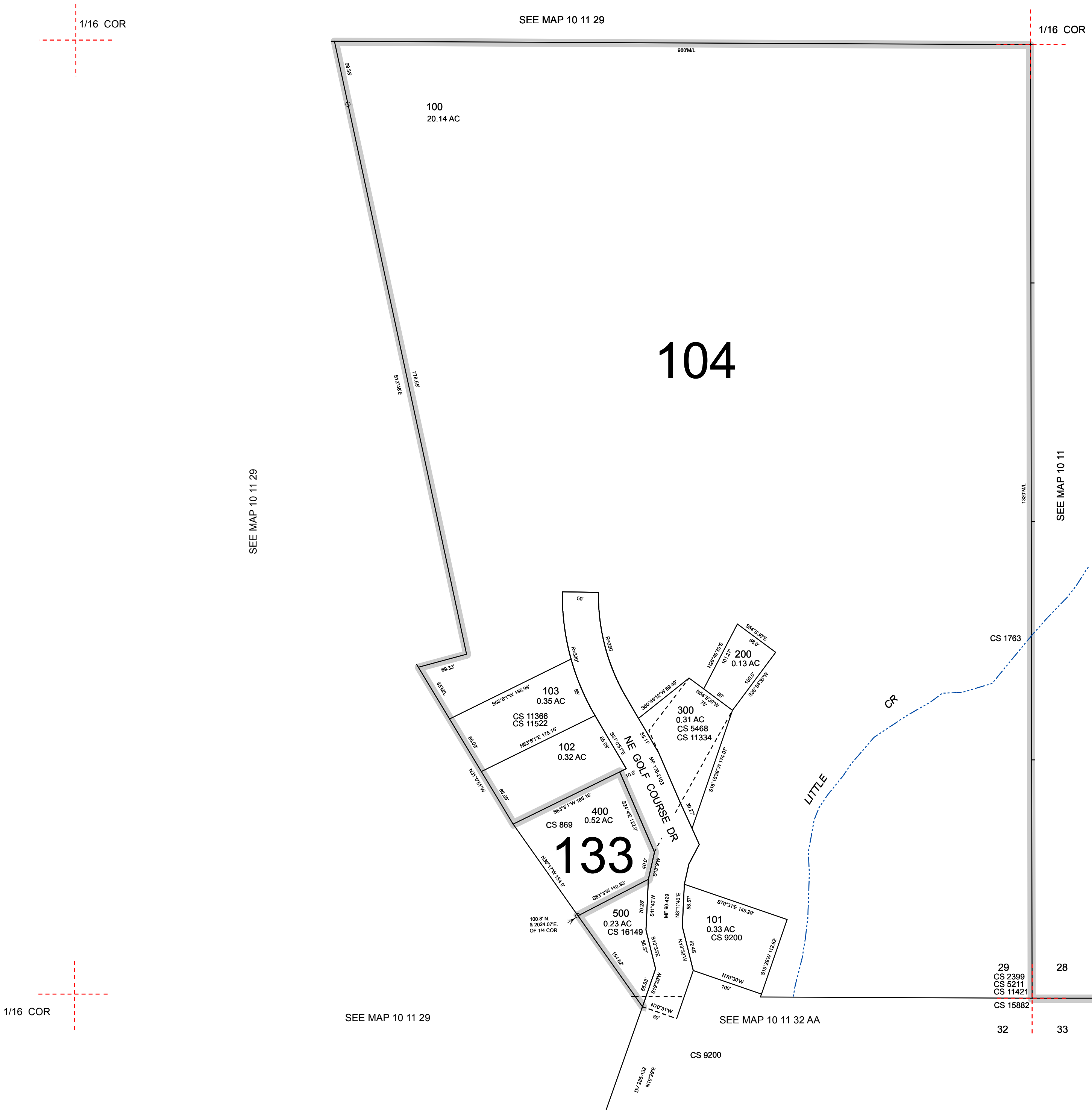
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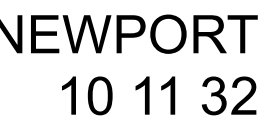
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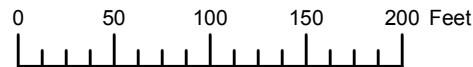


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03/30/2004

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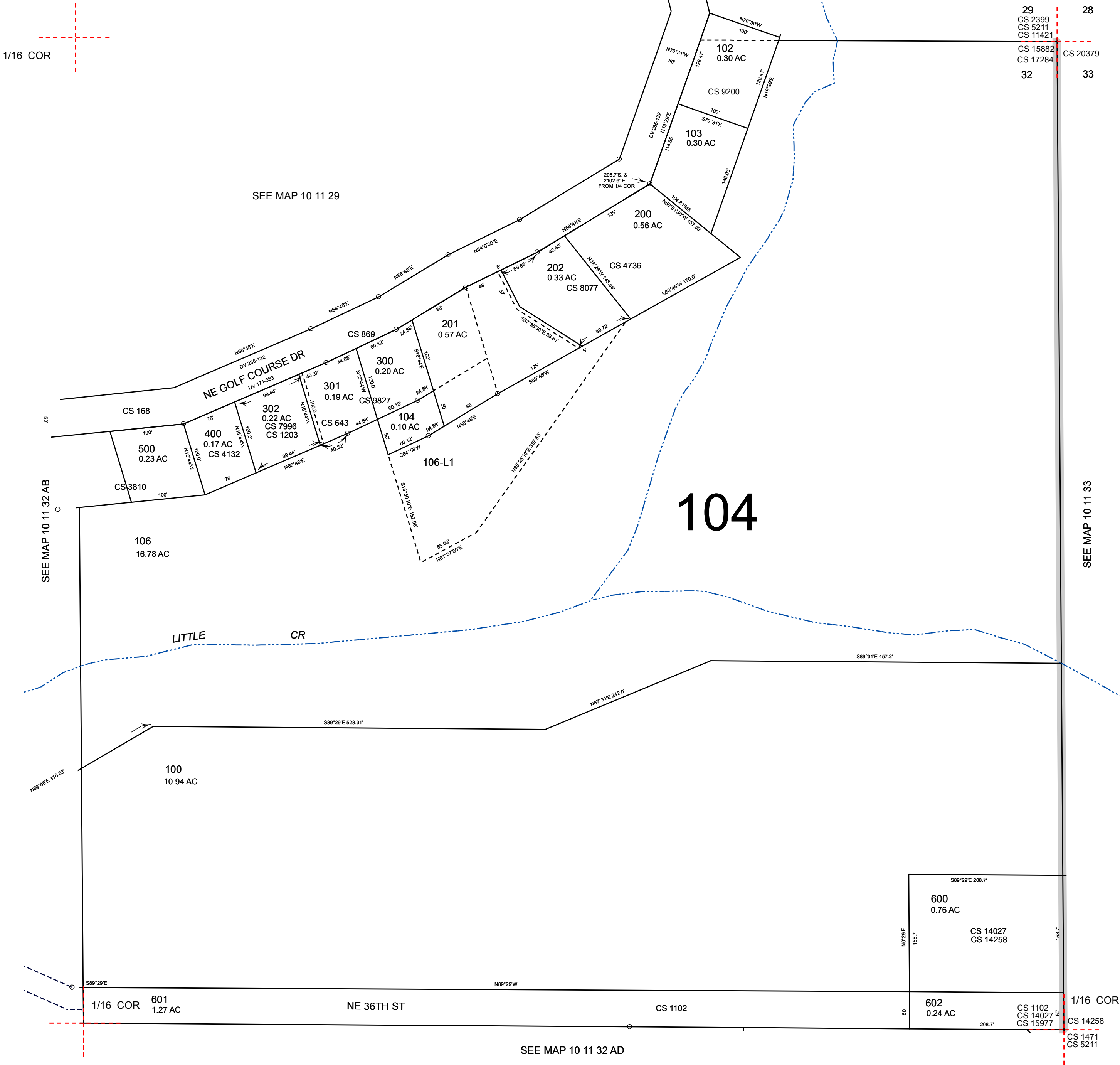
THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY



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1" = 100'

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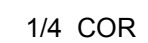
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Revised: SEB
09/06/2018

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NEWPORT
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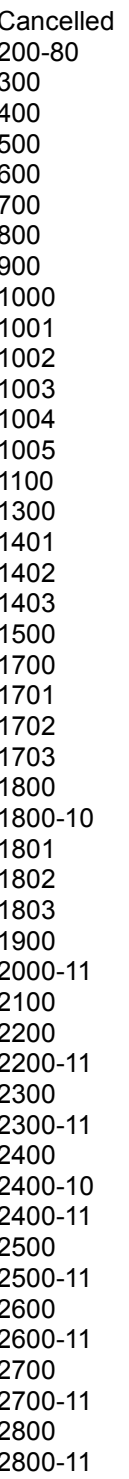
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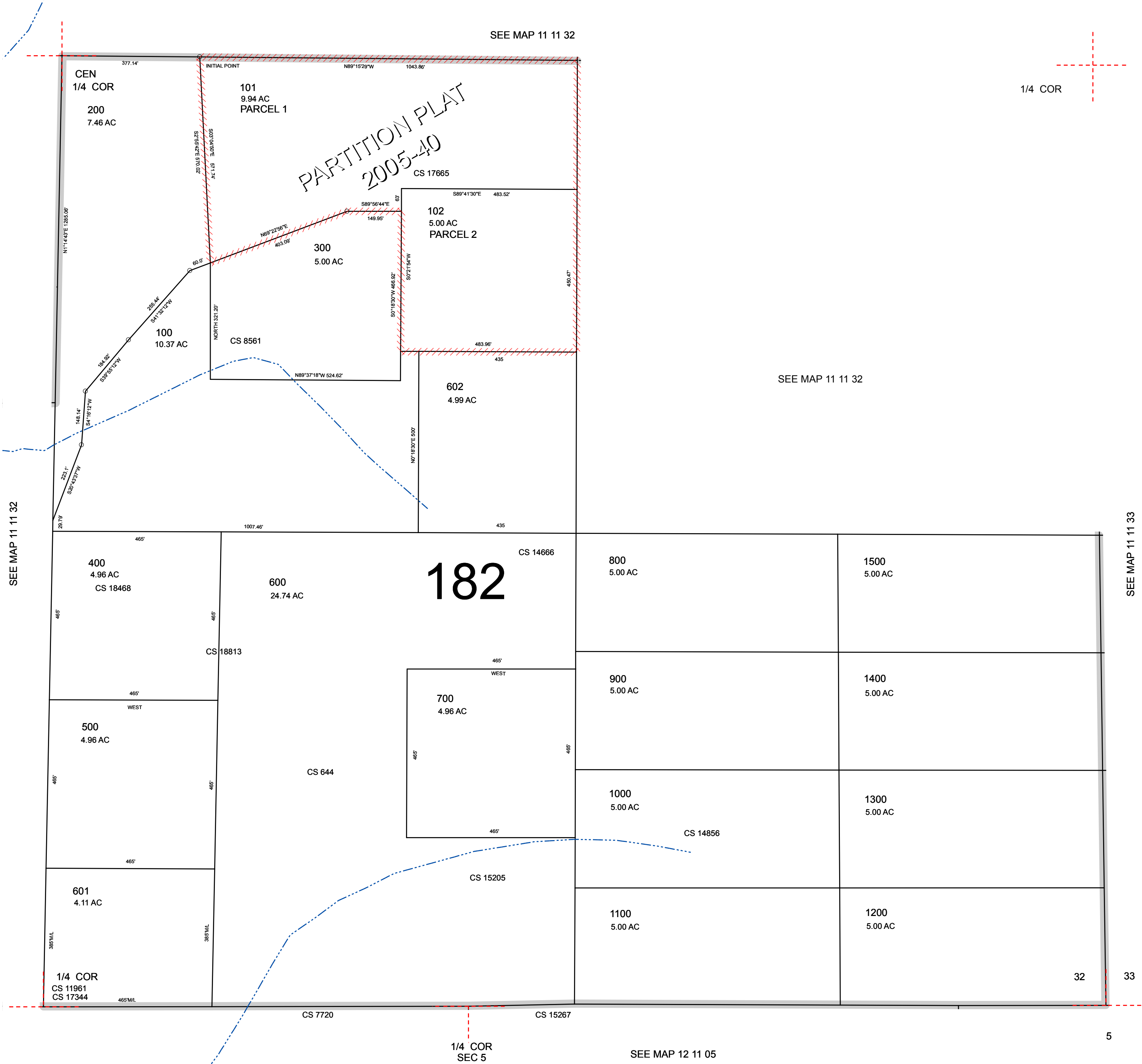
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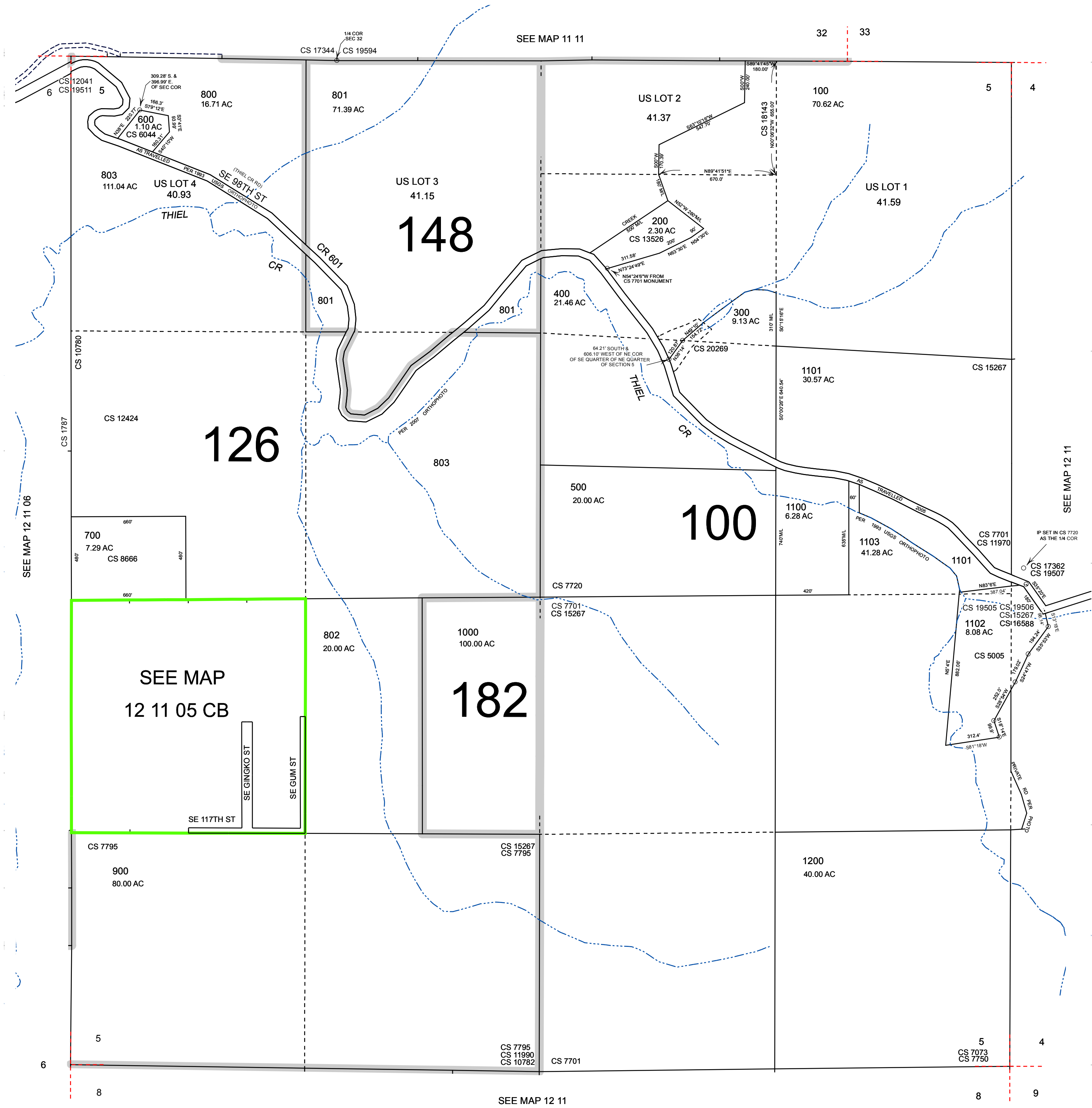
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10-11-28-00-00900-00		NELSON NICKOLAS R	466 WASKOW DR			SAN JOSE, CA 95123
10-11-28-00-01000-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-29-DD-00100-00		DUNSCOMB KATHRYN M TRUSTEE &	MARTIN TERENCE R TRUSTEE	ATTN RAMONA MARTIN	4100 N COAST HWY	NEWPORT, OR 97365
10-11-32-00-00309-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-00-00324-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-00-00327-00	1345 NE LAKEWOOD DR	WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AA-00100-00	405 NE 36TH ST	LC APARTMENTS LLC	1231B STATE ST			SANTA BARBARA, CA 93101
10-11-32-AA-00106-00		CITY OF NEWPORT	ATTN MINOR J CHRISTOPHER	236 W OLIVE ST		NEWPORT, OR 97365
10-11-32-AA-00600-00	575 NE 36TH ST	CENTRAL LINCOLN PUD	ATTN BRIAN BARTH	MGR ACCT & FINANCE	PO BOX 1126	NEWPORT, OR 97365
10-11-32-AA-00601-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
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10-11-32-AD-00100-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AD-00101-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
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10-11-32-AD-00300-00		SLAYDEN CONSTRUCTION GROUP INC	PO BOX 247			STAYTON, OR 97383
10-11-33-00-00100-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
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10-11-33-00-00300-00	3245 NE BIG CREEK RD	ETHERINGTON ROBERT C &	ETHERINGTON LINDA A	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00302-00	3249 NE BIG CREEK RD	ETHERINGTON ROBERT CHRIS &	ETHERINGTON LINDA ANN	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00900-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
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10-11-33-CB-03700-00	1245 NE LAKEWOOD DR	YUILLE KRISTIN H &	GREEN NATHAN R	1245 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03800-00	1235 NE LAKEWOOD DR	INGALLS DONNE J &	INGALLS KELSEY A	1235 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03900-00	1225 NE LAKEWOOD DR	WALKER STEPHEN D TSTEE &	WALKER CHRISTIE H TSTEE	1225 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04000-00	1215 NE LAKEWOOD DR	HESLEN AMIE L &	MARSHALL HEATH	1215 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04300-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-04400-00	1185 NE LAKEWOOD DR	STUDLEY DAVID J &	STUDLEY PAULETTE L	1185 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04500-00	1175 NE LAKEWOOD DR	KEPLER RICHARD ALLEN	1175 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04600-00		RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04700-00	1155 NE LAKEWOOD DR	RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04800-00	1145 NE LAKEWOOD DR	WENELL GARY W TSTEE &	WENELL PAULA C TSTEE	1145 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04900-00	1135 NE LAKEWOOD DR	MERWIN PAMELA D COTTEE &	ROEBBER SUSAN COTTEE &	VANGORP ALISON COTSTEE	1135 NE LAKEWOOD DR	NEWPORT, OR 97365
10-11-33-CB-05000-00	2935 NE LISI PL	BAKER CARL F &	BAKER DIAN G	2935 NE LISI PL		NEWPORT, OR 97365
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10-11-33-CB-06600-00	1080 NE LAKEWOOD DR	PETTETT JAMES W &	PETTETT MICHELLE R	1080 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06700-00	1090 NE LAKEWOOD DR	CAUDURO RAYMOND &	CAUDURO PATRICIA A	1090 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06800-00	1100 NE LAKEWOOD DR	PORCH ROBERT R	1100 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-06900-00	1110 NE LAKEWOOD DR	RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07000-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-07100-00		RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07200-00	1130 NE LAKEWOOD DR	LEE DAVID J &	LEE ROSALINE H	PO BOX 2226		NEWPORT, OR 97365
10-11-33-CB-07300-00		TODD EDWARD L &	TODD SYDNEY E	337 NE SAN-BAY-O CIR		NEWPORT, OR 97365
10-11-33-CB-07400-00	1150 NE LAKEWOOD DR	BRUNELLE LAWRENCE W &	BRUNELLE CLAUDIA J	1150 NE LAKEWOOD DR		NEWPORT, OR 97365

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
10-11-33-CB-07500-00	1160 NE LAKEWOOD DR	WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07600-00		WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07700-00		WEATHERS KAREN A	876 CHURCH ST			WOODBURN, OR 97071
10-11-33-CB-07800-00		SAVARA VIKRAM C TSTEE &	SAVARA NALINI V TSTEE	772 SW BROADWAY DR #2		PORTLAND, OR 97201
10-11-33-CB-07900-00	1200 NE LAKEWOOD DR	BURTON LYNSEY	1200 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-08000-00	1210 NE LAKEWOOD DR	SHAMAS RICHARD A &	SHAMAS IRIS T	6821 SYLVIA DR		HUNTINGTON BEACH, CA 92647
10-11-33-CB-08100-00	1220 NE LAKEWOOD DR	ARNSDORF JOSEPH A &	ARNSDORF JESSICA L	1220 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08200-00	1230 NE LAKEWOOD DR	BODENSTAB MARK R &	BODENSTAB DORIS	7836 E BRALTON DR		NAMPA, ID 83686
10-11-33-CB-08300-00	1240 NE LAKEWOOD DR	SMITH ROBERT &	SMITH LEA	1240 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08400-00	1250 NE LAKEWOOD DR	BOYS DAVID A II &	BOYS LEILA M	1250 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08500-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-08600-00		LAKESWOOD HILLS INC	810 SE 5TH ST			NEWPORT, OR 97365
10-11-33-CB-0ROAD-00						

11 11 32
NEWPORT

NEWPORT
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ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
11-11-32-00-01601-00		SENN JAMES A &	SENN JONG SOON	8450 SW MARINE VIEW ST		SOUTH BEACH, OR 97366
11-11-32-D0-00600-00		GOODPASTURE KATHERINE E	415 SE 98TH CT			SOUTH BEACH, OR 97366
11-11-32-D0-00601-00		FERRIS WILLARD STUART &	FERRIS PETER K &	FERRIS KATHERINE	415 SE 98TH CT	SOUTH BEACH, OR 97366
11-11-32-D0-01100-00	857 SE 98TH ST	PEDERSON JOEL W	16151 SHELLCRACKER RD			JACKSONVILLE, FL 32226
11-11-32-D0-01200-00		KLAY JONATHAN MARK &	KLAY FREDRIKA	20143 47TH AVE NE		LK FOREST PK, WA 98155
12-11-05-00-00100-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00200-00	1489 SE 98TH ST	SELICH JACK M &	SELICH JUDITH N	PO BOX 358		SOUTH BEACH, OR 97366
12-11-05-00-00400-00	1604 SE 98TH ST	ZEISER STEVEN K &	ZEISER KATHERINE K	3511 E 3RD ST		LONG BEACH, CA 90814
12-11-05-00-00800-00		STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-00801-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00803-00	760 SE 98TH ST	STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-0ROAD-00						

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
10-11-00-00-03500-00		JOHN HANCOCK LIFE INSUR CO	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-28-00-00900-00		NELSON NICKOLAS R	466 WASKOW DR			SAN JOSE, CA 95123
10-11-28-00-01000-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-29-DD-00100-00		DUNSCOMB KATHRYN M TRUSTEE &	MARTIN TERENCE R TRUSTEE	ATTN RAMONA MARTIN	4100 N COAST HWY	NEWPORT, OR 97365
10-11-32-00-00309-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-00-00324-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-00-00327-00	1345 NE LAKEWOOD DR	WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AA-00100-00	405 NE 36TH ST	LC APARTMENTS LLC	1231B STATE ST			SANTA BARBARA, CA 93101
10-11-32-AA-00106-00		CITY OF NEWPORT	ATTN MINOR J CHRISTOPHER	236 W OLIVE ST		NEWPORT, OR 97365
10-11-32-AA-00600-00	575 NE 36TH ST	CENTRAL LINCOLN PUD	ATTN BRIAN BARTH	MGR ACCT & FINANCE	PO BOX 1126	NEWPORT, OR 97365
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10-11-32-AD-00100-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AD-00101-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AD-00200-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AD-00300-00		SLAYDEN CONSTRUCTION GROUP INC	PO BOX 247			STAYTON, OR 97383
10-11-33-00-00100-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-33-00-00101-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-00-00200-00		BRAXLING ARTHUR &	BRAXBACH LLC	PO BOX 240		NEWPORT, OR 97365
10-11-33-00-00300-00	3245 NE BIG CREEK RD	ETHERINGTON ROBERT C &	ETHERINGTON LINDA A	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00302-00	3249 NE BIG CREEK RD	ETHERINGTON ROBERT CHRIS &	ETHERINGTON LINDA ANN	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00900-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-03600-00	1255 NE LAKEWOOD DR	WOODARD LISA A	1255 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-03700-00	1245 NE LAKEWOOD DR	YUILLE KRISTIN H &	GREEN NATHAN R	1245 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03800-00	1235 NE LAKEWOOD DR	INGALLS DONNE J &	INGALLS KELSEY A	1235 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03900-00	1225 NE LAKEWOOD DR	WALKER STEPHEN D TSTEE &	WALKER CHRISTIE H TSTEE	1225 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04000-00	1215 NE LAKEWOOD DR	HESLEN AMIE L &	MARSHALL HEATH	1215 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04300-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-04400-00	1185 NE LAKEWOOD DR	STUDLEY DAVID J &	STUDLEY PAULETTE L	1185 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04500-00	1175 NE LAKEWOOD DR	KEPLER RICHARD ALLEN	1175 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04600-00		RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04700-00	1155 NE LAKEWOOD DR	RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04800-00	1145 NE LAKEWOOD DR	WENELL GARY W TSTEE &	WENELL PAULA C TSTEE	1145 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04900-00	1135 NE LAKEWOOD DR	MERWIN PAMELA D COTTEE &	ROEBBER SUSAN COTTEE &	VANGORP ALISON COTSTEE	1135 NE LAKEWOOD DR	NEWPORT, OR 97365
10-11-33-CB-05000-00	2935 NE LISI PL	BAKER CARL F &	BAKER DIAN G	2935 NE LISI PL		NEWPORT, OR 97365
10-11-33-CB-05200-00	2930 NE KLAMATH PL	ROLL JOHN R &	ROLL NINA R	2930 NE KLAMATH PL		NEWPORT, OR 97365
10-11-33-CB-06400-00	2930 NE LISI PL	BARBER JERRY LEE &	BARBER SANDRA LEE	2930 NE LISI PL		NEWPORT, OR 97365
10-11-33-CB-06600-00	1080 NE LAKEWOOD DR	PETTETT JAMES W &	PETTETT MICHELLE R	1080 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06700-00	1090 NE LAKEWOOD DR	CAUDURO RAYMOND &	CAUDURO PATRICIA A	1090 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06800-00	1100 NE LAKEWOOD DR	PORCH ROBERT R	1100 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-06900-00	1110 NE LAKEWOOD DR	RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07000-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-07100-00		RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07200-00	1130 NE LAKEWOOD DR	LEE DAVID J &	LEE ROSALINE H	PO BOX 2226		NEWPORT, OR 97365
10-11-33-CB-07300-00		TODD EDWARD L &	TODD SYDNEY E	337 NE SAN-BAY-O CIR		NEWPORT, OR 97365
10-11-33-CB-07400-00	1150 NE LAKEWOOD DR	BRUNELLE LAWRENCE W &	BRUNELLE CLAUDIA J	1150 NE LAKEWOOD DR		NEWPORT, OR 97365

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
10-11-33-CB-07500-00	1160 NE LAKEWOOD DR	WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07600-00		WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07700-00		WEATHERS KAREN A	876 CHURCH ST			WOODBURN, OR 97071
10-11-33-CB-07800-00		SAVARA VIKRAM C TSTEE &	SAVARA NALINI V TSTEE	772 SW BROADWAY DR #2		PORTLAND, OR 97201
10-11-33-CB-07900-00	1200 NE LAKEWOOD DR	BURTON LYNSEY	1200 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-08000-00	1210 NE LAKEWOOD DR	SHAMAS RICHARD A &	SHAMAS IRIS T	6821 SYLVIA DR		HUNTINGTON BEACH, CA 92647
10-11-33-CB-08100-00	1220 NE LAKEWOOD DR	ARNSDORF JOSEPH A &	ARNSDORF JESSICA L	1220 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08200-00	1230 NE LAKEWOOD DR	BODENSTAB MARK R &	BODENSTAB DORIS	7836 E BRALTON DR		NAMPA, ID 83686
10-11-33-CB-08300-00	1240 NE LAKEWOOD DR	SMITH ROBERT &	SMITH LEA	1240 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08400-00	1250 NE LAKEWOOD DR	BOYS DAVID A II &	BOYS LEILA M	1250 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08500-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-08600-00		LAKESWOOD HILLS INC	810 SE 5TH ST			NEWPORT, OR 97365
10-11-33-CB-0ROAD-00						

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
11-11-32-00-01601-00		SENN JAMES A &	SENN JONG SOON	8450 SW MARINE VIEW ST		SOUTH BEACH, OR 97366
11-11-32-D0-00600-00		GOODPASTURE KATHERINE E	415 SE 98TH CT			SOUTH BEACH, OR 97366
11-11-32-D0-00601-00		FERRIS WILLARD STUART &	FERRIS PETER K &	FERRIS KATHERINE	415 SE 98TH CT	SOUTH BEACH, OR 97366
11-11-32-D0-01100-00	857 SE 98TH ST	PEDERSON JOEL W	16151 SHELLCRACKER RD			JACKSONVILLE, FL 32226
11-11-32-D0-01200-00		KLAY JONATHAN MARK &	KLAY FREDRIKA	20143 47TH AVE NE		LK FOREST PK, WA 98155
12-11-05-00-00100-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00200-00	1489 SE 98TH ST	SELICH JACK M &	SELICH JUDITH N	PO BOX 358		SOUTH BEACH, OR 97366
12-11-05-00-00400-00	1604 SE 98TH ST	ZEISER STEVEN K &	ZEISER KATHERINE K	3511 E 3RD ST		LONG BEACH, CA 90814
12-11-05-00-00800-00		STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-00801-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00803-00	760 SE 98TH ST	STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-0ROAD-00						



851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
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April 1, 2020

Project #: 23915

Keith Blair
ODOT Region 2
455 Airport Road SE, Bldg. A
Salem, OR 97301

Derrick Tokos
City of Newport
169 SW Coast Highway
Newport, OR 97365

RE: Newport UGB Lane Exchange

Dear Keith and Derrick,

This letter presents a Traffic Impact Analysis supporting the proposed land exchange that would remove 71.39 acres of undeveloped residential zoned land in the southern portion of Newport's urban growth boundary (UGB) and bring in approximately 40 acres of rural land located adjacent to the northeast quadrant of the City's UGB.

Based on the results of the transportation analysis outlined in this report, the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 40-acre site has the potential to create a significant effect on the surrounding transportation network if no mitigations are proposed. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2040 with potential mitigation measures in place as described in the report.

FINDINGS

Existing Transportation Conditions

- Traffic counts were collected in June 2019 at all of the study intersections during the critical weekday AM and PM peak travel periods. ODOT procedures were used to identify the 30th Highest Hour Volumes along the US 101 corridor which resulted in a 17% increase to the existing weekday AM and PM peak hour traffic volumes.
- Operational analyses indicate that all of the study intersections currently operate acceptably based on the existing mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Future Year 2040 Traffic Conditions

- The proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres is proposed to be removed from the UGB, it would have no significant future development potential outside of its current Lincoln County RR-10 zone designation. Accordingly, the focus of this analysis is on the proposed urbanization of the 40-acre site.
- Background traffic volumes for the 2040 planning horizon year were estimated using a 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. Trips associated with anticipated developments near the 40-acre site were applied to the study intersections to account for local traffic growth on the system.
- The existing 40-acre site is currently zoned Timber Conservation by Lincoln County. As a resource land designation, it essentially has no measurable trip generation potential. Therefore, the 2040 Background Conditions represent the future traffic conditions that can be expected under the existing Timber Conservation zone scenario.
- Operations of the study intersections under 2040 Background conditions (assumed regional and local traffic growth but no land use action on the 40-acre site) found that all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street and US 101/NE 20th Street intersections. During the weekday PM Peak hour, both of these intersections are forecast to operate with a volume-to-capacity ratio of 0.92 which exceeds their respective 0.80 and 0.90 mobility targets.
- With a potential UGB amendment, it was conservatively assumed that the 40-acre site could be zoned under the City of Newport's R-2 Medium Density Single Family Residential zone which allows a mix of duplexes and single-family homes. Based on a preliminary site assessment taking into consideration topography, non-buildable lands, and wetlands, it was determined that the site could conservatively support up to 200 single family homes.
- Comparing the existing Timber Conservation zoning to a potential R-2 Medium Density Single Family Residential zone, the later has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.
- Operations of the study intersections under the 2040 R-2 Medium Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets. Specifically:
 - The eastbound approach to the unsignalized US 101/NE 36th Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. This represents a significant impact to the operations of the intersection. To address TPR requirements, mitigation and potential revised mobility targets would

be needed to restore capacity to the intersection and show it can meet operating standards.

- The eastbound approach to the unsignalized US 101/NE 31st Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. To address TPR requirements, mitigation and potential revised mobility targets would be needed to restore capacity to the intersection and show it can meet operating standards.
- The signalized US 101/NE 25th Street intersection is forecast to operate at a volume-to-capacity ratio of 0.94 during the weekday PM peak hour. Compared to forecast volume-to-capacity ratio of 0.92 under 2040 Background conditions, this represents a further degradation to the intersection. To address TPR requirements, mitigation would need to be proposed that would restore the intersection operations back to a volume-to-capacity ratio of 0.92 or better.
- The signalized US 101/NE 20th Street intersection is forecast to operate at a volume-to-capacity ratio of 0.95 during the weekday PM peak hour. Compared to forecast volume-to-capacity ratio of 0.92 under 2040 Background conditions, this represents a further degradation to the intersection. To address TPR requirements, mitigation and potential revised mobility targets would be needed to show it can meet operating standards.

Conclusions

The following intersection mitigation measures would ensure the proposed land exchange and urbanization (R-2 Medium Density Single Family Residential zoning scenario) of the 40-acre parcel complies with the Oregon TPR:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects:
 - Widen the westbound NE 36th Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions:
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

PROJECT BACKGROUND

The proposed land exchange involves two separate land parcels. The first parcel is 71.36 acres of privately-owned property in southern Newport that is accessed from SE 98th Street. This land is located within the City of Newport's UGB, but it has not been annexed into the city limits. Currently zoned Rural Residential (RR-10) by Lincoln County, the property is steeply sloped, not currently served by established infrastructure, and not a currently desirable location for future urban development given its somewhat isolated location. The second parcel is a 40-acre site that is currently outside the City of Newport's UGB as shown in Figure 1. The land is currently zoned Timber-Conservation (T-C) by Lincoln County. The proposed land use action would remove the 71.36-acre property from the Newport UGB and bring in the 40-acre property where it would then be eligible for potential future annexation and residential development.

Per Oregon Administrative Rule 660-012-0060, also known as the Transportation Planning Rule (TPR), land use actions such as these need to determine if there will be a significant effect on an existing or planned transportation facility. Under these types of land use actions, a significant effect to a transportation facility typically is anything that could involve the degradation of the performance of an existing or planned transportation facility such that it would not meet adopted local performance standards. The following report addresses the TPR requirements.

Figure 1 – Site Vicinity Map



STUDY SCOPE & ANALYSIS METHODOLOGY

The proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres would be removed from the UGB, it would have no significant future development potential outside of its current Lincoln County RR-10 zone designation. Accordingly, the focus of this analysis is on the proposed 40-acre site and its applicable study area.

Study Scope

This analysis identifies the transportation-related impacts associated with the proposed land exchange. The study was prepared in accordance with the ODOT *Analysis Procedures Manual* (APM, Reference 1), the City of Newport's traffic impact study requirements, and supplemental direction provided by ODOT development review staff. The study scope and overall study area for this project were selected based on an analysis of current and future traffic volumes at study intersections and discussions with both City and ODOT staff. As required by the City of Newport's Municipal Code Chapter 14.45 and the TPR requirements, the analysis was prepared to address the following transportation issues:

- Existing land use and transportation system conditions within the site vicinity;
- Review of regional traffic growth and seasonal traffic patterns, in-process developments, planned transportation improvements, and related transportation impact studies for other developments in the study area;
- Site trip generation and distribution estimates for reasonable worst-case development scenarios for current Timber Conservation and proposed residential zoning;
- Planning horizon year 2040 traffic operations and vehicle queuing conditions under existing Timber Conservation and proposed residential zoning development scenarios;
- Identification of traffic system deficiencies and potential mitigation measures;
- Assessment of zone change compliance with the TPR (OAR Section 660-12-060); and,
- Conclusions and recommendations.

Study Intersections

The study intersections were identified in collaboration with City and ODOT staff. Figure 1 illustrates the location of the study intersections that are listed below. For ease of review, each intersection is referenced within this report using a numerical ID.

1. US 101 / NE 36th Street
2. US 101 / NE 31st Street
3. US 101 / NE 25th Street
4. US 101 / NE 20th Street

5. NE Harney Street / NE 31st Street

Traffic Analysis Time Periods

Study intersection operations were analyzed during the weekday morning (intersection peak hour between 7:00-9:00 AM) and evening peak hour (intersection peak hour between 4:00-6:00 PM).

Analysis Methodology

The unsignalized and signalized intersection operational analyses presented in this report were prepared following Highway Capacity Manual 6th edition (Reference 2) analysis procedures using VISTRO software.

Performance Measures & Operating Standards

Intersection performance measures reported in this study include volume-to-capacity ratio (V/C), and delay. Intersection operating standards adopted by the City and ODOT are summarized in this section.

ODOT Operating Standards (Mobility Targets)

ODOT uses volume-to-capacity (V/C) ratios to assess intersection operations. Table 6 of the *Oregon Highway Plan* (OHP) provides maximum volume-to-capacity ratio targets for all signalized and unsignalized intersections located outside the Portland metropolitan area. The ODOT controlled intersections within the study area are located along US 101. Table 1 summarizes the v/c ratios that will be used to identify the existing and potential future operational issues at the ODOT study intersections.

Table 1 – ODOT Mobility Targets

Intersection	OHP Mobility Target
US 101 / NE 36 th Street (unsignalized)	0.80 major approach / 0.90 minor approach
US 101 / NE 31 st Street (unsignalized)	0.80 major approach / 0.90 minor approach
US 101 / NE 25 th Street (signalized)	0.80
US 101 / NE 20 th Street (signalized)	0.90

Note: US 101 is a Statewide Highway (not a Freight Route). The posted speed along US 101 is 35 mph through the US 101/NE 20th Street intersection and transitions to a 45 mph facility from the NE 25th Street intersection through the NE 36th Street intersection.

City of Newport Operating Standards

The City of Newport has not adopted intersection operating standards and, per City staff, generally relies on consideration of queuing as well as ODOT standards. For the NE Harney Street / NE 31st Street intersection, a 0.80 major street approach/0.90 minor street approach volume-to-capacity standard will be utilized.

EXISTING CONDITIONS TRAFFIC ANALYSIS

The existing conditions analysis identifies field conditions and the current operational, traffic control, and geometric characteristics of the roadways and other transportation facilities within the vicinity of the 40-acre study area. These conditions will be compared with future year conditions later in this report. Kittelson staff visited the study area and inventoried the existing transportation system to identify lane configurations, traffic control devices, bicycle and pedestrian facilities, transit stops, geometric features, and sight distances at the study intersections during the summer of 2019.

Site Conditions and Adjacent Land Uses

The proposed 40-acre land exchange site is currently undeveloped and heavily forested. It is generally bordered by SW Harney Street to the west, existing single-family development to the south, and undeveloped forest land to the north and east.

Transportation Facilities

This section provides a multi-modal overview of transportation facilities in the site vicinity.

Roadway Facilities

Figure 2 summarizes the existing lane configurations and traffic control devices at the study intersections. Table 2 summarizes roadways in the site vicinity that are assessed as part of the traffic impact study.

Table 2 – Existing Transportation Facilities

Roadway	Jurisdictional Authority	Functional Classification ¹	Number of Auto Lanes	Posted Speed (MPH)	Sidewalks Present	Bicycle Lanes Present	On-Street Parking Allowed?
US 101	ODOT	Statewide Highway – <i>ODOT Oregon Highway Plan</i> Principal Arterial - <i>Newport</i>	3-5	45 ²	Yes ³	Yes ⁴	No
NE 36 th Street	City of Newport	Collector	2	25	No	Yes	No
NE 31 st Street	City of Newport	Minor Arterial	2	Not Posted	No	No	No
NW 25 th Street	City of Newport	Local	2	Not Posted	Yes	No	No
NW 20 th Street	City of Newport	Collector	2	Not Posted	No	No	No
NW Harney St	City of Newport	Collector	2	Not Posted	No	No	No

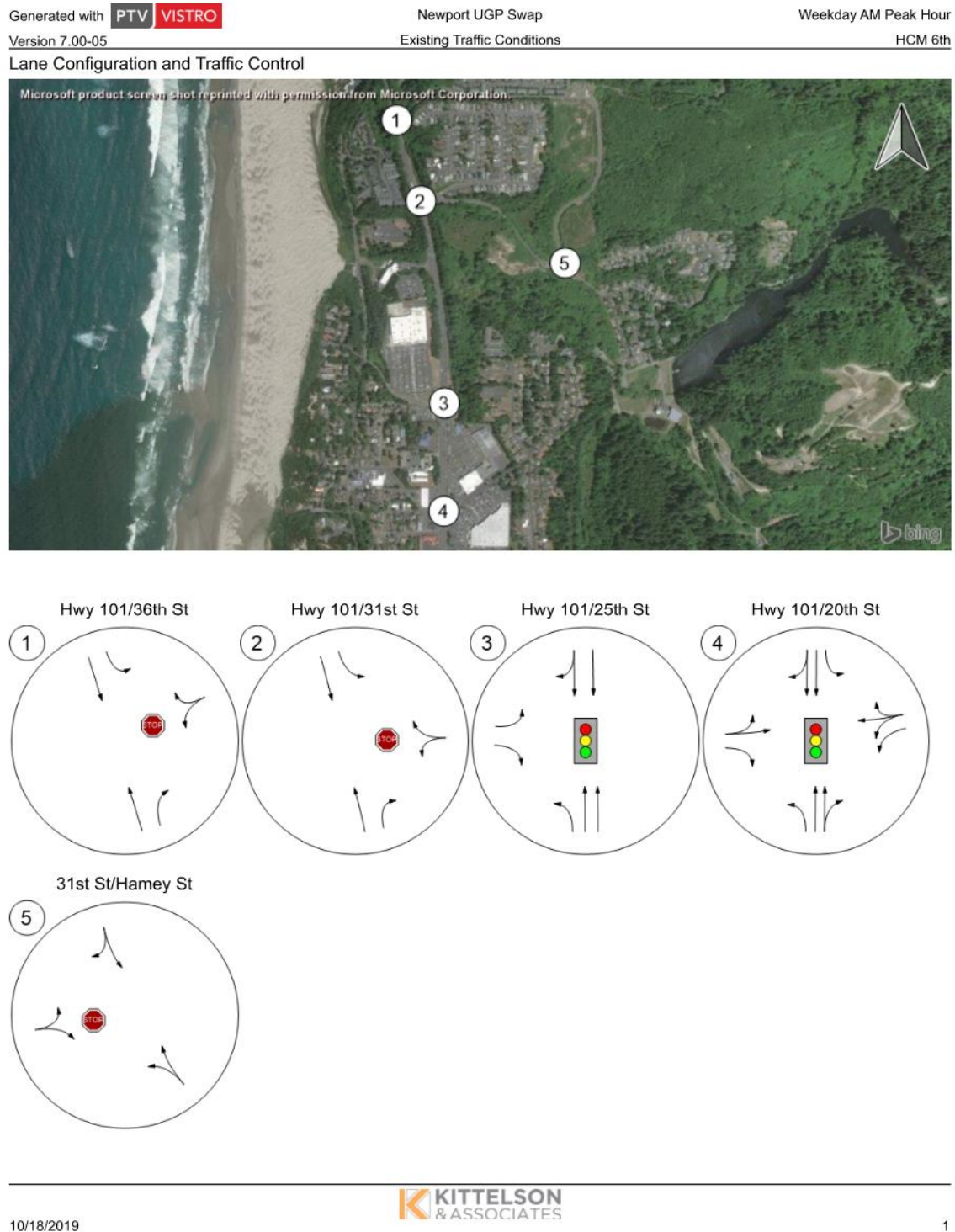
¹ Source: City of Newport Transportation System Plan

² The posted speed of US 101 lowers to 35 mph in the vicinity of NW 20th Street

³ There are no sidewalks on US 101 in the vicinity of NW 31st Street and NW 36th Street

⁴ US 101 has a striped bicycle lane or wide shoulder north of NW 25th Street

Figure 2 - Existing Study Intersection Lane Configurations and Traffic Control Devices



Transit Facilities

Lincoln County operates the Newport City Loop Bus within the City. The bus operates between 7:23 AM and 5:11 PM seven days a week except on Thanksgiving and Christmas. The bus route loops between Newport Business Center on the south side of the community and the NW 73rd & Avery intersection on the north side of the community with study area stops at Fred Meyer, Walmart, and the Little Creek Apartments. Intercity bus connections are also provided between Newport and Siletz, Lincoln City/Rose Lodge, and Yachats. The intercity service schedules vary by destination but generally operate Monday through Saturday with service to Newport occurring at a stop at City Hall.

Existing Traffic Volumes

Turning movement counts were conducted at the study intersections on a typical mid-weekday in early June 2019 while local schools were still in session. Peak traffic volumes were observed at the intersections between 7:20 - 8:20 AM and 4:05 – 5:05 PM. The traffic counts were seasonally adjusted to 30th highest hour design volumes before use in the operational analysis in accordance with procedures presented in ODOT's APM. *Appendix "A" provides the detailed methodology and calculations for the 30th highest hour adjustment.* Figures 3 and 4 show the resulting turning movement counts at the study intersections during the weekday AM and PM peak hours. *Appendix "B" contains the intersection turning movement count sheets.*

Existing Intersection Operations

Operations of the study intersections were assessed using the previously described methodology and were compared to the respective mobility targets. Table 3 summarizes the operational analyses for the weekday AM and PM peak hour reflective of the seasonal adjustment factor. As shown, all of the study intersections currently operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street intersection. During the weekday PM Peak hour, the intersection currently operates with a volume-to-capacity ratio of 0.84 which exceeds the 0.80 mobility target. *Appendix "C" includes the existing conditions intersection operations analysis worksheets.*

Table 3 – Existing Traffic Conditions

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.01 (SBLT) 0.37 (WB)	8.57 (SBLT) 34.1 (WB)	0.01 (SBLT) 0.15 (WB)	10.2 (SBLT) 33.5 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.43 (WB)	8.69 (SBLT) 46.1 (WB)	0.03 (SBLT) 0.37 (WB)	10.8 (SBLT) 58.6 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.54	12.8	0.84	41.8
US 101 / NE 20 th Street	0.90 for intersection	0.48	16.6	0.74	35.9
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	8.7 (EB)	0.07 (EB)	8.6 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio exceeds the respective mobility target

Figure 3 – Existing Traffic Volumes, Weekday AM Peak Hour

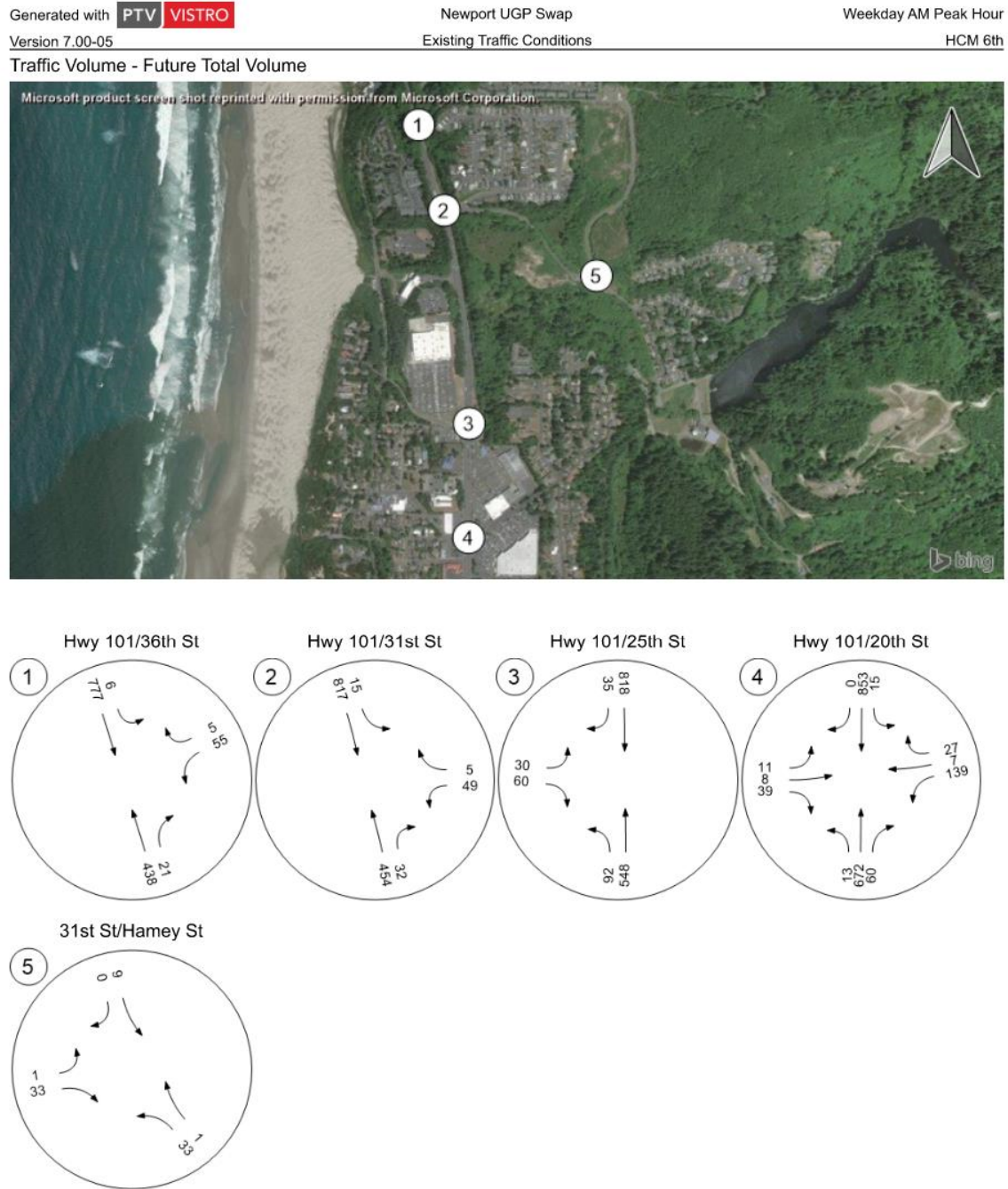
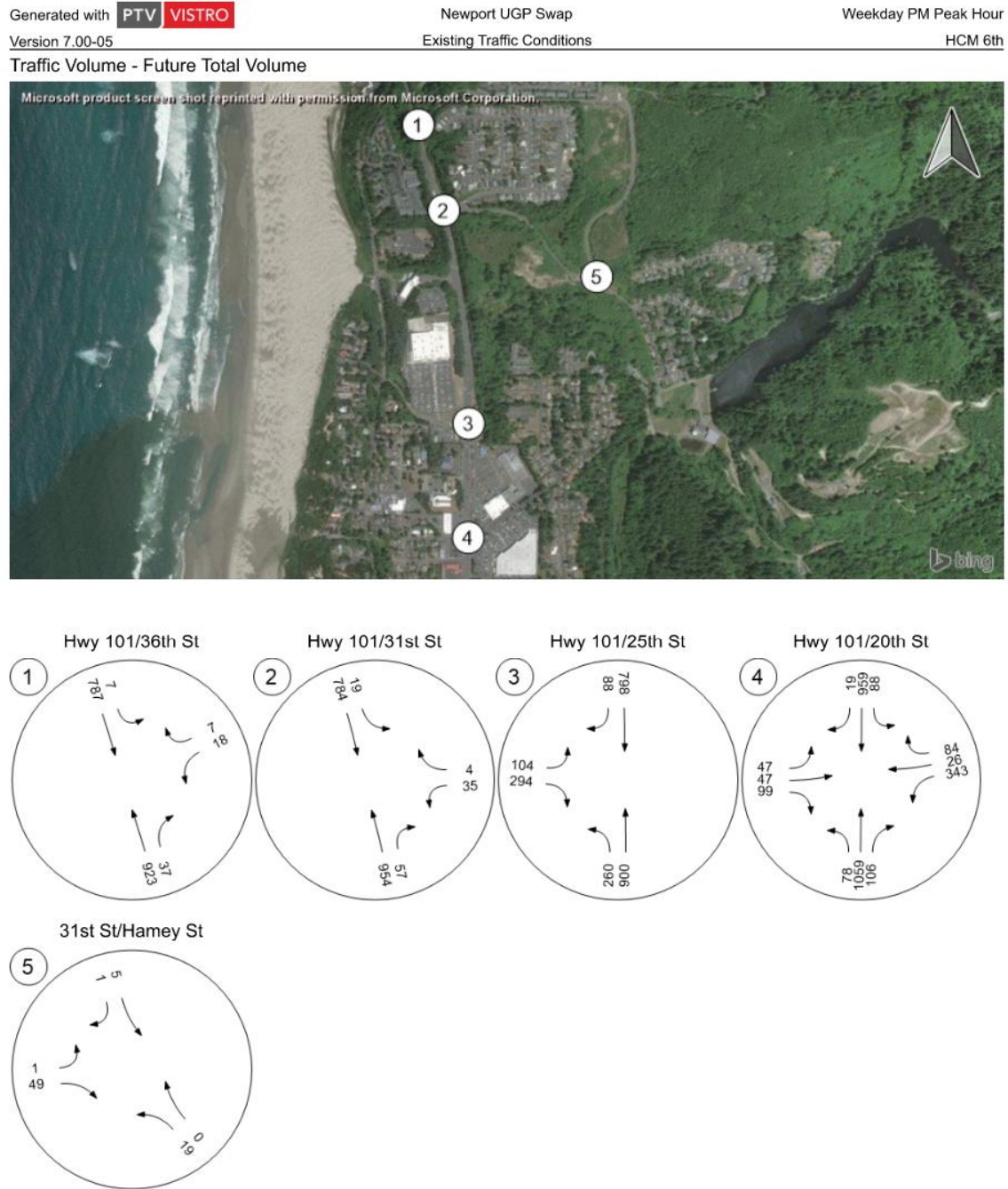


Figure 4 – Existing Traffic Volumes, Weekday PM Peak Hour



10/18/2019

K KITTELSON
& ASSOCIATES

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Intersection Crash History

The crash histories at the individual study intersections were obtained and reviewed in an effort to identify potential safety issues. ODOT provided crash records for the study intersections for the five-year period from January 1, 2013 through December 31, 2017. Table 4 summarizes the ODOT crash data.

Table 4 – Study Intersection Crash Summary (January 2013 to December 2017)

Study Intersections	Collision Type					Severity			Total
	Rear-End	Turning	Angle	Fixed Object	Other	PDO	Injury	Fatal	
US 101 / NE 36 th Street	1	6	0	0	0	1	5	1	7
US 101 / NE 31 st Street	2	3	0	0	0	4	1	0	5
US 101 / NE 25 th Street	5	2	0	1	0	6	2	0	8
US 101 / NE 20 th Street	9	5	3	0	2	7	12	0	19
NE Harney Street / NE 31 st Street	0	0	0	0	0	0	0	0	0

A review of Table 4 revealed the following:

- One fatality occurred at the US 101/NE 36th Street intersection that involved a westbound vehicle making a left-turn onto US 101 and colliding with a northbound US 101 vehicle. Six of the 7 recorded collisions also involved this same set of movements.
- The US 101/NE 20th Street intersection, a four legged higher volume intersection had the highest number of crashes. Of these crashes, six involved northbound rear-end collisions. There were no other discernable patterns amongst the other crash types.

Critical Crash Rate

Critical crash rates were calculated for each of the study intersections following the analysis methodology presented in ODOT's SPR 667 Assessment of Statewide Intersection Safety Performance (Reference 5). SPR 667 provided average crash rates at a variety of intersection configurations in Oregon based on the number of approaches and traffic control types. The average crash rate represents the approximate number of crashes that are "expected" at a study intersection. This average crash rate is used to calculate the critical crash rate for each study intersection, based on the Highway Safety Manual methodology (Reference 6). The critical crash rate shown in Table 5 serves as a threshold for further analysis.

Table 5 – Intersection Critical Crash Rate Assessment

Intersection	Total Crashes	Critical Crash Rate by Intersection	Critical Crash Rate by Volume	Observed Crash Rate at Intersection	Observed Crash Rate > Critical Crash Rate?
US 101 / NE 36 th Street	7	0.47	0.48	0.29	No
US 101 / NE 31 st Street	5	0.47	0.63	0.20	No
US 101 / NE 25 th Street	8	0.71	0.46	0.28	No
US 101 / NE 20 th Street	19	0.25	0.35	0.56	Yes
NE Harney Street / NE 31 st Street	0	1.01	1.04	0.00	No

As shown in Table 5, the observed crash rate at the US 101/NE 20th Street intersection exceeds the critical crash rate by intersection type and volume. Further, this intersection is on ODOT's 2017 Safety Priority Index List (SPIS). *Appendix "D" contains the crash data summary sheets.*

YEAR 2040 TRAFFIC CONDITIONS

This section of the report contains a detailed assessment of the long-term traffic impacts associated with the proposed land exchange. More specifically, it evaluates the impacts of urbanizing the 40-acre parcel on the north side of the Newport UGB¹. The analysis of long-term traffic conditions is mandated by the State's Transportation Planning Rule (TPR, OAR Section 660-12-0060), given that the proposed UGB amendment for the 40-acre parcel would require an amendment to an acknowledged land use regulation and may have the potential to significantly affect a transportation facility.

To test for significant effect, an analysis of traffic conditions was conducted under reasonable worst-case site development scenarios for the subject site under the current Lincoln County Timber Conservation zone and a proposed scenario where the UGB is amended and the land is zoned and annexed for future residential development.

Based on the required analysis, the impacts of traffic generated by the potential urbanization of the 40-acres site were examined in the following manner:

- Anticipated background traffic growth patterns and in-process development trips were identified for the weekday AM and PM peak hour of the 2040 planning horizon year.
- Planned transportation improvements in the site vicinity were identified and reviewed.
- Reasonable worst-case land development scenarios were developed under the current Timber Conservation zone and for a potential future residential zoning designation, including basic assumptions on site accessibility.
- Estimates of average daily, weekday AM, and weekday PM peak hour site trips were prepared for the current Timber Conservation zone and for a potential future residential zoning designation.
- A site trip distribution pattern was derived through a review of existing traffic volumes, surrounding transportation facilities, and conversations with ODOT and City of Newport staff.
- Weekday AM and PM peak hour site-generated trips were assigned to the surrounding street network for both zoning scenarios.

¹ As previously stated, the proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres would be removed from the UGB, it would have no significant future development potential outside of what is currently allowed under the Lincoln County RR-10 zone. Accordingly, the focus of this analysis is on the potential urbanization of 40-acre site and its surrounding study area.

- Planning horizon year 2040 traffic volumes, operations, and vehicle queuing conditions were analyzed for the weekday AM and PM peak hour under the existing Timber Conservation zone and for a potential future residential zoning designation.
- Operational deficiencies were identified and appropriate mitigation measures were evaluated.

Year 2040 Background Traffic Forecast

To achieve a reasonable estimate of background traffic levels during the 2040 planning horizon year, current weekday AM and PM peak hour volumes shown in Figure 3 were increased by a 1% linear annual growth rate to account for regional traffic growth in the area over the 20-year forecast window. This growth factor was determined through consultation with City of Newport staff.

Additional trips were added to the background traffic growth adjustments to account for development that is not specifically approved but highly anticipated to be built within the 2040 analysis period. Through discussions with city staff, three development projects are anticipated in the immediate vicinity of the 40-acre site. These developments² are defined below:

- A 66-unit multi-family apartment complex is anticipated on the undeveloped parcel of land east of the NE Harney Street/NE 31st Street intersection. This project would likely include an extension of NE Lakewood Drive to NE Harney Street.
- A 96-unit multi-family apartment complex is anticipated on the undeveloped parcel of land located south of NE 36th Street, west of NE Harney Street and east of the Pacific Homes Beach Club.
- An 84-unit multi-family apartment complex is anticipated on the undeveloped parcel of land located south of NE 31st Street and west of NE Harney Street.

Year 2040 background traffic volumes forecast for the weekday AM and PM peak hour are illustrated in Figures 5 and 6 for all study intersections. These figures reflect background traffic levels without any development on the subject site.

² Through conversations with City staff, none of these developments are formally approved. However, City staff feels they are all reasonably likely to be approved and built within the 20-year planning period of this study. For these reasons, representative stand in projects have been assumed to more conservatively account for this long-term traffic growth potential and its operational impacts at the NE 36th Street and NE 31st Street intersections.

Figure 5 – 2040 Background Traffic Volumes, Weekday AM Peak Hour

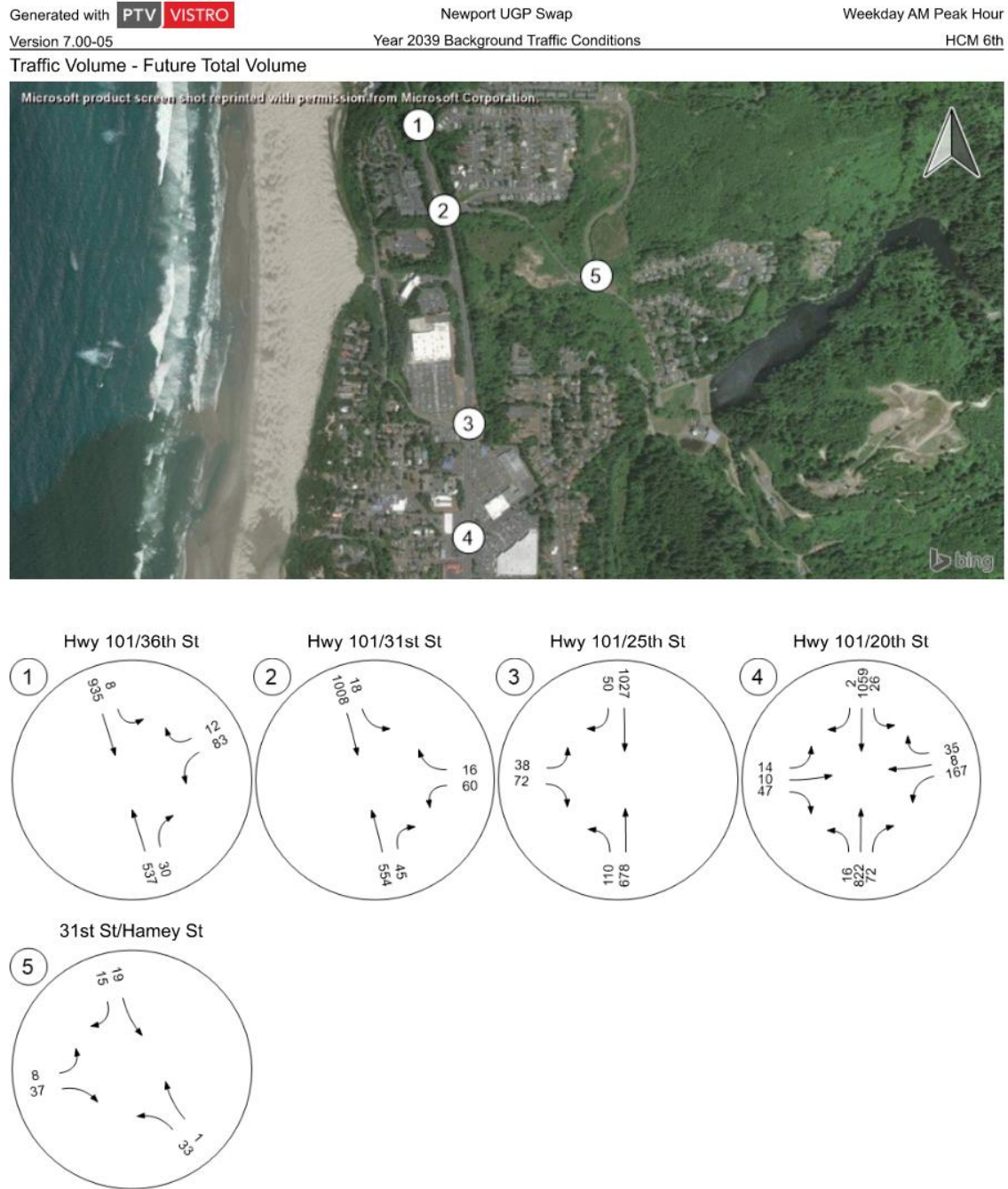
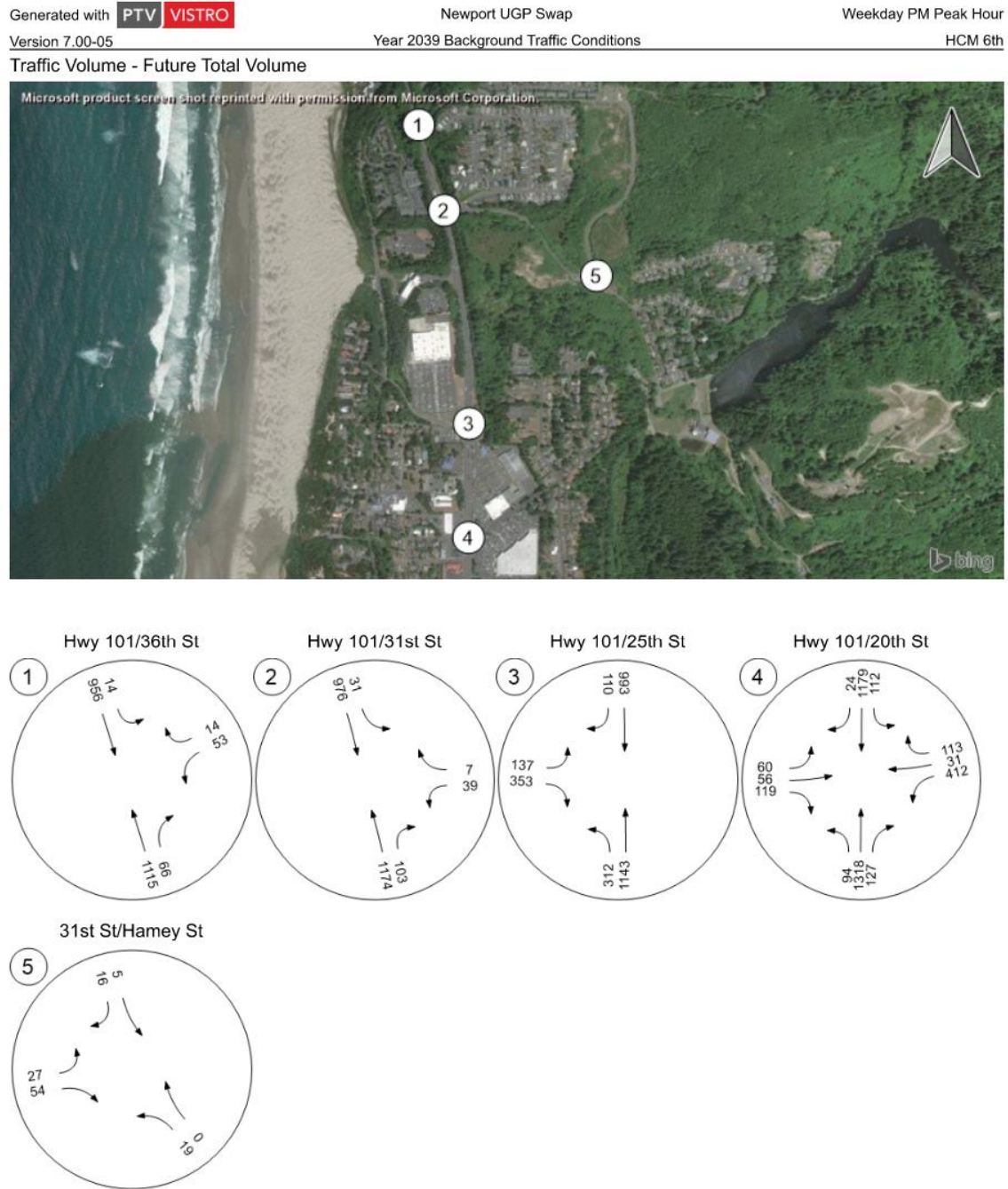


Figure 6 – 2040 Background Traffic Volumes, Weekday PM Peak Hour



Year 2040 Planned Transportation Improvements

The Transportation Planning Rule provides specific language and direction on how planned transportation improvements can be included in the long-range transportation impact analyses for proposed comprehensive plan and zone changes. Specifically, the TPR allows roadway or intersection improvement projects to be included in the analysis if they are in a Capital Improvement Plan with secured funding, are on a “financially constrained” project list in the adopted TSP, or alternatively, are deemed by the local agency to be “reasonably likely to occur” within the planning horizon. Within the study area, the Newport TSP has identified the need for signalization of the US 101/NE 36th Street intersection. However, the TSP identifies this infrastructure improvement as a development-based project that would be constructed when warranted. As such, it is not currently funded or included on the City’s CIP as has therefore not been assumed within the 2040 planning period.

Year 2040 Background Intersection Operations

Operations of the study intersections under 2040 Background conditions were assessed using the previously described methodology and were compared to the respective mobility targets. Table 6 summarizes the operational analyses for the weekday AM and PM peak hour reflective of anticipated regional and local traffic volume growth. As shown, all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street and US 101/NE 20th Street intersection. During the weekday PM Peak hour, both of these intersections are forecast to operate with a volume-to-capacity ratio of 0.92³ which exceeds their respective 0.80 and 0.90 mobility targets. *Appendix “E” includes the 2040 background conditions intersection operations analysis worksheets.*

Table 6 – 2040 Background Traffic Conditions

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.01 (SBLT) 0.59 (WB)	8.78 (SBLT) 54.5 (WB)	0.03 (SBLT) 0.72 (WB)	11.5 (SBLT) 123.0 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.61 (WB)	8.94 (SBLT) 72.3 (WB)	0.06 (SBLT) 0.79 (WB)	12.6 (SBLT) 182.2 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 for intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio is forecast to exceed the respective mobility target

³ The 20-year operations are reflective of signal timing optimization while maintaining the existing overall cycle length.

Site Zoning and Development Scenarios

For the purposes of this analysis, two reasonable worst-case development scenarios were identified for the 40-acre site to compare the traffic impacts between development under the existing Timber Conservation zone and for a potential future residential zoning designation.

Existing Timber Conservation Zoning vs. Potential Residential Zoning

The existing Timber Conservation zone is essentially a resource land zone designation. As such, it has conservatively been assumed that it has no significant or measurable trip generation potential. Under a potential residential zoning designation, it was conservatively assumed that the 40-acres site could be zoned under the City of Newport's R-2 Medium Density Single Family Residential zone which allows a mix of duplexes and single-family homes. Based on a preliminary site assessment taking into consideration topography, non-buildable lands, and wetlands, it was determined that the site could conservatively support up to 200 single family homes. This land use was assumed to represent a reasonable worst-case development scenario for the subject property.

Table 6 shows the estimated trip generation comparison between the two land use scenarios as summarized in the *ITE Trip Generation Manual, 10th Edition*. As shown, the proposed urbanization of the 40-acre site under R-2 development scenario would generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Table 7 – Estimated Trip Generation (Current Timber Conservation Zone vs. Proposed Residential Zone)

Land Use	ITE Code	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Existing Lincoln County Timber Conservation Zone									
Rural Resource Land	-	40 acres	-	-	-	-	-	-	-
Assumed City of Newport R-2 Medium Density Single Family Zoning									
Single-Family Detached Housing	210	200 homes	1,968	147	37	110	198	125	73
Net New Trips			+1,968	+147	+37	+110	+198	+125	+73

Site Trip Distribution and Assignment

Under the existing Timber Conservation Zone, there is no measurable trip profile that can be forecast from this land use. Under the assumed R-2 Medium Density Single Family Residential development scenario, vehicular access to the 40-acre site was assumed to occur via multiple driveways along the property's NE Harney Street frontage. From these points of access, the distribution of site-generated trips onto the study area roadway system was estimated based on an examination of major transportation facilities within the site vicinity and travel characteristics observed from the existing weekday AM and PM traffic counts.

The assumed trip distribution pattern for the R-2 Medium Density Single Family Residential development scenario are illustrated in Figures 7 and 8 along with the total weekday AM and PM peak hour site trip assignments.

Year 2040 Total Traffic Intersection Operations Analysis (40-Acres Converted to Residential Zoning)

The 2040 traffic conditions analysis forecasts how the study area's transportation system will operate by the planning horizon year if the subject site were to remain under the current Timber Conservation zone or reasonably developed under the R-2 Medium Density Single Family Residential zone. As noted, there is no measurable development potential under the Timber Conservation zone. Accordingly, the previously summarized 2040 Background traffic conditions effectively represent the operations under this scenario. To produce the analysis under the R-2 Medium Density Single Family Residential development scenario, the weekday AM and PM peak hour site generated traffic volumes shown in Figures 7 and 8 were added to the background traffic volumes shown in Figures 5 and 6 to arrive at year 2040 traffic volumes shown in Figures 9 and 10.

Year 2040 Total Traffic Operations Results (40-Acres Converted to Residential Zoning)

Operations of the study intersections under 2040 Total conditions (with the 40 acres converted to residential zoning) were assessed using the previously described methodology and were compared to the respective mobility targets. Table 8 summarizes the operational analyses for the weekday AM and PM peak hour reflective of anticipated regional/local traffic volume growth and the traffic generated by the R-2 Medium Density Single Family Residential zone. As shown, all of the study intersections are forecast to experience operational issues. Specifically, the US 101/NE 25th Street and US 101/NE 20th Street intersections are forecast to continue to operate above their respective mobility targets while the critical westbound approaches at the US 101/NE 36th Street and US 101/NE 20th Street intersections are forecast to operate over capacity. *Appendix "F" includes the 2040 total traffic conditions intersection operations analysis worksheets.*

Table 8 - 2040 Total Traffic Conditions (40 Acres Converted to Residential Zoning)

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.91 (WB)	8.87 (SBLT) 113.9 (WB)	0.07 (SBLT) 1.75 (WB)	12.2 (SBLT) 584.9 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 1.11 (WB)	9.06 (SBLT) 205.6 (WB)	0.07 (SBLT) 1.69 (WB)	13.4 (SBLT) 526.6 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.59	13.0	0.94	48.8
US 101 / NE 20 th Street	0.90 for intersection	0.58	18.8	0.95	73.3
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	9.17 (EB)	0.17 (EB)	11.1 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio is forecast to exceed the respective mobility target

Figure 7 – Site Trip Distribution and Site Generated Trips (Proposed Residential Zoning), Weekday AM Peak Hour

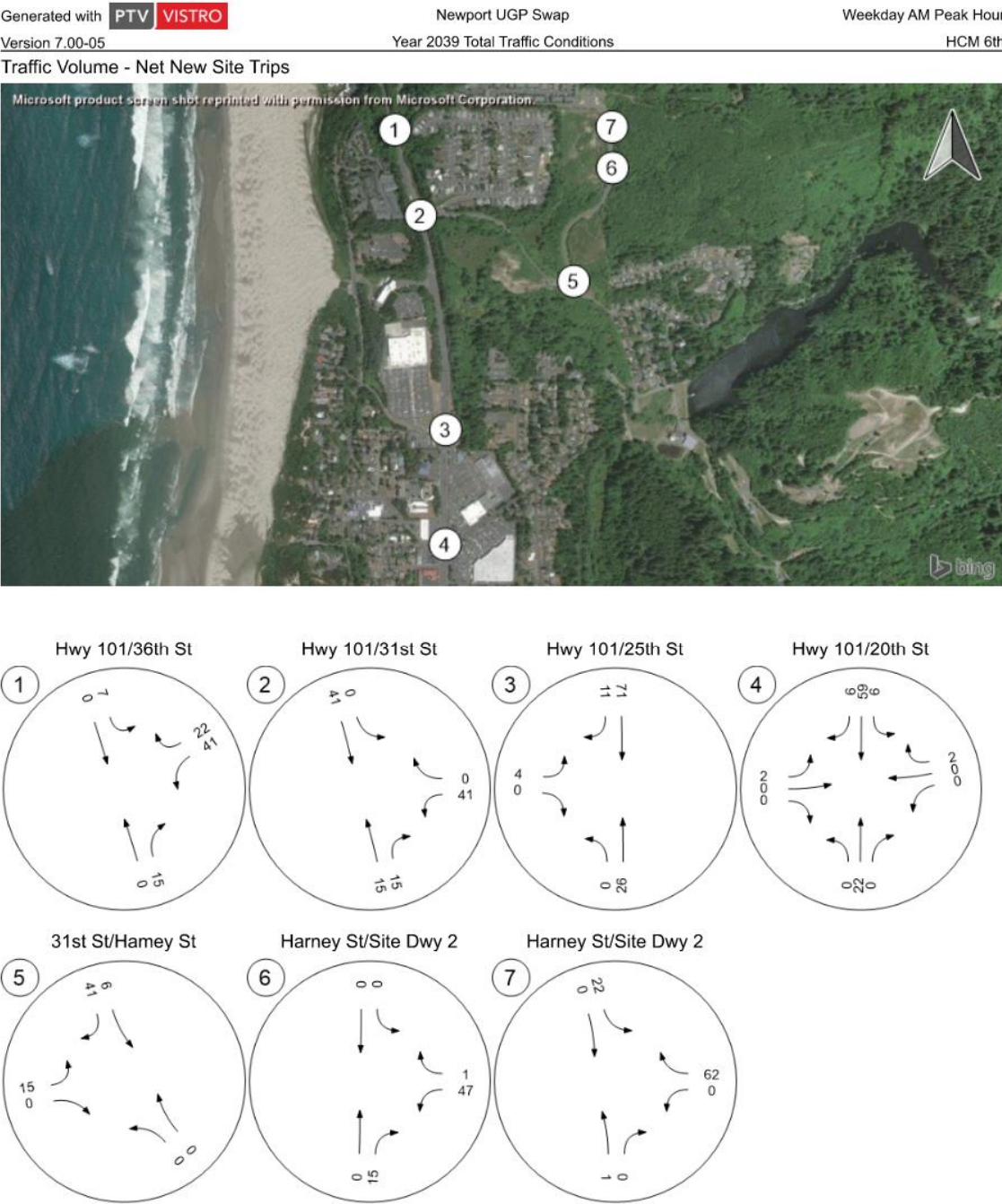


Figure 8 – Site Trip Distribution and Site Generated Trips (Proposed Residential Zoning), Weekday PM Peak Hour

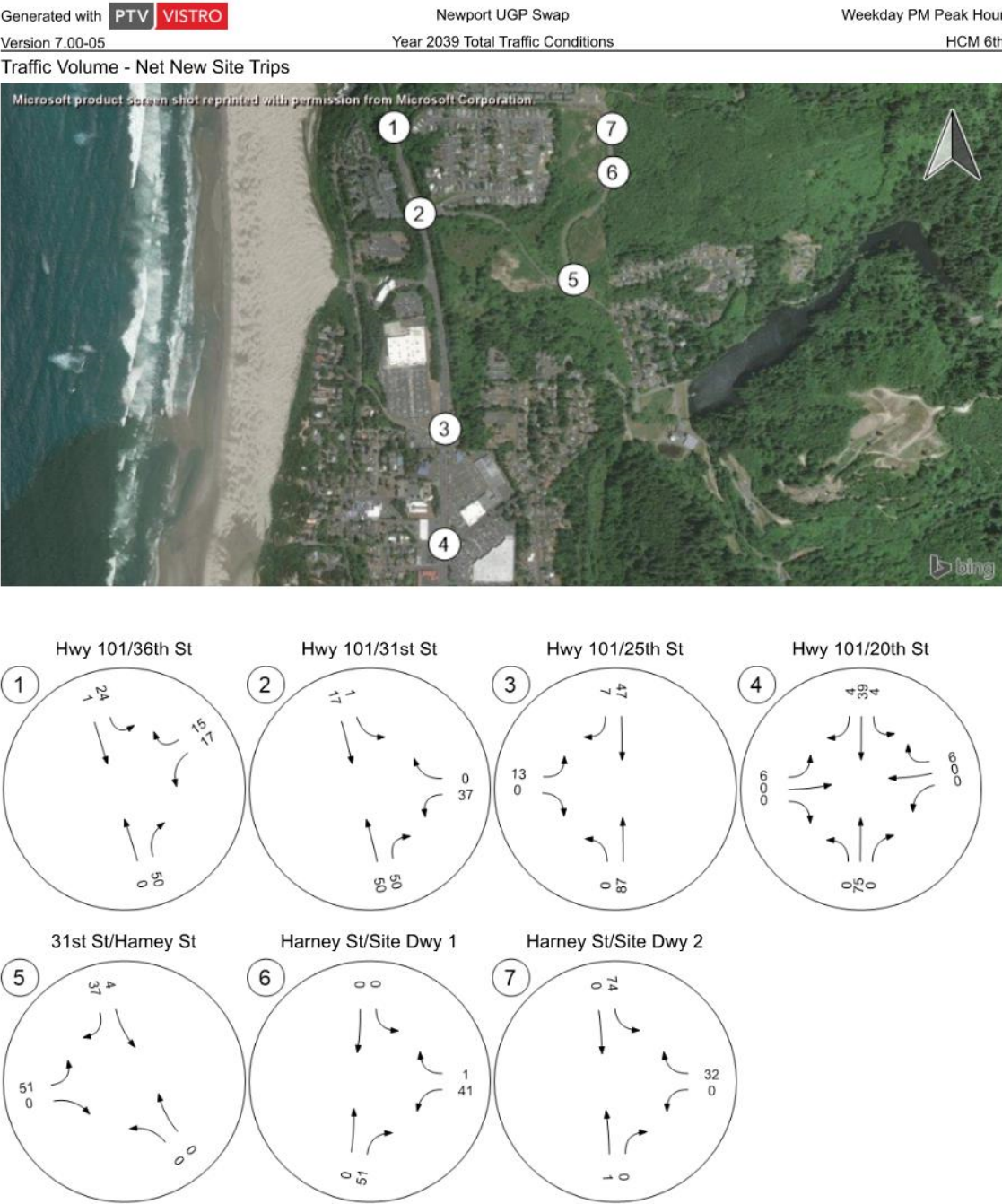
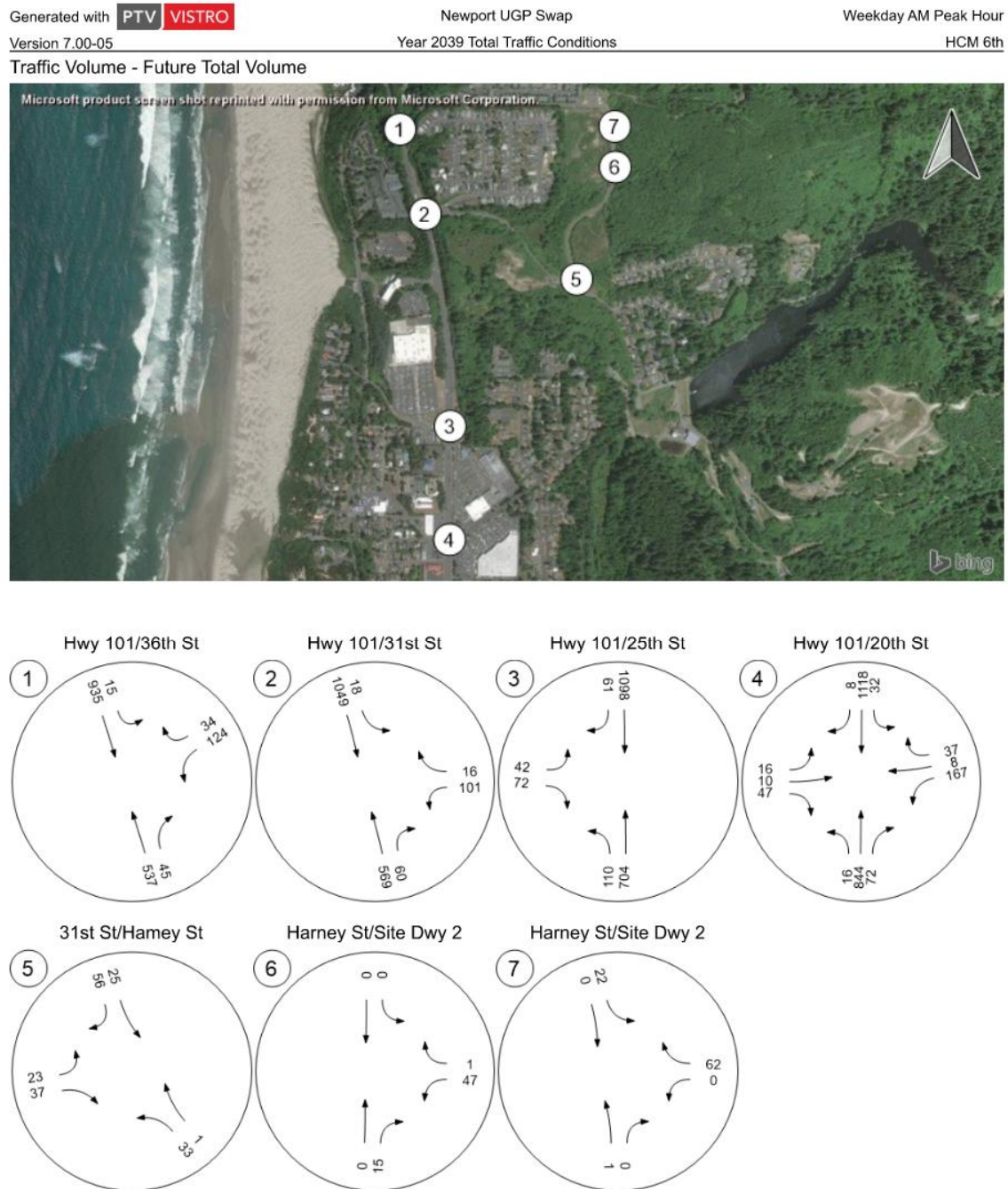


Figure 9 – 2040 Traffic Volumes (w/ Proposed Residential Zoning), Weekday AM Peak Hour

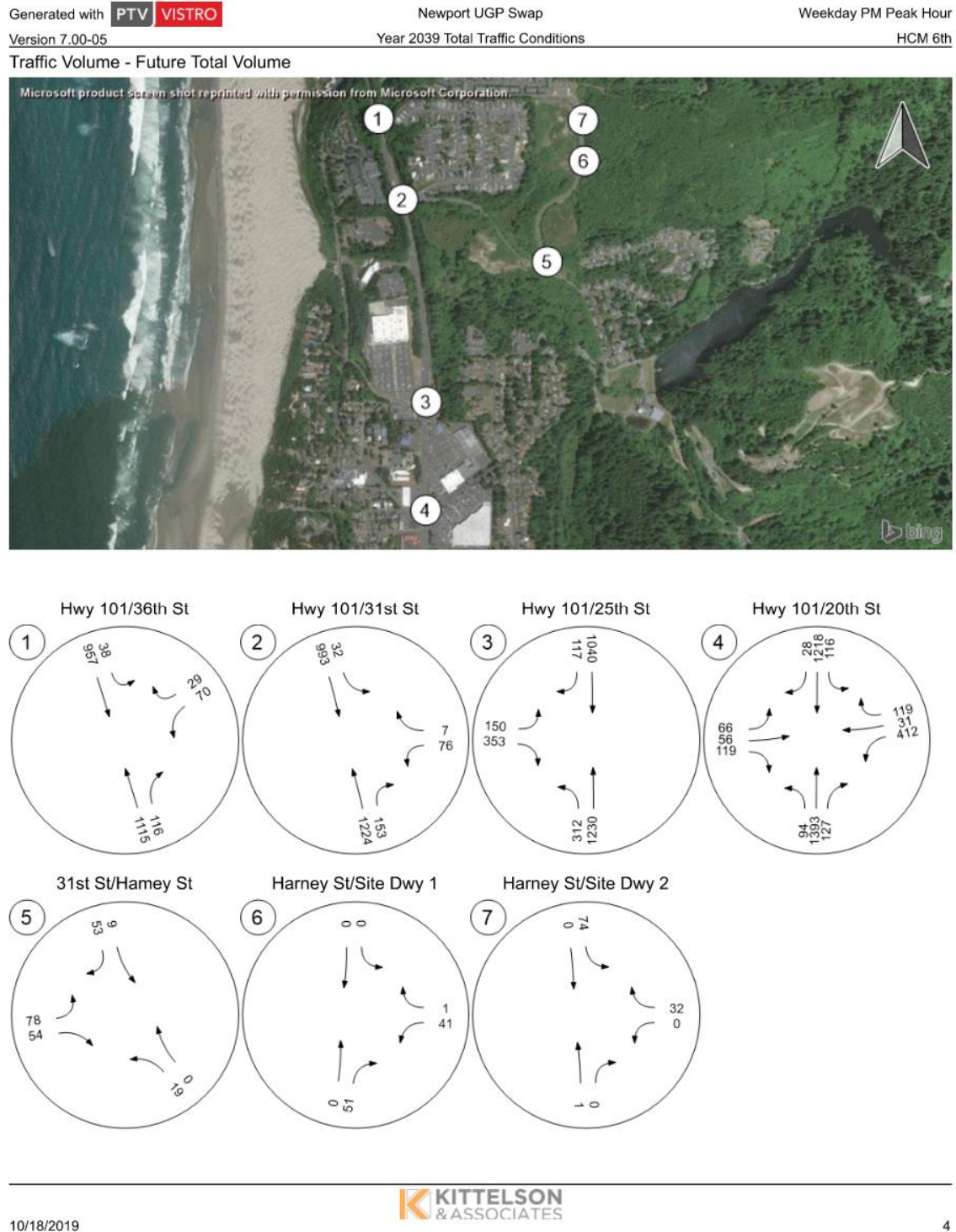


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Figure 10 – 2040 Traffic Volumes (w/ Proposed Residential Zoning), Weekday PM Peak Hour



Year 2040 Intersection Operation Deficiencies and Mitigation Measures

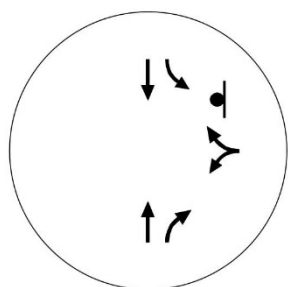
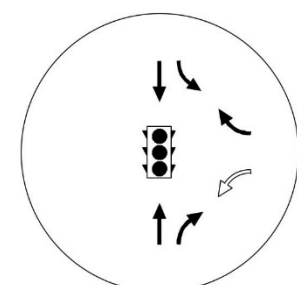
As noted in Table 8, the inclusion of R-2 Medium Density Single Family Residential zoning on the 40 acres is forecast to result in a measurable degradation of the four US 101 study intersections when compared to the 2040 Background Conditions analysis. Therefore, per the TPR, the proposed land exchange has the potential to create a significant effect on the supporting transportation infrastructure. The following sections identify potential mitigation measures that could be considered to address forecast operations.

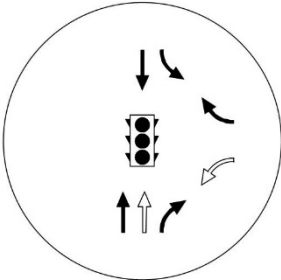
US 101/NE 36th Street Intersection

The westbound approach at the unsignalized US 101/NE 36th Street intersection is projected to exceed the mobility target during the weekday AM peak hour and operate well over capacity during the weekday PM peak hour. In recognition of these findings, the following investigation was performed:

- A signal warrant analysis found that the intersection is forecast to meet the volume-based planning warrants for a traffic signal.
- Given that signalization of the intersection is already identified in the Newport TSP, mitigation scenarios were limited to signalization and potential roadway widening options as summarized in Table 9 below.

Table 9 – US 101/NE 36th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 36 th Street Intersection		Weekday AM Peak Hour			Weekday PM Peak Hour						
Under Existing Unsignalized Intersection Configurations											
		Critical Westbound Approach V/C = 0.91			Critical Westbound Approach V/C = 1.75						
Mitigation Option #1 – Signalization w/separate left- and right-turn lanes on NE 36 th Street											
		V/C = 0.73	Approach	Lane	95 th Queue	V/C = 0.88	Approach	Lane	95 th Queue		
WB			LT	75	WB			LT	50		
			RT	25				RT	25		
SB			TH	200	SB			TH	100		
			LT	25				LT	25		
NB			TH	100	NB			TH	900		
			RT	25				RT	25		

US 101/NE 36 th Street Intersection		Weekday AM Peak Hour			Weekday PM Peak Hour			
Mitigation Option #2 – Signalization w/separate left- and right-turn lanes on NE 36th Street and a second northbound lane on US 101								
	V/C = 0.73	Approach	Lane	95 th Queue	V/C = 0.78	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	25
			RT	25			RT	25
		SB	TH	250		SB	TH	75
			LT	25			LT	25
		NB	TH	50		NB	TH	100
	RT		50	RT	100			

Note: Hollow arrows represent assumed lane configurations

As shown in Table 9, Mitigation Scenario #1 involves the signalization of the intersection along with widening for separate left- and right-turn lanes on the NE 36th Street approach. While this scenario would restore working capacity to the intersection (0.88), it would still operate above the 0.80 mobility target during the weekday PM peak hour. As such, Mitigation Scenario #2 assessed a widening of the critical northbound US 101 approach to include a second northbound through lane. This additional US 101 widening coupled with all the improvements under Mitigation Scenario #1 would provide sufficient capacity (0.78) to meet the 0.80 mobility target. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

Summary of US 101/NE 36th Street Intersection Mitigation and Potential Alternative Mobility Targets

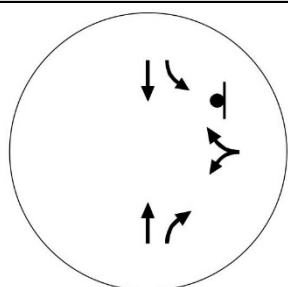
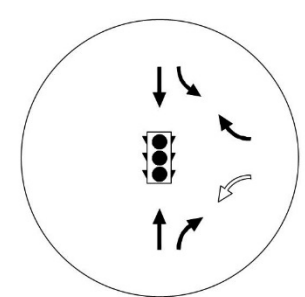
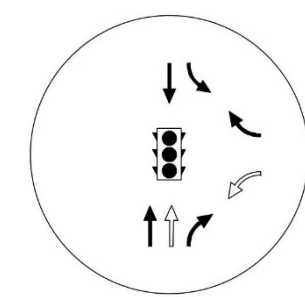
The analysis in Table 9 shows that without traffic control and widening improvements, the US 101/NE 36th Street intersection will operate over capacity. With the first level of intersection improvements in place (i.e. signalization w/separate left- and right-turn lanes on NE 36th Street), working capacity will be restored to the intersection, but it would still operate above the ODOT mobility target during the weekday PM peak hour. Given that the intersection will require a significant additional enhancement (a second northbound lane on US 101) to fully meet the 0.80 mobility target, the City of Newport may want to consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.90 or higher mobility target during 30th highest hour conditions or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets under the more realistic and achievable Mitigation Scenario #1.

US 101/NE 31st Street Intersection

The westbound approach at the unsignalized US 101/NE 31st Street intersection is projected to operate over capacity during the weekday AM and PM peak hours. In recognition of these findings, the following investigation was performed:

- A signal warrant analysis found that the intersection is forecast to meet the volume-based planning warrants for a traffic signal.
- Given the context and constraints of the study area, mitigation scenarios were limited to signalization and potential roadway widening options as summarized in Table 10 below.

Table 10 – US 101/NE 31st Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 31 st Street Intersection		Weekday AM Peak Hour			Weekday PM Peak Hour			
Under Existing Unsignalized Intersection Configurations								
	Critical Westbound Approach V/C = 1.11				Critical Westbound Approach V/C = 1.69			
Mitigation Option #1 – Signalization w/separate left- and right-turn lanes on NE 31 st Street								
	V/C = 0.79	Approach	Lane	95 th Queue	V/C = 0.95	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	50
			RT	25			RT	25
		SB	TH	400		SB	TH	125
			LT	25			LT	25
		NB	TH	100		NB	TH	1,300
			RT	25			RT	25
Mitigation Option #2 – Signalization w/separate left- and right-turn lanes on NE 31 st Street and a second northbound lane on US 101								
	V/C = 0.79	Approach	Lane	95 th Queue	V/C = 0.79	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	50
			RT	25			RT	25
		SB	TH	400		SB	TH	100
			LT	25			LT	25
		NB	TH	50		NB	TH	125
			RT	50			RT	25

Note: Hollow arrows represent assumed lane configurations

As shown in Table 10, Mitigation Scenario #1 involves the signalization of the intersection along with widening for separate left- and right-turn lanes on the NE 31st Street approach. While this scenario would restore some capacity to the intersection (0.95), it would still operate well above the 0.80 mobility target during the weekday PM peak hour. As such, Mitigation Scenario #2 assessed a widening of the critical northbound US 101 approach to include a second northbound through lane. This additional widening coupled with all the improvements under Mitigation Scenario #1 would provide sufficient capacity (0.79) to meet the 0.80 mobility target. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

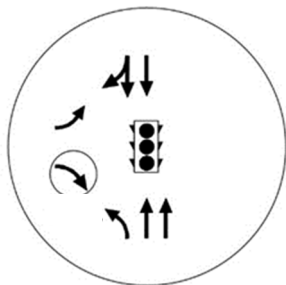
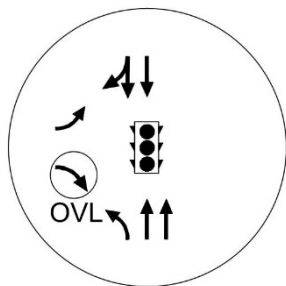
Summary of US 101/NE 31st Street Intersection Mitigation and Potential Alternative Mobility Targets

The analysis in Table 10 shows that without traffic control and physical improvements, the US 101/NE 31st Street intersection will operate over capacity. With the first level of intersection improvements in place (i.e. signalization w/separate left- and right-turn lanes on NE 31st Street), some capacity will be restored to the intersection, but it would still operate well above the ODOT mobility target during the weekday PM peak hour. Given that the intersection will require a significant additional enhancement (a second northbound lane on US 101) to fully meet the 0.80 mobility target, the City of Newport may want to consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.95 or higher mobility target during 30th highest hour conditions, or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets under the more realistic and achievable Mitigation Scenario #1.

US 101/NE 25th Street Intersection

The US 101/NE 25th Street intersection is forecast to operate at volume-to-capacity ratio of 0.94 during the weekday PM peak hour which exceeds the critical 0.92 volume-to-capacity ratio under background conditions. In recognition of this finding, a mitigation scenario was evaluated that involves the addition of right-turn overlap phasing to the eastbound right-turn lane. As summarized in Table 11, this relatively simple and inexpensive signal modification will significantly improve the intersection to an acceptable 0.76 volume-to-capacity ratio. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

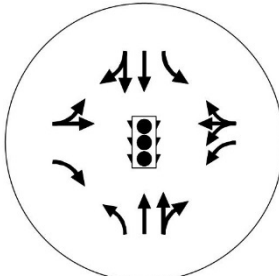
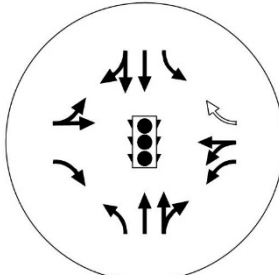
Table 11 - US 101/NE 25th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 25 th Street Intersection		Weekday AM Peak Hour			Weekday PM Peak Hour				
Under Existing Intersection Configurations									
		V/C = 0.59			V/C = 0.94				
Mitigation – Add overlap phasing to the eastbound right-turn movement									
		V/C = 0.56	Approach	Lane	95 th Queue	V/C = 0.76	Approach	Lane	95 th Queue
EB	LT		75	EB	LT		200		
	RT		50		RT		350		
SB	TH		275	SB	TH		675		
NB	TH		175	NB	TH		350		
	LT	50	LT		475				

US 101/NE 20th Street Intersection

The US 101/NE 20th Street intersection is forecast to operate at volume-to-capacity ratio of 0.95 during the weekday PM peak hour which exceeds the critical 0.92 volume-to-capacity ratio under background conditions. In recognition of this finding, a mitigation scenario was evaluated that involves the addition of right-turn overlap phasing to the eastbound right-turn lane and the addition of a separate westbound right-turn lane. As summarized in Table 12, this signal and signal timing modification will improve the intersection to an acceptable 0.89 volume-to-capacity ratio. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

Table 12 - US 101/NE 20th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 31 st Street Intersection	Weekday AM Peak Hour	Weekday PM Peak Hour						
Under Existing Intersection Configurations								
	V/C = 0.58	V/C = 0.95						
Mitigation Option #1 – Add overlap phasing to the eastbound right-turn movement and add a separate westbound right-turn lane								
	V/C = 0.58	Approach	Lane	95 th Queue	V/C = 0.89	Approach	Lane	95 th Queue
		EB	LT/TH	50		EB	LT/TH	200
			RT	25			RT	150
		WB	LT	125		WB	LT	300
			LT/TH	150			LT/TH	300
			RT	50			RT	175
		SB	TH/RT	350		SB	TH/RT	625
			LT	75			LT	250
		NB	LT	50		NB	LT	175
			TH/RT	275			TH/RT	950

Note: Hollow arrows represent assumed lane configurations

Summary of US 101/NE 20th Street Intersection Mitigation and Potential Alternative Mobility Targets

The analysis in Table 12 shows that without traffic control and physical improvements, the US 101/NE 20th Street intersection will operate over the 0.92 background volume-to-capacity ratio and over the 0.90 mobility target. With the identified intersection improvements in place (i.e. eastbound right-turn

overlap phasing and a separate westbound right-turn lane on NE 20th Street), some capacity will be restored to the intersection. However, given that the westbound right-turn lane will likely involve right-of-way impacts to the adjacent parcel, the City of Newport may consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.95 or higher mobility target during 30th highest hour conditions, or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets without the costly and impactful right-turn lane improvement.

Alternative Trip Routing Scenario Using Big Creek Road

At the request of the City of Newport, an alternative operations scenario was performed that assumes significant upgrades to Big Creek Road (widened to bi-directional travel and modernized to accommodate multi-modal use) and an associated higher percentage of local trips using this facility as an alternative to US 101. To address this request, a reasonable portion of the localized background growth and the new trips generated by urbanization of the 40 acres was reassigned to Big Creek Road. In summary, each of the study intersections that was previously identified as either operating over capacity or over their respective mobility targets would continue to operate over capacity or over their respective mobility targets. While Big Creek Road would provide some parallel benefit (particularly for trips to/from the local public schools), that benefit has its limitations given the roadways circuitous alignment through established residential neighborhoods and its lack of connections to major retail centers along the US 101 corridor.

TRANSPORTATION PLANNING RULE COMPLIANCE

This section addresses the Oregon Administrative Rule Section 660-12-0060 of the Oregon Transportation Planning Rule (TPR) requirements for the proposed zone change.

TRANSPORTATION PLAN RULE

OAR Section 660-12-0060 Plan and Land Use Regulation Amendments of the TPR sets forth the criteria for evaluating plan and land use regulation amendments. The criteria establish the determination of significant effect on a transportation system resulting from a land use action; where a significant effect is identified, the criteria establish the means for achieving compliance. The relevant portion of this section of the TPR is reproduced below in italics followed by the response for this project in standard text.

660-12-0060 Plan and Land Use Regulation Amendments

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

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

Response: The proposed land exchange and residential zoning of the 40-acre site will not require or result in any changes to the functional classification of any transportation facility in the vicinity of the site.

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

Response: The proposed land exchange and residential zoning of the 40-acre site will not outright require changes to the standards that implement the functional classification system. However, if desired by the City of Newport and ODOT, alternative mobility targets could potentially be adopted to address the operational impacts of the proposed land exchange. See subsequent responses to the (c) below.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to,

transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Response: The proposed land exchange and residential zoning of the 40-acre site would result in future traffic volumes that are consistent with the functional classifications of the roadways in the study area.

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Response: The proposed land exchange and residential zoning of the 40-acre site would degrade operations of the US 101/NE 36th Street and US 101/NE 31st Street intersections below their respective mobility targets. Signalization and the addition of travel lanes on US 101, NE 36th Street, and NE 31st Street would improve forecast intersection operations back to acceptable levels. Alternatively, signalization, widening to the NE 36th Street and NE 31st Street approaches, and potential adoption of alternative mobility targets would allow operations to be measured at acceptable levels without the significant and costly widening of US 101.

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Response: Without any mitigation measures in place, the proposed land exchange and residential zoning of the 40-acre site would result in further degradation of failing operations at the US 101/NE 25th Street and US 101/NE 20th Street intersections. Modification of current signal phasing would restore the US 101/NE 25th Street intersection to a v/c ratio that is better than the respective mobility target. Modification of current signal phasing and the installation of a separate westbound right-turn lane would restore the US 101/NE 20th Street intersection to a v/c ratio that is better than the respective mobility target. Alternatively, potential adoption of alternative mobility targets would allow operations to be measured at acceptable levels without the significant and costly widening of the westbound NE 20th Street approach.

CONCLUSIONS

Based on the long-term traffic impact analyses detailed in this report, the proposed land exchange and residential zoning of the 40-acre site has the potential to significantly affect the surrounding transportation system. As mitigation for this potential significant effect and to comply with the TPR (OAR Section 660-12-0060), the following intersection improvements can be considered:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects:
 - Widen the westbound NE 36th Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions:
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Matt Hughart, AICP
Principal Planner



Susan Wright, P.E.
Principal Engineer



Ali Razmpa
Transportation Analyst

Appendix A Season Adjustment Calculations

SEASONAL ADJUSTMENT CALCULATIONS

Version 2 of the APM identifies three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATR) located in select locations throughout the State Highway System that collect traffic data 24-hours a day/365 days a year. Within the study area, ATR #21-009 is located on US 101 at NW 25th Street. Given this location is within the study area, the On-Site ATR Method was used to adjust the intersection turning movement counts to 30th highest hour conditions. Since the traffic counts were taken in early June, an average of May and June data was used. The proposed seasonal adjustment factor calculations for ATR #21-009 is summarized in the Table below.

	2013	2014	2015	2016	2017	Avg
Peak Month (August)	127%	129%	122%	124%	123%	125%
Count Month (June)	108%	110%	113%	113%	113%	112%
Count Month (May)	101	100	100	104	104	102%

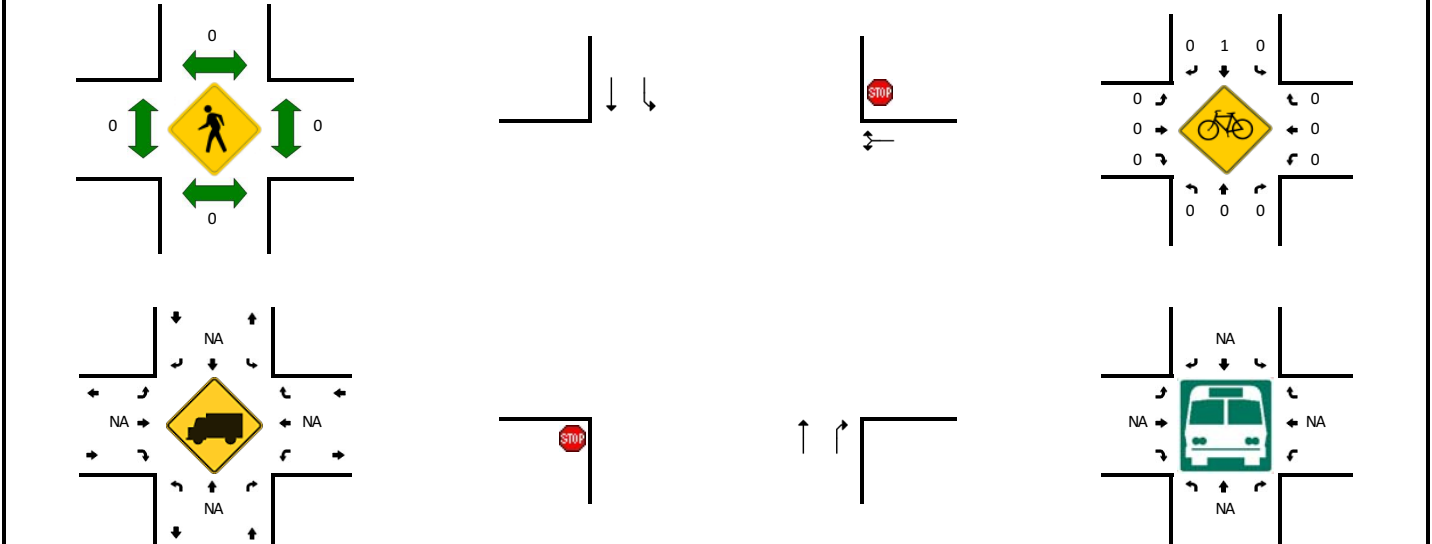
- The average peak month (August) is: $(127\% + 124\% + 123\%) / 3 = 125\%$
- The average count month (June) is: $(110\% + 113\% + 113\%) / 3 = 112\%$
- The average count month (May) is: $(101\% + 100\% + 104\%) / 3 = 102\%$
- The average of June and May is: $(112\% + 102\%) / 2 = 107\%$
- The season adjustment factor is $125\% / 107\% = \mathbf{1.17}$

Appendix B Traffic Counts

LOCATION: Hwy 101 -- NE 36th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004601
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



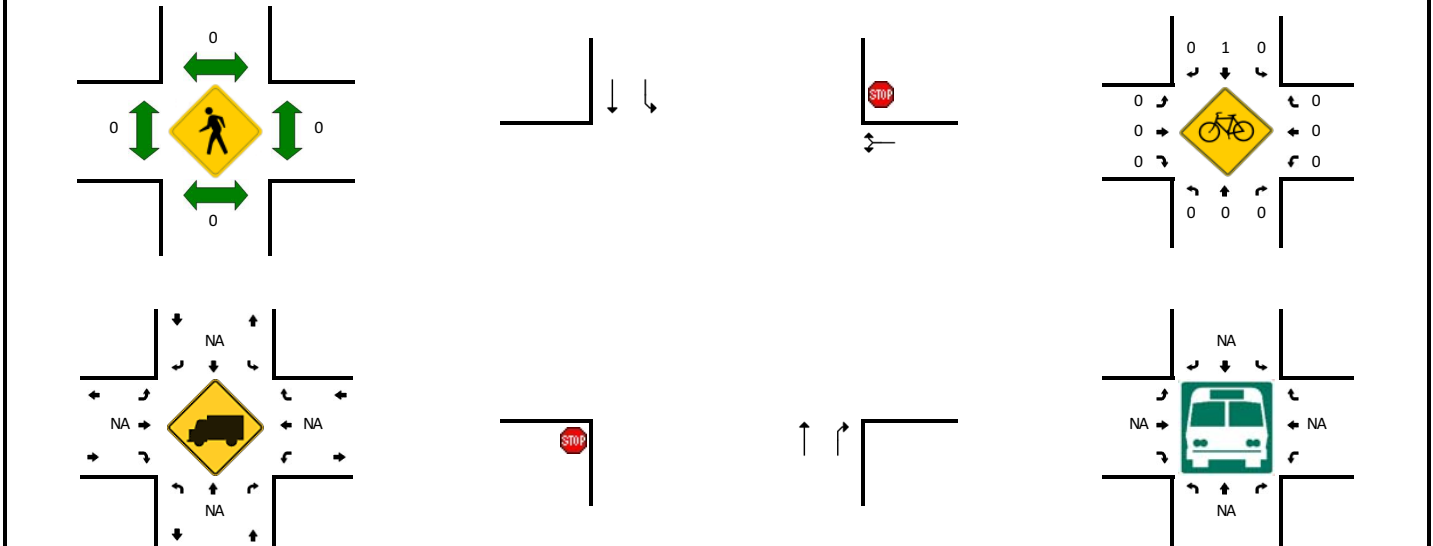
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 36th St (Eastbound)				NE 36th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	29	0	0	0	33	0	0	0	0	0	0	3	0	2	0	67	
7:05 AM	0	24	1	0	0	23	0	0	0	0	0	0	1	0	0	0	49	
7:10 AM	0	17	0	0	0	26	0	0	0	0	0	0	0	0	0	0	43	
7:15 AM	0	31	1	0	0	42	0	0	0	0	0	0	4	0	0	0	78	
7:20 AM	0	33	3	0	1	53	0	0	0	0	0	0	5	0	1	0	96	
7:25 AM	0	27	0	0	0	45	0	0	0	0	0	0	6	0	0	0	78	
7:30 AM	0	28	0	0	1	59	0	0	0	0	0	0	5	0	0	0	93	
7:35 AM	0	27	2	0	0	57	0	0	0	0	0	0	4	0	2	0	92	
7:40 AM	0	19	2	0	0	67	0	0	0	0	0	0	5	0	0	0	93	
7:45 AM	0	37	1	0	2	88	0	0	0	0	0	0	4	0	0	0	132	
7:50 AM	0	27	0	0	0	67	0	0	0	0	0	0	1	0	0	0	95	
7:55 AM	0	33	4	0	0	69	0	0	0	0	0	0	8	0	1	0	115	1031
8:00 AM	0	30	1	0	0	40	0	0	0	0	0	0	3	0	0	0	74	1038
8:05 AM	0	39	3	0	1	41	0	0	0	0	0	0	2	0	0	0	86	1075
8:10 AM	0	35	1	0	0	46	0	0	0	0	0	0	2	0	0	0	84	1116
8:15 AM	0	39	1	0	0	32	0	0	0	0	0	0	2	0	0	0	74	1112
8:20 AM	0	35	1	0	0	31	0	0	0	0	0	0	5	0	0	0	72	1088
8:25 AM	0	40	4	0	1	27	0	0	0	0	0	0	2	0	0	0	74	1084
8:30 AM	0	32	1	0	1	48	0	0	0	0	0	0	6	0	1	0	89	1080
8:35 AM	0	38	0	0	1	61	0	0	0	0	0	0	0	0	0	0	100	1088
8:40 AM	0	25	3	0	1	49	0	0	0	0	0	0	3	0	0	0	81	1076
8:45 AM	0	39	0	0	0	36	0	0	0	0	0	0	3	0	1	0	79	1023
8:50 AM	0	34	1	0	0	43	0	0	0	0	0	0	0	0	1	0	79	1007
8:55 AM	0	27	0	0	0	32	0	0	0	0	0	0	4	0	1	0	64	956
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	388	20	0	8	896	0	0	0	0	0	0	52	0	4	0	1368	
Heavy Trucks	0	20	0	0	0	60	0	0	0	0	0	0	0	0	0	0	80	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004603
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM

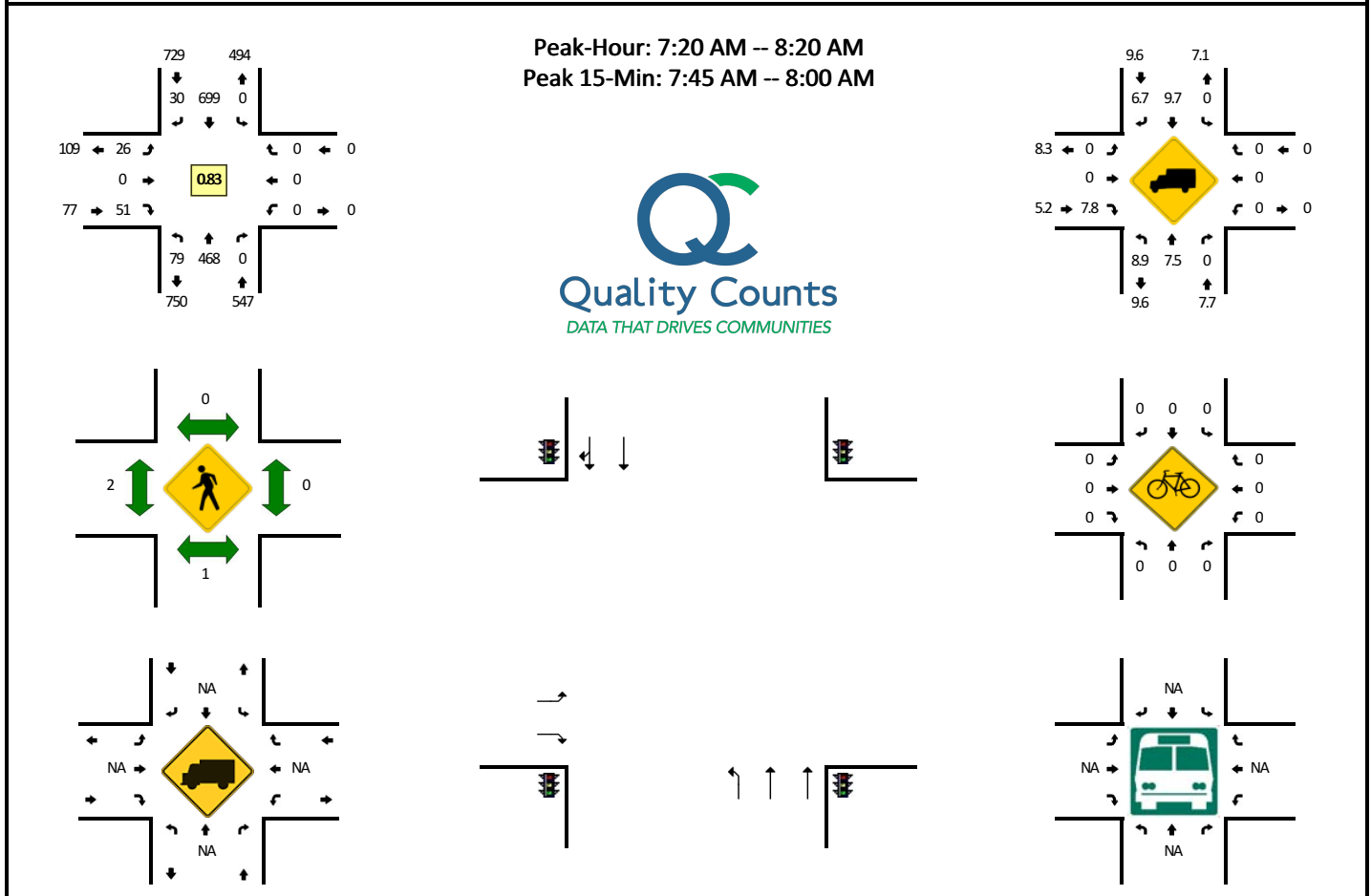


5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	32	0	0	0	35	0	0	0	0	0	0	2	0	1	0	70	
7:05 AM	0	22	2	0	0	24	0	0	0	0	0	0	1	0	0	0	49	
7:10 AM	0	16	2	0	1	26	0	0	0	0	0	0	2	0	0	0	47	
7:15 AM	0	35	1	0	0	46	0	0	0	0	0	0	2	0	0	0	84	
7:20 AM	0	33	0	0	0	57	0	0	0	0	0	0	2	0	0	0	92	
7:25 AM	0	30	2	0	0	52	0	0	0	0	0	0	4	0	0	0	88	
7:30 AM	0	27	0	0	0	64	0	0	0	0	0	0	3	0	1	0	95	
7:35 AM	0	27	2	0	3	58	0	0	0	0	0	0	5	0	0	0	95	
7:40 AM	0	25	3	0	1	71	0	0	0	0	0	0	5	0	0	0	105	
7:45 AM	0	34	0	0	0	92	0	0	0	0	0	0	5	0	1	0	132	
7:50 AM	0	25	7	0	0	67	0	0	0	0	0	0	4	0	0	0	103	
7:55 AM	0	37	4	0	4	74	0	0	0	0	0	0	3	0	1	0	123	1083
8:00 AM	0	32	2	0	1	42	0	0	0	0	0	0	2	0	1	0	80	1093
8:05 AM	0	38	4	0	0	43	0	0	0	0	0	0	6	0	0	0	91	1135
8:10 AM	0	41	1	0	1	47	0	0	0	0	0	0	0	0	0	0	90	1178
8:15 AM	0	38	2	0	3	31	0	0	0	0	0	0	3	0	0	0	77	1171
8:20 AM	0	34	3	0	2	33	0	0	0	0	0	0	0	0	0	0	72	1151
8:25 AM	0	44	0	0	1	29	0	0	0	0	0	0	3	0	0	0	77	1140
8:30 AM	0	36	0	0	1	53	0	0	0	0	0	0	2	0	0	0	92	1137
8:35 AM	0	37	3	0	1	60	0	0	0	0	0	0	3	0	0	0	104	1146
8:40 AM	0	25	2	0	1	51	0	0	0	0	0	0	1	0	0	0	80	1121
8:45 AM	0	40	0	1	0	39	0	0	0	0	0	0	5	0	0	0	85	1074
8:50 AM	0	37	1	0	0	43	0	0	0	0	0	0	2	0	0	0	83	1054
8:55 AM	0	28	3	0	1	35	0	0	0	0	0	0	4	0	0	0	71	1002
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	384	44	0	16	932	0	0	0	0	0	0	48	0	8	0	1432	
Heavy Trucks	0	20	0	0	0	60	0	0	0	0	0	0	0	0	0	0	80	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NW 25th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004605
DATE: Wed, Jun 5 2019



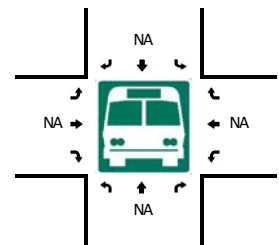
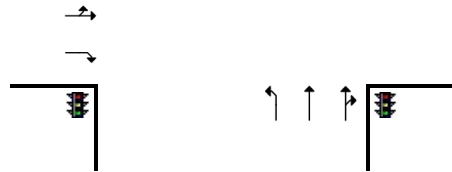
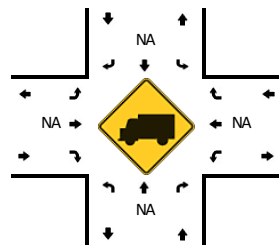
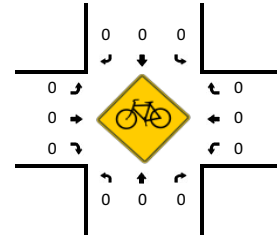
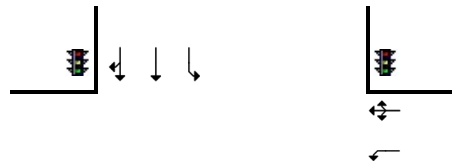
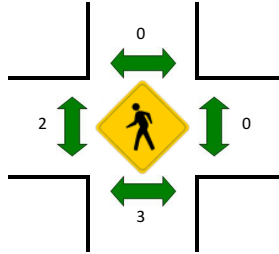
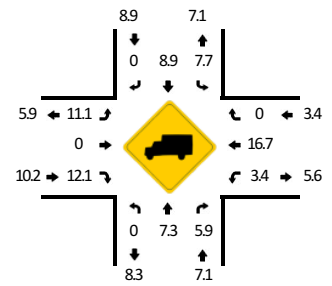
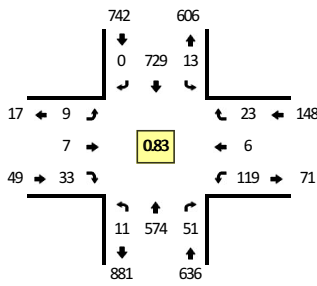
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NW 25th St (Eastbound)				NW 25th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	29	0	0	0	34	3	0	1	0	3	0	0	0	0	0	72	
7:05 AM	4	23	0	0	0	25	0	0	3	0	0	0	0	0	0	0	55	
7:10 AM	2	20	0	0	0	24	1	0	0	0	7	0	0	0	0	0	54	
7:15 AM	1	35	0	0	0	45	3	0	1	0	4	0	0	0	0	0	89	
7:20 AM	4	37	0	0	0	59	1	0	4	0	2	0	0	0	0	0	107	
7:25 AM	5	22	0	0	0	47	2	0	2	0	8	0	0	0	0	0	86	
7:30 AM	5	31	0	0	0	67	4	0	0	0	3	0	0	0	0	0	110	
7:35 AM	6	29	0	0	0	54	2	0	4	0	6	0	0	0	0	0	101	
7:40 AM	6	41	0	0	0	78	4	0	0	0	6	0	0	0	0	0	135	
7:45 AM	7	42	0	0	0	85	2	0	2	0	7	0	0	0	0	0	145	
7:50 AM	7	33	0	0	0	72	2	0	2	0	1	0	0	0	0	0	117	
7:55 AM	6	51	0	0	0	74	2	0	7	0	4	0	0	0	0	0	144	1215
8:00 AM	5	38	0	0	0	37	2	0	2	0	5	0	0	0	0	0	89	1232
8:05 AM	9	57	0	0	0	46	5	0	1	0	3	0	0	0	0	0	121	1298
8:10 AM	3	41	0	0	0	47	2	0	1	0	2	0	0	0	0	0	96	1340
8:15 AM	16	46	0	0	0	33	2	0	1	0	4	0	0	0	0	0	102	1353
8:20 AM	2	33	0	0	0	28	2	0	2	0	3	0	0	0	0	0	70	1316
8:25 AM	7	39	0	0	0	32	3	0	2	0	4	0	0	0	0	0	87	1317
8:30 AM	3	40	0	0	0	54	2	0	3	0	7	0	0	0	0	0	109	1316
8:35 AM	12	33	0	0	0	53	6	0	3	0	9	0	0	0	0	0	116	1331
8:40 AM	8	26	0	0	0	50	8	0	2	0	7	0	0	0	0	0	101	1297
8:45 AM	8	40	0	0	0	41	3	0	2	0	12	0	0	0	0	0	106	1258
8:50 AM	12	34	0	0	0	44	3	0	2	0	5	0	0	0	0	0	100	1241
8:55 AM	6	40	0	0	0	34	3	0	0	0	10	0	0	0	0	0	93	1190
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	80	504	0	0	0	924	24	0	44	0	48	0	0	0	0	0	1624	
Heavy Trucks	4	20	0	0	0	64	0	0	0	0	4	0	0	0	0	0	92	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 20th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004607
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



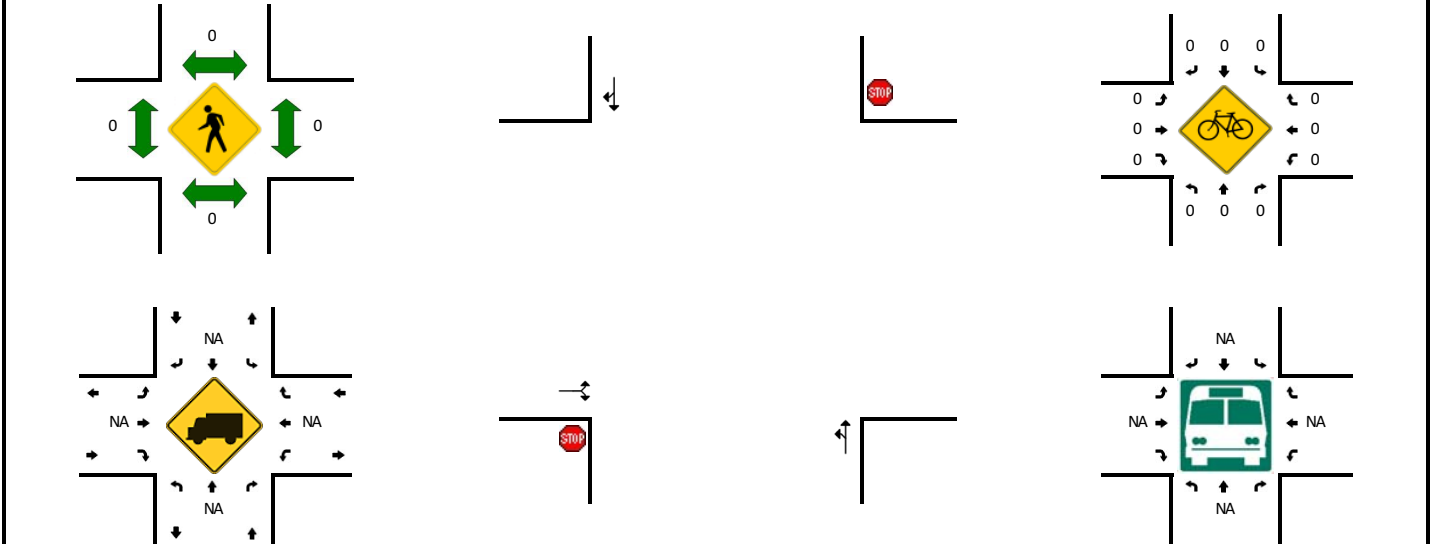
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 20th St (Eastbound)				NE 20th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	31	4	0	2	35	0	0	1	0	2	0	3	0	0	0	78	
7:05 AM	2	28	2	0	0	28	0	0	1	2	0	0	4	0	1	0	68	
7:10 AM	1	22	0	0	2	30	1	0	0	0	3	0	6	0	1	0	66	
7:15 AM	2	37	2	0	0	46	0	0	0	0	1	0	8	1	0	0	97	
7:20 AM	1	44	4	0	0	46	0	0	0	1	4	0	13	0	2	0	115	
7:25 AM	1	22	3	0	1	63	0	0	1	0	1	0	15	1	1	0	109	
7:30 AM	1	42	5	0	3	65	0	0	1	0	2	0	9	0	2	0	130	
7:35 AM	0	32	2	0	2	61	0	0	1	0	2	0	11	1	1	0	113	
7:40 AM	1	50	3	0	0	70	0	0	1	1	1	0	9	0	1	0	137	
7:45 AM	0	55	2	0	1	88	0	0	0	0	3	0	11	0	3	0	163	
7:50 AM	0	47	5	0	0	77	0	0	2	2	4	0	11	1	0	0	149	
7:55 AM	3	55	3	0	0	80	0	0	1	1	5	0	8	0	6	0	162	1387
8:00 AM	1	47	5	0	2	42	0	0	1	2	1	0	11	1	4	0	117	1426
8:05 AM	0	74	5	0	2	45	0	0	0	0	5	0	2	0	0	0	133	1491
8:10 AM	2	42	2	0	1	54	0	0	0	0	4	0	7	1	2	0	115	1540
8:15 AM	1	64	12	0	1	38	0	0	1	0	1	0	12	1	1	0	132	1575
8:20 AM	2	33	2	0	1	30	1	0	1	1	1	0	15	0	4	0	91	1551
8:25 AM	3	40	6	0	2	21	0	0	2	1	1	0	11	0	1	0	88	1530
8:30 AM	0	40	1	0	3	58	1	0	2	0	2	0	5	1	2	0	115	1515
8:35 AM	2	47	7	0	0	60	1	0	1	1	6	0	13	0	1	0	139	1541
8:40 AM	4	35	2	0	4	42	0	0	0	4	8	0	9	1	4	0	113	1517
8:45 AM	3	50	2	0	3	55	2	0	2	1	4	0	5	2	0	0	129	1483
8:50 AM	2	50	7	0	3	48	0	1	0	1	6	0	6	0	1	0	125	1459
8:55 AM	4	47	7	0	3	46	0	0	2	1	4	0	6	1	1	0	122	1419
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	628	40	0	4	980	0	0	12	12	48	0	120	4	36	0	1896	
Heavy Trucks	0	28	4	0	0	68	0	0	0	0	0	0	12	0	0	0	112	
Pedestrians	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	8	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: NE Harney St -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004609
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM



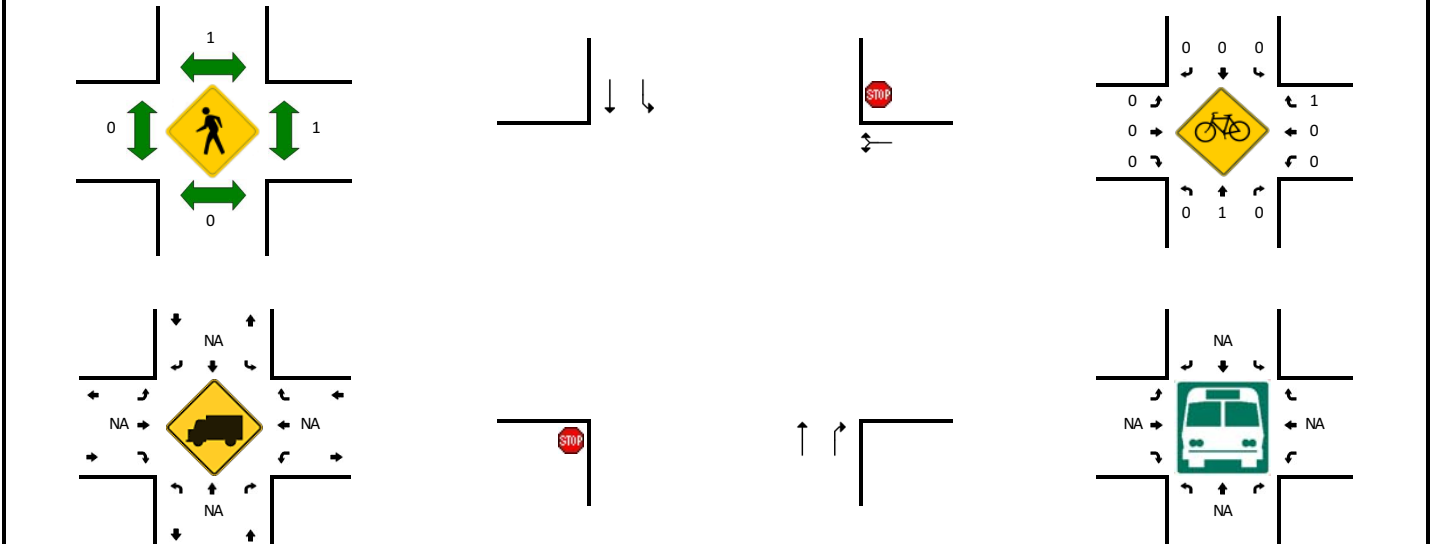
5-Min Count Period Beginning At	NE Harney St (Northbound)				NE Harney St (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
7:05 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	
7:10 AM	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	
7:15 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	
7:20 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:25 AM	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	6	
7:30 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6	
7:35 AM	4	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	9	
7:40 AM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	
7:45 AM	6	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	8	
7:50 AM	1	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	7	
7:55 AM	3	1	0	0	0	1	0	0	0	0	8	0	0	0	0	0	13	68
8:00 AM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	71
8:05 AM	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	7	75
8:10 AM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	73
8:15 AM	2	0	0	0	0	0	0	0	1	0	4	0	0	0	0	0	7	77
8:20 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	78
8:25 AM	2	1	0	0	0	2	0	0	0	0	3	0	0	0	0	0	8	80
8:30 AM	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	77
8:35 AM	1	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	6	74
8:40 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	71
8:45 AM	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	69
8:50 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	64
8:55 AM	1	0	0	0	0	1	0	0	1	0	3	0	0	0	0	0	6	57
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	40	4	0	0	0	16	0	0	0	0	52	0	0	0	0	0	112	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians		0				0					0			0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 36th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004602
DATE: Wed, Jun 5 2019

Peak-Hour: 4:05 PM -- 5:05 PM
 Peak 15-Min: 4:50 PM -- 5:05 PM

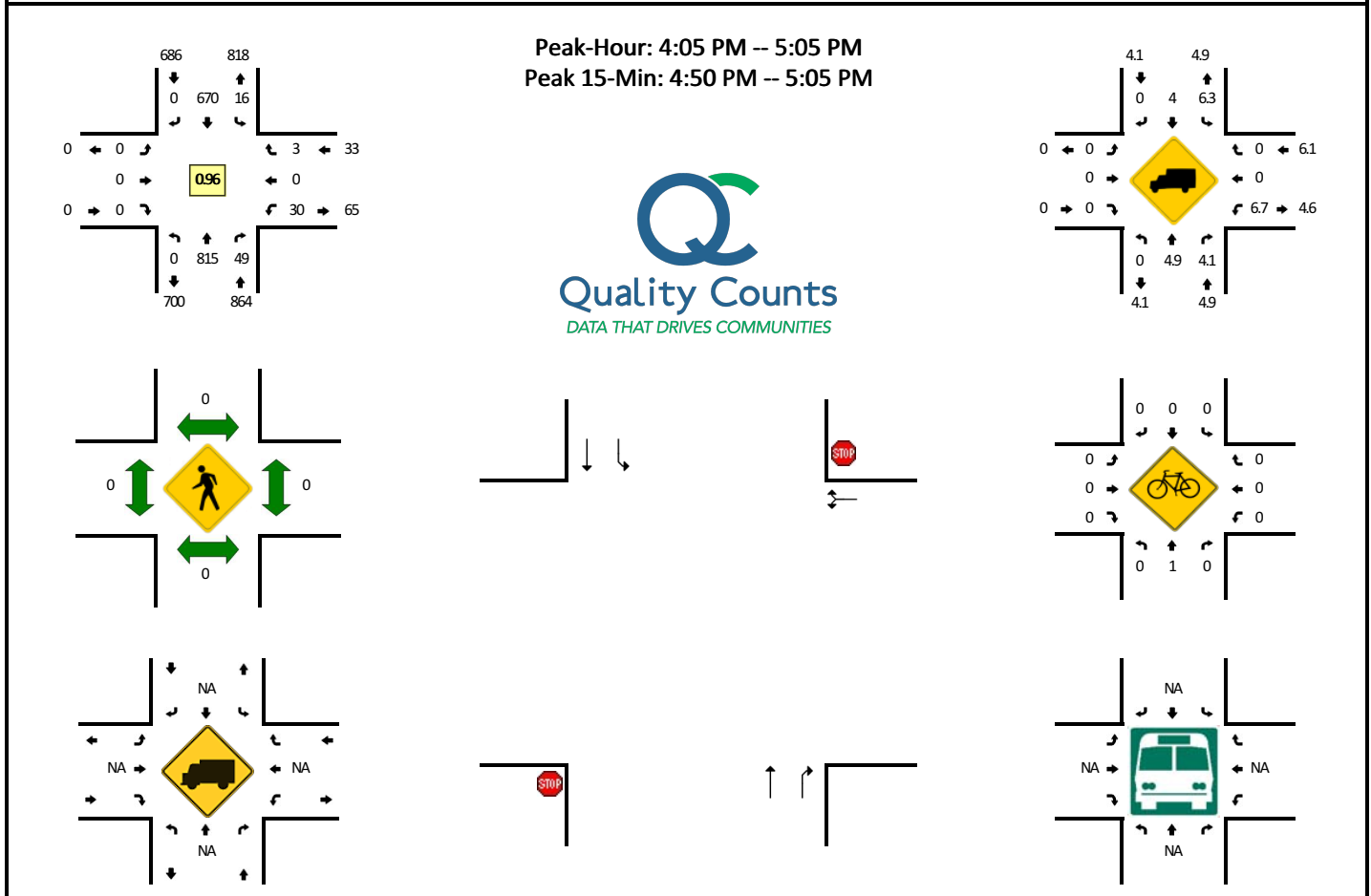


5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 36th St (Eastbound)				NE 36th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	59	2	0	0	64	0	0	0	0	0	0	3	0	1	0	129	
4:05 PM	0	72	3	0	0	56	0	0	0	0	0	0	2	0	1	0	134	
4:10 PM	0	64	3	0	0	60	0	0	0	0	0	0	0	0	0	0	127	
4:15 PM	0	57	1	0	0	58	0	0	0	0	0	0	0	0	0	0	116	
4:20 PM	0	63	3	0	0	57	0	0	0	0	0	0	0	0	1	0	124	
4:25 PM	0	63	5	0	2	56	0	0	0	0	0	0	1	0	1	0	128	
4:30 PM	0	66	2	0	0	47	0	0	0	0	0	0	0	0	1	0	116	
4:35 PM	0	72	4	0	0	44	0	0	0	0	0	0	4	0	0	0	124	
4:40 PM	0	57	2	0	0	67	0	0	0	0	0	0	1	0	2	0	129	
4:45 PM	0	67	3	0	0	48	0	0	0	0	0	0	3	0	0	0	121	
4:50 PM	0	71	3	0	1	71	0	0	0	0	0	0	1	0	0	0	147	
4:55 PM	0	60	1	0	2	41	0	1	0	0	0	0	2	0	0	0	107	1502
5:00 PM	0	77	2	0	0	68	0	0	0	0	0	0	1	0	0	0	148	1521
5:05 PM	0	65	2	0	0	52	0	0	0	0	0	0	4	0	0	0	123	1510
5:10 PM	0	64	4	0	0	45	0	0	0	0	0	0	0	0	0	0	113	1496
5:15 PM	0	49	3	0	1	47	0	0	0	0	0	0	0	0	0	0	100	1480
5:20 PM	0	55	5	0	2	43	0	0	0	0	0	0	2	0	0	0	107	1463
5:25 PM	0	63	3	0	0	60	0	0	0	0	0	0	2	0	2	0	130	1465
5:30 PM	0	60	5	0	0	43	0	0	0	0	0	0	2	0	1	0	111	1460
5:35 PM	0	66	7	0	2	57	0	0	0	0	0	0	0	0	0	0	132	1468
5:40 PM	0	53	6	0	1	61	0	0	0	0	0	0	2	0	0	0	123	1462
5:45 PM	0	40	3	0	0	45	0	0	0	0	0	0	0	0	1	0	89	1430
5:50 PM	0	53	1	0	0	45	0	0	0	0	0	0	2	0	2	0	103	1386
5:55 PM	0	49	1	0	1	21	0	0	0	0	0	0	2	0	1	0	75	1354
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	832	24	0	12	720	0	4	0	0	0	0	16	0	0	0	1608	
Heavy Trucks	0	48	0	0	0	32	0	0	0	0	0	0	0	0	0	0	80	
Pedestrians	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004604
DATE: Wed, Jun 5 2019

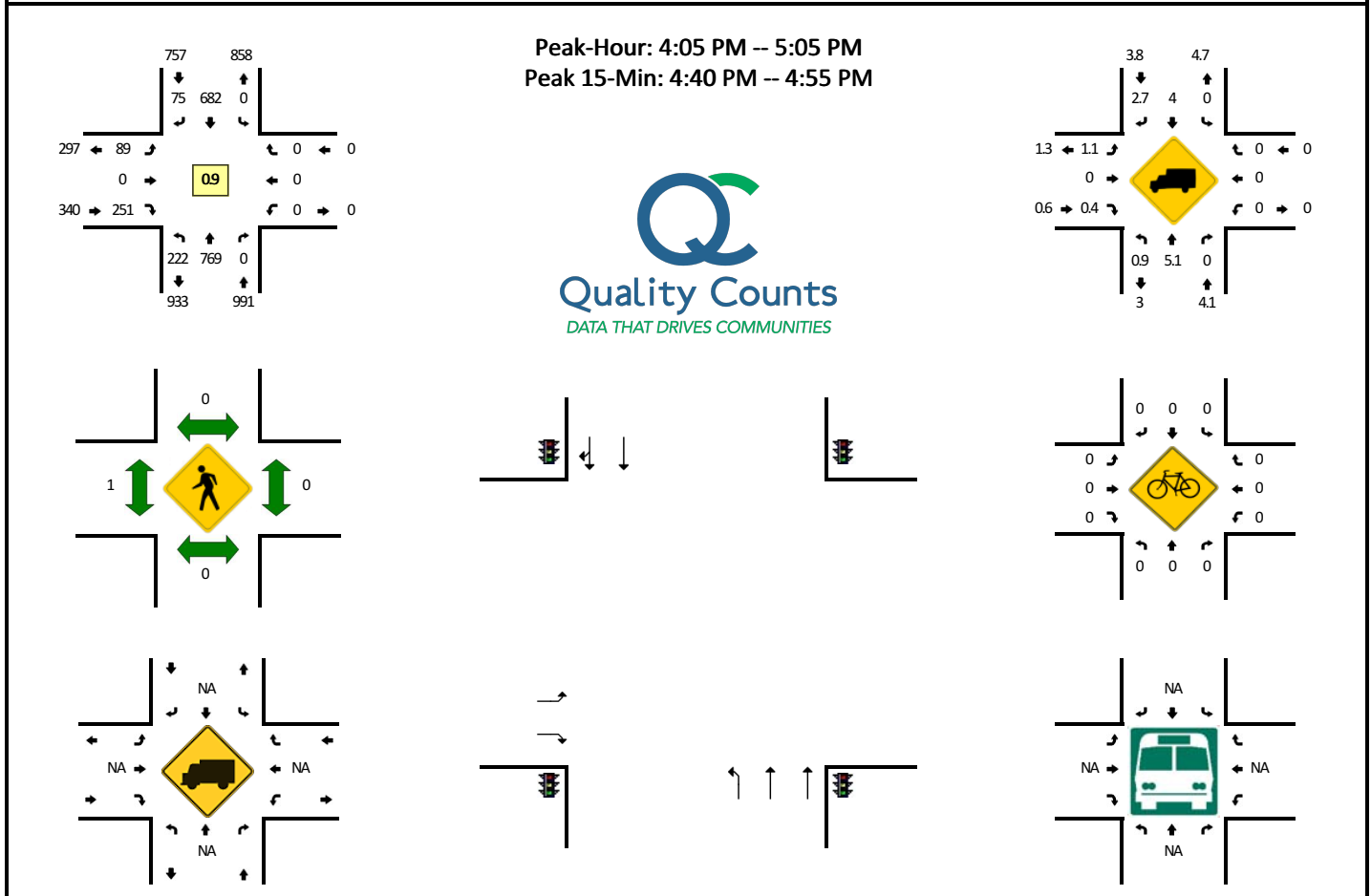


5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	63	4	0	2	65	0	0	0	0	0	0	0	0	3	0	137	
4:05 PM	0	73	3	0	1	57	0	0	0	0	0	0	0	1	0	0	135	
4:10 PM	0	68	9	0	1	59	0	0	0	0	0	0	0	3	0	0	140	
4:15 PM	0	57	6	0	3	54	0	0	0	0	0	0	0	3	0	0	123	
4:20 PM	0	63	3	0	2	54	0	0	0	0	0	0	0	6	0	0	128	
4:25 PM	0	72	3	0	2	55	0	0	0	0	0	0	0	2	0	0	134	
4:30 PM	0	71	4	0	1	46	0	0	0	0	0	0	0	0	0	0	122	
4:35 PM	0	67	4	0	0	48	0	0	0	0	0	0	0	2	0	1	122	
4:40 PM	0	61	3	0	0	68	0	0	0	0	0	0	0	5	0	0	137	
4:45 PM	0	76	0	0	2	48	0	0	0	0	0	0	0	2	0	1	129	
4:50 PM	0	66	3	0	2	71	0	0	0	0	0	0	0	0	0	1	143	
4:55 PM	0	65	7	0	0	43	0	0	0	0	0	0	0	3	0	0	118	1568
5:00 PM	0	76	4	0	2	67	0	0	0	0	0	0	0	3	0	0	152	1583
5:05 PM	0	64	5	0	0	56	0	0	0	0	0	0	0	2	0	1	128	1576
5:10 PM	0	67	8	0	0	45	0	0	0	0	0	0	0	4	0	1	125	1561
5:15 PM	0	52	9	0	1	46	0	0	0	0	0	0	0	0	0	1	109	1547
5:20 PM	0	58	4	0	1	44	0	0	0	0	0	0	0	1	0	1	109	1528
5:25 PM	0	70	9	0	3	57	0	0	0	0	0	0	0	2	0	0	141	1535
5:30 PM	0	63	5	0	0	45	0	0	0	0	0	0	0	1	0	0	114	1527
5:35 PM	0	83	4	0	1	57	0	0	0	0	0	0	0	3	0	0	148	1553
5:40 PM	0	46	5	0	6	58	0	0	0	0	0	0	0	2	0	0	117	1533
5:45 PM	0	50	3	0	0	44	0	0	0	0	0	0	0	2	0	1	100	1504
5:50 PM	0	50	4	0	1	46	0	0	0	0	0	0	0	0	0	0	101	1462
5:55 PM	0	47	4	0	0	23	0	0	0	0	0	0	0	4	0	1	79	1423
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	828	56	0	16	724	0	0	0	0	0	0	24	0	4	0	1652	
Heavy Trucks	0	48	4	0	4	28	0	0	0	0	0	0	4	0	0	0	88	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NW 25th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004606
DATE: Wed, Jun 5 2019

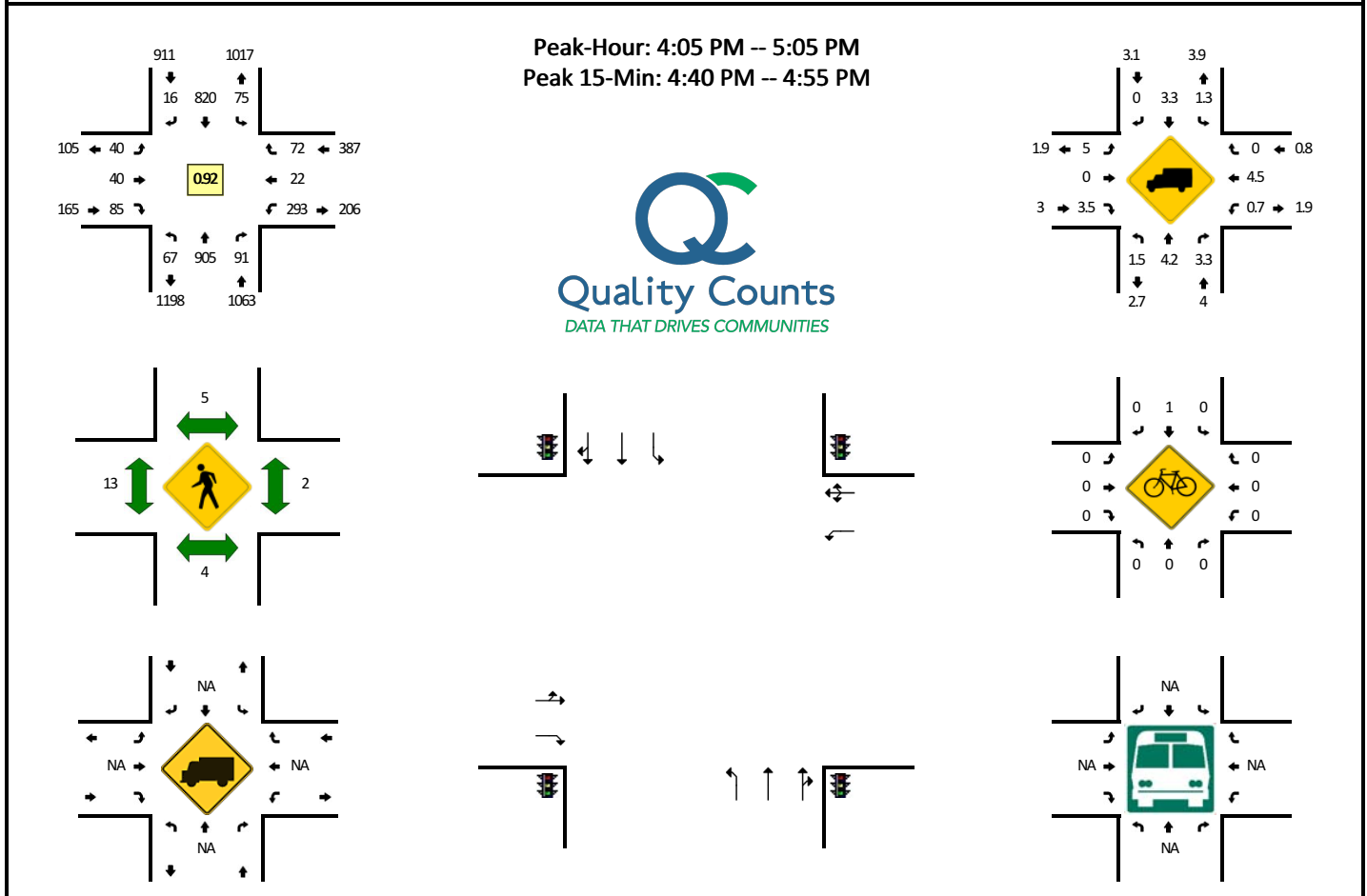


5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NW 25th St (Eastbound)				NW 25th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	13	75	0	0	0	53	8	0	9	0	9	0	0	0	0	0	167	
4:05 PM	18	51	0	0	0	46	7	0	13	0	22	0	0	0	0	0	157	
4:10 PM	13	75	0	0	0	55	8	0	1	0	16	0	0	0	0	0	168	
4:15 PM	14	53	0	0	0	59	8	0	7	0	19	0	0	0	0	0	160	
4:20 PM	17	72	0	0	0	61	3	0	7	0	20	0	0	0	0	0	180	
4:25 PM	18	57	0	0	0	41	6	0	9	0	27	0	0	0	0	0	158	
4:30 PM	12	76	0	0	0	45	3	0	5	0	20	0	0	0	0	0	161	
4:35 PM	33	55	0	0	0	52	4	0	10	0	8	0	0	0	0	0	162	
4:40 PM	17	57	0	0	0	80	10	0	9	0	24	0	0	0	0	0	197	
4:45 PM	29	67	0	0	0	63	7	0	4	0	28	0	0	0	0	0	198	
4:50 PM	13	74	0	0	0	66	8	0	8	0	16	0	0	0	0	0	185	
4:55 PM	22	45	0	0	0	39	6	0	12	0	27	0	0	0	0	0	151	2044
5:00 PM	16	87	0	0	0	75	5	0	4	0	24	0	0	0	0	0	211	2088
5:05 PM	19	54	0	0	0	42	4	0	10	0	23	0	0	0	0	0	152	2083
5:10 PM	14	73	0	0	0	51	3	0	13	0	18	0	0	0	0	0	172	2087
5:15 PM	24	42	0	0	0	47	0	0	13	0	16	0	0	0	0	0	142	2069
5:20 PM	17	73	0	0	0	50	6	0	3	0	21	0	0	0	0	0	170	2059
5:25 PM	16	62	0	0	0	48	7	0	5	0	18	0	0	0	0	0	156	2057
5:30 PM	10	78	0	0	0	45	5	0	8	0	17	0	0	0	0	0	163	2059
5:35 PM	22	64	0	0	0	43	12	0	10	0	14	0	0	0	0	0	165	2062
5:40 PM	14	50	0	0	0	54	6	0	8	0	23	0	0	0	0	0	155	2020
5:45 PM	13	40	0	0	0	35	1	0	3	0	14	0	0	0	0	0	106	1928
5:50 PM	11	62	0	0	0	50	3	0	5	0	16	0	0	0	0	0	147	1890
5:55 PM	15	34	0	0	0	30	4	0	9	0	20	0	0	0	0	0	112	1851
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	236	792	0	0	0	836	100	0	84	0	272	0	0	0	0	0	2320	
Heavy Trucks	0	40	0	0	0	32	0	0	0	0	0	0	0	0	0	0	72	
Pedestrians	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 20th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004608
DATE: Wed, Jun 5 2019

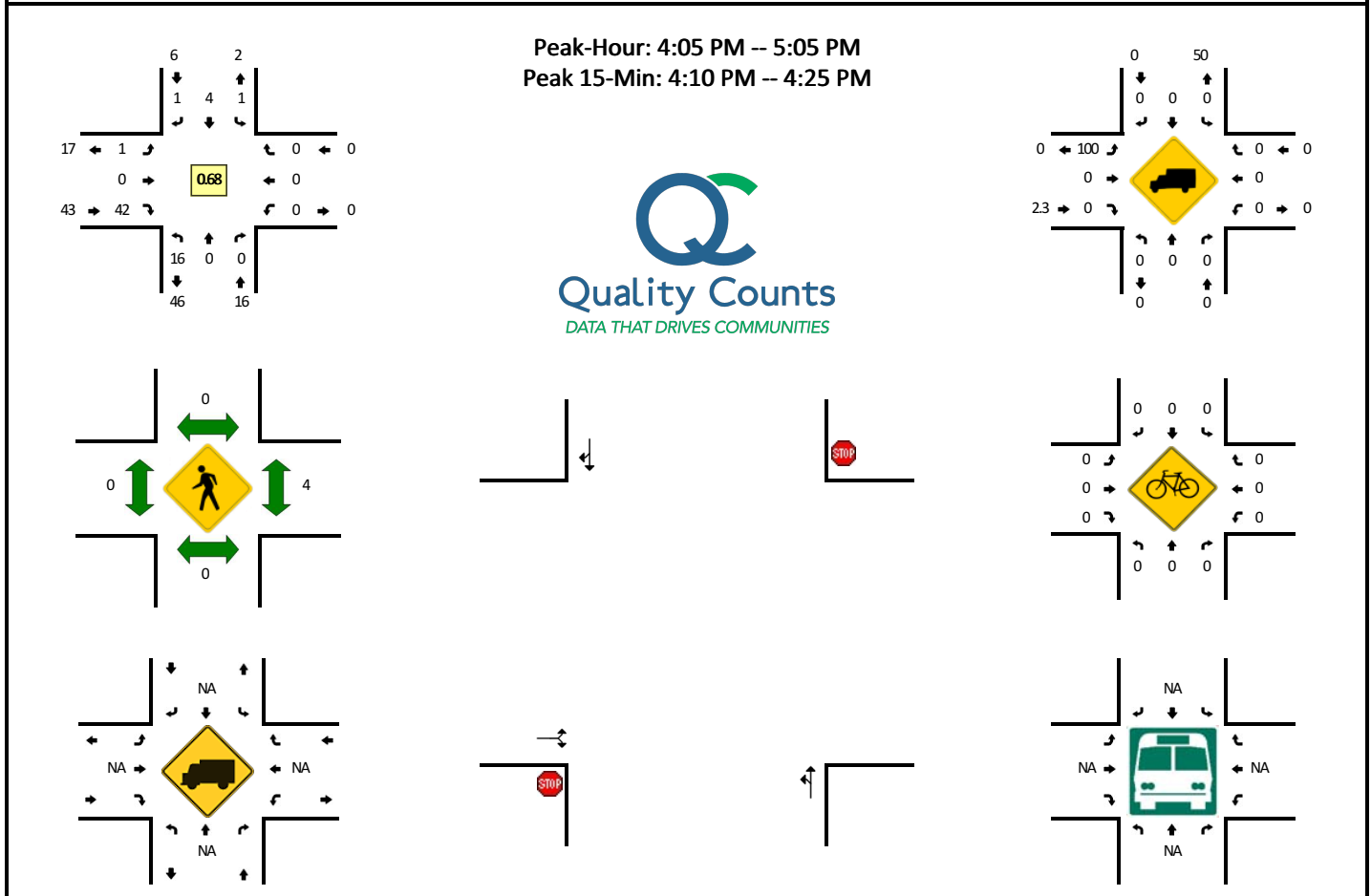


5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 20th St (Eastbound)				NE 20th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	96	12	0	7	71	1	0	2	1	10	0	14	1	5	0	226	
4:05 PM	5	55	3	0	3	51	0	0	5	6	6	0	35	4	4	0	177	
4:10 PM	4	84	13	0	8	69	1	0	3	3	5	0	20	1	6	0	217	
4:15 PM	9	51	7	0	9	48	0	0	3	3	10	0	24	2	9	0	175	
4:20 PM	2	87	13	0	10	77	1	0	5	3	3	0	22	3	1	0	227	
4:25 PM	7	71	2	0	6	57	4	0	0	4	5	0	33	0	5	0	194	
4:30 PM	8	96	9	0	4	70	2	0	4	3	11	0	14	1	4	0	226	
4:35 PM	8	72	5	0	5	58	1	0	1	6	6	0	41	6	3	0	212	
4:40 PM	5	85	9	0	4	81	1	0	2	4	10	0	16	1	5	0	223	
4:45 PM	7	71	7	0	7	76	3	0	5	1	12	0	35	2	13	0	239	
4:50 PM	1	95	5	0	6	86	1	0	3	3	5	0	14	0	5	0	224	
4:55 PM	10	39	5	0	10	65	0	0	6	3	7	0	21	2	10	0	178	2518
5:00 PM	1	99	13	0	3	82	2	0	3	1	5	0	18	0	7	0	234	2526
5:05 PM	6	54	8	0	6	61	1	0	5	1	9	0	28	2	8	0	189	2538
5:10 PM	3	97	6	0	8	80	2	0	5	1	4	0	21	4	8	0	239	2560
5:15 PM	3	57	7	0	5	52	2	0	2	9	4	0	26	2	3	0	172	2557
5:20 PM	4	90	6	0	3	60	1	0	1	0	4	0	18	6	2	0	195	2525
5:25 PM	2	68	7	0	4	60	0	0	4	0	9	0	30	3	5	0	192	2523
5:30 PM	5	90	9	0	3	60	2	0	1	1	7	0	22	0	2	0	202	2499
5:35 PM	3	76	8	0	5	50	1	0	4	3	7	0	30	2	4	0	193	2480
5:40 PM	4	62	7	0	10	74	2	0	2	2	6	0	20	2	5	0	196	2453
5:45 PM	4	48	7	0	6	47	0	0	4	5	8	0	14	1	6	0	150	2364
5:50 PM	1	65	6	0	3	62	0	0	3	1	5	0	12	1	3	0	162	2302
5:55 PM	7	43	8	0	2	47	0	0	0	3	2	0	27	1	4	0	144	2268
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	52	1004	84	0	68	972	20	0	40	32	108	0	260	12	92	0	2744	
Heavy Trucks	0	24	0	0	0	32	0	0	8	0	4	0	4	4	0	0	76	
Pedestrians	0	4	0	0	0	0	0	0	0	32	0	0	0	0	0	0	36	
Bicycles	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: NE Harney St -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004610
DATE: Wed, Jun 5 2019



5-Min Count Period Beginning At	NE Harney St (Northbound)				NE Harney St (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	6	
4:05 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	
4:10 PM	4	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	11	
4:15 PM	2	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	7	
4:20 PM	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	0	6	
4:25 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	
4:30 PM	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	
4:35 PM	1	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	4	
4:40 PM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:50 PM	1	0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	6	
4:55 PM	1	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	7	
5:00 PM	2	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	7	64
5:05 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	65
5:10 PM	2	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	9	64
5:15 PM	1	0	0	0	0	1	0	0	0	0	10	0	0	0	0	0	12	62
5:20 PM	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	6	67
5:25 PM	0	2	0	0	0	1	0	0	0	0	10	0	0	0	0	0	13	67
5:30 PM	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	5	76
5:35 PM	2	0	0	0	0	1	0	0	1	0	5	0	0	0	0	0	9	76
5:40 PM	2	0	0	0	0	2	1	0	0	0	7	0	0	0	0	0	12	81
5:45 PM	2	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	8	88
5:50 PM	0	1	0	0	0	1	0	0	0	0	5	0	0	0	0	0	7	96
5:55 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	97
																	93	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	24	0	0	0	0	8	0	0	0	0	64	0	0	0	0	0	96	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians																	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Appendix C Existing Intersection Operations

Newport UGP Swap

Vistro File: H:\...\Vistro.vistro
Report File: H:\...\Exist AM.pdf

Scenario 1 Exist AM
10/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hwy 101/36th St	Two-way stop	HCM 6th Edition	WB Left	0.367	35.2	E
2	Hwy 101/31st St	Two-way stop	HCM 6th Edition	WB Left	0.426	47.8	E
3	Hwy 101/25th St	Signalized	HCM 6th Edition	NB Left	0.541	12.8	B
4	Hwy 101/20th St	Signalized	HCM 6th Edition	SB Left	0.483	16.5	B
5	31st St/Hamey St	Two-way stop	HCM 6th Edition	EB Left	0.001	9.4	A




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 35.2
 Level Of Service: E
 Volume to Capacity (v/c): 0.367

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	438	21	6	777	55	5
Peak Hour Factor	0.8100	0.8100	0.8100	0.8100	0.8100	0.8100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	135	6	2	240	17	2
Total Analysis Volume [veh/h]	541	26	7	959	68	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.37	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.57	0.00	35.18	21.96
Movement LOS	A	A	A	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.00	1.64	1.64
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.52	0.00	41.08	41.08
d_A, Approach Delay [s/veh]	0.00		0.06		34.11	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	1.61					
Intersection LOS	E					

Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 47.8
 Level Of Service: E
 Volume to Capacity (v/c): 0.426

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	454	32	15	817	49	5
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	138	10	5	249	15	2
Total Analysis Volume [veh/h]	554	39	18	996	60	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.43	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.69	0.00	47.83	28.80
Movement LOS	A	A	A	A	E	D
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	1.96	1.96
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.38	0.00	49.08	49.08
d_A, Approach Delay [s/veh]	0.00		0.15		46.10	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	1.91					
Intersection LOS	E					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 12.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.541

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	548	818	35	30	60
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	165	246	11	9	18
Total Analysis Volume [veh/h]	111	660	986	42	36	72
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	91	76	76	8	8
g / C, Green / Cycle	0.09	0.83	0.69	0.69	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.08	0.23	0.35	0.36	0.02	0.06
s, saturation flow rate [veh/h]	1395	2835	1451	1430	1500	1249
c, Capacity [veh/h]	132	2349	1006	991	114	95
d1, Uniform Delay [s]	49.00	2.11	8.02	8.08	48.11	49.81
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.29	0.30	1.86	1.94	1.16	8.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.28	0.51	0.52	0.32	0.76
d, Delay for Lane Group [s/veh]	59.29	2.41	9.87	10.02	49.27	58.64
Lane Group LOS	E	A	A	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	1.11	5.68	5.74	0.97	2.17
50th-Percentile Queue Length [ft/ln]	84.14	27.72	141.99	143.41	24.30	54.23
95th-Percentile Queue Length [veh/ln]	6.06	2.00	9.59	9.66	1.75	3.90
95th-Percentile Queue Length [ft/ln]	151.45	49.90	239.70	241.61	43.74	97.62

Movement, Approach, & Intersection Results

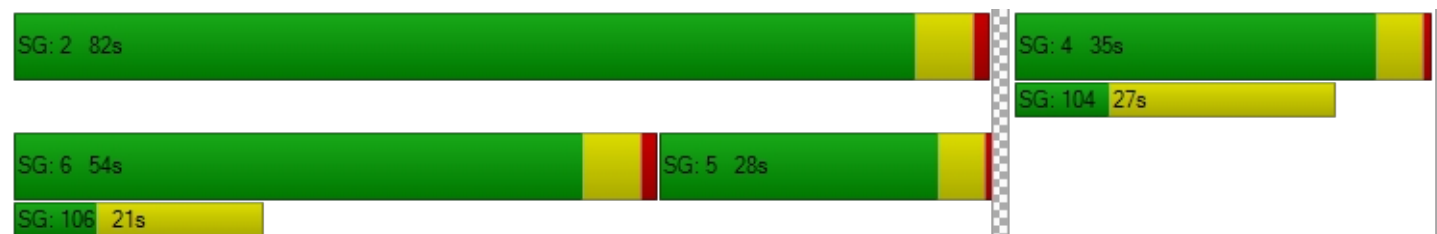
d_M, Delay for Movement [s/veh]	59.29	2.41	9.94	10.02	49.27	58.64
Movement LOS	E	A	A	B	D	E
d_A, Approach Delay [s/veh]	10.60		9.95		55.52	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	12.79					
Intersection LOS	B					
Intersection V/C	0.541					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10604.79	0.00	4788.15
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.665	2.560	2.035
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.768	4.981	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 16.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.483

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	202	18	5	257	0	3	2	12	42	2	8
Total Analysis Volume [veh/h]	16	810	72	18	1028	0	13	10	47	167	8	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing m	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	74	74	2	74	74	6	6	10	10
g / C, Green / Cycle	0.01	0.67	0.67	0.02	0.67	0.67	0.06	0.06	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.01	0.27	0.27	0.01	0.32	0.32	0.01	0.04	0.07	0.07
s, saturation flow rate [veh/h]	1667	1653	1606	1561	1626	1626	1702	1325	1627	1391
c, Capacity [veh/h]	24	1107	1075	25	1090	1090	97	76	145	124
d1, Uniform Delay [s]	53.95	8.24	8.24	53.91	8.72	8.72	49.58	50.68	48.99	49.04
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.10	1.13	25.28	1.46	1.46	0.91	6.00	6.18	7.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.40	0.40	0.72	0.47	0.47	0.24	0.62	0.77	0.78
d, Delay for Lane Group [s/veh]	74.06	9.34	9.37	79.19	10.19	10.19	50.50	56.68	55.18	56.53
Lane Group LOS	E	A	A	E	B	B	D	E	E	E
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.58	4.75	4.63	0.67	5.82	5.82	0.63	1.39	3.24	2.85
50th-Percentile Queue Length [ft/ln]	14.40	118.81	115.71	16.75	145.60	145.60	15.74	34.74	80.95	71.13
95th-Percentile Queue Length [veh/ln]	1.04	8.33	8.16	1.21	9.78	9.78	1.13	2.50	5.83	5.12
95th-Percentile Queue Length [ft/ln]	25.92	208.20	203.91	30.15	244.55	244.55	28.33	62.53	145.71	128.03

Movement, Approach, & Intersection Results

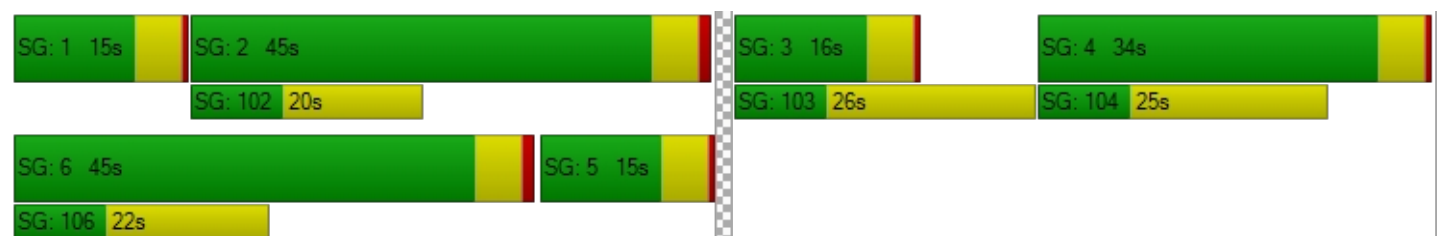
d_M, Delay for Movement [s/veh]	74.06	9.36	9.37	79.19	10.19	10.19	50.50	50.50	56.68	55.64	56.53	56.53
Movement LOS	E	A	A	E	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	10.51			11.37			54.65			55.80		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	16.55											
Intersection LOS	B											
Intersection V/C	0.483											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	3730.20			0.00			5789.53			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	2.726			2.679			1.979			2.049		
Crosswalk LOS	B			B			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	727			727			209			536		
d_b, Bicycle Delay [s]	22.27			22.27			44.10			29.46		
I_b,int, Bicycle LOS Score for Intersection	2.300			2.423			1.675			1.903		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.001

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	9	0	1	33
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	3	0	0	12
Total Analysis Volume [veh/h]	48	1	13	0	1	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	0.00	9.38	8.52
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.14	0.14
95th-Percentile Queue Length [ft/ln]	2.33	2.33	0.00	0.00	3.61	3.61
d_A, Approach Delay [s/veh]	7.18		0.00		8.54	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.94					
Intersection LOS	A					

Newport UGP Swap

Vistro File: H:\...\Vistro.vistro
Report File: H:\...\Exist AM.pdfScenario 1 Exist AM
10/15/2019**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
1	Hwy 101/36th St	438	21	6	777	55	5	1302

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	Hwy 101/31st St	454	32	15	817	49	5	1372

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
3	Hwy 101/25th St	92	548	818	35	30	60	1583

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Hwy 101/20th St	13	672	60	15	853	0	11	8	39	139	7	27	1844

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	31st St/Hamey St	33	1	9	0	1	33	77

Vistro File: H:\...\Vistro.vistro
Report File: H:\...\Exist PM.pdf

Newport UGP Swap

Scenario 2 Exist PM
10/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hwy 101/36th St	Two-way stop	HCM 6th Edition	WB Left	0.147	37.7	E
2	Hwy 101/31st St	Two-way stop	HCM 6th Edition	WB Left	0.366	61.1	F
3	Hwy 101/25th St	Signalized	HCM 6th Edition	EB Right	0.835	41.8	D
4	Hwy 101/20th St	Signalized	HCM 6th Edition	NB Left	0.743	35.9	D
5	31st St/Hamey St	Two-way stop	HCM 6th Edition	EB Left	0.001	10.2	B




V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 37.7
 Level Of Service: E
 Volume to Capacity (v/c): 0.147

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	923	37	7	787	18	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	243	10	2	207	5	2
Total Analysis Volume [veh/h]	972	39	7	828	19	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.15	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	10.24	0.00	37.73	21.85
Movement LOS	A	A	B	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	0.60	0.60
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.76	0.00	14.88	14.88
d_A, Approach Delay [s/veh]	0.00		0.09		33.45	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	0.50					
Intersection LOS	E					

Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 61.1
 Level Of Service: F
 Volume to Capacity (v/c): 0.366

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	954	57	19	784	35	4
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	248	15	5	204	9	1
Total Analysis Volume [veh/h]	994	59	20	817	36	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.37	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	10.75	0.00	61.13	36.21
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.10	0.00	1.54	1.54
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.39	0.00	38.56	38.56
d_A, Approach Delay [s/veh]	0.00		0.26		58.64	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.33					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 41.8
 Level Of Service: D
 Volume to Capacity (v/c): 0.835

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	900	798	88	104	294
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	250	222	24	29	82
Total Analysis Volume [veh/h]	289	1000	887	98	116	327
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	25	84	55	55	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.19	0.35	0.32	0.33	0.08	0.24
s, saturation flow rate [veh/h]	1488	2881	1525	1473	1488	1339
c, Capacity [veh/h]	309	2017	693	670	316	285
d1, Uniform Delay [s]	46.73	8.28	26.35	26.80	40.33	47.23
k, delay calibration	0.26	0.50	0.50	0.50	0.08	0.42
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.08	0.87	6.08	7.05	0.53	95.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.50	0.71	0.74	0.37	1.15
d, Delay for Lane Group [s/veh]	70.81	9.15	32.43	33.85	40.86	142.75
Lane Group LOS	E	A	C	C	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	10.50	5.69	12.29	12.63	2.99	16.00
50th-Percentile Queue Length [ft/ln]	262.58	142.37	307.36	315.65	74.63	399.95
95th-Percentile Queue Length [veh/ln]	15.82	9.61	18.04	18.45	5.37	24.23
95th-Percentile Queue Length [ft/ln]	395.45	240.21	451.12	461.34	134.33	605.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.81	9.15	33.06	33.85	40.86	142.75
Movement LOS	E	A	C	C	D	F
d_A, Approach Delay [s/veh]	22.98		33.14		116.07	
Approach LOS	C		C		F	
d_I, Intersection Delay [s/veh]	41.84					
Intersection LOS	D					
Intersection V/C	0.835					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	7520.16
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.801	2.656	2.224
Crosswalk LOS	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.196	4.945	4.132
Bicycle LOS	F	E	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SG: 2 90s

SG: 4 30s

SG: 104 27s

SG: 6 60s

SG: 5 30s

SG: 106 21s





Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 35.9
 Level Of Service: D
 Volume to Capacity (v/c): 0.743

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	288	29	24	261	5	13	13	27	93	7	23
Total Analysis Volume [veh/h]	85	1151	115	96	1042	21	51	51	108	373	28	91
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	60	60	9	61	61	12	12	21	21
g / C, Green / Cycle	0.06	0.50	0.50	0.07	0.51	0.51	0.10	0.10	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.05	0.38	0.38	0.06	0.31	0.31	0.06	0.08	0.15	0.15
s, saturation flow rate [veh/h]	1654	1695	1641	1654	1709	1694	1707	1423	1654	1538
c, Capacity [veh/h]	107	847	820	120	867	859	167	139	291	271
d1, Uniform Delay [s]	55.36	24.19	24.26	54.88	21.21	21.23	52.03	52.89	48.19	48.19
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.24	6.28	6.60	8.88	3.26	3.31	2.69	6.82	6.22	6.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.76	0.76	0.80	0.62	0.62	0.61	0.78	0.87	0.87
d, Delay for Lane Group [s/veh]	64.60	30.46	30.86	63.76	24.47	24.53	54.72	59.70	54.41	54.83
Lane Group LOS	E	C	C	E	C	C	D	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.81	15.74	15.42	3.16	11.30	11.24	3.07	3.44	7.91	7.39
50th-Percentile Queue Length [ft/ln]	70.35	393.40	385.59	78.92	282.50	281.05	76.86	85.93	197.79	184.81
95th-Percentile Queue Length [veh/ln]	5.07	22.24	21.86	5.68	16.81	16.74	5.53	6.19	12.52	11.85
95th-Percentile Queue Length [ft/ln]	126.63	556.04	546.61	142.06	420.32	418.52	138.34	154.68	313.11	296.29

Movement, Approach, & Intersection Results

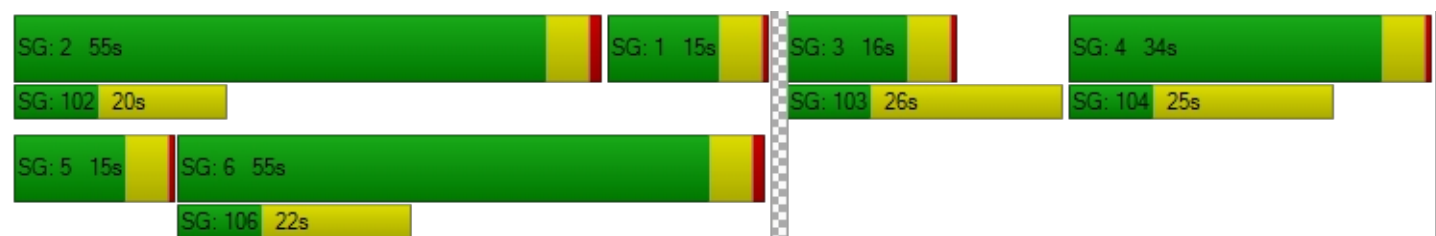
d_M, Delay for Movement [s/veh]	64.60	30.64	30.86	63.76	24.50	24.53	54.72	54.72	59.70	54.55	54.83	54.83
Movement LOS	E	C	C	E	C	C	D	D	E	D	D	D
d_A, Approach Delay [s/veh]	32.79			27.75			57.29			54.61		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	35.92											
Intersection LOS	D											
Intersection V/C	0.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2300.69			1895.36			782.97			4315.98		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	2.873			2.791			2.065			2.198		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	833			833			192			492		
d_b, Bicycle Delay [s]	20.42			20.43			49.05			34.13		
I_b,int, Bicycle LOS Score for Intersection	2.674			2.516			1.906			2.371		
Bicycle LOS	B			B			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.001

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	5	1	1	49
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	2	0	0	18
Total Analysis Volume [veh/h]	28	0	7	1	1	72
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	7.27	0.00	0.00	0.00	10.19	8.58
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.22	0.22
95th-Percentile Queue Length [ft/ln]	1.33	1.33	0.00	0.00	5.47	5.47
d_A, Approach Delay [s/veh]	7.27		0.00		8.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.63					
Intersection LOS	B					

Newport UGP Swap

Vistro File: H:\...\Vistro.vistro

Report File: H:\...\Exist PM.pdf

Scenario 2 Exist PM

10/15/2019

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
1	Hwy 101/36th St	923	37	7	787	18	7	1779

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	Hwy 101/31st St	954	57	19	784	35	4	1853

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
3	Hwy 101/25th St	260	900	798	88	104	294	2444

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Hwy 101/20th St	78	1059	106	88	959	19	47	47	99	343	26	84	2955

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	31st St/Hamey St	19	0	5	1	1	49	75

Appendix D Crash Data Summary Sheets

009 OREGON COAST

US 101 Oregon Coast Highway (009) & NE 20th St

January 1, 2013 through December 31, 2017

SER#	P	G	S	W	E A / C O	DATE	COUNTY	RD#	FC	CONN #	INT-TYP	SPCL USE	MOVE	A S	PED	ACTN	EVENT	CAUSE							
INVEST	E L M H R	DAY/TIME	CITY	URBAN AREA	CMPT/MLG	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH TYP	TRLR QTY	OWNER	FROM	PRTC	INJ	G E	LICNS	PED					
UNLOC?	D C J L K	LAT/LONG	URBAN AREA	LRS	MILEPNT	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL TYP	V#	VEH TYPE	TO	P#	TYPE	SVRTY	E X	RES	LOC	ERROR			
00456	N N N N N	08/28/2014	LINCOLN		1	14	INTER	CROSS	N		N CLR	S-STRGHT	01	NONE	0	STRGHT								013	07
CITY	N	Thu 1P	NEWPORT		MN	0	OREGON COAST HY	N	TRF SIGNAL	N DRY	REAR			PRVTE	N S								022	00	
No	44 39	5.46 -124	NEWPORT UA		139.32	20TH ST	06	0		N DAY	INJ			PSNGR CAR		01	DRVR	NONE	37 F	OR-Y	043	000		07	
					000900100S00														OR<25						
														02	NONE	0	STRGHT						022	013	
														PRVTE	N S									00	
														PSNGR CAR		01	DRVR	INJC	41 F	OTH-Y	000	000		00	
																			OR<25					00	
														03	NONE	0	STRGHT						000		
														PRVTE	N S									00	
														PSNGR CAR		01	DRVR	NONE	65 F	OR-Y	000	000		00	
																			OR<25						
00070	N N N N N	02/07/2016	LINCOLN		1	14	INTER	CROSS	N		N CLR	S-STRGHT	01	NONE	0	STRGHT								07,27	
CITY	N	Sun 12P	NEWPORT		MN	0	OREGON COAST HY	N	TRF SIGNAL	N DRY	REAR			PRVTE	N S								000	00	
No	44 39	5.46 -124	NEWPORT UA		139.32	20TH ST	06	0		N DAY	INJ			PSNGR CAR		01	DRVR	NONE	51 M	OR-Y	043,016	038		07,27	
					000900100S00														OR<25						
														02	NONE	0	STRGHT						006	00	
														PRVTE	N S									00	
														PSNGR CAR		01	DRVR	NONE	22 M	OR-Y	000	000		00	
																			OR>25					00	
																			02	PSNG	INJC	31 F	000	000	
																								00	
00651	Y N N N N	12/06/2013	LINCOLN		1	14	INTER	CROSS	N		N SNOW	ANGL-OTH	01	NONE	0	TURN-R							124	01	
CITY	N	Fri 9A	NEWPORT		MN	0	OREGON COAST HY	E	TRF SIGNAL	N ICE	TURN			PRVTE	S E							000	124	00	
No	44 39	5.46 -124	NEWPORT UA		139.32	20TH ST	06	0		N DAY	INJ			PSNGR CAR		01	DRVR	NONE	57 M	OR-Y	047,080	017		01	
					000900100S00														OR<25						
														02	NONE	0	STOP						011	00	
														PRVTE	E W									00	
														PSNGR CAR		01	DRVR	INJC	57 M	OR-Y	000	000		00	
																			OR<25						
00594	N N N	11/03/2013	LINCOLN		1	14	INTER	CROSS	N		N RAIN	ANGL-OTH	01	NONE	0	TURN-R							02		
NONE	N	Sun 5P	NEWPORT		MN	0	OREGON COAST HY	S	L-GRN-SIG	N WET	TURN			PRVTE	W S							000	00		
No	44 39	5.46 -124	NEWPORT UA		139.32	20TH ST	05	0		N DUSK	PDO			PSNGR CAR		01	DRVR	NONE	18 F	OR-Y	028	000		02	
					000900100S00														OR<25						
														02	NONE	0	TURN-L						000	00	
														PRVTE	E S									00	
														PSNGR CAR		01	DRVR	NONE	55 M	OR-Y	000	000		00	
																			OR<25						

009 OREGON COAST

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

SER#	P INVEST UNLOC?	E A / C O D C J L K	G S W M H R DAY/TIME LAT/LONG	DATE	COUNTY CITY URBAN AREA	RD# CMPT/MLG LRS	FC FIRST STREET INTERSECTION	CONN # SECOND STREET SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS TRAF- (#LANES)	INT-REL TRAF- CNTL	OFFRD RND BT SURF DRVWY	WTHR LIGHT	CRASH TYP COLL SVRTY	SPCL USE TRLR QTY VEH TYPE	MOVE OWNER FROM TO		PRTC P#	INJ SVRTY	A S G E E X RES	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00699	N N N			12/30/2013	LINCOLN	1	14		INTER	CROSS	N			O-1STOP	01 NONE	0 BACK										10
NO RPT		N		Mon 5P	NEWPORT	MN 0	OREGON COAST HY		S	L-GRN-SIG		N DRY	BACK		PRVTE	N S								000		00
					NEWPORT UA	139.32	20TH ST		06	0		N DUSK	PDO		PSNGR CAR			01 DRVR	NONE	59 F	OR-Y		011		000	10
No	44	39	5.46	-124	3 10.79	000900100S00		1													OR<25					
															02 NONE	0 STOP									011	00
															PRVTE	N S										
															PSNGR CAR			01 DRVR	NONE	53 M	OR-Y		000		000	00
																					OR<25					
00100	N N N N N			02/22/2016	LINCOLN	1	14		INTER	CROSS	N			O-1STOP	01 NONE	9 BACK										10
CITY		N		Mon 12P	NEWPORT	MN 0	OREGON COAST HY		S	TRF SIGNAL		N DRY	BACK		N/A	N S								088		00
					NEWPORT UA	139.32	20TH ST		06	0		N DAY	PDO		SEMI TOW			01 DRVR	NONE	00 U	UNK		000		000	00
No	44	39	5.46	-124	3 10.79	000900100S00		1																		
															02 NONE	9 STOP									011	00
															N/A	S N										
															PSNGR CAR			01 DRVR	NONE	00 U	UNK		000		000	00
00133	N N N N N			03/25/2013	LINCOLN	1	14		INTER	CROSS	N			ANGL-OTH	01 NONE	0 STRGHT										04
CITY		N		Mon 3P	NEWPORT	MN 0	OREGON COAST HY		CN	TRF SIGNAL		N DRY	ANGL		PRVTE	N S								000		00
					NEWPORT UA	139.32	20TH ST		01	0		N DAY	PDO		PSNGR CAR			01 DRVR	NONE	59 M	OR-Y		000		000	00
No	44	39	5.46	-124	3 10.79	000900100S00		1													OR<25					
															02 NONE	0 STRGHT									000	00
															PRVTE	E W										
															PSNGR CAR			01 DRVR	NONE	84 M	OR-Y		020		000	04
																					OR<25					
00342	N N N			07/13/2013	LINCOLN	1	14		INTER	CROSS	N			S-STRGHT	01 NONE	0 STRGHT										13
NONE		N		Sat 2P	NEWPORT	MN 0	OREGON COAST HY		CN	TRF SIGNAL		N DRY	SS-O		PRVTE	N S								000		00
					NEWPORT UA	139.32	20TH ST		03	0		N DAY	PDO		PSNGR CAR			01 DRVR	NONE	88 F	OR-Y		045		000	13
No	44	39	5.46	-124	3 10.79	000900100S00		1													OR<25					
															02 NONE	0 STRGHT									000	00
															PRVTE	N S										
															PSNGR CAR			01 DRVR	NONE	61 F	OR-Y		000		000	00
																					OR<25					
00133	N N N			03/04/2016	LINCOLN	1	14		INTER	CROSS	N			ANGL-OTH	01 NONE	9 STRGHT										04
NONE		N		Fri 9A	NEWPORT	MN 0	OREGON COAST HY		CN	TRF SIGNAL		N DRY	ANGL		N/A	W E								000		00
					NEWPORT UA	139.32	20TH ST		03	0		N DAY	PDO		PSNGR CAR			01 DRVR	NONE	00 U	UNK		000		000	00
No	44	39	5.46	-124	3 10.79	000900100S00		1																		
																				</						

009 OREGON COAST

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

[illegible]

CITY OF NEWPORT, LINCOLN COUNTY

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

[illegible]

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST		
ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST		
CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST		
COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST		
CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST			DRIVER RESIDENCE CODE TRANSLATION LIST		
LIC CODE	SHORT DESC	LONG DESCRIPTION	RES CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)	1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
1	OR-Y	VALID OREGON LICENSE	2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY	3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
3	SUSP	SUSPENDED/REVOKED	4	N-RES	NON-RESIDENT
4	EXP	EXPIRED	9	UNK	UNKNOWN IF OREGON RESIDENT
8	N-VAL	OTHER NON-VALID LICENSE			
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH			

ERROR CODE TRANSLATION LIST		
ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNUED FROM WRONG LANE
007	TO WRONG	TURNUED INTO WRONG LANE
008	ILLEG U	U-TURNUED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

FUNCTIONAL CLASSIFICATION TRANSLATION LIST		
FUNC CLASS	DESCRIPTION	
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE	
02	RURAL PRINCIPAL ARTERIAL - OTHER	
06	RURAL MINOR ARTERIAL	
07	RURAL MAJOR COLLECTOR	
08	RURAL MINOR COLLECTOR	
09	RURAL LOCAL	
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE	
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP	
14	URBAN PRINCIPAL ARTERIAL - OTHER	
16	URBAN MINOR ARTERIAL	
17	URBAN MAJOR COLLECTOR	
18	URBAN MINOR COLLECTOR	
19	URBAN LOCAL	
78	UNKNOWN RURAL SYSTEM	
79	UNKNOWN RURAL NON-SYSTEM	
98	UNKNOWN URBAN SYSTEM	
99	UNKNOWN URBAN NON-SYSTEM	

INJURY SEVERITY CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

MEDIAN TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

HIGHWAY COMPONENT TRANSLATION LIST	
CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

LIGHT CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MILEAGE TYPE CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST		
ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST		
CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST		
COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST		
CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST			DRIVER RESIDENCE CODE TRANSLATION LIST		
LIC CODE	SHORT DESC	LONG DESCRIPTION	RES CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)	1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
1	OR-Y	VALID OREGON LICENSE	2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY	3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
3	SUSP	SUSPENDED/REVOKED	4	N-RES	NON-RESIDENT
4	EXP	EXPIRED	9	UNK	UNKNOWN IF OREGON RESIDENT
8	N-VAL	OTHER NON-VALID LICENSE			
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH			

ERROR CODE TRANSLATION LIST		
ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNE
007	TO WRONG	TURNE
008	ILLEG U	U-TURNE
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

FUNCTIONAL CLASSIFICATION TRANSLATION LIST		
FUNC CLASS	DESCRIPTION	
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE	
02	RURAL PRINCIPAL ARTERIAL - OTHER	
06	RURAL MINOR ARTERIAL	
07	RURAL MAJOR COLLECTOR	
08	RURAL MINOR COLLECTOR	
09	RURAL LOCAL	
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE	
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP	
14	URBAN PRINCIPAL ARTERIAL - OTHER	
16	URBAN MINOR ARTERIAL	
17	URBAN MAJOR COLLECTOR	
18	URBAN MINOR COLLECTOR	
19	URBAN LOCAL	
78	UNKNOWN RURAL SYSTEM	
79	UNKNOWN RURAL NON-SYSTEM	
98	UNKNOWN URBAN SYSTEM	
99	UNKNOWN URBAN NON-SYSTEM	

INJURY SEVERITY CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

MEDIAN TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

HIGHWAY COMPONENT TRANSLATION LIST	
CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

LIGHT CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MILEAGE TYPE CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

009 OREGON COAST D	US 101 Oregon Coast Highway (009) & NE 31st St January 1, 2013 through December 31, 2017
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[illegible]

009 OREGON COAST D	US 101 Oregon Coast Highway (009) & NE 31st St January 1, 2013 through December 31, 2017
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SER#	P	G	S	W	RD#	FC	CONN #	INT-TYP	SPCL	USE	INVEST	E	L	M	H	R	DATE	COUNTY	CMPT/MLG	FIRST	STREET	RD	CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH	TYP	TRLR	QTY	MOVE	A	S	UNLOC?	D	C	J	L	K	LAT/LONG	URBAN	AREA	LRS	INTERSECTION	SEQ#	LOCTN	(#LANES)	CNTL	DRVWY	LIGHT	SVRTY	V#	VEH	TYPE	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACTN	EVENT	CAUSE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST		
ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST		
CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST		
COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST		
CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST			DRIVER RESIDENCE CODE TRANSLATION LIST		
LIC CODE	SHORT DESC	LONG DESCRIPTION	RES CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)	1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
1	OR-Y	VALID OREGON LICENSE	2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY	3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
3	SUSP	SUSPENDED/REVOKED	4	N-RES	NON-RESIDENT
4	EXP	EXPIRED	9	UNK	UNKNOWN IF OREGON RESIDENT
8	N-VAL	OTHER NON-VALID LICENSE			
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH			

ERROR CODE TRANSLATION LIST		
ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNUED FROM WRONG LANE
007	TO WRONG	TURNUED INTO WRONG LANE
008	ILLEG U	U-TURNUED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

FUNCTIONAL CLASSIFICATION TRANSLATION LIST		
FUNC CLASS	DESCRIPTION	
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE	
02	RURAL PRINCIPAL ARTERIAL - OTHER	
06	RURAL MINOR ARTERIAL	
07	RURAL MAJOR COLLECTOR	
08	RURAL MINOR COLLECTOR	
09	RURAL LOCAL	
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE	
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP	
14	URBAN PRINCIPAL ARTERIAL - OTHER	
16	URBAN MINOR ARTERIAL	
17	URBAN MAJOR COLLECTOR	
18	URBAN MINOR COLLECTOR	
19	URBAN LOCAL	
78	UNKNOWN RURAL SYSTEM	
79	UNKNOWN RURAL NON-SYSTEM	
98	UNKNOWN URBAN SYSTEM	
99	UNKNOWN URBAN NON-SYSTEM	

HIGHWAY COMPONENT TRANSLATION LIST	
CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

009 OREGON COAST

US 101 Oregon Coast Highway (009) & NE 36th St
January 1, 2013 through December 31, 2017

[illegible]

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST		
ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST		
CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST		
COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST		
CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST			DRIVER RESIDENCE CODE TRANSLATION LIST		
LIC CODE	SHORT DESC	LONG DESCRIPTION	RES CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)	1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
1	OR-Y	VALID OREGON LICENSE	2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY	3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
3	SUSP	SUSPENDED/REVOKED	4	N-RES	NON-RESIDENT
4	EXP	EXPIRED	9	UNK	UNKNOWN IF OREGON RESIDENT
8	N-VAL	OTHER NON-VALID LICENSE			
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH			

ERROR CODE TRANSLATION LIST		
ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNUED FROM WRONG LANE
007	TO WRONG	TURNUED INTO WRONG LANE
008	ILLEG U	U-TURNUED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST		
EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

FUNCTIONAL CLASSIFICATION TRANSLATION LIST		
FUNC CLASS	DESCRIPTION	
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE	
02	RURAL PRINCIPAL ARTERIAL - OTHER	
06	RURAL MINOR ARTERIAL	
07	RURAL MAJOR COLLECTOR	
08	RURAL MINOR COLLECTOR	
09	RURAL LOCAL	
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE	
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP	
14	URBAN PRINCIPAL ARTERIAL - OTHER	
16	URBAN MINOR ARTERIAL	
17	URBAN MAJOR COLLECTOR	
18	URBAN MINOR COLLECTOR	
19	URBAN LOCAL	
78	UNKNOWN RURAL SYSTEM	
79	UNKNOWN RURAL NON-SYSTEM	
98	UNKNOWN URBAN SYSTEM	
99	UNKNOWN URBAN NON-SYSTEM	

HIGHWAY COMPONENT TRANSLATION LIST	
CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST	
CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST		
CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH




Appendix E 2040 Background Operations

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 56.5
 Level Of Service: F
 Volume to Capacity (v/c): 0.588

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	537	30	8	935	83	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	8	2	260	23	3
Total Analysis Volume [veh/h]	597	33	9	1039	92	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.59	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	8.78	0.00	56.54	40.16
Movement LOS	A	A	A	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	3.37	3.37
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.71	0.00	84.29	84.29
d_A, Approach Delay [s/veh]	0.00		0.08		54.51	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.25					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 77.9
 Level Of Service: F
 Volume to Capacity (v/c): 0.612

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	554	45	18	1008	60	16
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	154	13	5	280	17	4
Total Analysis Volume [veh/h]	616	50	20	1120	67	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.61	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	8.94	0.00	77.94	52.11
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	3.45	3.45
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.64	0.00	86.17	86.17
d_A, Approach Delay [s/veh]	0.00		0.16		72.47	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.35					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 14.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.622

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	678	1027	50	38	72
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	188	285	14	11	20
Total Analysis Volume [veh/h]	122	753	1141	56	42	80
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	11	90	75	75	9	9
g / C, Green / Cycle	0.10	0.82	0.68	0.68	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.27	0.41	0.42	0.03	0.06
s, saturation flow rate [veh/h]	1395	2835	1451	1427	1500	1250
c, Capacity [veh/h]	144	2328	982	966	125	104
d1, Uniform Delay [s]	48.48	2.39	9.75	9.87	47.54	49.36
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.85	0.37	2.81	2.98	1.16	8.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.32	0.61	0.62	0.34	0.77
d, Delay for Lane Group [s/veh]	58.34	2.76	12.56	12.85	48.71	57.87
Lane Group LOS	E	A	B	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.67	1.44	7.86	7.98	1.13	2.39
50th-Percentile Queue Length [ft/ln]	91.80	35.94	196.60	199.52	28.16	59.84
95th-Percentile Queue Length [veh/ln]	6.61	2.59	12.46	12.61	2.03	4.31
95th-Percentile Queue Length [ft/ln]	165.25	64.69	311.58	315.34	50.68	107.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.34	2.76	12.70	12.85	48.71	57.87
Movement LOS	E	A	B	B	D	E
d_A, Approach Delay [s/veh]	10.51		12.70		54.71	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	14.17					
Intersection LOS	B					
Intersection V/C	0.622					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10466.90	0.00	4640.17
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.717	2.625	2.047
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.854	5.120	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SG: 2 82s

SG: 4 35s

SG: 104 27s

SG: 6 54s

SG: 5 28s

SG: 106 21s





Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.3
 Level Of Service: B
 Volume to Capacity (v/c): 0.551

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	822	72	26	1059	2	14	10	47	167	8	35
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	228	20	7	294	1	4	3	13	46	2	10
Total Analysis Volume [veh/h]	18	913	80	29	1177	2	16	11	52	186	9	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing m	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	72	72	2	72	72	7	7	11	11
g / C, Green / Cycle	0.02	0.65	0.65	0.02	0.66	0.66	0.06	0.06	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.01	0.30	0.30	0.02	0.36	0.36	0.02	0.04	0.08	0.08
s, saturation flow rate [veh/h]	1667	1653	1607	1561	1626	1625	1700	1326	1627	1388
c, Capacity [veh/h]	27	1077	1046	35	1069	1068	102	80	160	136
d1, Uniform Delay [s]	53.87	9.62	9.62	53.61	10.13	10.13	49.38	50.55	48.49	48.53
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.46	1.50	30.53	2.05	2.05	1.01	6.47	6.23	7.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.47	0.47	0.84	0.55	0.55	0.26	0.65	0.79	0.79
d, Delay for Lane Group [s/veh]	73.98	11.08	11.13	84.14	12.18	12.18	50.39	57.02	54.72	56.07
Lane Group LOS	E	B	B	F	B	B	D	E	D	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	6.05	5.89	1.09	7.61	7.61	0.74	1.54	3.64	3.18
50th-Percentile Queue Length [ft/ln]	16.08	151.30	147.37	27.28	190.22	190.13	18.44	38.54	90.97	79.62
95th-Percentile Queue Length [veh/ln]	1.16	10.09	9.88	1.96	12.13	12.13	1.33	2.77	6.55	5.73
95th-Percentile Queue Length [ft/ln]	28.95	252.16	246.92	49.11	303.32	303.20	33.20	69.37	163.75	143.32

Movement, Approach, & Intersection Results

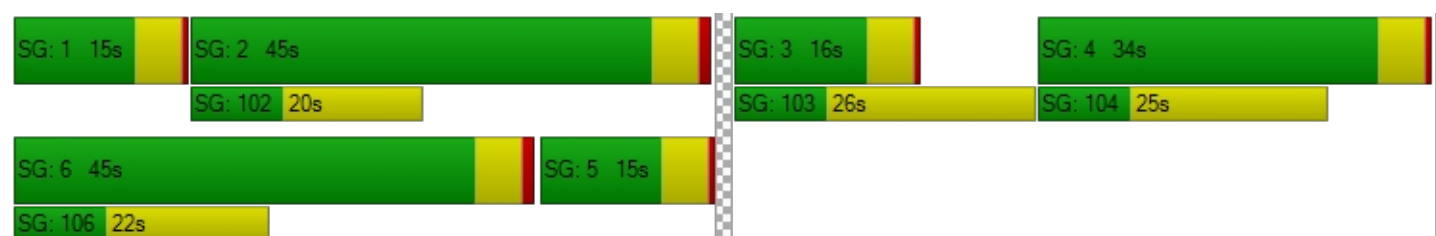
d_M, Delay for Movement [s/veh]	73.98	11.10	11.13	84.14	12.18	12.18	50.39	50.39	57.02	55.17	56.07	56.07
Movement LOS	E	B	B	F	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	12.22			13.91			54.76			55.34		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	18.34											
Intersection LOS	B											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	3703.14			0.00			5769.88			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	2.782			2.733			1.984			2.064		
Crosswalk LOS	C			B			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	727			727			209			536		
d_b, Bicycle Delay [s]	22.27			22.27			44.10			29.46		
I_b,int, Bicycle LOS Score for Intersection	2.394			2.556			1.690			1.946		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.010

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	19	15	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	5	4	2	10
Total Analysis Volume [veh/h]	37	1	21	17	9	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.01	0.04
d_M, Delay for Movement [s/veh]	7.43	0.00	0.00	0.00	9.34	8.62
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.16	0.16
95th-Percentile Queue Length [ft/ln]	1.87	1.87	0.00	0.00	3.90	3.90
d_A, Approach Delay [s/veh]	7.23		0.00		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.65					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 129.5
 Level Of Service: F
 Volume to Capacity (v/c): 0.715

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1115	66	14	956	53	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	17	4	252	14	4
Total Analysis Volume [veh/h]	1174	69	15	1006	56	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.72	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	11.52	0.00	129.46	99.09
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.00	4.06	4.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.04	0.00	101.53	101.53
d_A, Approach Delay [s/veh]	0.00		0.17		123.04	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.82					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 190.0
 Level Of Service: F
 Volume to Capacity (v/c): 0.790

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1174	103	31	976	39	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	306	27	8	254	10	2
Total Analysis Volume [veh/h]	1223	107	32	1017	41	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.06	0.01	0.79	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	12.59	0.00	189.97	136.39
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.20	0.00	3.64	3.64
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.05	0.00	90.91	90.91
d_A, Approach Delay [s/veh]	0.00		0.38		182.15	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.77					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 48.5
 Level Of Service: D
 Volume to Capacity (v/c): 0.916

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1143	993	110	137	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	318	276	31	38	98
Total Analysis Volume [veh/h]	347	1270	1103	122	152	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	26	84	54	54	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.21	0.40	0.36	0.37	0.09	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1637	1654	1488
c, Capacity [veh/h]	352	2241	762	736	352	316
d1, Uniform Delay [s]	47.07	8.96	28.44	29.02	40.95	47.23
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	34.82	1.05	8.79	10.62	0.62	130.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.57	0.80	0.83	0.43	1.24
d, Delay for Lane Group [s/veh]	81.89	10.00	37.23	39.65	41.58	178.11
Lane Group LOS	F	B	D	D	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.66	7.82	16.68	17.30	3.97	20.88
50th-Percentile Queue Length [ft/ln]	341.49	195.40	417.02	432.38	99.28	522.05
95th-Percentile Queue Length [veh/ln]	19.72	12.40	23.38	24.12	7.15	31.60
95th-Percentile Queue Length [ft/ln]	493.02	310.02	584.48	602.89	178.70	789.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	81.89	10.00	38.30	39.65	41.58	178.11
Movement LOS	F	B	D	D	D	F
d_A, Approach Delay [s/veh]	25.43		38.44		139.96	
Approach LOS	C		D		F	
d_I, Intersection Delay [s/veh]	48.54					
Intersection LOS	D					
Intersection V/C	0.916					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	7012.83
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.920	2.789	2.283
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.466	5.143	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 63.2
 Level Of Service: E
 Volume to Capacity (v/c): 0.921

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1318	127	112	1179	24	60	56	119	412	31	113
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	358	35	30	320	7	16	15	32	112	8	31
Total Analysis Volume [veh/h]	102	1433	138	122	1282	26	65	61	129	448	34	123
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	53	53	11	54	54	13	13	25	25
g / C, Green / Cycle	0.08	0.44	0.44	0.09	0.45	0.45	0.11	0.11	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.47	0.47	0.07	0.38	0.39	0.07	0.09	0.19	0.19
s, saturation flow rate [veh/h]	1654	1695	1643	1654	1709	1694	1706	1424	1654	1531
c, Capacity [veh/h]	124	748	725	145	775	769	182	152	348	322
d1, Uniform Delay [s]	54.70	33.53	33.53	53.93	29.06	29.12	51.70	52.59	46.20	46.23
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.50	49.41	55.63	9.37	11.00	11.27	3.47	9.33	8.98	9.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	1.06	1.08	0.84	0.85	0.85	0.69	0.85	0.90	0.90
d, Delay for Lane Group [s/veh]	64.21	82.94	89.15	63.30	40.06	40.39	55.16	61.92	55.18	56.06
Lane Group LOS	E	F	F	E	D	D	E	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	31.37	31.65	4.00	18.71	18.69	3.83	4.20	9.94	9.31
50th-Percentile Queue Length [ft/ln]	84.16	784.14	791.33	100.09	467.66	467.16	95.77	105.03	248.56	232.78
95th-Percentile Queue Length [veh/ln]	6.06	42.33	43.17	7.21	25.80	25.78	6.90	7.56	15.11	14.32
95th-Percentile Queue Length [ft/ln]	151.48	1058.21	1079.24	180.16	644.99	644.40	172.39	189.06	377.84	357.89

Movement, Approach, & Intersection Results

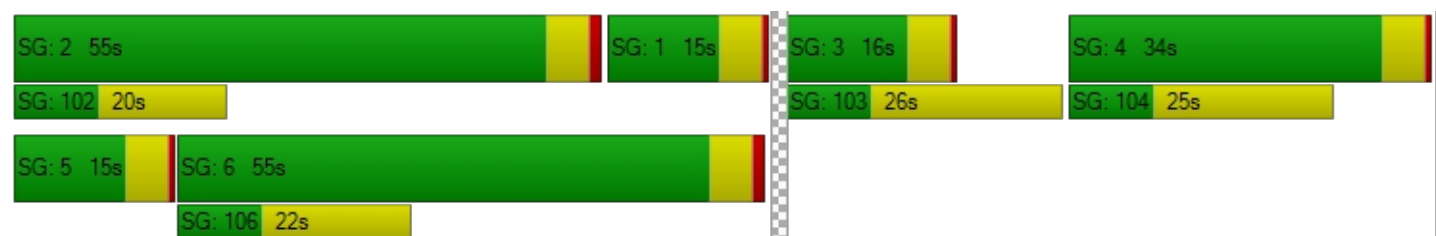
d_M, Delay for Movement [s/veh]	64.21	85.72	89.15	63.30	40.22	40.39	55.16	55.16	61.92	55.45	56.06	56.06
Movement LOS	E	F	F	E	D	D	E	E	E	E	E	E
d_A, Approach Delay [s/veh]	84.69			42.19			58.58			55.60		
Approach LOS	F			D			E			E		
d_I, Intersection Delay [s/veh]	63.24											
Intersection LOS	E											
Intersection V/C	0.921											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48			1791.51			775.42			4104.77		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	3.002			2.908			2.089			2.254		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	833			833			192			492		
d_b, Bicycle Delay [s]	20.42			20.43			49.05			34.13		
I_b,int, Bicycle LOS Score for Intersection	2.940			2.739			1.980			2.558		
Bicycle LOS	C			B			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.6
 Level Of Service: B
 Volume to Capacity (v/c): 0.056

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	5	16	27	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	2	6	10	20
Total Analysis Volume [veh/h]	28	0	7	24	40	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.06	0.07
d_M, Delay for Movement [s/veh]	7.38	0.00	0.00	0.00	10.63	8.97
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.45	0.45
95th-Percentile Queue Length [ft/ln]	1.39	1.39	0.00	0.00	11.18	11.18
d_A, Approach Delay [s/veh]	7.38		0.00		9.53	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.53					
Intersection LOS	B					




Appendix F 2040 Total Traffic Operations

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 117.6
 Level Of Service: F
 Volume to Capacity (v/c): 0.907

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	537	45	15	935	124	34
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	9
Total Analysis Volume [veh/h]	597	50	17	1039	138	38
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.91	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.87	0.00	117.58	100.56
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.00	7.88	7.88
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.37	0.00	196.92	196.92
d_A, Approach Delay [s/veh]	0.00		0.14		113.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	10.75					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 205.6
 Level Of Service: F
 Volume to Capacity (v/c): 1.110

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	569	60	18	1049	101	16
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	4
Total Analysis Volume [veh/h]	632	67	20	1166	112	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	1.11	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	9.06	0.00	205.62	177.12
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	8.09	8.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.69	0.00	202.34	202.34
d_A, Approach Delay [s/veh]	0.00		0.15		201.67	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	13.10					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.0
 Level Of Service: B
 Volume to Capacity (v/c): 0.592

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	704	1098	61	42	72
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	20
Total Analysis Volume [veh/h]	122	782	1220	68	47	80
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	91	76	76	9	9
g / C, Green / Cycle	0.09	0.83	0.69	0.69	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.06
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1388
c, Capacity [veh/h]	147	2605	1115	1094	129	107
d1, Uniform Delay [s]	48.94	2.19	8.71	8.82	48.17	49.66
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.77	0.30	2.18	2.32	1.28	7.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.30	0.58	0.59	0.36	0.74
d, Delay for Lane Group [s/veh]	57.71	2.48	10.89	11.14	49.44	57.01
Lane Group LOS	E	A	B	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.64	1.35	7.68	7.80	1.27	2.37
50th-Percentile Queue Length [ft/ln]	90.97	33.82	192.06	195.03	31.74	59.18
95th-Percentile Queue Length [veh/ln]	6.55	2.43	12.23	12.38	2.29	4.26
95th-Percentile Queue Length [ft/ln]	163.75	60.87	305.69	309.55	57.14	106.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.71	2.48	11.01	11.14	49.44	57.01
Movement LOS	E	A	B	B	D	E
d_A, Approach Delay [s/veh]	9.94		11.02		54.21	
Approach LOS	A		B		D	
d_I, Intersection Delay [s/veh]	12.96					
Intersection LOS	B					
Intersection V/C	0.592					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10466.90	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.738	2.656	2.053
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SG: 2 82s

SG: 4 35s

SG: 104 27s

SG: 6 54s

SG: 5 28s

SG: 106 21s





Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	47	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	13	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	52	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing m	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	71	71	3	72	72	7	7	11	11
g / C, Green / Cycle	0.02	0.64	0.64	0.03	0.66	0.66	0.06	0.06	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.04	0.08	0.08
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1326	1627	1386
c, Capacity [veh/h]	27	1065	1036	44	1067	1064	103	80	161	137
d1, Uniform Delay [s]	53.87	10.12	10.12	53.21	10.57	10.57	49.41	50.52	48.45	48.49
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.58	1.62	23.57	2.37	2.37	1.10	6.36	6.22	7.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.48	0.48	0.82	0.59	0.59	0.28	0.65	0.79	0.80
d, Delay for Lane Group [s/veh]	73.98	11.70	11.74	76.78	12.93	12.94	50.52	56.88	54.67	56.04
Lane Group LOS	E	B	B	E	B	B	D	E	D	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	6.44	6.28	1.28	8.44	8.42	0.79	1.54	3.67	3.21
50th-Percentile Queue Length [ft/ln]	16.08	161.09	157.03	31.88	210.99	210.59	19.84	38.48	91.78	80.22
95th-Percentile Queue Length [veh/ln]	1.16	10.61	10.39	2.30	13.20	13.18	1.43	2.77	6.61	5.78
95th-Percentile Queue Length [ft/ln]	28.95	265.16	259.78	57.39	330.09	329.59	35.72	69.27	165.20	144.40

Movement, Approach, & Intersection Results

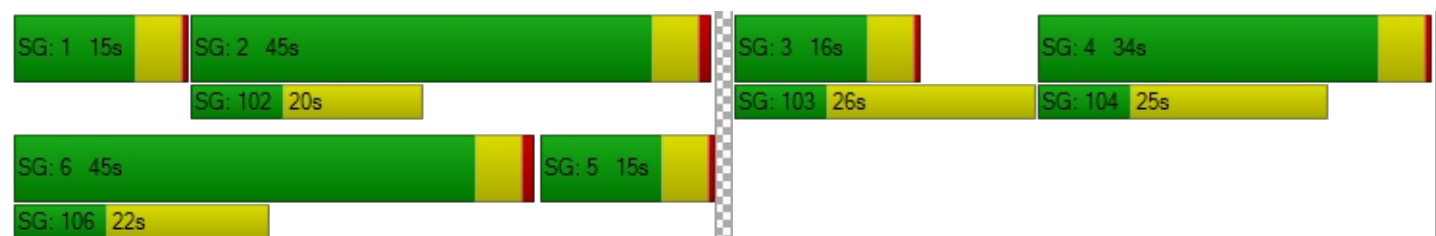
d_M, Delay for Movement [s/veh]	73.98	11.72	11.74	76.78	12.94	12.94	50.52	50.52	56.88	55.12	56.04	56.04
Movement LOS	E	B	B	E	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	12.80			14.72			54.60			55.30		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	18.82											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	3703.14			0.00			5701.08			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	2.799			2.754			1.987			2.067		
Crosswalk LOS	C			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	727			727			209			536		
d_b, Bicycle Delay [s]	22.27			22.27			44.10			29.46		
I_b,int, Bicycle LOS Score for Intersection	2.414			2.621			1.693			1.949		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 9.6
Level Of Service: A
Volume to Capacity (v/c): 0.031

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					




Intersection Level Of Service Report

Intersection 6: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.064

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 604.8
 Level Of Service: F
 Volume to Capacity (v/c): 1.749

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1115	116	38	957	70	29
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	8
Total Analysis Volume [veh/h]	1174	122	40	1007	74	31
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.07	0.01	1.75	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	12.18	0.00	604.77	537.49
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.24	0.00	10.12	10.12
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.96	0.00	252.95	252.95
d_A, Approach Delay [s/veh]	0.00		0.47		584.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	25.29					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 531.5
 Level Of Service: F
 Volume to Capacity (v/c): 1.690

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.07	0.01	1.69	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	13.40	0.00	531.52	471.39
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.23	0.00	8.36	8.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.75	0.00	209.12	209.12
d_A, Approach Delay [s/veh]	0.00		0.41		526.62	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	17.68					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 48.8
 Level Of Service: D
 Volume to Capacity (v/c): 0.937

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	26	84	54	54	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	352	2241	762	736	352	316
d1, Uniform Delay [s]	47.07	9.43	29.27	29.92	41.37	47.23
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	34.82	1.25	11.02	13.67	0.74	130.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.61	0.84	0.87	0.48	1.24
d, Delay for Lane Group [s/veh]	81.89	10.68	40.28	43.59	42.11	178.11
Lane Group LOS	F	B	D	D	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.66	8.88	18.34	19.16	4.41	20.88
50th-Percentile Queue Length [ft/ln]	341.49	221.94	458.54	479.06	110.29	522.05
95th-Percentile Queue Length [veh/ln]	19.72	13.76	25.37	26.34	7.86	31.60
95th-Percentile Queue Length [ft/ln]	493.02	344.10	634.13	658.54	196.41	789.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	81.89	10.68	41.75	43.59	42.11	178.11
Movement LOS	F	B	D	D	D	F
d_A, Approach Delay [s/veh]	25.10		41.94		137.48	
Approach LOS	C		D		F	
d_I, Intersection Delay [s/veh]	48.83					
Intersection LOS	D					
Intersection V/C	0.937					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 73.3
 Level Of Service: E
 Volume to Capacity (v/c): 0.954

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	53	53	11	54	54	13	13	25	25
g / C, Green / Cycle	0.08	0.44	0.44	0.09	0.45	0.45	0.11	0.11	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.19	0.19
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1424	1654	1528
c, Capacity [veh/h]	124	744	723	145	772	764	182	152	351	324
d1, Uniform Delay [s]	54.70	33.65	33.65	54.07	29.94	30.02	51.93	52.59	46.07	46.10
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.12	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.50	69.50	78.07	11.15	13.64	14.06	4.17	9.33	9.28	10.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	1.12	1.14	0.87	0.88	0.88	0.73	0.85	0.90	0.91
d, Delay for Lane Group [s/veh]	64.21	103.15	111.72	65.22	43.58	44.09	56.10	61.92	55.35	56.32
Lane Group LOS	E	F	F	E	D	D	E	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	35.39	36.07	4.20	20.30	20.31	4.09	4.20	10.07	9.43
50th-Percentile Queue Length [ft/ln]	84.16	884.64	901.80	105.10	507.41	507.65	102.17	105.03	251.82	235.64
95th-Percentile Queue Length [veh/ln]	6.06	48.90	50.38	7.57	27.68	27.70	7.36	7.56	15.28	14.46
95th-Percentile Queue Length [ft/ln]	151.48	1222.52	1259.43	189.16	692.12	692.40	183.91	189.06	381.95	361.52

Movement, Approach, & Intersection Results

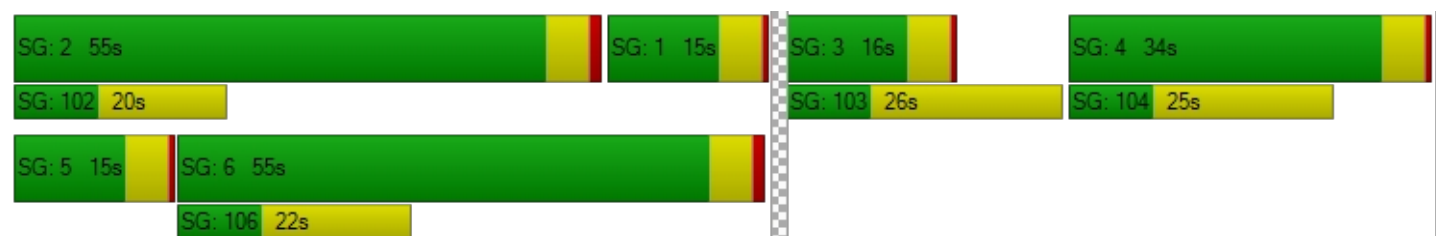
d_M, Delay for Movement [s/veh]	64.21	107.02	111.72	65.22	43.83	44.09	56.10	56.10	61.92	55.64	56.32	56.32
Movement LOS	E	F	F	E	D	D	E	E	E	E	E	E
d_A, Approach Delay [s/veh]	104.90			45.65			58.97			55.82		
Approach LOS	F			D			E			E		
d_I, Intersection Delay [s/veh]	73.32											
Intersection LOS	E											
Intersection V/C	0.954											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	12.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48	1772.03	769.39	4104.77
d_p, Pedestrian Delay [s]	48.60	48.60	48.60	48.60
I_p,int, Pedestrian LOS Score for Intersection	3.026	2.936	2.092	2.257
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	833	833	192	492
d_b, Bicycle Delay [s]	20.42	20.43	49.05	34.13
I_b,int, Bicycle LOS Score for Intersection	3.007	2.781	1.992	2.568
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.170

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					




Intersection Level Of Service Report

Intersection 6: Harney St/Site Dwy 1

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.030

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					




Appendix G 2040 Total Traffic Mitigation

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 14.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.727

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	1	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	22
Total Hourly Volume [veh/h]	537	45	15	935	124	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	3
Total Analysis Volume [veh/h]	597	50	17	1039	138	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	86	0	9	95	15	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	1	27	4	4
g / C, Green / Cycle	0.56	0.56	0.02	0.68	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.37	0.03	0.01	0.64	0.08	0.01
s, saturation flow rate [veh/h]	1626	1488	1667	1612	1666	1487
c, Capacity [veh/h]	906	829	36	1099	189	169
d1, Uniform Delay [s]	6.05	3.96	18.88	5.57	16.73	15.48
k, delay calibration	0.11	0.11	0.11	0.33	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.82	0.03	9.02	12.55	5.32	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.06	0.47	0.95	0.73	0.08
d, Delay for Lane Group [s/veh]	6.87	3.99	27.89	18.12	22.05	15.67
Lane Group LOS	A	A	C	B	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.01	0.11	0.22	5.48	1.29	0.10
50th-Percentile Queue Length [ft/ln]	50.22	2.64	5.59	136.88	32.23	2.43
95th-Percentile Queue Length [veh/ln]	3.62	0.19	0.40	9.31	2.32	0.17
95th-Percentile Queue Length [ft/ln]	90.40	4.76	10.05	232.82	58.02	4.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.87	3.99	27.89	18.12	22.05	15.67
Movement LOS	A	A	C	B	C	B
d_A, Approach Delay [s/veh]	6.65		18.28		21.50	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	14.48					
Intersection LOS	B					
Intersection V/C	0.727					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.061
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	5.200	5.875	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 23.4
 Level Of Service: C
 Volume to Capacity (v/c): 0.791

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	1	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	11
Total Hourly Volume [veh/h]	569	60	18	1049	101	5
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	1
Total Analysis Volume [veh/h]	632	67	20	1166	112	6
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	87.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	89	0	9	98	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	1	30	4	4
g / C, Green / Cycle	0.60	0.60	0.03	0.72	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.39	0.05	0.01	0.72	0.07	0.00
s, saturation flow rate [veh/h]	1626	1488	1667	1612	1666	1487
c, Capacity [veh/h]	967	885	45	1156	154	137
d1, Uniform Delay [s]	5.63	3.60	20.11	5.93	18.53	17.36
k, delay calibration	0.12	0.11	0.11	0.46	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.81	0.04	6.87	27.54	6.48	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.08	0.45	1.01	0.73	0.04
d, Delay for Lane Group [s/veh]	6.44	3.64	26.98	33.47	25.01	17.49
Lane Group LOS	A	A	C	F	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.08	0.14	0.26	10.45	1.20	0.05
50th-Percentile Queue Length [ft/ln]	52.09	3.39	6.40	261.28	29.97	1.28
95th-Percentile Queue Length [veh/ln]	3.75	0.24	0.46	15.86	2.16	0.09
95th-Percentile Queue Length [ft/ln]	93.77	6.10	11.52	396.58	53.95	2.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.44	3.64	26.98	33.47	25.01	17.49
Movement LOS	A	A	C	F	C	B
d_A, Approach Delay [s/veh]	6.17		33.36		24.63	
Approach LOS	A		C		C	
d_I, Intersection Delay [s/veh]	23.36					
Intersection LOS	C					
Intersection V/C	0.791					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.037
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	5.286	6.089	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.560

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	48
Total Hourly Volume [veh/h]	110	704	1098	61	42	24
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	7
Total Analysis Volume [veh/h]	122	782	1220	68	47	27
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	60.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	14	78	64	0	32	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	95	81	81	5	5
g / C, Green / Cycle	0.09	0.86	0.73	0.73	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.02
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1384
c, Capacity [veh/h]	134	2706	1179	1157	76	63
d1, Uniform Delay [s]	49.79	1.45	6.60	6.69	51.57	51.11
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.42	0.27	1.82	1.93	6.06	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.29	0.55	0.56	0.62	0.43
d, Delay for Lane Group [s/veh]	65.21	1.72	8.42	8.62	57.63	54.53
Lane Group LOS	E	A	A	A	E	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.89	0.84	6.29	6.39	1.40	0.78
50th-Percentile Queue Length [ft/ln]	97.25	20.91	157.22	159.65	34.97	19.59
95th-Percentile Queue Length [veh/ln]	7.00	1.51	10.40	10.53	2.52	1.41
95th-Percentile Queue Length [ft/ln]	175.04	37.64	260.04	263.25	62.94	35.26

Movement, Approach, & Intersection Results

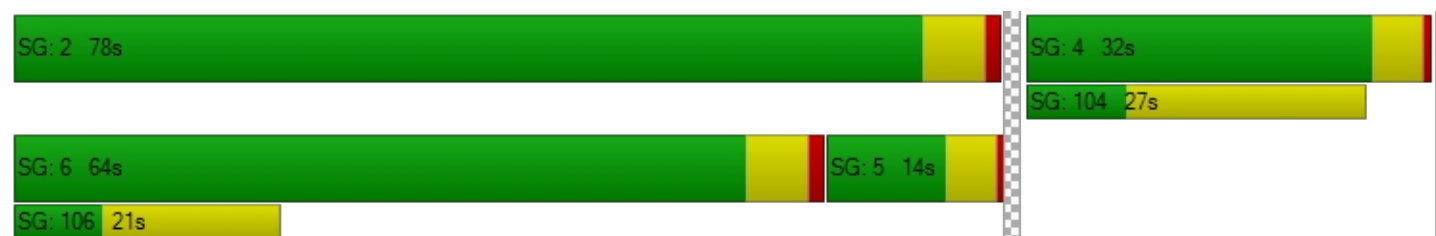
d_M, Delay for Movement [s/veh]	65.21	1.72	8.51	8.62	57.63	54.53
Movement LOS	E	A	A	A	E	D
d_A, Approach Delay [s/veh]	10.29		8.52		56.50	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	10.79					
Intersection LOS	B					
Intersection V/C	0.560					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	11380.41	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.737	2.656	2.119
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Hwy 101/20th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	31	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	16	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	4	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	18	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing m	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	97.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	17	27	0	22	32	0	0	31	31	0	30	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	69	69	3	71	71	6	30	14	14	14
g / C, Green / Cycle	0.02	0.63	0.63	0.03	0.64	0.64	0.05	0.27	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.01	0.06	0.10	0.03
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1343	1406	1084	1488
c, Capacity [veh/h]	26	1039	1011	43	1042	1039	86	366	213	198	185
d1, Uniform Delay [s]	53.89	11.02	11.02	53.22	11.54	11.54	50.44	29.49	46.96	48.00	43.36
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.33	1.69	1.74	24.36	2.57	2.57	1.69	0.04	0.92	1.78	0.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.50	0.50	0.83	0.60	0.60	0.34	0.05	0.40	0.55	0.22
d, Delay for Lane Group [s/veh]	75.22	12.72	12.77	77.58	14.10	14.11	52.13	29.53	47.88	49.79	43.80
Lane Group LOS	E	B	B	E	B	B	D	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.65	6.83	6.66	1.28	8.98	8.96	0.81	0.36	2.29	3.01	1.03
50th-Percentile Queue Length [ft/ln]	16.24	170.81	166.50	32.07	224.40	223.99	20.28	8.93	57.30	75.35	25.73
95th-Percentile Queue Length [veh/ln]	1.17	11.12	10.89	2.31	13.89	13.87	1.46	0.64	4.13	5.42	1.85
95th-Percentile Queue Length [ft/ln]	29.23	277.98	272.31	57.72	347.24	346.71	36.51	16.07	103.15	135.62	46.31

Movement, Approach, & Intersection Results

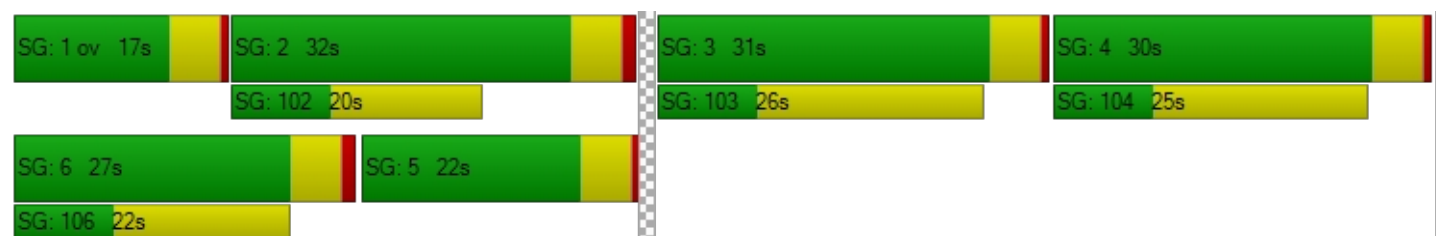
d_M, Delay for Movement [s/veh]	75.22	12.74	12.77	77.58	14.11	14.11	52.13	52.13	29.53	48.90	49.79	43.80
Movement LOS	E	B	B	E	B	B	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	13.83			15.88			43.47			48.05		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.48											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2817.70			0.00			5701.08			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	3.080			2.754			2.030			2.228		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			491			482			464		
d_b, Bicycle Delay [s]	35.20			31.31			31.69			32.46		
I_b,int, Bicycle LOS Score for Intersection	2.414			2.621			1.688			1.949		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.6
 Level Of Service: A
 Volume to Capacity (v/c): 0.031

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 7: Harney St/Site Dwy 2**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.064

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 40.0
 Level Of Service: D
 Volume to Capacity (v/c): 0.877

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	1
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	17
Total Hourly Volume [veh/h]	1115	116	38	957	70	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	3
Total Analysis Volume [veh/h]	1174	122	40	1007	74	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	10	108	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	Yes		No	Yes	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	2	36	4	4
g / C, Green / Cycle	0.63	0.63	0.04	0.76	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.70	0.08	0.02	0.59	0.04	0.01
s, saturation flow rate [veh/h]	1681	1452	1667	1695	1667	1100
c, Capacity [veh/h]	1054	911	78	1284	125	83
d1, Uniform Delay [s]	8.91	3.63	22.27	3.47	21.40	20.69
k, delay calibration	0.50	0.11	0.11	0.41	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	64.35	0.07	5.21	4.04	4.36	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.11	0.13	0.52	0.78	0.59	0.16
d, Delay for Lane Group [s/veh]	73.27	3.69	27.48	7.51	25.76	21.57
Lane Group LOS	F	A	C	A	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	24.56	0.29	0.51	2.22	0.88	0.14
50th-Percentile Queue Length [ft/ln]	614.07	7.15	12.80	55.48	21.95	3.59
95th-Percentile Queue Length [veh/ln]	35.58	0.51	0.92	3.99	1.58	0.26
95th-Percentile Queue Length [ft/ln]	889.57	12.86	23.05	99.86	39.51	6.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.27	3.69	27.48	7.51	25.76	21.57
Movement LOS	F	A	C	A	C	C
d_A, Approach Delay [s/veh]	66.72		8.27		25.13	
Approach LOS	E		A		C	
d_I, Intersection Delay [s/veh]	40.04					
Intersection LOS	D					
Intersection V/C	0.877					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.066
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	6.271	5.860	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 58.2
 Level Of Service: E
 Volume to Capacity (v/c): 0.947

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	1
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	101.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	9	107	13	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	2	36	3	3
g / C, Green / Cycle	0.63	0.63	0.04	0.76	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.76	0.11	0.02	0.61	0.05	0.00
s, saturation flow rate [veh/h]	1681	1440	1588	1695	1666	1406
c, Capacity [veh/h]	1062	910	64	1282	125	106
d1, Uniform Delay [s]	8.75	3.62	22.32	3.61	21.32	20.42
k, delay calibration	0.50	0.11	0.11	0.43	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	99.61	0.09	6.16	4.73	5.15	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.20	0.17	0.51	0.81	0.63	0.07
d, Delay for Lane Group [s/veh]	108.36	3.71	28.49	8.35	26.48	20.68
Lane Group LOS	F	A	C	A	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	34.94	0.37	0.44	2.49	0.95	0.07
50th-Percentile Queue Length [ft/ln]	873.38	9.19	10.97	62.34	23.75	1.83
95th-Percentile Queue Length [veh/ln]	51.35	0.66	0.79	4.49	1.71	0.13
95th-Percentile Queue Length [ft/ln]	1283.70	16.54	19.75	112.20	42.75	3.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	108.36	3.71	28.49	8.35	26.48	20.68
Movement LOS	F	A	C	A	C	C
d_A, Approach Delay [s/veh]	96.75		8.97		26.00	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	58.20					
Intersection LOS	E					
Intersection V/C	0.947					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.046
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	6.499	5.893	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 31.7
 Level Of Service: C
 Volume to Capacity (v/c): 0.761

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	5	2	6	0	4	4
Auxiliary Signal Groups						4,5
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	4.0	5.0	5.0	0.0	4.0	4.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.5
Split [s]	32	88	56	0	32	32
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	2.5
Walk [s]	0	7	7	0	8	8
Pedestrian Clearance [s]	0	17	14	0	19	19
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	2.5
Minimum Recall	No	Yes	Yes		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	0.00
g_i, Effective Green Time [s]	27	84	53	53	25	56
g / C, Green / Cycle	0.22	0.70	0.44	0.44	0.21	0.47
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	370	2251	749	723	346	700
d1, Uniform Delay [s]	45.71	9.22	30.12	30.80	41.71	22.81
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.21	1.23	12.27	15.36	0.78	3.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.61	0.86	0.89	0.48	0.56
d, Delay for Lane Group [s/veh]	69.92	10.45	42.39	46.16	42.49	25.88
Lane Group LOS	E	B	D	D	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	12.58	8.74	18.85	19.74	4.43	8.45
50th-Percentile Queue Length [ft/ln]	314.49	218.56	471.15	493.60	110.84	211.17
95th-Percentile Queue Length [veh/ln]	18.40	13.59	25.97	27.03	7.89	13.21
95th-Percentile Queue Length [ft/ln]	459.90	339.78	649.14	675.78	197.17	330.33

Movement, Approach, & Intersection Results

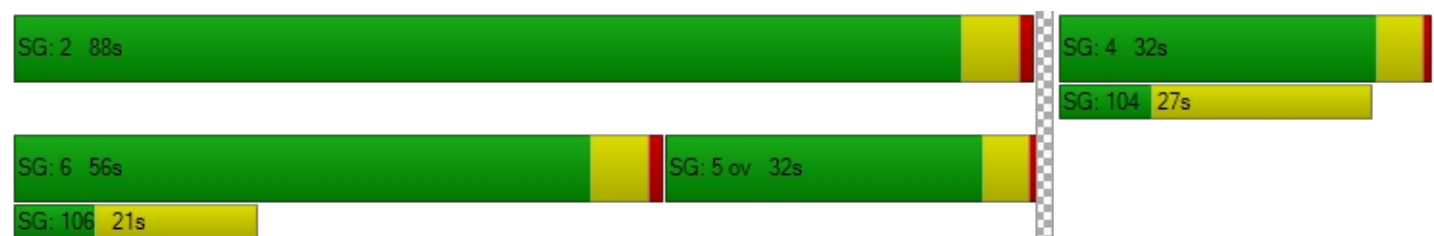
d_M, Delay for Movement [s/veh]	69.92	10.45	44.06	46.16	42.49	25.88
Movement LOS	E	B	D	D	D	C
d_A, Approach Delay [s/veh]	22.49		44.28		30.84	
Approach LOS	C		D		C	
d_I, Intersection Delay [s/veh]	31.67					
Intersection LOS	C					
Intersection V/C	0.761					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Hwy 101/20th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 51.1
 Level Of Service: D
 Volume to Capacity (v/c): 0.890

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	81.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	31	31	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	13	44	0	13	44	0	0	31	31	0	32	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	60	60	9	60	60	13	26	21	21	21
g / C, Green / Cycle	0.07	0.50	0.50	0.07	0.50	0.50	0.11	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.15	0.15	0.09
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1436	1654	1612	1475
c, Capacity [veh/h]	119	842	817	119	848	840	180	309	284	277	253
d1, Uniform Delay [s]	55.12	29.85	30.24	55.74	25.26	25.33	52.15	40.66	48.34	48.34	45.12
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.05	27.94	32.86	48.86	7.82	8.02	4.41	0.67	5.69	5.81	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.99	1.01	1.06	0.80	0.80	0.74	0.42	0.86	0.86	0.51
d, Delay for Lane Group [s/veh]	67.17	57.79	63.10	104.60	33.08	33.35	56.56	41.33	54.03	54.14	46.29
Lane Group LOS	E	E	F	F	C	C	E	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.45	29.13	29.99	5.23	17.48	17.47	4.11	3.36	7.53	7.35	3.58
50th-Percentile Queue Length [ft/ln]	86.31	728.37	749.87	130.74	437.09	436.64	102.74	84.06	188.34	183.74	89.42
95th-Percentile Queue Length [veh/ln]	6.21	37.99	39.16	9.14	24.34	24.32	7.40	6.05	12.04	11.80	6.44
95th-Percentile Queue Length [ft/ln]	155.35	949.68	978.91	228.44	608.53	607.98	184.93	151.30	300.88	294.89	160.95

Movement, Approach, & Intersection Results

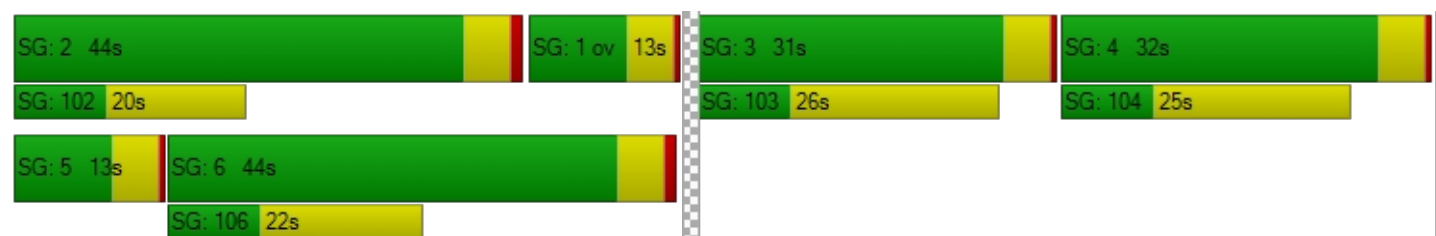
d_M, Delay for Movement [s/veh]	67.17	60.19	63.10	104.60	33.21	33.35	56.56	56.56	41.33	54.08	54.14	46.29
Movement LOS	E	E	E	F	C	C	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	60.82			39.29			49.06			52.44		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	51.07											
Intersection LOS	D											
Intersection V/C	0.890											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48			1772.03			769.39			4104.77		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	3.026			2.936			2.092			2.372		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	650			650			442			458		
d_b, Bicycle Delay [s]	27.34			27.35			36.43			35.65		
I_b,int, Bicycle LOS Score for Intersection	3.007			2.781			1.992			2.568		
Bicycle LOS	C			C			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.170

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.030

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.727

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	22
Total Hourly Volume [veh/h]	537	45	15	935	124	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	3
Total Analysis Volume [veh/h]	597	50	17	1039	138	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	86	0	9	95	15	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	1	27	4	4
g / C, Green / Cycle	0.56	0.56	0.02	0.68	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.20	0.20	0.01	0.64	0.08	0.01
s, saturation flow rate [veh/h]	1626	1582	1667	1612	1666	1487
c, Capacity [veh/h]	906	882	36	1099	189	169
d1, Uniform Delay [s]	4.78	4.81	18.87	5.57	16.73	15.48
k, delay calibration	0.11	0.11	0.11	0.33	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.24	0.26	9.03	12.55	5.33	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.37	0.47	0.95	0.73	0.08
d, Delay for Lane Group [s/veh]	5.01	5.06	27.90	18.12	22.06	15.67
Lane Group LOS	A	A	C	B	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.83	0.84	0.22	5.47	1.29	0.10
50th-Percentile Queue Length [ft/ln]	20.77	20.96	5.59	136.81	32.23	2.42
95th-Percentile Queue Length [veh/ln]	1.50	1.51	0.40	9.31	2.32	0.17
95th-Percentile Queue Length [ft/ln]	37.38	37.73	10.06	232.72	58.02	4.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.04	5.06	27.90	18.12	22.06	15.67
Movement LOS	A	A	C	B	C	B
d_A, Approach Delay [s/veh]	5.04		18.28		21.51	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	13.92					
Intersection LOS	B					
Intersection V/C	0.727					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.061
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.666	5.875	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 22.8
 Level Of Service: C
 Volume to Capacity (v/c): 0.791

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	11
Total Hourly Volume [veh/h]	569	60	18	1049	101	5
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	1
Total Analysis Volume [veh/h]	632	67	20	1166	112	6
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	87.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	89	0	9	98	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	1	30	4	4
g / C, Green / Cycle	0.60	0.60	0.03	0.72	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.22	0.22	0.01	0.72	0.07	0.00
s, saturation flow rate [veh/h]	1626	1572	1667	1612	1666	1487
c, Capacity [veh/h]	967	936	45	1156	153	137
d1, Uniform Delay [s]	4.38	4.42	20.10	5.93	18.53	17.35
k, delay calibration	0.11	0.11	0.11	0.46	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.25	6.92	27.50	6.54	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.37	0.45	1.01	0.73	0.04
d, Delay for Lane Group [s/veh]	4.61	4.67	27.01	33.42	25.07	17.48
Lane Group LOS	A	A	C	F	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.86	0.87	0.26	10.43	1.20	0.05
50th-Percentile Queue Length [ft/ln]	21.60	21.87	6.41	260.79	30.02	1.28
95th-Percentile Queue Length [veh/ln]	1.55	1.57	0.46	15.84	2.16	0.09
95th-Percentile Queue Length [ft/ln]	38.87	39.36	11.53	395.93	54.03	2.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.63	4.67	27.01	33.42	25.07	17.48
Movement LOS	A	A	C	F	C	B
d_A, Approach Delay [s/veh]	4.64		33.31		24.69	
Approach LOS	A		C		C	
d_I, Intersection Delay [s/veh]	22.80					
Intersection LOS	C					
Intersection V/C	0.791					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.037
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.709	6.089	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.560

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	48
Total Hourly Volume [veh/h]	110	704	1098	61	42	24
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	7
Total Analysis Volume [veh/h]	122	782	1220	68	47	27
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	60.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	14	78	64	0	32	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	95	81	81	5	5
g / C, Green / Cycle	0.09	0.86	0.73	0.73	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.02
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1384
c, Capacity [veh/h]	134	2706	1179	1157	76	63
d1, Uniform Delay [s]	49.79	1.45	6.60	6.69	51.57	51.11
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.42	0.27	1.82	1.93	6.06	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.29	0.55	0.56	0.62	0.43
d, Delay for Lane Group [s/veh]	65.21	1.72	8.42	8.62	57.63	54.53
Lane Group LOS	E	A	A	A	E	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.89	0.84	6.29	6.39	1.40	0.78
50th-Percentile Queue Length [ft/ln]	97.25	20.91	157.22	159.65	34.97	19.59
95th-Percentile Queue Length [veh/ln]	7.00	1.51	10.40	10.53	2.52	1.41
95th-Percentile Queue Length [ft/ln]	175.04	37.64	260.04	263.25	62.94	35.26

Movement, Approach, & Intersection Results

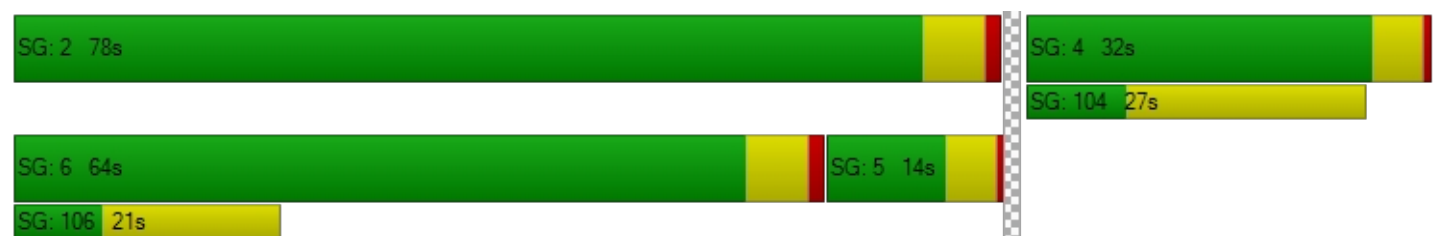
d_M, Delay for Movement [s/veh]	65.21	1.72	8.51	8.62	57.63	54.53
Movement LOS	E	A	A	A	E	D
d_A, Approach Delay [s/veh]	10.29		8.52		56.50	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	10.79					
Intersection LOS	B					
Intersection V/C	0.560					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	11380.41	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.737	2.656	2.119
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Hwy 101/20th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	31	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	16	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	4	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	18	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing m	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	97.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	17	27	0	22	32	0	0	31	31	0	30	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	69	69	3	71	71	6	30	14	14	14
g / C, Green / Cycle	0.02	0.63	0.63	0.03	0.64	0.64	0.05	0.27	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.01	0.06	0.10	0.03
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1343	1406	1084	1488
c, Capacity [veh/h]	26	1039	1011	43	1042	1039	86	366	213	198	185
d1, Uniform Delay [s]	53.89	11.02	11.02	53.22	11.54	11.54	50.44	29.49	46.96	48.00	43.36
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.33	1.69	1.74	24.36	2.57	2.57	1.69	0.04	0.92	1.78	0.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.50	0.50	0.83	0.60	0.60	0.34	0.05	0.40	0.55	0.22
d, Delay for Lane Group [s/veh]	75.22	12.72	12.77	77.58	14.10	14.11	52.13	29.53	47.88	49.79	43.80
Lane Group LOS	E	B	B	E	B	B	D	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.65	6.83	6.66	1.28	8.98	8.96	0.81	0.36	2.29	3.01	1.03
50th-Percentile Queue Length [ft/ln]	16.24	170.81	166.50	32.07	224.40	223.99	20.28	8.93	57.30	75.35	25.73
95th-Percentile Queue Length [veh/ln]	1.17	11.12	10.89	2.31	13.89	13.87	1.46	0.64	4.13	5.42	1.85
95th-Percentile Queue Length [ft/ln]	29.23	277.98	272.31	57.72	347.24	346.71	36.51	16.07	103.15	135.62	46.31

Movement, Approach, & Intersection Results

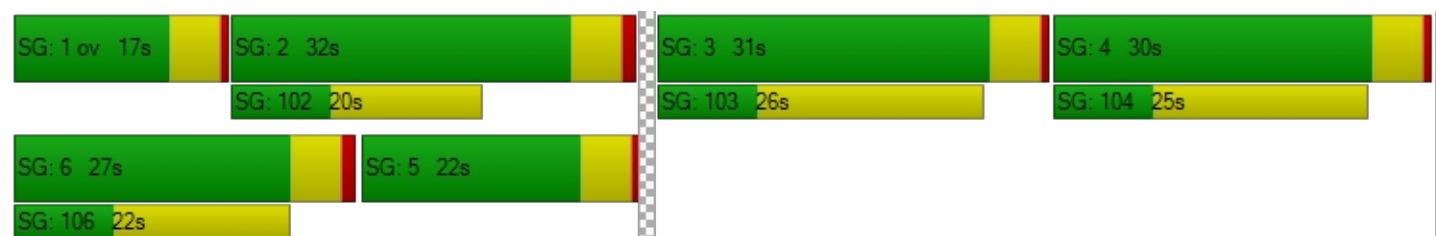
d_M, Delay for Movement [s/veh]	75.22	12.74	12.77	77.58	14.11	14.11	52.13	52.13	29.53	48.90	49.79	43.80
Movement LOS	E	B	B	E	B	B	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	13.83			15.88			43.47			48.05		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.48											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2817.70			0.00			5701.08			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	3.080			2.754			2.030			2.228		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			491			482			464		
d_b, Bicycle Delay [s]	35.20			31.31			31.69			32.46		
I_b,int, Bicycle LOS Score for Intersection	2.414			2.621			1.688			1.949		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.6
 Level Of Service: A
 Volume to Capacity (v/c): 0.031

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.064

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.0
 Level Of Service: A
 Volume to Capacity (v/c): 0.782

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	17
Total Hourly Volume [veh/h]	1115	116	38	957	70	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	3
Total Analysis Volume [veh/h]	1174	122	40	1007	74	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	10	108	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	Yes		No	Yes	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	2	22	3	3
g / C, Green / Cycle	0.50	0.50	0.05	0.67	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.39	0.40	0.02	0.59	0.04	0.01
s, saturation flow rate [veh/h]	1681	1627	1667	1695	1667	1100
c, Capacity [veh/h]	843	816	79	1137	141	93
d1, Uniform Delay [s]	6.62	6.76	15.22	4.37	14.36	13.88
k, delay calibration	0.11	0.11	0.11	0.19	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.51	1.80	4.93	4.35	3.00	0.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.79	0.51	0.89	0.52	0.14
d, Delay for Lane Group [s/veh]	8.13	8.57	20.16	8.71	17.36	14.56
Lane Group LOS	A	A	C	A	B	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.08	2.18	0.34	1.63	0.54	0.09
50th-Percentile Queue Length [ft/ln]	52.12	54.41	8.61	40.72	13.43	2.22
95th-Percentile Queue Length [veh/ln]	3.75	3.92	0.62	2.93	0.97	0.16
95th-Percentile Queue Length [ft/ln]	93.81	97.95	15.49	73.29	24.18	4.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.33	8.57	20.16	8.71	17.36	14.56
Movement LOS	A	A	C	A	B	B
d_A, Approach Delay [s/veh]	8.35		9.15		16.94	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.00					
Intersection LOS	A					
Intersection V/C	0.782					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.066
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.202	5.860	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 2: Hwy 101/31st St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.793

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	101.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	9	107	13	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	1	24	3	3
g / C, Green / Cycle	0.54	0.54	0.04	0.69	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.43	0.44	0.02	0.61	0.05	0.00
s, saturation flow rate [veh/h]	1681	1618	1588	1695	1666	1406
c, Capacity [veh/h]	905	871	63	1172	136	115
d1, Uniform Delay [s]	6.56	6.75	16.62	4.30	15.62	14.96
k, delay calibration	0.11	0.11	0.11	0.24	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.61	2.03	6.50	5.11	3.87	0.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.82	0.52	0.88	0.58	0.06
d, Delay for Lane Group [s/veh]	8.17	8.78	23.11	9.41	19.49	15.18
Lane Group LOS	A	A	C	A	B	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.45	2.59	0.33	2.02	0.65	0.05
50th-Percentile Queue Length [ft/ln]	61.16	64.83	8.34	50.49	16.29	1.25
95th-Percentile Queue Length [veh/ln]	4.40	4.67	0.60	3.64	1.17	0.09
95th-Percentile Queue Length [ft/ln]	110.09	116.69	15.00	90.89	29.33	2.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.43	8.78	23.11	9.41	19.49	15.18
Movement LOS	A	A	C	A	B	B
d_A, Approach Delay [s/veh]	8.47		9.84		19.14	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.39					
Intersection LOS	A					
Intersection V/C	0.793					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.046
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.315	5.893	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 31.7
 Level Of Service: C
 Volume to Capacity (v/c): 0.761

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	5	2	6	0	4	4
Auxiliary Signal Groups						4,5
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	4.0	5.0	5.0	0.0	4.0	4.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.5
Split [s]	32	88	56	0	32	32
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	2.5
Walk [s]	0	7	7	0	8	8
Pedestrian Clearance [s]	0	17	14	0	19	19
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	2.5
Minimum Recall	No	Yes	Yes		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	0.00
g_i, Effective Green Time [s]	27	84	53	53	25	56
g / C, Green / Cycle	0.22	0.70	0.44	0.44	0.21	0.47
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	370	2251	749	723	346	700
d1, Uniform Delay [s]	45.71	9.22	30.12	30.80	41.71	22.81
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.21	1.23	12.27	15.36	0.78	3.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.61	0.86	0.89	0.48	0.56
d, Delay for Lane Group [s/veh]	69.92	10.45	42.39	46.16	42.49	25.88
Lane Group LOS	E	B	D	D	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	12.58	8.74	18.85	19.74	4.43	8.45
50th-Percentile Queue Length [ft/ln]	314.49	218.56	471.15	493.60	110.84	211.17
95th-Percentile Queue Length [veh/ln]	18.40	13.59	25.97	27.03	7.89	13.21
95th-Percentile Queue Length [ft/ln]	459.90	339.78	649.14	675.78	197.17	330.33

Movement, Approach, & Intersection Results

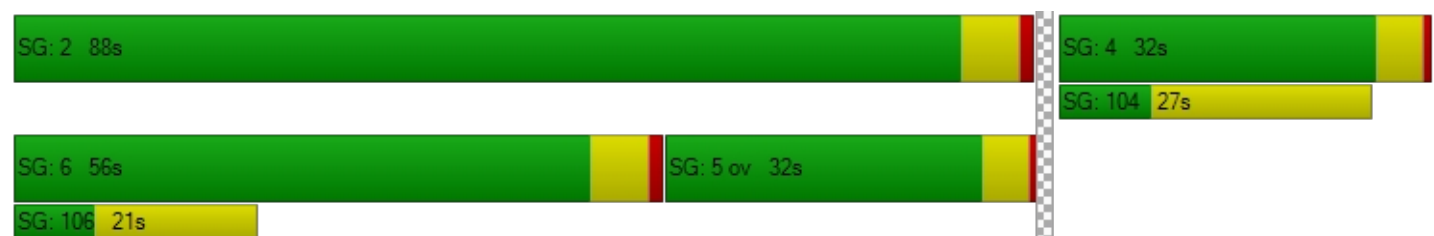
d_M, Delay for Movement [s/veh]	69.92	10.45	44.06	46.16	42.49	25.88
Movement LOS	E	B	D	D	D	C
d_A, Approach Delay [s/veh]	22.49		44.28		30.84	
Approach LOS	C		D		C	
d_I, Intersection Delay [s/veh]	31.67					
Intersection LOS	C					
Intersection V/C	0.761					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Hwy 101/20th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 51.1
 Level Of Service: D
 Volume to Capacity (v/c): 0.890

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	81.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	31	31	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	13	44	0	13	44	0	0	31	31	0	32	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	60	60	9	60	60	13	26	21	21	21
g / C, Green / Cycle	0.07	0.50	0.50	0.07	0.50	0.50	0.11	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.15	0.15	0.09
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1436	1654	1612	1475
c, Capacity [veh/h]	119	842	817	119	848	840	180	309	284	277	253
d1, Uniform Delay [s]	55.12	29.85	30.24	55.74	25.26	25.33	52.15	40.66	48.34	48.34	45.12
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.05	27.94	32.86	48.86	7.82	8.02	4.41	0.67	5.69	5.81	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.99	1.01	1.06	0.80	0.80	0.74	0.42	0.86	0.86	0.51
d, Delay for Lane Group [s/veh]	67.17	57.79	63.10	104.60	33.08	33.35	56.56	41.33	54.03	54.14	46.29
Lane Group LOS	E	E	F	F	C	C	E	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.45	29.13	29.99	5.23	17.48	17.47	4.11	3.36	7.53	7.35	3.58
50th-Percentile Queue Length [ft/ln]	86.31	728.37	749.87	130.74	437.09	436.64	102.74	84.06	188.34	183.74	89.42
95th-Percentile Queue Length [veh/ln]	6.21	37.99	39.16	9.14	24.34	24.32	7.40	6.05	12.04	11.80	6.44
95th-Percentile Queue Length [ft/ln]	155.35	949.68	978.91	228.44	608.53	607.98	184.93	151.30	300.88	294.89	160.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.17	60.19	63.10	104.60	33.21	33.35	56.56	56.56	41.33	54.08	54.14	46.29
Movement LOS	E	E	E	F	C	C	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	60.82			39.29			49.06			52.44		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	51.07											
Intersection LOS	D											
Intersection V/C	0.890											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48			1772.03			769.39			4104.77		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	3.026			2.936			2.092			2.372		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	650			650			442			458		
d_b, Bicycle Delay [s]	27.34			27.35			36.43			35.65		
I_b,int, Bicycle LOS Score for Intersection	3.007			2.781			1.992			2.568		
Bicycle LOS	C			C			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.170

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.030

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

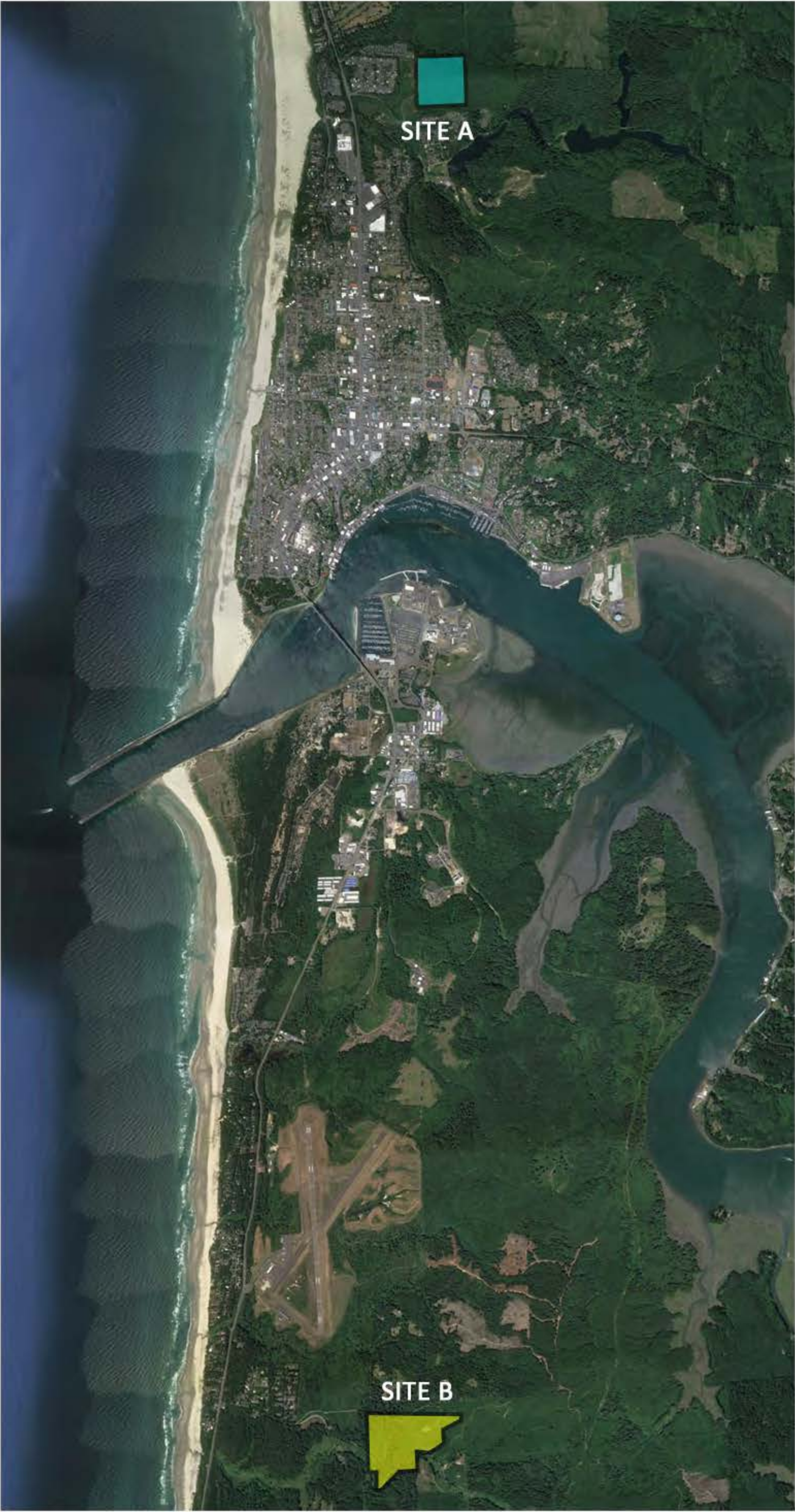
Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					





EXISTING ZONING | COMP PLAN DESIGNATION

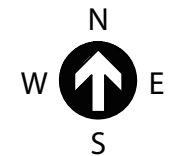
43.4
ACRES TIMBER CONSERVATION (T-C)

PROPOSED ZONING | COMP PLAN DESIGNATION

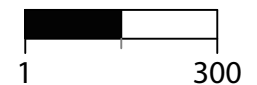
43.4
ACRES HIGH DENSITY RESIDENTIAL (R-4)
COMP: HIGH DENSITY RESIDENTIAL

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 300'



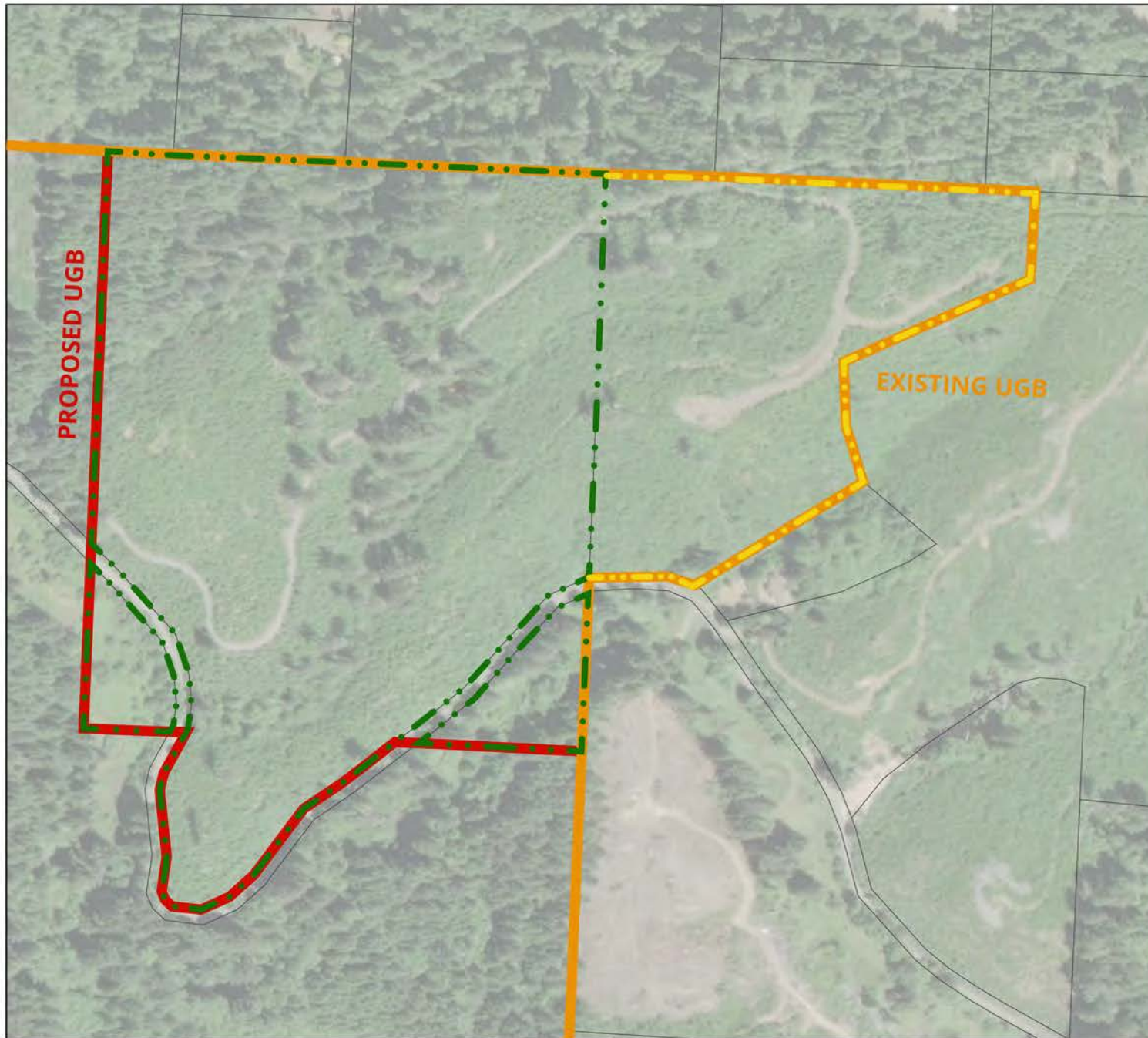
HANCOCK UGB ADJUSTMENT

SITE A ZONE CHANGE EXHIBIT

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SEPTEMBER 2020



EXISTING ZONING | COMP PLAN DESIGNATION

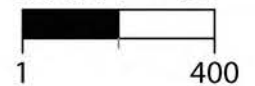
71 RURAL RESIDENTIAL (RR-10) |
ACRES HIGH DENSITY RESIDENTIAL (HDR)

SITE NOTE

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SCALE: 1" = 400'



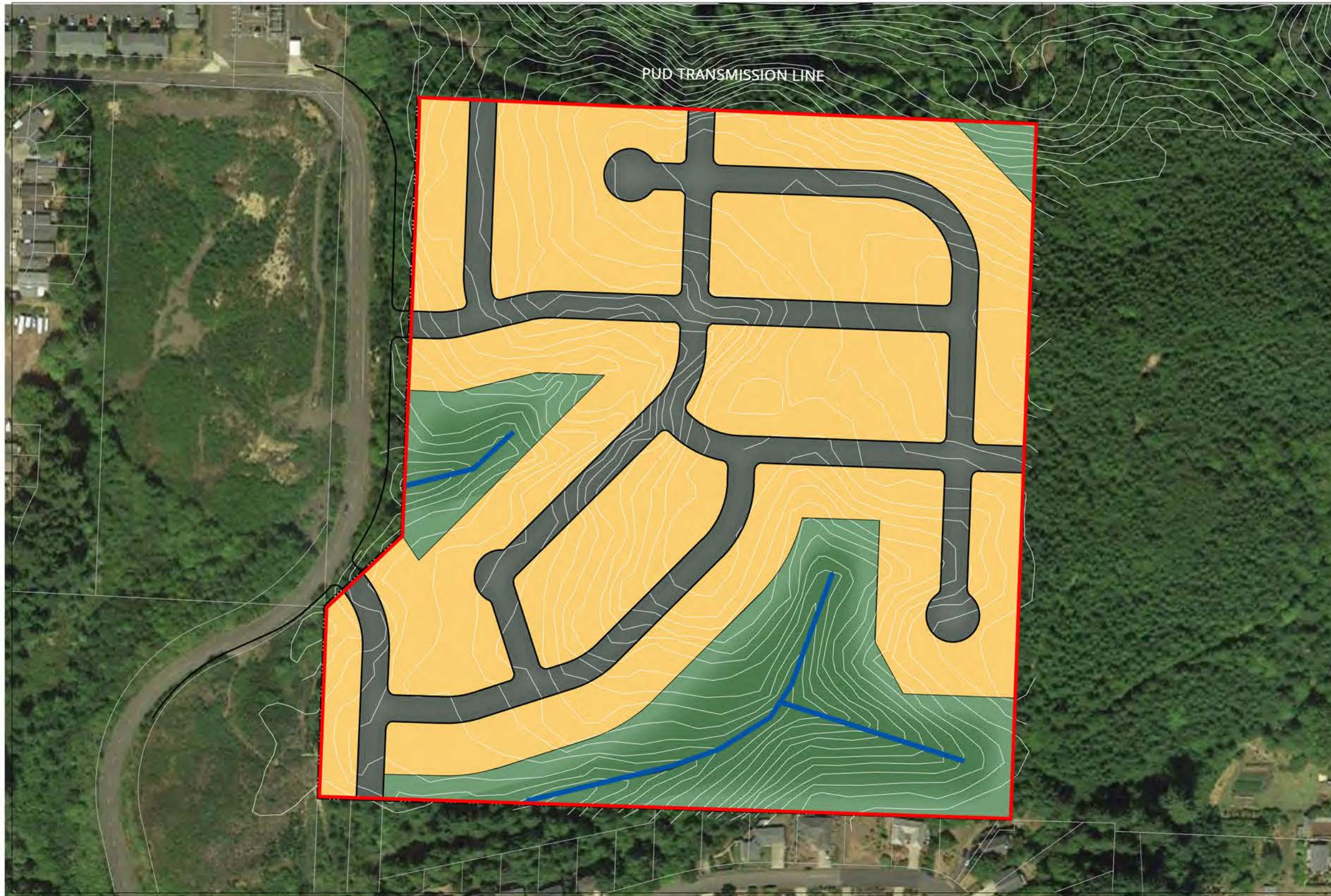
HANCOCK UGB ADJUSTMENT

UGB AMENDMENT EXHIBIT

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SEPTEMBER 2020

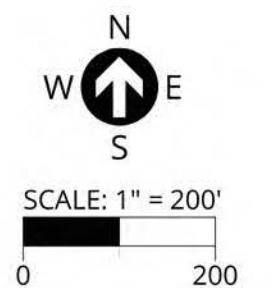


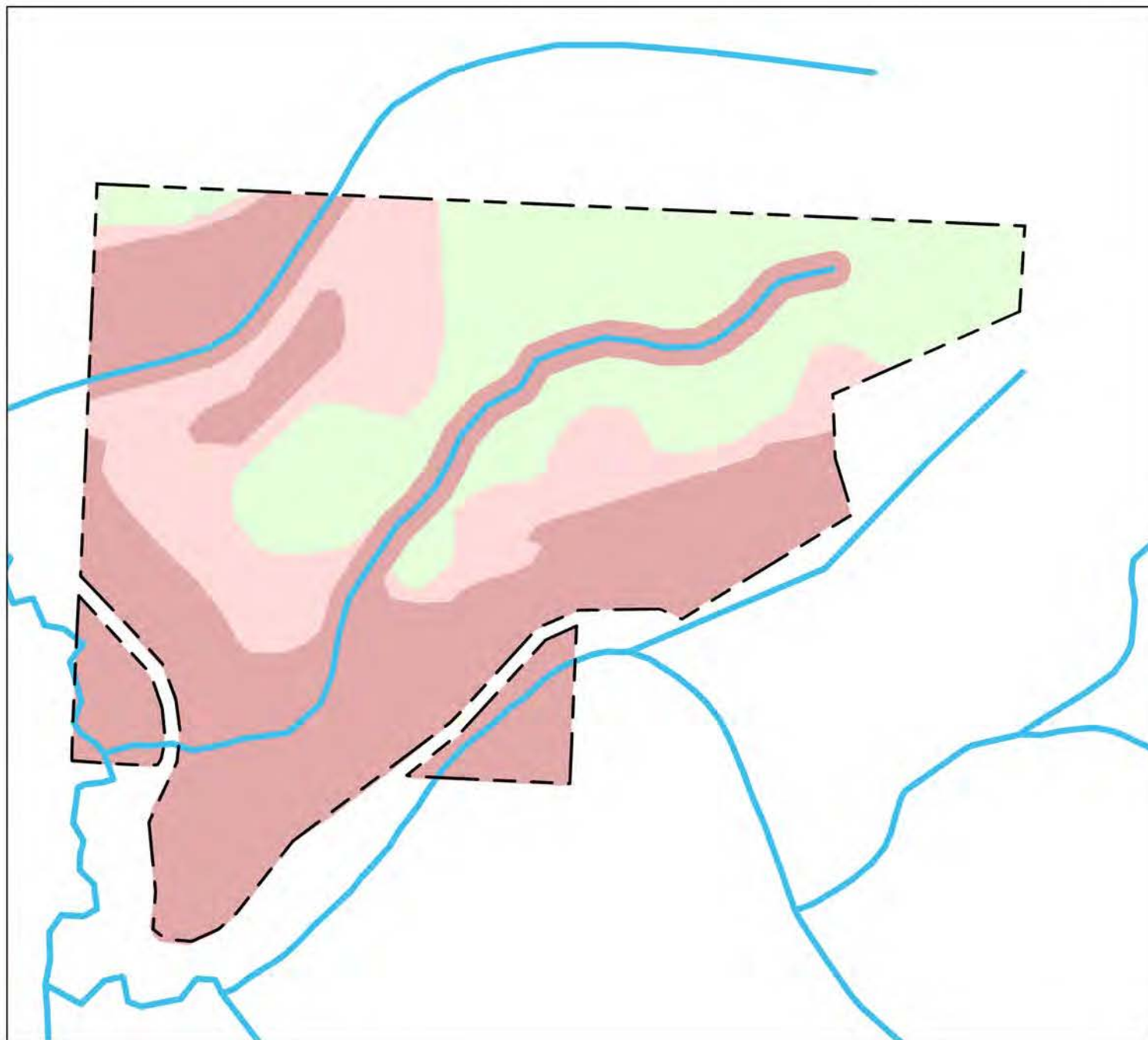
SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING TAX MAPS AND COUNTY RLIS GIS DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.

LEGEND

- DEVELOPABLE LOT AREA
21.6 ACRES
- STREAM BUFFER/STEEP SLOPES
8.4 ACRES
- POTENTIAL STREAM ALIGNMENT



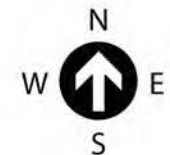


LEGEND

	EST. ACREAGE
■ BUILDABLE	22.5
■ PARTIALLY CONSTRAINED	15.2
■ CONSTRAINED	33.7
- - - SITE B BOUNDARY	
— STREAMS	

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



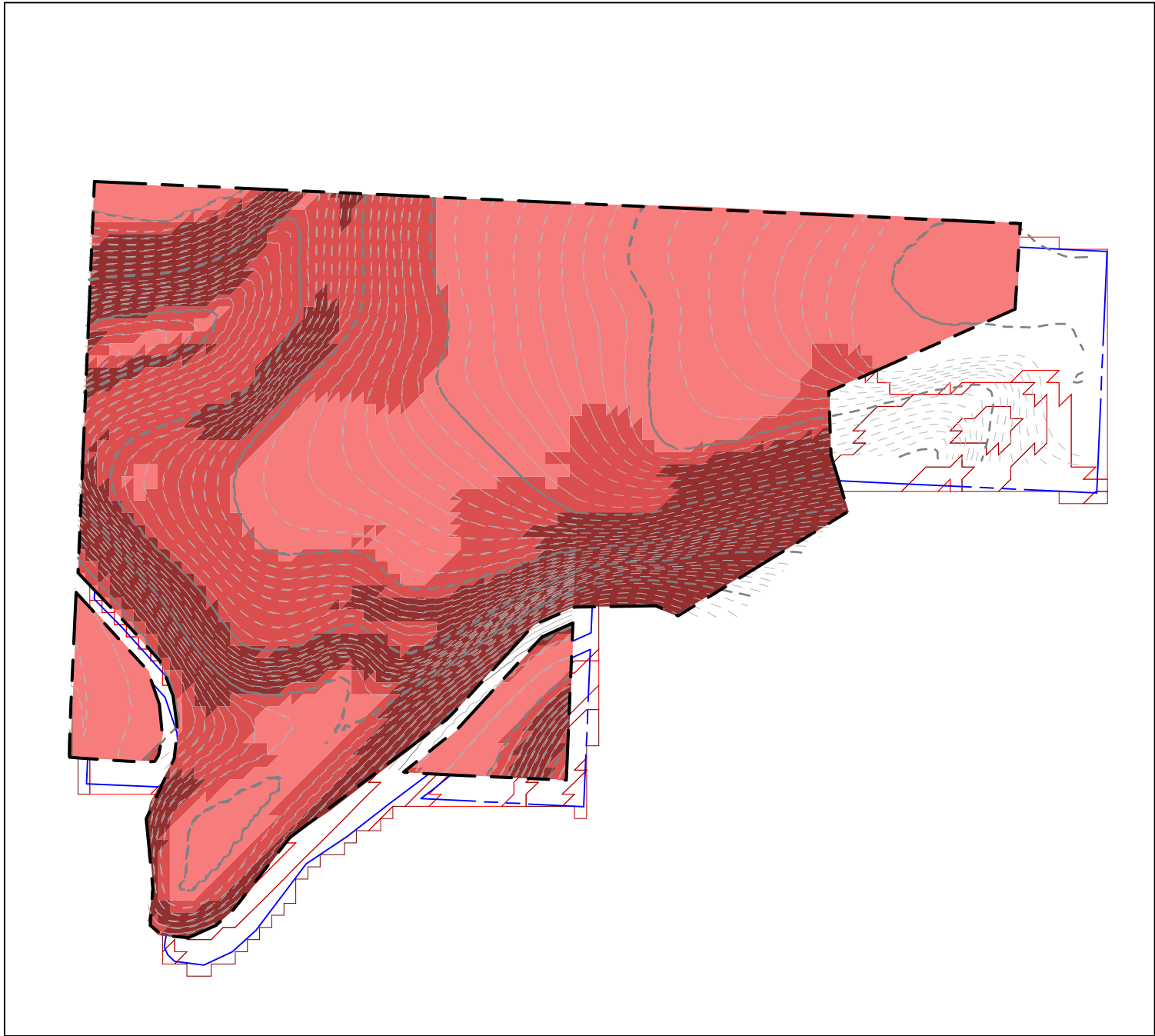
HANCOCK UGB ADJUSTMENT

SITE B BUILDABLE LANDS ANALYSIS

3J CONSULTING

CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

SEPTEMBER 2020



LEGEND

0 - 10% SLOPE

10 - 25% SLOPE

>25% SLOPE

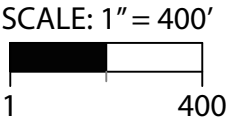
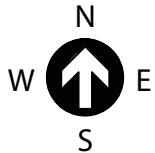
SITE B BOUNDARY

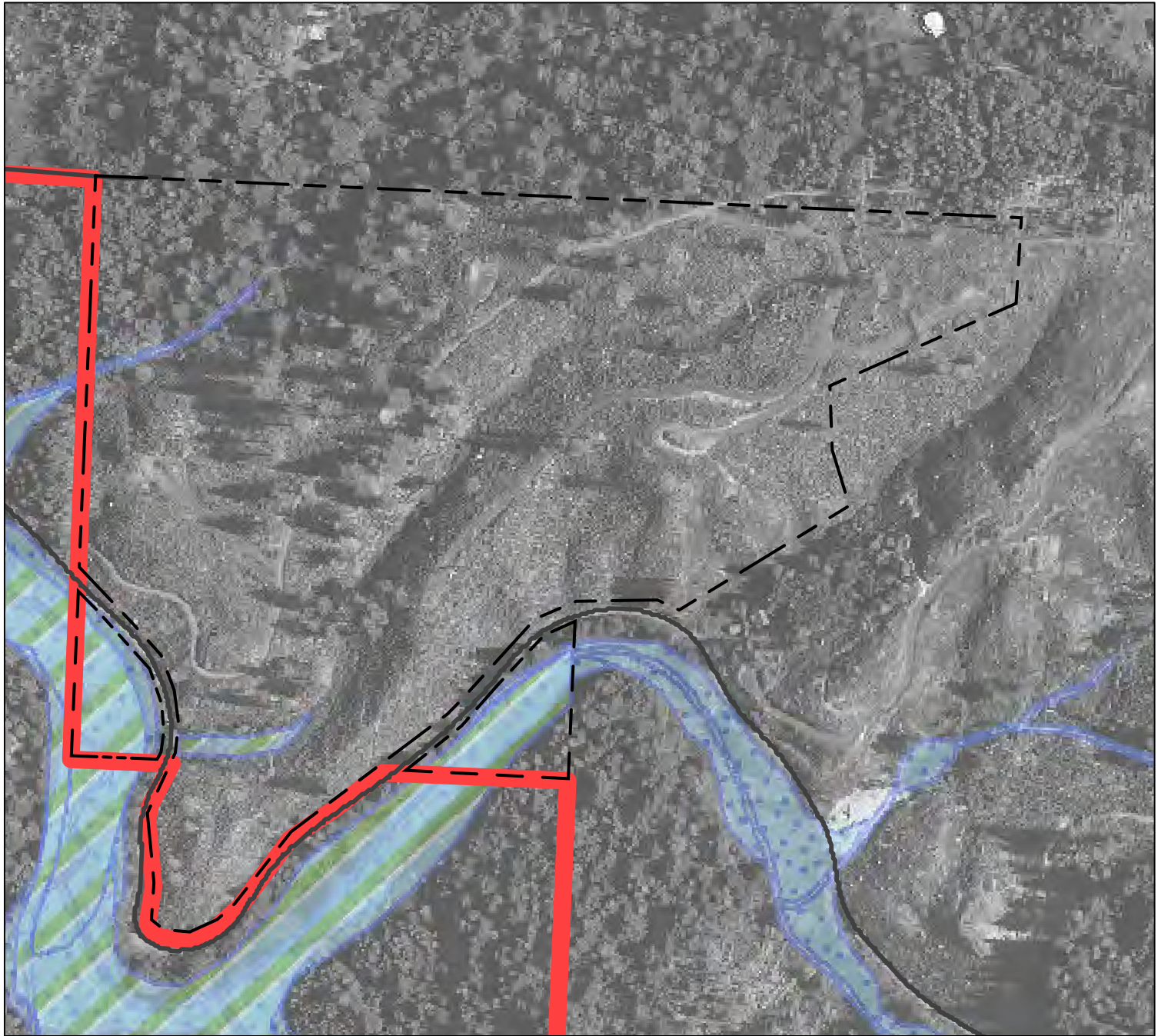
40 FT MAJOR CONTOURS

5 FT MINOR CONTOURS





SITE NOTE

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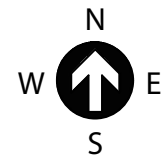


LEGEND

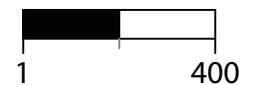
-  LOCAL WETLAND INVENTORY
-  NATIONAL WETLAND INVENTORY
-  SITE B BOUNDARY
-  URBAN GROWTH BOUNDARY (OUT OF DATE)

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING CITY OF NEWBERG WETLAND MAPS. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



HANCOCK UGB ADJUSTMENT


SITE B WETLAND ANALYSIS

3J CONSULTING
CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

SEPTEMBER 2020

Memorandum

To: Newport City Council

From: Derrick Tokos, Community Development Director 

Date: January 13, 2021

Re: Updated Supplemental Analysis for Boston Timber Opportunities, LLC UGB
Amendment (File 1-UGB-20/1-CP-20)

This memo addresses boundary location and priority provisions outlined in OAR 660-024-0065 and OAR 660-024-0067. It has been updated since the December 14, 2020 Planning Commission hearing to address specific feedback contained in a December 17, 2020 email from Kevin Young, Senior Urban Planner, with the Department of Land Conservation and Development.

The locational provisions of the above referenced Administrative Rules require that the City evaluate lands within 1 mile of the Newport Urban Growth Boundary (UGB) to see if the 43.4 acres the applicant proposes to add to the UGB is best suited for that purpose given (a) the identified residential need and (b) the State of Oregon's priorities which emphasize non-resource (i.e. "exception") land being added as opposed to resource (i.e. "farm and forest") lands. A map enclosed as Attachment "A" shows the 1 mile study area. If exception areas are contiguous to the 1 mile buffer, then the analysis must extend another ½ mile from the Newport UGB. This 1½ mile buffer has not been mapped, but is addressed in the analysis. Exception lands exist south, east, and north of the City of Newport UGB and maps illustrating these areas are attached as Attachments "B," "C," and "D."

The City may exclude lands from the study area if it determines that it is not practicable for the City to extend the necessary public services, or the lands are subject to development hazards such as bluff and dune backed erosion hazards, landslide hazards, or tsunami inundation (OAR 660-024-0065(4)(a) and (b)). Both of these factors are relevant to lands within the study area.

Exception lands south of the Newport UGB are being excluded because they are far removed from City water and wastewater services, and are significantly impacted by bluff and dune backed erosion hazards, landslide hazards, or tsunami inundation. The extent to which the properties are impacted by development hazards is illustrated on Attachment "B." Water and wastewater service would have to be extended from SE 50th Street, which is over three miles to the north. For wastewater alone, a force main and lift stations would have to be extended south along the US 101 corridor which is heavily impacted by wetlands and lies within the tsunami inundation area. The City Waterwater Master Plan, by Brown and Caldwell, dated February 9, 2018, includes an estimate for extending sewer service to the Surfland unincorporated rural residential development, which lies just inside the Newport UGB and is a little more than 1 mile from existing services at SE 50th Street. Its location is identified on Attachment "B." The project cost is estimated to be a little more than \$6.2 million (2016 dollars), including a force main, lift station, and gravity main distribution system. This is not a project the City can presently fund, having exhausted much of its resources upsizing

lift stations on the north side of town to address overflow problems. Exception lands are an additional two miles distant from the Surfland development. These properties are heavily parcelized, meaning the City would expect a lower level of development, that would occur incrementally during the planning period. This has been an impediment to extending service to Surfland, because without the connection of a significant number of units the flow of effluent will be too low, and the wastewater system will not operate properly. Many of the properties are also subject to inundation from a near shore XXL Cascadia earthquake and resulting tsunami, as mapped by the Oregon Department of Geology and Mineral Industries (DOGAMI), and all are reliant upon a stretch of US 101 that is within the tsunami inundation area and serves as the sole point of vehicle access to these lands.

Exception lands to the east are depicted on Attachment "C." They face similar issues as unincorporated exception lands to the south. Property between US 20 and the Yaquina Bay Road is steeply sloped and within a landslide hazard area mapped by DOGAMI. Wastewater would be directed downslope to a lift station at SE Running Springs Drive and SE Bay Blvd. That lift station is at capacity and would have to be upsized. The same goes for the force main between that lift station and the Bayfront lift station located at Port Dock 7. From there effluent is directed to the Northside lift station, which then pumps it under Yaquina Bay to the City's wastewater treatment plant in South Beach. The City's Wastewater Master Plan estimates the cost of these upgrades at a little more than \$5.2 million (2016 dollars). Exception areas east of Newport's UGB that are north of US 20, are situated along Yaquina Heights Drive and Newport Heights Drive. Some of these lands are within mapped landslide hazard areas. They are steeply sloped except where they border the roads and the Wastewater Master Plan assumes only a 40% of otherwise permissible infill due to slope constraints. This area feeds to the Bayfront lift station which is capacity constrained (part of the \$5.2 million cost). Wastewater service to this area would require new lift stations and force mains along each of the main roads due to the elevation changes. This has not been priced out, but would likely be more expensive than the Surfland extension due to the terrain.

Exception areas north of the Newport UGB, as shown on Attachment "D," are located tight to US 101. These lands rely upon highway access and, unfortunately, this stretch of US 101 is within an active landslide area. City wastewater service is only 1/3 of a mile from the UGB at US 101 and NE 73rd Street; however, the City cannot practicably extend that service further north due to the unstable terrain in that area. The only other exception land in that area is the Iron Mountain Quarry, at the east end of NE 71st St. This is a Goal 5 protected aggregate site that abuts industrial land and would be brought into the City as industrial if added to the UGB and annexed. It is not suitable for residential development.

What is left are resource lands, which are exclusively Timber-Conservation (T-C) forest zoned properties. They are identified as "County Resource Lands" on the attached maps, and are situated east and inland from exception lands. These properties are privately managed timberlands with some being smaller and others larger than the applicant's 43.4 acre site. They share the same service limitations as the exception lands excluded for the reasons noted above, and are in fact even further removed from those services. Most of the resource zoned properties are undeveloped, although some parcels contain private residences. Access is available by logging road or private residential driveways. The applicant's property is unique in that it does not share these same limitations. City services are in place immediately adjacent to the subject property that are capable of supporting urban levels of development. Sewer lift stations that serve this area (unlike some of the others mentioned) were recently upsized to address chronic overflow issues the City had experienced, and a new water tank, pumps, and main lines have been constructed to provide adequate water pressure. A paved collector roadway abuts the property, as does an electric utility substation. As illustrated on the attached maps, most resource lands within the study area are geographically isolated from urban development, being separated by exception lands or as yet un-served properties within the urban growth boundary. That is not the case with the applicant's site, which is bordered by urban

scale residential development to the south and west. Further, a utility easement for high voltage power lines cuts across the north end of the property. The result is a property isolated on three sides from other forest lands, which will allow for urbanization to occur with minimal impacts to nearby forest operations. The property does have some terrain limitations; however, such limitations are common on both exception and resource lands in the vicinity of Newport. The property is outside of mapped landslide and tsunami inundation hazard areas.

Considering the above, boundary locational requirements outlined in OAR 660-024-0065 and 660-024-0067 have been adequately addressed for this UGB amendment.

Attachments






Attachment A – UGB Study Area

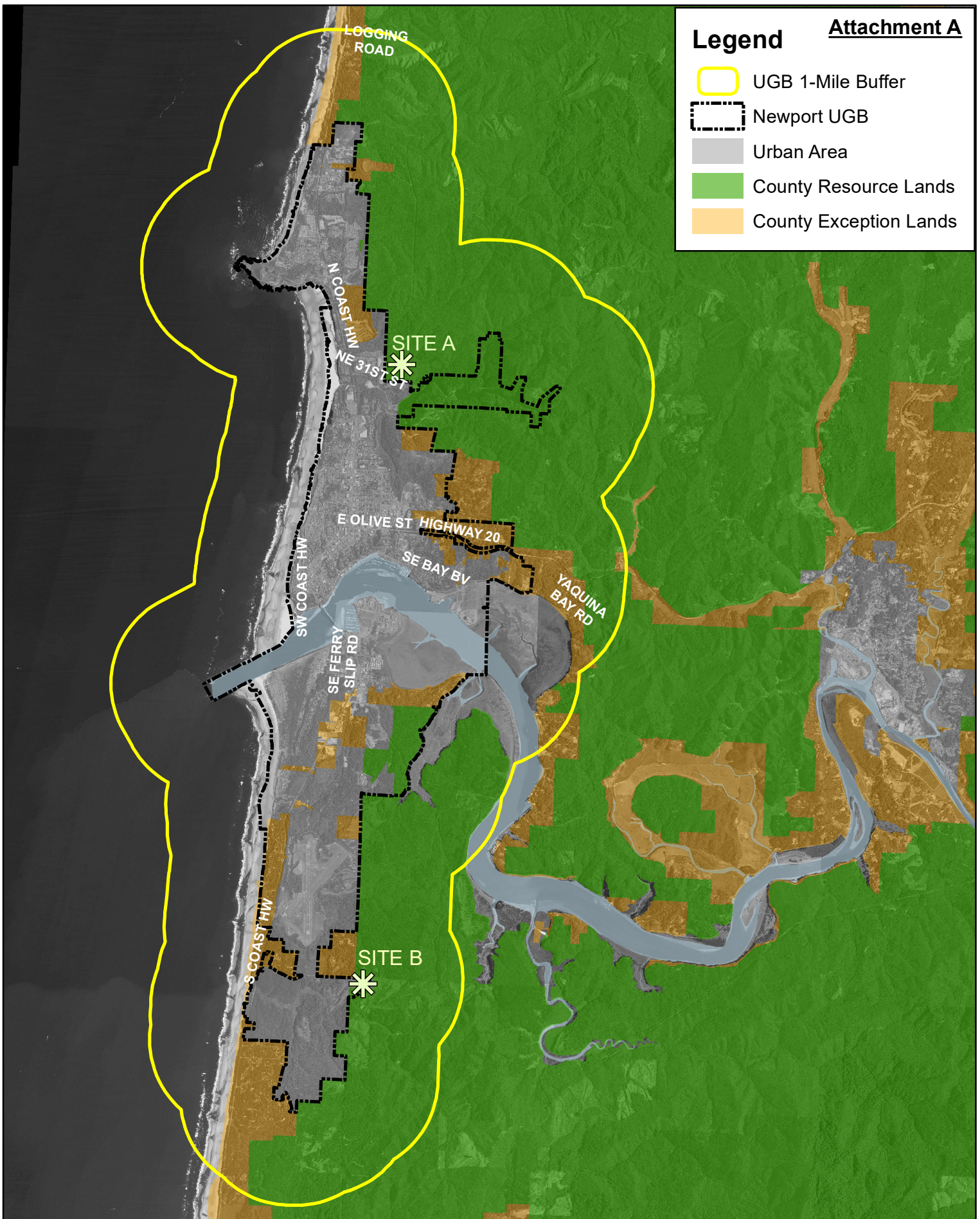
Attachment B – Exception Lands South of Newport

Attachment C – Exception Lands East of Newport

Attachment D – Exception Lands North of Newport

Legend









-  UGB 1-Mile Buffer
-  Newport UGB
-  Urban Area
-  County Resource Lands
-  County Exception Lands

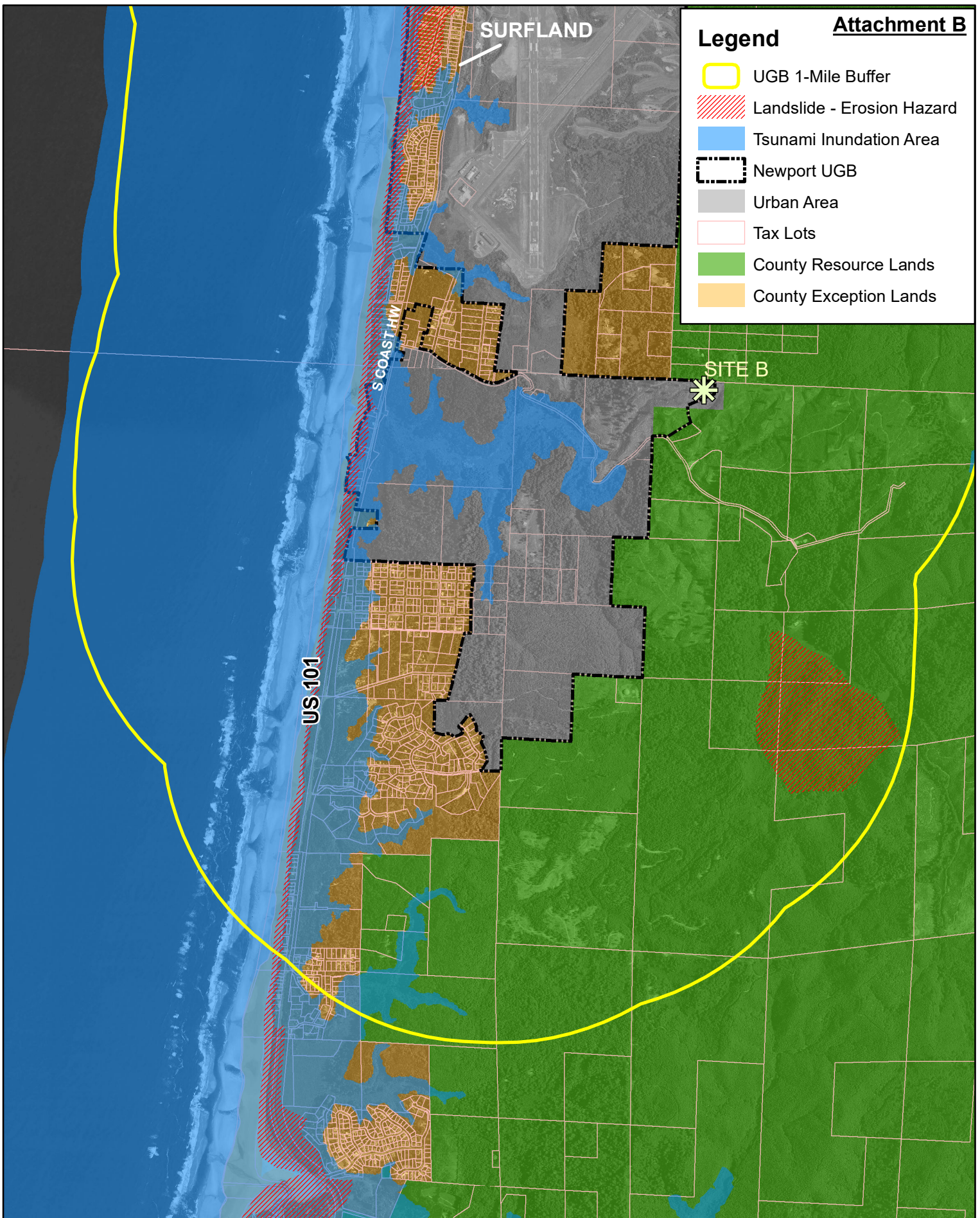


**Urban Growth Boundary Study Area
Boston Timber Opportunities, LLC (File No. 1-UGB-20/1-CP-20)**



Legend

-  UGB 1-Mile Buffer
-  Landslide - Erosion Hazard
-  Tsunami Inundation Area
-  Newport UGB
-  Urban Area
-  Tax Lots
-  County Resource Lands
-  County Exception Lands



**UGB Study Area - Exception Land South of Newport
Boston Timber Opportunities, LLC (File No. 1-UGB-20/1-CP-20)**

City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
Phone: 1.541.574.0629
Fax: 1.541.574.0644









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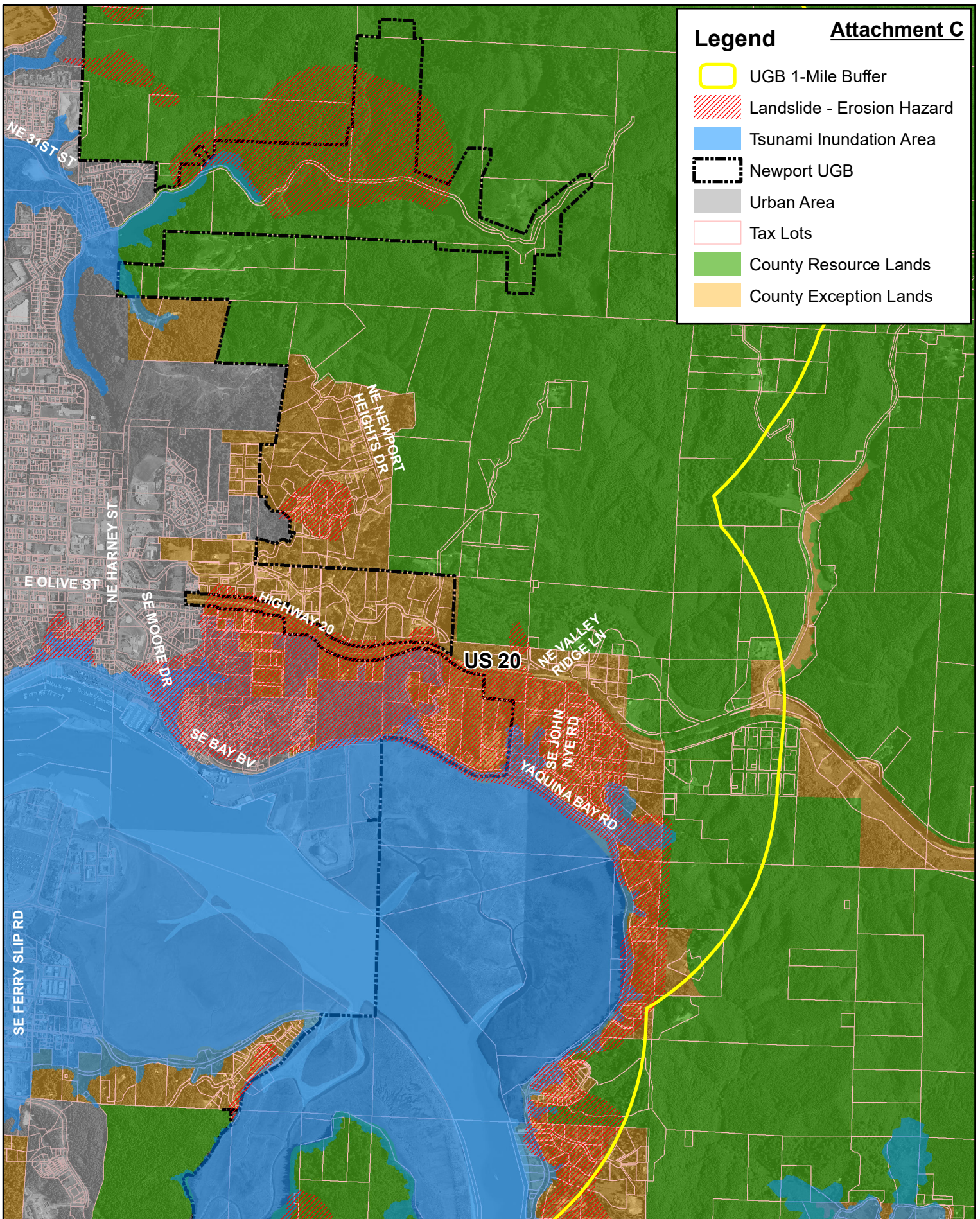
Image Taken July 2018
4-inch, 4-band Digital Orthophotos
Quantum Spatial, Inc. Corvallis, OR

0 1,200 2,400 4,800 Feet



Legend

-  UGB 1-Mile Buffer
-  Landslide - Erosion Hazard
-  Tsunami Inundation Area
-  Newport UGB
-  Urban Area
-  Tax Lots
-  County Resource Lands
-  County Exception Lands



**UGB Study Area - Exception Land East of Newport
Boston Timber Opportunities, LLC (File No. 1-UGB-20/1-CP-20)**

City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
Phone: 1.541.574.0629
Fax: 1.541.574.0644









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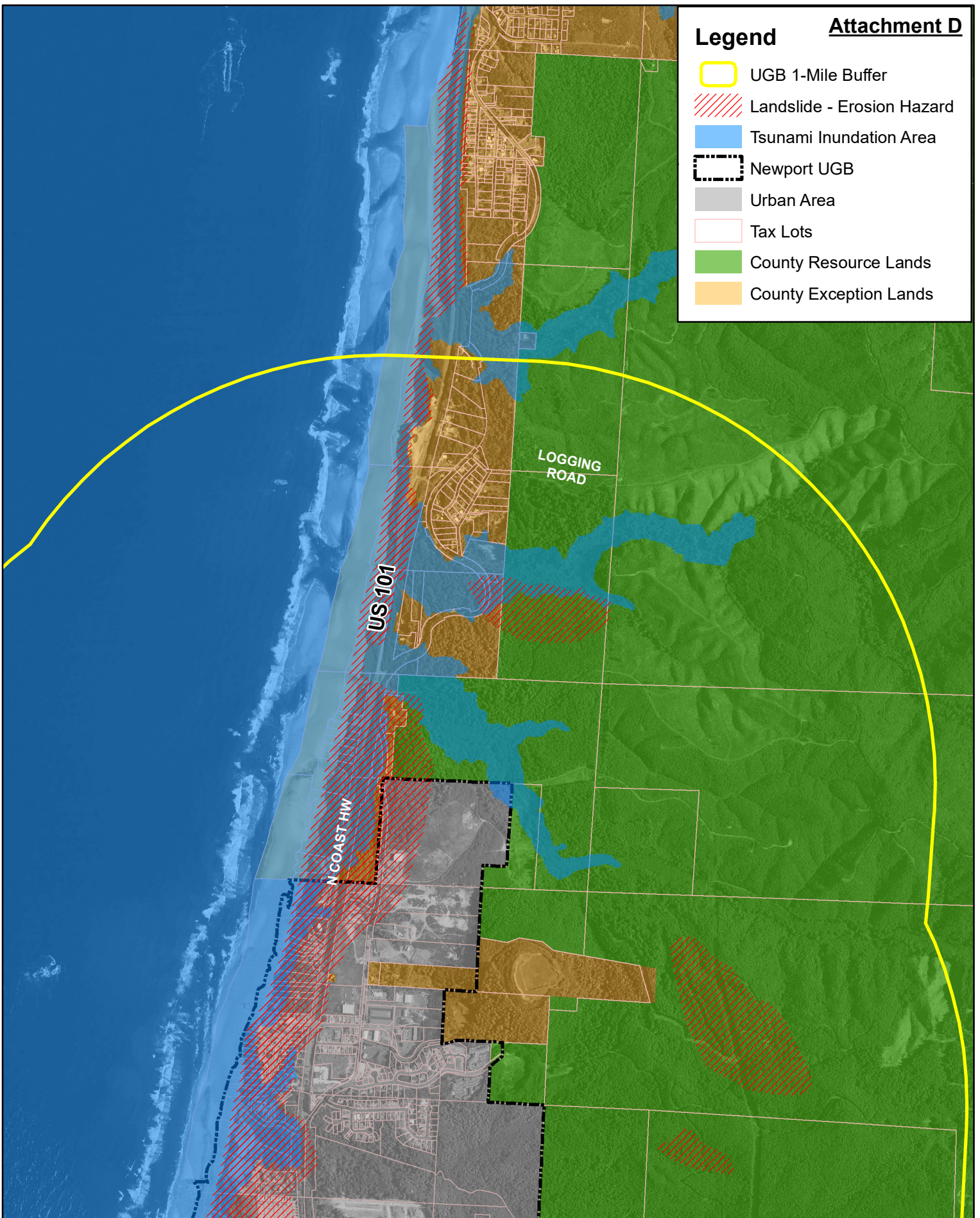
Image Taken July 2018
4-inch, 4-band Digital Orthophotos
Quantum Spatial, Inc. Corvallis, OR

0 1,200 2,400 4,800 Feet



Legend

-  UGB 1-Mile Buffer
-  Landslide - Erosion Hazard
-  Tsunami Inundation Area
-  Newport UGB
-  Urban Area
-  Tax Lots
-  County Resource Lands
-  County Exception Lands



**UGB Study Area - Exception Land North of Newport
Boston Timber Opportunities, LLC (File No. 1-UGB-20/1-CP-20)**



City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
Phone: 1.541.574.0629
Fax: 1.541.574.0644

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Image Taken July 2018
4-inch, 4-band Digital Orthophotos
Quantum Spatial, Inc. Corvallis, OR

0 1,200 2,400 Feet



URBAN GROWTH BOUNDARY AMENDMENT PROCEDURES CHECKLIST:Date5/29/2020 Application filed with city or initiated by _____.10/26/2020 Notice to DLCD (45 days before PC Meeting); 45 days is _____.11/20/2020 Public notice for Planning Commission prepared.11/23/2020 Affected property owners, departments, and utilities notified.11/23/2020 Lincoln County Commissioners notified.11/23/2020 Lincoln County Planning Department notified.11/23/2020 Notice sent to newspaper (published once: 12/4/2020)._____
Staff Report available (copy to applicant _____).12/14/2020 Review by Planning Commission (continued: _____).

Recommended: _____ Not recommended: _____

Copy of Planning Commission minutes from _____ to file._____
Copy of Planning Commission minutes from _____ to file._____
Copy of Planning Commission minutes from _____ to file._____
Staff report amended per Planning Commission decision._____
Draft ordinance to applicant for his review.12/28/2020 Public notice for Council meeting prepared.12/28/2020 Affected property owners notified.12/28/2020 Lincoln County Commissioners notified.12/28/2020 Lincoln County Planning Department notified.12/28/2020 Notice sent to newspaper (published 1/8/21, _____, and _____).1/19/21 Public hearing before City Council (con't: _____).1/19/21 1st reading of Ordinance No. 2175.

2nd reading of Ordinance No. _____.

1/20/21 Date ordinance signed.2/20/21 City's "effective date" of Ordinance No. 2175 (30 days after signed).2/21/21 Copy of City Council minutes from 1/19/21 to file._____
Copy of City Council minutes from _____ to file._____
Copy of City Council minutes from _____ to file.2/21/21 Update "file numbers" log.1/21/21 Within 5 days of signing of ordinance, send Notice of Adoption to DLCD and the Notice of Adoption of an UGB Amendment-if area is over 50 acres (includes 2 copies of signed ordinance, a legal description, and a map).1/21/21 Applicant notified (include copy of ordinance).1/21/21 Proponents/opponents notified.1/21/21 Lincoln County Commissioners notified (include copy of ordinance).1/21/21 Lincoln County Planning Department notified (include copy of ordinance).1/21/21 Lincoln County Assessor notified (include copy of ordinance).1/21/21 Copy of ordinance to "pending amendments" file.2/10/21 Appeal period over (21 days)._____
Applicant notified of status of appeal period.

CITY OF NEWPORT
169 SW COAST HWY
NEWPORT, OREGON 97365

COAST GUARD CITY, USA



phone: 541.574.0629
fax: 541.574.0644
<http://newportoregon.gov>

mombetsu, japan, sister city

January 21, 2021

Lincoln County Board of Commissioners
225 West Olive Street, Room 110
Newport, Oregon 97365

Dear Commissioners,

Enclosed is a copy of City of Newport Ordinance No. 2175, amending the Newport Urban Growth Boundary and Comprehensive Plan Map, adding 43.4 acres in the vicinity of NE Harney and NE 36th Street and removing 71.4 acres at the northeast end of the undeveloped Wolf Tree Destination Resort site south of the Municipal Airport. The property being added has been given a "High Density Residential" City of Newport Comprehensive Plan Map designation, but will continue to be subject to Lincoln County Timber-Conservation zoning until it is annexed. The property being removed had a City of Newport "High-Density Residential" Comprehensive Plan Map designation.

Ordinance No. 2175 will not take effect until the Lincoln County Board of Commissioners adopts corresponding amendments acknowledging these changes to Newport's Urban Growth Boundary. As this was an applicant-initiated change, they or their representatives, will be reaching out to the Lincoln County Planning Department in the coming days to discuss what is required to begin the County review process.

Please do not hesitate to contact me if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Derrick I. Tokos".

Derrick I. Tokos, AICP
Community Development Director
City of Newport

xc: Lincoln County Planning Department
Lincoln County Assessor's Office

CITY OF NEWPORT
169 SW COAST HWY
NEWPORT, OREGON 97365

COAST GUARD CITY, USA



phone: 541.574.0629
fax: 541.574.0644
<http://newportoregon.gov>

mombetsu, japan, sister city

January 21, 2021

Boston Timber Opportunities, LLC
Attn: Casey Fisher
17700 SE Mill Plain Blvd, Suite 180
Vancouver, WA 98683

Dear Ms. Fisher,

Enclosed for your records is a copy of City of Newport Ordinance No. 2175, approved by the Newport City Council on January 19, 2021 and signed by our mayor the following day. This ordinance constitutes the City's final land use decision in this matter, and that decision can be appealed to the Oregon Land Use Board of Appeals. Our office is notifying all persons who made an appearance on the record of their appeal rights. A copy of that notice is attached.

Ordinance No. 2175 will not take effect until the Lincoln County Board of Commissioners adopts corresponding amendments acknowledging these changes to Newport's Urban Growth Boundary. We are mailing copies of the ordinance to the Lincoln County Board of Commissioners, Lincoln County Assessor, and Lincoln County Planning Department and are advising them that you, or your representatives, will be reaching out to their Planning Department in the coming days to discuss what is required to begin the County review process.

Please do not hesitate to contact me if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Derrick I. Tokos".

Derrick I. Tokos, AICP
Community Development Director
City of Newport

Attachments
Notice of Decision

CITY OF NEWPORT
169 SW COAST HWY
NEWPORT, OREGON 97365

COAST GUARD CITY, USA



phone: 541.574.0629
fax: 541.574.0644
<http://newportoregon.gov>

mombetsu, japan, sister city

January 21, 2021

Terrance Lettenmaier
P.O. Box 550
South Beach, Oregon 97366

Dear Mr. Lettenmaier,

Enclosed for your records is a copy of City of Newport Ordinance No. 2175, approved by the Newport City Council on January 19, 2021 and signed by our mayor the following day. This ordinance constitutes the City's final land use decision in this matter, and that decision can be appealed to the Oregon Land Use Board of Appeals. Our office is notifying all persons who made an appearance on the record of their appeal rights. A copy of that notice is attached.

Ordinance No. 2175 will not take effect until the Lincoln County Board of Commissioners adopts corresponding amendments acknowledging these changes to Newport's Urban Growth Boundary. We are mailing copies of the ordinance to the Lincoln County Board of Commissioners, Lincoln County Assessor, and Lincoln County Planning Department and are advising them that Boston Timber Opportunities, LLC, or their representatives, will be reaching out to their Planning Department in the coming days to discuss what is required to begin the County review process.

Please do not hesitate to contact me if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Derrick I. Tokos".

Derrick I. Tokos, AICP
Community Development Director
City of Newport

Attachments
Notice of Decision

169 SW COAST HWY
NEWPORT, OREGON 97365

COAST GUARD CITY, USA



www.newportoregon.gov

MOMBETSU, JAPAN, SISTER CITY

COMMUNITY DEVELOPMENT DEPARTMENT
(541) 574-0626
FAX: (541) 574-0644

NOTICE OF DECISION

January 21, 2021

The Newport City Council, by Ordinance No. 2175, accepted the Planning Commission's recommendation to approve an amendment to the Newport Urban Growth Boundary and Comprehensive Plan Map that adds approximately 43.4-acres (Site "A") and removes approximately 71.4-acres (Site "B"). The properties are located at Tax Map 10-11-33-00, Tax Lot 100, owned by Boston Timber Opportunities, LLC, and Tax Map 10-11-33-00, Tax Lot 101, owned by the City of Newport (Site "A"); and Tax Map 12-11-05-00, Tax Lot 801, (853 SE 98th St) owned by Terrance Lettenmaier (Site "B").

A copy of the adopted ordinance may be reviewed or obtained at the Community Development Department located in the Newport City Hall (169 SW Coast Highway, Newport, OR 97365).

Please note that this decision may be appealed to the Oregon Land Use Board of Appeals. The following general appeal information is provided as a courtesy and it is recommended that you contact the Oregon Land Use Board of Appeals, or an attorney with land use experience, for a further explanation of the appeal process or if you have questions about the appeal process:

Oregon law allows a land use decision made by the City Council to be appealed to the Oregon Land Use Board of Appeals (LUBA). For this type of application, the time allowed to file a notice of intent to appeal with LUBA is generally 21 days from the date the parties received notice of the decision (if notification of the decision is requested in writing by a party that participated in the hearing) or 21 days after the decision is final. An applicant or an aggrieved person may appeal the decision of the City Council by submitting the appropriate application and the required filing fee to LUBA (306 State Library Building, 250 Winter Street N.E., Salem, Oregon 97310).

CONTACT INFORMATION: Derrick Tokos, Community Development Director, City of Newport, 169 SW Coast Highway, Newport, OR 97365. Phone: (541) 574-0626; email: d.tokos@newportoregon.gov.

EST.

1882

LEE LYNCH
210 NE 33RD ST.
NEWPORT'S OR 97365

YOUNGA HENNESSEY
3356 NE COOS ST
NEWPORT OR 97365

TERRY ZWETZIG
3426 NE DOUGLAS ST
NEWPORT, OR 97365

File 1-UGB-20 / 1-CP-20

**Notice of Decision Mailing
Public Members Giving Testimony**

SUSAN SPRAGUE
224 NE 33RD ST
NEWPORT, OR 97365

SHARON LOWRY
3236 NE DOUGLAS STREET
NEWPORT, OR 97365

RAMUNE AND PAUL ARLAUSKAS
177 NE 35TH ST
NEWPORT, OR 97365

ROBERTS KATHERINE M TRUSTEE &
VILLALOBOS NANCY C TRUSTEE
PO BOX 25
CAMARILLO, CA 93011

NORMAN JONES
3432 NE DOUGLAS ST
NEWPORT, OR 97365

MR. AND MRS. ROBERT PULASKI
3417 NE DOUGLAS ST
NEWPORT, OR 97365

ELMER & SANDRA AMSDEN
422 NE 35TH STREET
NEWPORT, OR 97365

AGATE BEACH SAFETY COALITION,
LLC
ATTN: GEORGE DWYER
245 NW 10TH ST
NEWPORT OR 97365

KROSNIUNAS JONI
3223 NE DOUGLAS ST
NEWPORT, OR 97365

DEBORAH HICKS
PACIFIC HOMES BEACH CLUB
450 NE 32ND ST
NEWPORT, OR 97365

BRADLEY DIANE M &
WARE HELEN R
142 NE 33RD ST
NEWPORT, OR 97365

DOREEN FARNAM
(No Mail Address Could Be Found)
Emailed: doreenfarnam@hotmail.com

KEVING YOUNG, AICP
DLCD COMMUNITY SERVICES DIVISION
635 CAPITOL STREET NE, SUITE 150
SALEM, OR 97301

BONNIE ANDERSEN
3444 NE DOUGLAS ST
NEWPORT, OR 97365

WOOD DANIEL STEPHEN &
HENNESSEY RUTH ROSE
4940 SW DAKOTA AVE
CORVALLIS, OR 97333

MERCEDES SERRA
3J CONSULTING, INC
9600 SW NIMBUS AVE, SUITE 100
BEAVERTON, OR 97008

MATT HUGHART, AICP
KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204

PETTETT JAMES W &
PETTETT MICHELLE R
1080 NE LAKEWOOD DR
NEWPORT, OR 97365

BARBARA TURRILL
3316 NE AVERY ST
NEWPORT OR 97365

YUILLE KRISTIN H &
GREEN NATHAN R
1245 NE LAKEWOOD DR
NEWPORT, OR 97365

STUDLEY DAVID J &
STUDLEY PAULETTE L
1185 NE LAKEWOOD DR
NEWPORT, OR 97365

CAMERON LA FOLLETTE
OREGON COAST ALLIANCE
PO BOX 857
ASTORIA, OR 97103

SEAN T MALONE
ATTORNEY AT LAW
259 E FIFTH AVE, SUITE 200-C
EUGENE, OR 97401

3J CONSULTING, INC
ATTN: ANDREW TULL
9600 SW NIMBUS AVE, SUITE 100
BEAVERTON, OR 97008

DAVE & ANDREA LARSEN
2910 NE LISI PLACE
NEWPORT, OR 97365

MICHEAL ROBINSON
SCHWABE, WILLIAMSON AND WYATT
1211 SW 5TH AVE, SUITE 1900
PORTLAND, OR 97204

JEAN DAHLQUIST
FAIR HOUSING COUNCIL OF OREGON
1221 SW YAMHILL ST #305
PORTLAND, OR 97205

BOSTON TIMBER OPPORTUNITIES, LLC
ATTN: CASEY FISHER
17700 SE MILL PLAIN BLVD
STE 180
VANCOUVER, WA 98683

LETTENMAIER TERRANCE M &
WEITKAMP LAURIE A
PO BOX 550
SOUTH BEACH, OR 97366

INGALLS DONNE J &
INGALLS KELSEY A
1235 NE LAKEWOOD DR
NEWPORT, OR 97365

Sherri Marineau

From: Public comment
Sent: Thursday, January 21, 2021 9:58 AM
To: 'Doreen Farnam'; Public comment
Subject: RE: Annexed Property being developed.
Attachments: 1-UGB-20 -- 1-CP-20 - Notice of Council Decision.pdf

Doreen,

Please see the attached Notice of Council Decision concerning the public hearing for the Urban Growth Boundary amendment that you submitted testimony for. If you have questions, please contact Community Development Director, Derrick Tokos at (541) 574-0626 or d.tokos@newportoregon.gov.

-----Original Message-----

From: Doreen Farnam <doreenfarnam@hotmail.com>
Sent: Monday, January 18, 2021 3:07 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: Annexed Property being developed.

To Whom it May Concern

I am very much concerned about the newly annexed property to be developed on 31st and Harney. With that number of residents, it would make it extremely difficult to evacuate should there ever be a need for some catastrophic occasion. Please make note of this at your meeting on Tuesday.
Thank you,
Doreen Farnam.

Sent from my iPad

Derrick Tokos

From: DLCDC Plan Amendments <plan.amendments@state.or.us>
Sent: Thursday, January 21, 2021 10:26 AM
To: Derrick Tokos
Subject: Confirmation of PAPA Online submittal to DLCDC

Newport

Your notice of adoption of a change to a comprehensive plan or land use regulation has been received by the Oregon Department of Land Conservation and Development.

Local File #: 1-UGB-20 / 1-CP-20

DLCDC File #: 006-20

Original Proposal Received: 10/26/2020

Adoption Notice Received: 1/19/2021

Submitted by: dtokos

If you have any questions about this notice, please reply or send an email to plan.amendments@state.or.us.



Oregon Department of Land Conservation and Development

PAPA Online Submittal

Derrick Tokos ▾

[Home](#)

[\(/PAPA_Online/\)](#)

Reports

(https://db.lcd.state.or.us/papa_online_reports)

Report A Problem

(mailto:plan.amendments@state.or.us?

subject=PAPA_PR

Report a Problem)

Newport (/PAPA_Online/Jurisdictions/Jurisdiction/Get/187) -> Amendment 006-20 (Read Only)

DLCD File #: 006-20

Status: Adopted Change Received

Revision Type: Department Review

Revise

Withdraw

Deny

Local File #:

1-UGB-20 / 1-CP-20

County:

Lincoln County

Date of 1st Hearing:

12/14/2020

County Local File #

TBD

?

49

Days difference

County 1st Hearing Date:

02/24/2021

Date of Final Hearing

01/18/2021

County Final Hearing Date:

03/23/2021

?

84

Days difference

Type:

- ☒ Comprehensive Plan Map Change
- ☐ Zoning Map Change
- ☐ Comprehensive Plan Map & Zoning Map Change
- ☐ Comprehensive Plan Text Change
- ☐ Land Use Regulation Change
- ☐ UGB using Simplified Method (div 38)

- ☐ UGB amendment by city with population less than 2,500 within UGB (div24)
- ☐ UGB amendment of 50 acres or less by a city with population 2,500 or more within UGB (div 24)
- ☐ UGB amendment adding more than 50 acres by city with population 2,500 or more within UGB (div 24)
- ☐ UGB amendment that adds more than 100 acres by Metro (div 24)
- ☐ Urban Reserve designation by Metro or a city with population 2,500 or more within UGB
- ☐ Urban Reserve amendment to add over 50 acres by a city with population 2,500 or more within UGB
- ☐ Urban Reserve designation or amendment by a city with population less than 2,500 within UGB
- ☐ Urban Reserve amendment by Metro
- ☐ Urban Reserve Other
- ☐ Other
- ☐ Periodic Review Task

Summary

UGB land exchange that will add 43.4 acres in the vicinity of NE Harney and NE 36th Street and remove 71.4 acres from the undeveloped Wolf Tree Destination Resort site south of the airport. The City Comprehensive Plan designation is High Density Residential.

An exception to a statewide planning goal is proposed: ☐

Amended Text:

Note: County process has not yet been initiated. This online form required that a County adoption date be entered in order for the City information to be saved. Only the City has rendered a final decision at this time.

Total Acres:

0.00

* Does this amendment impact the Oregon Coastal Management Program (OCMP) and its enforceable policies as it relates to your jurisdiction's plans and codes? ☐ Yes ☐ No ☒ Unsure

If you answered "Yes" above, please list the proposed code and/or plan amendments that would alter your current OCMP enforceable policies. If the proposal includes one or more code or plan provisions meant to become new OCMP enforceable policies, please list these here as well.

For help or additional information on OCMP enforceable policies, please click here (<https://www.oregon.gov/LCD/OCMP/Pages/Enforceable-Policies.aspx>).

* Is this plan amendment related to a project being reviewed for a federal permit/license or for federal consistency under the Coastal Zone Management Act? Examples include projects requiring U.S. Army Corps of Engineers Section 404 Permits, FERC Energy Citing Certificate, etc. This includes any project that requires a Joint Permit Application and associated Land Use Compatibility Statement. ☐ Yes ☐ No ☒ Unsure

If yes, enter the project name or federal permit number.

Locations (If there's a large number of tax lots associated with this amendment, please contact DLCD for assistance. plan.amendments@state.or.us (<mailto:plan.amendments@state.or.us?subject=PAPA%20on-line%20location%20entry%20assistance>))

Type
Tax Lot
From
To
Acres
Comprehensive Plan Map Change
00100
Plan Map: Forest
Plan Map: Urban Residential
39.80
<input type="checkbox"/>
Comprehensive Plan Map Change
00101
Plan Map: Forest

Plan Map: Urban Residential

3.58

Comprehensive Plan Map Change

00801

Plan Map: Urban Residential

Overlay: Destination Resort

Contacts

Contacts

Derrick Tokos Community Development Director (Local)

Documents

Upload supporting documentation. Administrative rule requires that you include all of the following materials that may apply:

- The text of the amendment (e.g., plan or code text changes, exception findings, justification for change)
- Any staff report on the proposed change or information that describes when the staff report will be available and how a copy may be obtained
- A map of the affected area showing existing and proposed plan and zone designations
- A copy of the notice or a draft of the notice regarding a quasi-judicial land use hearing, if applicable
- Any other information necessary to advise DLCD of the effect of the proposal

Uploaded

Name

User

10/26/2020

Proposal_19529-Hancock-Narrative_2020-10-26_12-37-03.pdf (/PAPA_Online/Document/Get?documentID=249886)

10/26/2020

Proposal_Signed land use Applications_2020-10-26_12-37-35.pdf (/PAPA_Online/Document/Get?documentID=249887)

10/26/2020

Proposal_19529-Hancock Newport-Legal Description-Attachment B_2020-10-26_12-38-15.pdf (/PAPA_Online/Document/Get?documentID=249888)

10/26/2020

Proposal_Assessors Maps - Vicinity of Site A_2020-10-26_12-45-06.pdf (/PAPA_Online/Document/Get?documentID=249889)

10/26/2020

Proposal_Assessors Maps - Vicinity of Site B_2020-10-26_12-45-16.pdf (/PAPA_Online/Document/Get?documentID=249890)

10/26/2020

Proposal_23915 UGB Land Swap Traffic Analysis Cover Letter_2020-10-26_12-45-37.pdf (/PAPA_Online/Document/Get?documentID=249891)

10/26/2020

Proposal_23915 UGB Zone Change Final for Submittal_2020-10-26_12-45-46.pdf (/PAPA_Online/Document/Get?documentID=249892)

10/26/2020

Proposal_19529-Hancock-Exhibit Maps-Attachment E_2020-10-26_12-46-05.pdf (/PAPA_Online/Document/Get?documentID=249893)

10/26/2020

Proposal_Survey Record 20889_2020-10-26_12-59-01.pdf (/PAPA_Online/Document/Get?documentID=249894)

1/21/2021

Adopted_1-UGB-20_Decision_Notice_2021-01-21_10-18-48.pdf (/PAPA_Online/Document/Get?documentID=250612)

1/21/2021

Adopted_File 1-UGB-20_Decision_Notice_Mailing_Labels_2021-01-21_10-18-58.pdf (/PAPA_Online/Document/Get?documentID=250613)

1/21/2021

Adopted_Ord. No. 2175_2021-01-21_10-19-07.pdf (/PAPA_Online/Document/Get?documentID=250614)

1/21/2021

Adopted_Ord. No. 2175 - Exhibit A_2021-01-21_10-19-25.pdf (/PAPA_Online/Document/Get?documentID=250615)

1/21/2021

Adopted_Ord. No. 2175 - Exhibit B_2021-01-21_10-19-34.pdf (/PAPA_Online/Document/Get?documentID=250616)

1/21/2021

Adopted_UGB Ord - Exhibit C_2021-01-21_10-19-40.pdf (/PAPA_Online/Document/Get?documentID=250617)

1/21/2021

Adopted_UGB Ord - Exhibit D_2021-01-21_10-19-51.pdf (/PAPA_Online/Document/Get?documentID=250618)

Newport approves urban growth boundary change

BY KENNETH LIPP
Of the News-Times

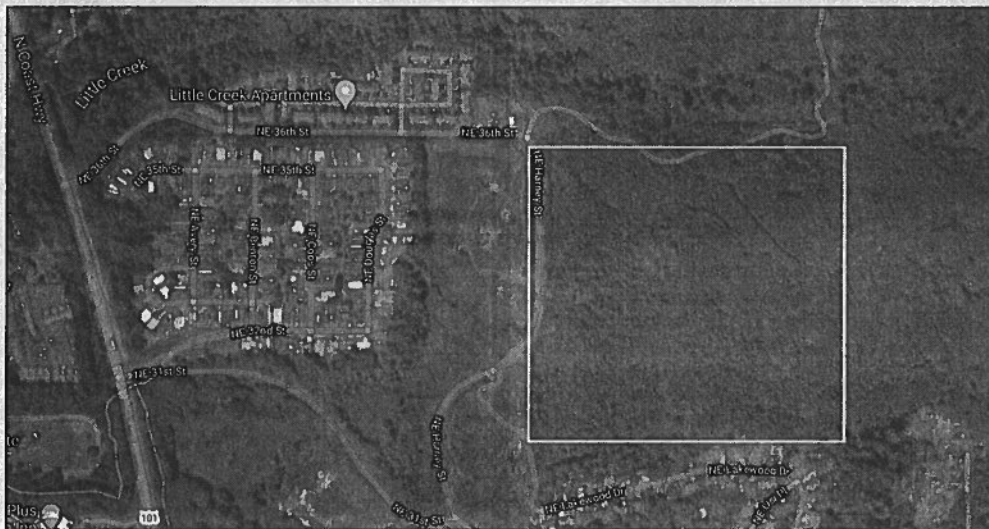
NEWPORT — On Jan. 19, the Newport City Council approved an ordinance that swaps 71 acres on the south end of its urban growth boundary with 43 acres on the north, a move requested by the latter's owners, who say they plan to build workforce housing there.

During their most recent regular meeting, councilors held a quasi-judicial hearing on the application of Boston Timber Opportunities, a limited liability corporation of Hancock Timber Resource Group, to add 40 acres of timber land it owns at Harney and 36 streets, plus a few acres of roadway owned by the city, to Newport's urban growth boundary. Under state law, an urban growth boundary is the area where a city expects to grow within the next 20 years and where it can conduct land use planning. Development is limited in areas outside of the boundary to prevent urban sprawl.

The application was first made in May 2020. In December, the Newport Planning Commission held its own quasi-judicial hearing on the matter and unanimously recommended that city council approve an ordinance adjusting the boundary.

Community Development Director Derrick Tokos said that in order to qualify for an urban growth boundary adjustment, a proposed use must be demonstrably needed, and it must be shown that the need is met by the property in question. Tokos said both of those requirements were met in the application.

Newport's Comprehensive Plan calls for the addition of 42 new housing units each year, 60 percent of which should be



A white box approximately marks the 40 acres east of Northeast Harney Street that Boston Timber Opportunities, a Hancock Timber Resource Group limited liability corporation, intends to eventually develop with up to 200 single-family homes.

single-family detached dwellings, and the remaining 40 percent attached and multifamily dwellings. Tokos said Boston Timber Opportunities intends to eventually construct 200 attached and detached single-family dwellings on the property near Big Creek.

The location is better suited to development than the area for which it is being swapped, 71 acres southeast of the airport owned by Terrance M. Lettenmaier and Laurie A. Weitkamp, who are co-applicants with Boston Timber and have no intention of developing their own property.

An urban growth boundary adjustment requires removal of an area at least equal in size to the area to be added. Otherwise, Tokos said, the developer would have to demonstrate to the state that there was not enough residential land already within the boundary. "That's a high bar, because we have quite a bit of land. It's just that a lot of the land we already have in the boundary is not developing because we can't get services to it in a cost-effective way," Tokos said.

The property at 36th and Harney has the ad-

vantage of location on an existing urban collector road in good condition, Tokos said, as well as proximity to other infrastructure. "One of the reasons why this property was uniquely positioned to be brought in is because we have those services in place," Tokos said. "The developer will be doing some modifications as they extend services into their property. But we've already improved our sewer lift stations, for example, so they have additional capacity ... This particular area is one where our sewer and water system have the capacity to take on the additional development without big additional costs to the city."

The Oregon Coast Alliance and Fair Housing Council of Oregon both submitted testimony for last week's hearing, urging approval of the ordinance. Council also received opposing testimony from more than 20 residents of the Pacific Homes Beach Club subdivision, which lies west of the proposed development. Several of those written submissions simply stated that the sender was "opposed to any further development in the

Agate Beach area and surrounding communities." Others expressed concern with the increased burden on limited ingress-egress routes to Highway 101 — the subdivision, as well as an apartment complex, would share highway access with the proposed development via 31st and 36th streets — and how that burden could become a danger during an emergency. Some testimony specifically opposed the building of apartments at the site.

The developer's attorney, in written testimony, addressed the latter issue, saying the developer committed not to build multifamily housing. The developer also committed to work with the city to build low housing affordable for the local workforce.

Tokos said the next step would be county consideration of rezoning the 71 acres being removed from the city's growth boundary. Developers will

then need to apply for the Harney Street location to be annexed to Newport and rezoned as high-density residential. The process will give the city a chance to address potential transportation impacts at the same time as it completes its own Transportation System Plan, the community development director said. It will be quite some time before any ground is broken at the site.

"We can also put some parameters on the development to ensure that it doesn't overtax the transportation system," Tokos said. "That will have its own series of public hearings before the planning commission and city council, so there are a number of places over the next year or two where the public will have a chance to further engage and learn more about what Boston Timber Opportunities is looking to do."

Weather

Friday: Patchy fog before 10 a.m. Otherwise, sunny, with a high near 48. Low around 35. Northeast wind 5 to 8 mph.

Saturday: Partly sunny, with a high near 47. Low around 39. Chance of precipitation is 60%.

Sunday: Rain. High near 46. Chance of precipitation is 90%. Low around 37.

Monday: A chance of showers. Partly sunny, with a high near 45. Low around 35.

Past Weather

On the Coast

	Rain	Low	High
Jan. 22	0.00	37.6	52.3
Jan. 23	0.01	33.4	52.0
Jan. 24	0.35	40.1	48.0
Jan. 25	0.21	36.6	47.4
Jan. 26	.47	36.3	42.0
Jan. 27	0.01	37.6	40.8

Total rainfall to date from Jan. 1..12.22"

Tides Tables

National Oceanic and Atmospheric Administration

	Low	High
January 29 6:00 a.m. / -3.5 7:02 p.m. / -1.1		1:12 a.m. / 7.5 12:03 p.m. / 9.5
January 30 7:38 p.m. / -0.9		1:45 a.m. / 7.7 12:47 p.m. / 9.4
January 31 7:42 a.m. / 2.9 8:15 p.m. / -0.5		2:19 a.m. / 8.0 1:34 p.m. / 8.9
February 1 8:34 a.m. / 2.5 8:53 p.m. / 0.2		2:55 a.m. / 8.3 2:25 p.m. / 8.3
February 2 9:32 a.m. / 2.2 9:33 p.m. / 1.0		3:32 a.m. / 8.5 3:23 p.m. / 7.5
February 3 10:37 a.m. / 1.8 10:17 p.m. / 1.9		4:13 a.m. / 8.8 4:32 p.m. / 6.7
February 4 11:48 a.m. / 1.3 11:09 p.m. / 2.8		4:58 a.m. / 8.9 5:57 p.m. / 6.1

Sunrise/Sunset

Jan. 29	7:39 a.m.	5:20 p.m.
Jan. 30	7:37 a.m.	5:21 p.m.
Jan. 31	7:36 a.m.	5:23 p.m.
Feb. 1	7:35 a.m.	5:24 p.m.
Feb. 2	7:34 a.m.	5:26 p.m.
Feb. 3	7:33 a.m.	5:27 p.m.

Lottery

Tuesday, January 26
Mega Millions
29 • 49 • 56 • 66 • 67 • MB-24 • x3

Wednesday, January 27
Powerball
17 • 33 • 35 • 42 • 52 • PB-9 • x3

Wednesday, January 27
Megabucks
14 • 15 • 18 • 37 • 43 • 47

Inside

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Obits	A7

MEETINGS

ONE REALTYONEGROUP
AT THE BEACH

Kristi Cline

January 19, 2021
6:00 P.M.
Newport, Oregon

CITY COUNCIL

The Newport City Council met on the above date and time via Zoom in the Council Chambers of the Newport City Hall. On roll call, Collett, Goebel, Hall, Botello, Jacobi, Sawyer, and Parker were present.

Staff in attendance was Spencer Nebel, City Manager; Peggy Hawker, City Recorder/Special Projects Director; David Allen, City Attorney; Chris Janigo, Interim City Engineer; Laura Kimberly, Library Director; Lance Vanderbeck, Airport Director; Clare Paul, Interim Public Works Director; Rob Murphy, Fire Chief; and Derrick Tokos, Community Development Director.

PLEDGE OF ALLEGIANCE

Council, staff, and the audience participated in the Pledge of Allegiance.

CONSENT CALENDAR

The consent calendar consisted of the following items:

- A. Approve the Minutes of the Work Session of January 4, 2021;
- B. Approve the Minutes of the Transitional Meeting of January 4, 2021;
- C. Approve the Minutes of the Regular Session of January 4, 2021;
- D. Approve Recommendation to the Oregon Liquor Control Commission (OLCC) for a "Limited OnPremises" and an "Off-Premises" Liquor License for the Nye Hotel, LLC, doing business as, Ocean House, 4920 Woody Way, Newport, Oregon;
- E. Receive the Monthly Financial Report;
- F. Receive Approved Committee Minutes.

MOTION was made by Parker, seconded by Jacobi, to approve the consent calendar as presented. The motion carried unanimously in a voice vote.

LOCAL CONTRACT REVIEW BOARD CONSENT CALENDAR

The Local Contract Review Board consent calendar consisted of the following items:

- A. Approve Engineering Scope of Services for Addendum No. 1 in the Amount of \$19,643 for Civil West Engineering Services for Conducting the Sewer Pipeline Rehabilitation 2020 Project

Hawker introduced the agenda item. Sawyer opened the Local Contract Review Board at 6:25 P.M. Parker asked if this covers any particular sections of the sewer system. Nebel replied this is a specific project to repair various spots of the sanitary sewer system. Interim City Engineer Chris Janigo reported the basic project is a sewer rehab in the northwestern part of town, fixing broken pipes between 10th street and Big Creek Pump Station. He stated staff are splitting up the city into phases of construction. He noted

construction is planned for this spring. Goebel confirmed the design services have been done, and this project is for construction observation and contract administration services through construction phase. He asked how long the project will take. Janigo replied three to four months.

MOTION was made by Parker, seconded by Hall, to approve Addendum No. 1 with Civil West Engineering Services in the amount of \$19,643 for engineering services related to the Newport Sewer Pipeline Rehabilitation 2020 Project, and authorize the City Manager to sign the addendum on behalf of the City of Newport. The motion carried unanimously in a voice vote.

Sawyer closed the Local Contract Review Board at 6:30 P.M.

PUBLIC HEARING

Public Hearing Regarding the Need for Regulations to Reduce the Use of Expanded Polystyrene (EPS) Foam and Plastics in the City of Newport. Hawker introduced the agenda item. Nebel reported at the November 2 work session, the City Council discussed a potential ordinance that would encourage the reduction of plastic/foam food and drink containers. He stated the City Council developed of a process to initiate this discussion with the community on possible regulations for plastic and foam single-use items. He noted while it may not be appropriate to implement regulations at this point with the impact that COVID-19 has had on restaurants and prepared food businesses, it is appropriate to initiate discussions, regarding how an ordinance could reduce the use of EPS and plastic food containers, to determine the level of support from the community for enacting these types of regulations. He indicated if the community is supportive of moving forward with this type of regulation, he recommends that Council approve an ordinance, with an implementation date no earlier than January 2022 or later. He added the Council approved a schedule for conducting this policy evaluation with a February 1 work session to consider the comments made at the public hearing to determine whether it is appropriate to develop a draft ordinance regulating EPS foam and plastic food containers.

Sawyer read the names of people who submitted written public comment. Sawyer opened the public hearing at 6:35 P.M. He called for public comment.

Fred Holzmer confirmed his written public comment was received by Council. He stated winter storms brought in a lot of EPS foam and plastic debris on the beaches. He noted he is pleased by Council's consideration of this and considers it to be low-hanging fruit. He indicated there are alternatives to EPS foam and plastic. He suggested Council take a similar tack on this as the plastic bag ban. He added the plastics shown in pictures is a drop in the bucket.

Hawker read Frances O'Halloran's public comment into the record.

Sawyer closed the public hearing at 6:37 P.M. for Council deliberation.

Hall noted one letter in opposition to this ordinance was a manufacturing company that did not recognize this City of Newport is in Oregon, rather than Rhode Island. Parker thanked Holzmer for his comments. Parker explained when the coastal river systems in Oregon flood, the majority of the debris is found on beaches is river-based debris.

Holzmer clarified his pictures show items which are not polystyrene.

Parker reported on the state-level legislation. He stated, barring any unforeseen development in the legislature, should this concept go forward, it will go through a variety

of committees and, potentially, a floor vote. He explained that item is comprehensive and prohibits many different plastics.

Nebel stated he will include a copy of that bill in the next work session and discuss how ordinance will be different. Parker noted other legislation passed or being considered on the west coast is in the packet.

Hall stated she is comfortable moving forward with the work session. Nebel asked if staff should extend an invitation someone from Surfrider to participate in the work session. Sawyer noted the recycling center in Tualatin needs polystyrene products. He reported on public outreach to change to combustibles in town. He indicated 30 percent of restaurants in town use polystyrenes. He added he thinks the city needs to do something, and this is a good way to start.

Jacobi noted the recycling place in Tigard does not take any polystyrene stained with food. Discussion ensued on logistical and cost issues regarding recycling. Parker suggested at the work session, Council discuss use of Urban Renewal Agency funds to create a small grant program so people who claim hardship can get a supply of biodegradable containers. Collett and Botello thanked Parker for his efforts. Botello suggested reaching out to those individuals who speak a different language and inviting them to the work session. She emphasized creating awareness is very important. Parker stated he is in favor of helping smaller restaurants move to a sustainable model. Goebel stated he is in favor of scheduling a work session.

MOTION was made by Parker, seconded by Jacobi, to schedule a work session to discuss an ordinance to regulate and reduce the use of expanded polystyrene foam and plastic take-out containers in the City of Newport. The motion carried unanimously in a voice vote.

Parker requested Councilors send him ideas prior to the meeting, so he can research them.

Public Hearing and Potential Adoption of Ordinance No. 2174, an Ordinance Amending the Composition of the Library Board to Include a High School Student Representative, and a Cultural Diversity Representative Member. Hawker read the agenda item. Nebel reported on Wednesday, January 13, the Library Board met to approve a request to the City Council adding two new positions to the Library Board. He stated one position would be adding a high school student representative to the Library Board, with the second position adding a cultural diversity representative to the Library Board. He noted Ordinance No. 2174 has been drafted and included in the packet for your review and approval. Library Director Laura Kimberly reported the library recently created a teen advisory group that helps advise on programming, services, and the collection. She stated she hopes this is another bridge to partner with the school district.

Sawyer opened the public hearing at 6:56 P.M. He called for public comment. There was none. Sawyer closed the public hearing at 6:57 P.M. for Council deliberation.

MOTION was made by Hall, seconded by Botello, to place for final passage and read by title only Ordinance No 2174, an ordinance amending the composition of the Library Board. The motion carried unanimously in a voice vote.

Hawker read the title of Ordinance No. 2174. Voting aye on the adoption of Ordinance No. 2174 were Goebel, Collett, Parker, Jacobi, Botello, Sawyer, and Hall.

Public Hearing and Potential Adoption of Ordinance No. 2175, an Ordinance Amending the Urban Growth Boundary and Comprehensive Plan Map to Facilitate a Residential Land Exchange. Hawker introduced the agenda item. Sawyer opened the public hearing at 7:01 P.M. He read the script for quasi-judicial hearings. He asked City Councilors to disclose any actual or potential conflicts of interest, bias, ex-parte contacts, or site visits. There was none. He asked if anyone present has an objection to the participation of any City Councilor, or the City Council as a whole. There was none. Nebel reported the Community Development Department has received an application from Boston Timber Opportunities, LLC, Terrance M. Lettenmaier and Laurie A. Weitkamp, owners, on May 29, 2020, to adjust the City of Newport Urban Growth Boundary. He stated the proposed amendment adds a 43.4-acre parcel owned by Boston Timber Opportunities, LLC located east of Harney Street and north of the Lakewood Hills Residential Subdivision. He noted as part of this transaction, a 71.4-acre parcel of property owned by Terrance M. Lettenmaier and Laurie A. Weitkamp located south of the airport would be removed from the Urban Growth Boundary. He added this is a quasi-judicial hearing.

Nebel reported under the Oregon land use system, justifying an Urban Growth Boundary requires that two considerations be addressed. He stated the first is to demonstrate there is a need to add land within the Urban Growth Boundary within the City of Newport. He noted the second consideration includes a boundary location analysis to establish that the subject property is the most appropriate land to meet the identified need, which in this case, is for additional housing. He indicated the Newport Planning Commission held a quasi-judicial public hearing on December 14, 2020. He explained after taking testimony and considering the information contained in the record, the Commission concluded that the relevant policies and standards have been satisfied and recommended that the Urban Growth Boundary and Comprehensive Plan amendment be approved by the City Council. He added the Council will take additional public testimony on the proposal.

Nebel reported City Council must approve the request if it finds that the approval standards have been met. He stated, alternatively, the City Council must deny the request if the criteria have not been met and cannot be reasonably met through the imposition of conditions of approval. He noted once the property is located within the City's Urban Growth Boundary, a separate action would be required to consider annexation. He indicated at the time that annexation would be requested, the applicant would be required to address the State's Transportation Planning Rule, and other requirements relating to rezoning. He added prior to annexation, the property continues to be subject to the County's Timber Conservation zoning.

Community Development Director Derrick Tokos reported there is an ordinance the Council that could adopt regarding this designation. He stated Boston Timber Opportunities is Handcock Forest Products. He noted they own the bulk of Site A that is proposed to be brought in, and an additional parcel of 3.5 acres is owned by the City of Newport, which contains Harney Street. He explained the balance of Site A is forested. He mentioned the standards included in the ordinance.

Tokos reported Council has to decide if there is a need. He stated in this case the need is additional residential development. He noted Council then has to decide is this the right property to meet that need. He explained Lettenmaier is amenable with their property leaving the urban growth boundary, and they have no plan to develop it. He indicated the

applicant relied upon the city's existing housing needs analysis, done in 2011 and updated in 2014. He added according to the housing analysis, Newport needs to add 42 dwellings per year, and only hits half of that.

Tokos reported in this project, the applicant is interested in constructing 200 units, single family detached and attached as high density residential. He noted they don't intend to develop to that full potential. He indicated state law for these types of land swaps require the zone be the same. He explained the map of Site A and B and the costs of developing infrastructure. He added if the applicant is successful, the property goes into the urban growth boundary, would remain zoned as timber conservation, and would not be developed immediately.

Tokos reported there are more public hearings ahead, and the city would look at entering into a development agreement to stagger or phase in development, require transportation improvements, and work out with the developer on affordability. He explained during the subdivision phase, the applicant would do a geological analysis. He noted there is testimony from Oregon Coast Alliance that this meets their rules. He indicated the Fair Housing Council weighed in with approval. He added most testimony of concern comes from Pacific Homes Beach Club. He explained a preliminary traffic study is included in materials.

Michael Robinson, land use attorney with Schwabe, Williamson, and Wyatt, stated he will offer testimony on behalf of the applicant. Robinson stated the applicant agrees the recommendations of the Community Development Director and Planning Commission's unanimous recommendation that City Council approve the urban growth boundary amendment to remove land that owner has said will not be developed for urban, residential possibilities for land that will be developed for urban, residential uses. He noted he worked very closely with the Planning Department and state agencies to ensure that this is the right land to come in to meet the housing need and it can be developed. He indicated he appreciates the support of the bodies mentioned in the staff report, Oregon Coastal Alliance and Fair Housing Council of Oregon. He added both indicated this application can be approved.

Robinson reported he also worked with the Department of Land Conservation and Development and the Oregon Department of Transportation, and neither of those agencies oppose this application. He emphasized the client does not have any adverse comments from any state agencies. He stated the applicant met all of the applicable approval criteria for the city and state. He noted the state has been reviewing the work, and so far, they have met their criteria. He noted the applicant can provide adequate water and sanitary sewer service and that distinguishes this property from many other areas that may be developed. He indicated although an application like this can be fairly complex, everyone who has looked at it has found it satisfies the approval criteria. He added that is what the decision is based on.

Robinson reported the transportation issues are important, and the transportation planning rule analysis can be deferred. He noted it is being deferred because it made sense to defer it. He explained the applicant wants to wait and coordinate the analysis with the conclusion of the city's Transportation System Plan. He indicated the two should be done together. He added in the next stage where the applicant will seek annexation and a zoning map amendment is the appropriate stage for the analysis, and that is what typically occurs.

Robinson reported the commitments the applicants made are to not propose apartments for this property. He stated they will work with the city on how to provide workforce housing and affordable housing. He noted they agreed to do a geotechnical study at the subdivision stage. He explained although the current study shows a failure of the transportation system, it requires the applicant to mitigate those failures. He indicated before the city can approve the zoning, the city has to be assured that whatever transportation failure this application causes with 200 new homes can be satisfied. He added there will be a development agreement to specify how to do that, and there will likely be improvements on Highway 101 or local streets that the applicant will make. He emphasized nothing is going to be done which would put those properties in the neighborhood in jeopardy. He urged approval of the application.

Mercedes Serra, planning consultant with 3J Consulting, spoke in favor of the applicant. She thanked Council, Planning Commission, and staff. She reported her proposal would adjust the urban growth boundary to include a 43.4 acre parcel, Site A into the urban growth boundary and remove a 71.4 acre parcel, Site B. She introduced members of the project team. She stated Site A is located on the northeast portion of Newport at the intersection of Harney Street and 35th Street, east of Highway 101. She noted the property is undeveloped forest land with Lakewood Hills subdivision to the south and Pacific Homes community and Little Creek Apartments to the west. She indicated Site B is part of the Wolf Tree Resort area located in southwest portion of Newport on 98th Street, east of Highway 101. She added the majority of the property is undeveloped with the exception of one single family home, and there is low density, residential to the west of the property.

Serra reported the boundary analysis provided to the city addresses the requirements of OAR 660.024.0065 and 660.024.0067. She noted the staff report addresses the issues raised by Kevin Young of the Department of Land Conservation and Development (DLCD). She explained the characteristics of both properties. She stated Oregon land use law requires the land swap have the same designation. He indicated the applicant is committed to providing single family homes consistent with the needs identified by the city and will not be proposing an apartment development at the site.

Serra reported on conformity to the city's 2011 housing need analysis. She stated Site A is approximately 28 acres smaller than Site B, but the current housing element of the Newport Comprehensive Plan indicates the city has a surplus of high-density residential land, and therefore the adjustment will not result in a gross acreage loss. She noted much of the land on Site B has significant development constraints that would impact the total number of units the parcel could support. She emphasized the overall outcome in terms of units produced will be substantially similar between sites.

Serra reported the applicant will accept the condition of approval for a geotechnical study of this site at the time of development application and will adhere to the recommendations provided in such a report. She stated adequate water system facilities exist adjacent to Site A, and can be served with the provision of appropriate system development charges, facilities, and connections. She explained the water infrastructure needed to serve residences above 183 ft above sea level. She indicated significant water infrastructure improvements are necessary to develop Site B and the Wolf Tree Resort area. She added adequate sanitary sewer services exist at Site A with the provision of the appropriate system development charges, facilities, and connection. She explained the proposed wastewater system.

Serra reported the proposal would require the inclusion of a storm drainage and storm sewer system pursuant to municipal code. She explained the proposed stormwater system. She stated Site A is currently adjacent to a developed collector, NE Harney Street. She noted according to the attached transportation impact analysis, the proposal has potential to create a significant effect on the surrounding transportation network. She explained the transportation study for Site A will be finalized after the completion of the city's Transportation System Plan update. She indicated while Site A was not analyzed as part of the Parks System Master Plan, it is identified as the location of potential future trail connections to the Big Creek Reservoir open space. She added Big Creek open space is a 536-acre natural park adjacent to the subject site.

Serra reported a proposed trail connection would be incorporated in a future development of the site. She explained the Newport Park System Master Plan process. She noted the proposal provides an effective response to the regional issue of limited workforce housing supply and increased housing costs affecting the City of Newport and Lincoln County. She summarized inclusion of Site A would provide a large site that has minimal development constraints, is serviceable by existing public utilities and services, and is located near an existing development and economic opportunities in Newport. She added the proposal received the unanimous recommendation from the Planning Commission and has been supported by city staff, ODOT, and DLCD.

Matt Hughart, transportation engineer with Kittelson and Associates, spoke in favor of the applicant. He stated he understands and recognizes this is a sensitive issue for many people. He noted many people have rightful concerns on how a development like this and urbanization of this parcel might impact circulation and transportation in the site vicinity. He indicated the concerns fall into two categories. He indicated the first is overall concerns regarding circulation and capacity to accommodate the additional traffic expected to be generated by such a development. He added there were also concerns focused on how the transportation system would accommodate a natural disaster or a need for evacuation.

Hughart reported the applicant shares those concerns. He stated they think the disaster planning is being addressed by the Transportation System Plan, and they are waiting for the outcome to spear their project to answer those questions. He noted as for the capacity concerns, he submitted a letter that outlines the steps that have to be taken at the transportation level. He explained the transportation analysis in the packet is preliminary, an initial attempt by the project team to get a better understanding of what kind of limitations exist in the area. He indicated the Transportation System Plan update really needs to be completed first before revising and finalizing this study. He added when there is a development proposal on the table, then there will be another study to fully determine what kind of mitigation and offsite improvements are needed to support that development. He explained in a number of steps going forward, the applicant will be assisting city staff and ODOT to help address questions.

Terry Lettenmaier, a South Beach resident, spoke in favor of the applicant. He noted he owns Site B and confirmed what Tokos and Robinson said. He stated his wife and he support their land being removed. He indicated he does not have any plans to develop it beyond its zoning. He explained he does not think it would be practical to develop it to urban density. He added his property is very steep, and he is not familiar with the north property.

Sawyer noted one email in favor. He asked if there was any testimony against the proposal. Hawker noted public comment in opposition.

James Pettett, a Newport resident, spoke in opposition of the applicant. He stated most residents recognize a housing shortage. He noted the applicant has to show this is the most appropriate location. He explained the information the city has in front of it concerning the traffic and geology leaves so many unknowns that it can't answer that question. He noted the street improvements discussed at the Planning Commission. He emphasized those are hopes, and they are still discussing who might pay for it. He indicated the applicant can't answer the traffic questions. He added right now there are already traffic problems in this area.

Pettett reported from Harney to Big Creek Road is very popular in the mornings, especially while school is in session. He stated the applicant is talking about adding a large number of homes that would be workforce and family housing, which means more children and more traffic to the elementary school. He noted there are three new apartment developments going up along Harney in this area. He indicated the city knows there are existing problems, because of how much money and effort has to be put into Big Creek Road. He added it has to be regraded every other month.

Pettett reported trying to take a left onto Highway 101 in the summer is a bit of a nightmare. He stated there is also 31st Street, which is sinking into the wetland. He noted there are some big problems here that are not being adequately addressed. He explained his next concern is the geology of the area. He indicated there is also incredibly steep ground out there. He added a mile to the north, there was a slide that took out homes last summer. He emphasized the coast range is a unique environment and very slide prone.

Pettett reported until that geology assessment is done, the city can't know whether this area is good. He stated this area already has quite a lot of high density, residential apartments, and now the applicant is talking about 40 more acres designated as high density. He gave examples of developers in Washington and California. He emphasized the city does not have enough information to make a decision at this point.

Kristin Yuille, resident of Newport, spoke in opposition to the applicant. She stated her main concern is the traffic impact study that needs to be done. She noted this study needs to be done before any further steps are taken in this process. She indicated whether the applicant is allowed to defer at this step is really not appropriate for this development because it's really fundamental to determine whether this project should move forward. She explained she has been a resident of this area for several years, and uses Big Creek Road on a daily basis as does a majority of residents in this area. She added city staff indicated Big Creek Road would likely be converted to pedestrian and bike only.

Yuille reported if that is true, then a traffic study is even more important because current residents will not have any alternate route, and that will create even more of a traffic issue as 101 will be the only access. She provided the example of Oregon Parks and Rec who applied for a zoning change to develop a campground and park near Beaver Creek. She stated although the state arguably met criteria to move the project forward, the County Commissioners denied the application, citing many of the same concerns regarding traffic, safety, converting resource lands, the environment, as well as basic livability for residents. She added she agrees Pettett's comments that a proper analysis has not been done that this is the most appropriate location.

Yuille reported Council is also required to look at the environmental and social consequences. She noted that is not being done. She stated City Councilors have

discretion when reviewing land applications. She explained Council can weigh factors such as safety and livability. She indicated she thinks everyone here is in support of growing the city, but she thinks it should be done in a thoughtful and responsible way. She added the applicant has not done the necessary front-end work to show this proposal should be considered, let alone approved. She requested that Council deny this proposal and require the applicant, at minimum, to complete a traffic study before a recommendation is made.

Hawker read Paulette Studley's and Barbara Terrill's letters of opposition into the record.

Sawyer noted emails received in opposition to the proposal. He asked if the applicant wished to provide rebuttal.

Robinson provided rebuttal on behalf of the applicant. He stated no one disputes this land is needed to meet the city's housing needs. He noted the question is if this is the right site. He indicated on transportation, there are not any adverse impacts from ODOT or city staff. He explained if either of those bodies thought the applicant was not capable of satisfying the transportation obligation, and that includes spending money to make public improvements, the applicants would not have a recommendation of approval from the Community Development Director or Planning Commission. He added ODOT would have weighed in to say otherwise.

Robinson reported the applicant understands there will be a development agreement where they will commit to certain improvements and funding those improvements. He stated in terms of a promise, Council has on the record the applicant's commitment to do these things. He emphasized if the applicant didn't think they could do them, they wouldn't be saying this in a public hearing. He indicated this is the appropriate site for this development, and there simply aren't any other sites that can be brought into the city to satisfy housing needs. He added he understands the uniqueness of the Oregon Coast, and that's why they are committed to doing a geotechnical study at the subdivision stage.

Robinson reported there is no geotechnical problem with this site. He noted no one is proposing development until they have done a geotechnical analysis. He stated there is adequate water and sanitary sewer services at the site. He indicated he is confident traffic concerns can be satisfied. He added the real problem with traffic, apart from concern additional traffic on local streets, is making a left turn on Highway 101.

Robinson reported that the applicant is going to be coordinating with the city and ODOT to make improvements on Highway 101 to facilitate a left turn. He stated with respect to the local streets, streets like Harney that are designated as collector streets are intended to collect traffic and bring it to higher order streets like 101, so putting additional traffic on Harney is entirely appropriate. He noted if through the traffic analysis, the city identifies deficiencies in the road the applicant needs to improve, that will be their obligation. He added the site is no more steep than other areas that have been developed for residential houses. He explained the steepest areas won't be developed.

Robinson reported the areas that can be developed safely and appropriately for single family housing will be developed. He noted the R-4 zoning is exactly the same as the property to the west. He stated the removal of Big Creek Road is not something the applicant has proposed. He indicated that would have to be part of the Transportation System Plan, and that is a decision the Council will make. He added he is not sure how the Oregon Parks application denied by county is relevant to this, but I state agencies,

public advocacy groups, and city staff have come to the same conclusion that the applicant met the criteria.

Robinson explained state urban growth rules the applicant has followed. He stated the applicant has been working with ODOT for two years, and the state is not recommending denial of this application. He recommended approval the application. He added findings and conditions can be added at later stages of the process.

Sawyer asked for Council comments and questions. Parker thanked everyone for their testimony. He noted a number of people brought up the condition of 31st Street. He stated there is a big crack in the street, and that area is geologically unstable. He indicated he expects if Council were to approve this plan, the developer would have to do an assessment of 31st Street road conditions up to and including slide mitigation, installation of sidewalk that is bicycle friendly, and city infrastructure as far as culverts. He added, essentially, a lot of improvements would be needed.

Parker stated he does not think the city can afford to improve them to assist a private developer. He noted the developer would need to fund those improvements as well as 36th Street. He indicated landslide mitigation testing would be needed before any further process would be approved. He suggested geologic core sampling at the development site. He indicated the developer mentioned that would need to be done at the subdivision phase, but he suggested the geologic study needs to be done now before Council approval.

Parker stated as far as the traffic study, he would expect that to be funded 100 percent by the developer and that would need to include peak season flow between Memorial Day and Labor Day. He noted as far as whether or not this is the appropriate site, he offers into the record, to use the county commons as a mixed commercial/residential, high density development where the land is flat, there is already existing infrastructure, and people can walk to businesses in town. He added he wants to know what would be done about those issues in writing.

Robinson stated he does not know about the county commons, and that property has not come up before. He stated if that property is not available, then it cannot be considered. He stated the transportation study is a fully applicant-funded study. He agreed the study needs to be done during peak season. He indicated the applicant would be happy to analyze those two streets and see what their condition is and what it needs to be done. He added that could be part of the development agreement. Robinson explained the applicant can't make commitments about what needs to be done until the analysis. He emphasized addressing geologic issues will be done at the subdivision stage.

Hall confirmed there are 28 acres that are developable. She asked how 200 homes would fit there. She clarified the attachment in the packet related to the Transportation System Plan. She stated if there is new development, there should be some opportunity to grow the park system, and she would like to see some way to build in a park. Serra replied the 200 is a sort of worst-case scenario. She stated the applicant is not expecting 200 units on site. She noted once there is a development plan, they would have a better estimate. Hall stated she is concerned there is not a realistic estimate. Serra added the development agreement would include requirements on park development.

Goebel thanked proponents and opponents for their testimony. He stated the city is really in need of additional housing stock. He noted finding pieces of property that are within reach of city services is difficult. He indicated this is an ideal spot for extension of

infrastructure. He explained he read the Planning Commission minutes carefully, and the concerns were transportation and geology. He asked Tokos to explain the process if this amendment is approved.

Tokos reported this step gives the developer indication the city will work with them before spending a bunch of money. He explained if the amendment is approved by the city, it goes to the county, and the county holds a public hearing. He noted no development can occur once it enters the urban growth boundary. He stated the next step would be for the applicant to file for annexation and designation of zoning. He indicated that would require a public hearing before the Planning Commission and City Council.

Tokos reported that is when the applicant will have to have the transportation impact analysis complete and show the system can function. He emphasized Big Creek Road has only been discussed in the Transportation System Plan as bike and pedestrian only if the Harney Street extension goes through. He noted the applicant can include a subdivision plan with the zoning or submit that afterward. He indicated if it is submitted afterward, that will be an additional public hearing before the Planning Commission. He explained the Planning Commission would evaluate the specific street layout, internal to the site and how it would connect to other areas. He added this would likely provide secondary access to Lakewood Hills.

Tokos reported the applicant is willing to do geological analysis at the subdivision phase, showing how they are laying out their streets and lots is conducive to underlying geology. Goebel stated if this moves forward, there is a minimum of five more public hearings. He emphasized there is a number of safeguards in place before the developer can do anything. He confirmed the public testimony at the Planning Commission level was similar to tonight.

Collett asked if Council has grounds to vote no if the applicant has checked all their mandated boxes. He asked if the Council's only option if it gives approval is to condition that approval. Tokos replied under state rules, it is a question of need and appropriate location given available options. He noted during the annexation and zoning phase, Council can drill into more of these details. Collett emphasized the conditions will give the reassurance needed for the valid points raised tonight.

Botello thanked Tokos for his report. She asked if the Transportation System Plan or the development process comes first. Tokos replied the applicant will wait to see how Transportation System Plan unfolds, and that will provide a number of options for how the system should be improved and how transportation impacts can be addressed. He noted this developer is not the only one looking to add additional units out here. He explained as these projects move forward, developers have the responsibility to show that the amount of traffic they are adding to the system will not overtax the system, meaning that the intersections will continue to function. He explained the process after the proposal is approved.

Botello asked if the city has the money to move forward with the Transportation System Plans recommendations. Tokos explained how the process would work once the Transportation System Plan is approved. Botello asked if adding sidewalks would be funded by the city. Tokos replied all modes are subject to evaluation. He noted what the city asks a developer has to be reasonable, but there are expectations the developers would do sidewalk work. He gave the example that the apartments under construction now are extending sidewalks as part of their project. Botello confirmed the traffic study will be in writing in detail.

Robinson stated Tokos described the applicant's intentions and obligations accurately. He noted one of the reasons to wait on the traffic study is so the city can finish its Transportation System Plan. He added one of the reasons he submitted a letter is to assure what the applicant would do in writing.

Collett confirmed the sewer capacity has been studied and modeled in this area. He asked if a study has been done that resulted in the geological comments. Tokos replied these areas have been studied by DOGAMI. He noted their study is not as well done for inland as it is for coastal. Collett recommended the developer check out 70th Street. He stated at the annexation and zoning level, he expects to see good geological analysis and a detailed traffic study. He strongly recommended an emergency level analysis of traffic as well.

Jacobi thanked everyone for testimony. She stated these are great growing pains. She noted Lincoln City turned down a developer on Logan Road because of access. She added she does not know how comparative that road is to Harney and Big Creek. She indicated since this area does not have parallel roads to Highway 101, she hopes state regulations take that into account. She stated she is concerned with having extra people here, only two ways in and out, and that Big Creek is unstable. She mentioned George Dwyer's letter. She emphasized she wants to take care of the community's safety and house them.

Hall stated wherever Councilors go, people ask about housing. She noted there is no workforce housing, no affordable housing. She indicated this is where Newport can grow the community. She emphasized the need to recognize safety and to go forward on this. She added this would be a bustling community, if homes could be added.

Nebel stated the decision tonight is to adjust the urban growth boundary. He noted housing has been an issue for the seven years he has lived in Newport. He indicated there are a lot of questions that need to be answered, and this is the first step.

Sawyer closed the public hearing at 8:55 P.M. for Council deliberation.

MOTION was made by Goebel, seconded by Hall, to place for final passage and read by title only Ordinance No. 2175, an ordinance amending the Urban Growth Boundary and Comprehensive Plan Map, adding 43.4 acres in the vicinity of NE Harney and NE 36th Streets with a "high-density residential" comprehensive plan map designation, and removing 71.4 acres at the NE end of the Wolf Tree Designation Resort site, south of the municipal airport, which also has a "high-density" comprehensive plan map designation. The motion carried unanimously in a voice vote.

Hawker read the title of Ordinance No. 2175. Voting aye on the adoption of Ordinance No. 2175 were Goebel, Collett, Parker, Jacobi, Botello, Sawyer, and Hall.

COMMUNICATIONS

From the Airport Advisory Committee - Request for a Letter of Support Eliminating the Sunset Provision House Bill 2075. Hawker introduced the agenda item. Nebel reported House Bill 2075 provides for an increase in tax on aviation fuel, with these funds being made available to help airports across Oregon with local matches required for FAA AIP grants. He stated AIP grants have been an important part of funding for the Newport Municipal Airport. He noted the Aviation System Action Program (ASAP) has been very important in order to address local matches to federal funds for airport improvement. Removal of the Sunset Provision requires a three-fifths vote of the legislatures. He

indicated the Airport Committee is recommending that the City Council authorize a letter to be sent to Representative Gomberg and Senator Anderson requesting consideration for eliminating the Sunset Provision of House Bill 2075.

Airport Director Lance Vanderbeck reported there were Connect Oregon grants for airports including Newport. He stated if the sunset sunsets then there are no other granting opportunities for the airport to consider. Parker asked what percentage of the airport budget is funded by the gas tax. Vanderbeck replied the gas tax goes directly to the state, and then is redistributed across the state in grants.

MOTION was made by Hall, seconded by Botello, to authorize the Mayor, City Manager, and Airport Director to send a letter to Representative Gomberg and Senator Anderson to support the lifting of the Sunset Provision included in House Bill 2075, as it relates to the added fuel tax on aviation fuel used to fund local airport projects. The motion carried unanimously in a voice vote.

CITY MANAGER'S REPORT

Approval of a Memorandum of Understanding between the City of Newport and Lincoln County Regarding Lease of Land for an Animal Shelter at the Airport. Hawker introduced the agenda item. Nebel reported on January 14, 2020, the Airport Committee heard a presentation from Lincoln County Counsel, Wayne Belmont, regarding the county's desire to locate an animal shelter on the airport property. He stated the committee had initially indicated support for this concept in December. He noted on January 21, 2020, the City Council reviewed the recommendations from the Airport Committee, and authorized negotiations with Lincoln County to proceed with this plan. He indicated the county is seeking up to five acres of land for a site that would accommodate an animal shelter, potential housing for larger animals, and storage. He added one of the initial limiting factors was that this location could not meet minimum fire flows for any new structures.

Nebel reported the city has worked with the Seal Rock Water District, and minimal fire flows are now available to the site. He stated the city has advised the county that the type and design of the building will dictate what type of fire suppression system will be used, based on the capabilities of the Seal Rock Water system to provide adequate fire flows based on the code requirements for the proposed buildings. He noted in March, staff met with Wayne to initiate these discussions. He indicated this discussion was to develop a memorandum of understanding outlining the various steps that both the county and city would take would be an appropriate pathway forward for these discussions.

Lincoln County Counsel Wayne Belmont thanked the city for working on the MOU. He stated if everything goes smoothly, construction could begin as early as next fall. He noted the Lincoln County Board of Commissioners reviewed this MOU today and approved it. Goebel stated he is in support of the MOU. Jacobi agreed and who would design the shelter. Belmont replied the county has an RPF for consultants to develop a site plan for a conditional use permit and construction drawings for bid. Jacobi confirmed the county will look into a septic tank for waste.

MOTION was made by Goebel, seconded by Jacobi, to approve a memorandum of understanding between the City of Newport and Lincoln County to develop a lease of land for the construction of the Lincoln County Animal Shelter on airport property, and

authorize the City Manager to execute said memorandum of understanding. The motion carried unanimously in a voice vote.

Sawyer thanked Belmont for his efforts.

Consideration and Potential Adoption of Resolution No. 3908, a Resolution Amending the Membership to the Police Advisory Committee and Repealing Resolution No. 3905.

Hawker introduced the agenda item. Nebel reported on January 11, the City Council held interviews at a work session to appoint the first members of the Police Advisory Committee. He stated at the work session, the Council indicated the desire to expand the committee from nine to eleven members to include an additional student and an additional at-large member to the committee. He noted Resolution No. 3908 will increase the membership to eleven members as outlined above. Botello thanked Hall for her efforts.

MOTION was made by Hall, seconded by Goebel, to adopt Resolution No. 3908 amending the membership to the Police Advisory Committee, and repealing Resolution No. 3905. The motion carried unanimously in a voice vote.

Ratify the Mayor's Appointments to the Police Advisory Committee. Hawker introduced the agenda item. Nebel reported Resolution No. 3908, which was just approved, expands the committee from nine to eleven members to include an additional student and an additional at-large member. Sawyer thanked the applicants and Council. Sawyer recommended appointments of Ed Simon, Stu Osborn, Sandy Roumagoux, Trisha Lakey-Serrano, Harper Thomson, Sam Hurst, Susan Van Liew, Melinda Baxter, Richard Gutknecht, and David Heitman.

MOTION was made by Jacobi, seconded by Collett, to ratify the Mayor's appointments as presented for the Police Advisory Committee. The motion carried unanimously in a voice vote.

Hall thanked staff for their efforts. Nebel noted there is one vacancy left, and Council will interview applicants at the next work session.

State Legislative Priorities for the City of Newport. Hawker introduced the agenda item. Nebel reported the Oregon State Legislature convened on January 11, 2021, for their regular legislative session. He noted the League of Oregon Cities develops its statewide legislative policies each year. He stated the Newport City Council participated in this process by forwarding the City's priorities to the League at the August 3, 2020 Council meeting. He explained City Recorder/Special Projects Director, Peggy Hawker, has included the determined list of the City's priorities and forwarded them to LOC and the League's priorities from this process for this legislative session. He indicated in addition to these items, the City Council has been advocating for several other legislative efforts.

Nebel reported the League of Oregon Cities holds its "City Day at the Capitol" at the beginning of each regular legislative session. He noted this year's City Day at the Capitol will be virtual and will be held on Thursday, January 28, 2021. He requested that the City Council confirm the City legislative priorities for the 2021 session. He explained staff will develop white papers on each of these issues to share with State Representative, David Gomberg, and State Senator, Dick Anderson. He stated the legislative priorities identified by the City Council in August, included COVID-19 economic recovery investments, digital equity and inclusion, infrastructure financing and resilience, and mental health service delivery. These legislative priorities were forwarded on to the League of Oregon Cities.

Nebel reported after reviewing each community priorities, the LOC has developed the priorities that are outlined in Hawker's report. He stated in addition, the City Council has been actively lobbying for funding for the design and permitting for the replacement dam at Big Creek, advocating for property that is located within tsunami inundation areas disclosed at time of sale, urging the state to begin moving forward with plans for the replacement of the Yaquina Bay Bridge, and removal of the Sunset Provision for AIP funding for local airports. He added the Council is discussing EPS foam and plastics and asked if Council would like to include that as a priority.

Jacobi asked if expansion and support of childcare services could be added. Parker suggested requesting the Legislature address timber tax fairness. Botello suggested utility payment assistance for those impacted by COVID. Council expressed majority support for adding these three items.

MOTION was made by Parker, seconded by Jacobi, City Council identify as its top priorities the following:

Funding for the Big Creek Dam, engineering and permitting; requiring disclosures when land is sold in tsunami inundation areas; advocating for development of a replacement plan for the Yaquina Bay Bridge; advocating for COVID-19 economic recovery investments, including utility relief; digital equity and inclusion; infrastructure financing and resilience; mental health service delivery; advocating for a state-wide and Lincoln County specific program for timber tax fairness; and childcare availability for working families.

The motion carried unanimously in a voice vote.

Report Regarding the January 4, 2021, Communication from Catherine Roller Regarding a Connection to the City's Public Water and Sewer System. Hawker introduced the agenda item. Nebel reported on January 4, 2021, Catherine Roller requested to be on the City Council Agenda to address her disagreement with the City's determination regarding connecting water and sewer lateral lines into a private water and sewer system. He stated as indicated on January 4, the City Council has since received an update on litigation regarding the question of ownership of Longview Hills infrastructure in executive session. He noted Ms. Roller can currently request to connect directly to the city's public water and sewer system on NE 54th Street, or wait until after the U.S. District Court reviews this ownership question, which is currently being litigated by HCA Management, the current owner of Longview Hills, to see if there will be a change in the ownership of the infrastructure located in Longview Hills.

Nebel reported reopening the Recreation and Aquatic Centers depended on COVID-19 cases remaining below the Extreme Risk level. He stated staff intent is to open the Recreation and Aquatic Centers on a limited basis on Friday. Fire Chief Rob Murphy reported the numbers indicate Lincoln County will stay in the High Risk category.

Nebel reported on the slide at Jump Off Joe. He noted the city has made efforts to better sign that area. Murphy reported the slide has been occurring since November 2019. He noted the county has been notified. He stated over the weekend the slide moved a significant degree, and the different pieces of concrete foundation were beginning to heave and shift. He explained the city cordoned off the area with tape, notified Public Works, Central Lincoln PUD, Lincoln County, and Oregon State Parks. He indicated Public Works staff have installed more substantial barricades and specific signage. He added drone footage has been taken of the area.

Murphy reported the level of concern has gone up. He noted the realistic things the city can do is limited. He stated the Fire Department's concern is if large pieces of foundation fall down onto the beach or toward the beach. He added the city is continuing to monitor it and develop contingency plans. Goebel confirmed a sinkhole developed nearby by the condos. Interim Public Works Director Clare Paul reported the sinkhole is on private property, and their consultant has recommended a plan. She explained they have drain line that is not connected to the city storm drain. Goebel asked what is the city's legal exposure for people getting hurt near Jump Off Joe. Nebel replied since it is on county property, he is not sure the city has any legal liability. He added no trespassing signs mean that police could address people who access the property. Allen added the city is assisting the county in assessing its options for the area.

REPORT FROM MAYOR AND COUNCIL

Council Reports. Jacobi added to her report included in the packet that Commissioner Jacobson liked the encouragement to harvest sea urchins and invasive species. She reported the owner of Harbor Village accepted the residents offer to buy it, and now they have to assess infrastructure.

Allen recommended a special executive session to finish employee evaluations. Nebel recommended January 25, 2021, for the executive session. Botello suggested the remaining Police Advisory Committee interview take place at the same time.


Parker noted Beaverton will share its environmental outreach materials with Newport. Goebel requested an update on the financial projection model used by Finance. Nebel replied a report can be provided at the next Finance Work Group meeting.

ADJOURNMENT

Having no further business, the meeting adjourned at 10:08 P.M.

Memorandum

To: Newport City Council

From: Derrick Tokos, Community Development Director 

Date: January 13, 2021

Re: Updated Supplemental Analysis for Boston Timber Opportunities, LLC UGB
Amendment (File 1-UGB-20/1-CP-20)

This memo addresses boundary location and priority provisions outlined in OAR 660-024-0065 and OAR 660-024-0067. It has been updated since the December 14, 2020 Planning Commission hearing to address specific feedback contained in a December 17, 2020 email from Kevin Young, Senior Urban Planner, with the Department of Land Conservation and Development.

The locational provisions of the above referenced Administrative Rules require that the City evaluate lands within 1 mile of the Newport Urban Growth Boundary (UGB) to see if the 43.4 acres the applicant proposes to add to the UGB is best suited for that purpose given (a) the identified residential need and (b) the State of Oregon's priorities which emphasize non-resource (i.e. "exception") land being added as opposed to resource (i.e. "farm and forest") lands. A map enclosed as Attachment "A" shows the 1 mile study area. If exception areas are contiguous to the 1 mile buffer, then the analysis must extend another ½ mile from the Newport UGB. This 1½ mile buffer has not been mapped, but is addressed in the analysis. Exception lands exist south, east, and north of the City of Newport UGB and maps illustrating these areas are attached as Attachments "B," "C," and "D."

The City may exclude lands from the study area if it determines that it is not practicable for the City to extend the necessary public services, or the lands are subject to development hazards such as bluff and dune backed erosion hazards, landslide hazards, or tsunami inundation (OAR 660-024-0065(4)(a) and (b)). Both of these factors are relevant to lands within the study area.

Exception lands south of the Newport UGB are being excluded because they are far removed from City water and wastewater services, and are significantly impacted by bluff and dune backed erosion hazards, landslide hazards, or tsunami inundation. The extent to which the properties are impacted by development hazards is illustrated on Attachment "B." Water and wastewater service would have to be extended from SE 50th Street, which is over three miles to the north. For wastewater alone, a force main and lift stations would have to be extended south along the US 101 corridor which is heavily impacted by wetlands and lies within the tsunami inundation area. The City Waterwater Master Plan, by Brown and Caldwell, dated February 9, 2018, includes an estimate for extending sewer service to the Surfland unincorporated rural residential development, which lies just inside the Newport UGB and is a little more than 1 mile from existing services at SE 50th Street. Its location is identified on Attachment "B." The project cost is estimated to be a little more than \$6.2 million (2016 dollars), including a force main, lift station, and gravity main distribution system. This is not a project the City can presently fund, having exhausted much of its resources upsizing

lift stations on the north side of town to address overflow problems. Exception lands are an additional two miles distant from the Surfland development. These properties are heavily parcelized, meaning the City would expect a lower level of development, that would occur incrementally during the planning period. This has been an impediment to extending service to Surfland, because without the connection of a significant number of units the flow of effluent will be too low, and the wastewater system will not operate properly. Many of the properties are also subject to inundation from a near shore XXL Cascadia earthquake and resulting tsunami, as mapped by the Oregon Department of Geology and Mineral Industries (DOGAMI), and all are reliant upon a stretch of US 101 that is within the tsunami inundation area and serves as the sole point of vehicle access to these lands.

Exception lands to the east are depicted on Attachment "C." They face similar issues as unincorporated exception lands to the south. Property between US 20 and the Yaquina Bay Road is steeply sloped and within a landslide hazard area mapped by DOGAMI. Wastewater would be directed downslope to a lift station at SE Running Springs Drive and SE Bay Blvd. That lift station is at capacity and would have to be upsized. The same goes for the force main between that lift station and the Bayfront lift station located at Port Dock 7. From there effluent is directed to the Northside lift station, which then pumps it under Yaquina Bay to the City's wastewater treatment plant in South Beach. The City's Wastewater Master Plan estimates the cost of these upgrades at a little more than \$5.2 million (2016 dollars). Exception areas east of Newport's UGB that are north of US 20, are situated along Yaquina Heights Drive and Newport Heights Drive. Some of these lands are within mapped landslide hazard areas. They are steeply sloped except where they border the roads and the Wastewater Master Plan assumes only a 40% of otherwise permissible infill due to slope constraints. This area feeds to the Bayfront lift station which is capacity constrained (part of the \$5.2 million cost). Wastewater service to this area would require new lift stations and force mains along each of the main roads due to the elevation changes. This has not been priced out, but would likely be more expensive than the Surfland extension due to the terrain.

Exception areas north of the Newport UGB, as shown on Attachment "D," are located tight to US 101. These lands rely upon highway access and, unfortunately, this stretch of US 101 is within an active landslide area. City wastewater service is only 1/3 of a mile from the UGB at US 101 and NE 73rd Street; however, the City cannot practicably extend that service further north due to the unstable terrain in that area. The only other exception land in that area is the Iron Mountain Quarry, at the east end of NE 71st St. This is a Goal 5 protected aggregate site that abuts industrial land and would be brought into the City as industrial if added to the UGB and annexed. It is not suitable for residential development.

What is left are resource lands, which are exclusively Timber-Conservation (T-C) forest zoned properties. They are identified as "County Resource Lands" on the attached maps, and are situated east and inland from exception lands. These properties are privately managed timberlands with some being smaller and others larger than the applicant's 43.4 acre site. They share the same service limitations as the exception lands excluded for the reasons noted above, and are in fact even further removed from those services. Most of the resource zoned properties are undeveloped, although some parcels contain private residences. Access is available by logging road or private residential driveways. The applicant's property is unique in that it does not share these same limitations. City services are in place immediately adjacent to the subject property that are capable of supporting urban levels of development. Sewer lift stations that serve this area (unlike some of the others mentioned) were recently upsized to address chronic overflow issues the City had experienced, and a new water tank, pumps, and main lines have been constructed to provide adequate water pressure. A paved collector roadway abuts the property, as does an electric utility substation. As illustrated on the attached maps, most resource lands within the study area are geographically isolated from urban development, being separated by exception lands or as yet un-serviced properties within the urban growth boundary. That is not the case with the applicant's site, which is bordered by urban

scale residential development to the south and west. Further, a utility easement for high voltage power lines cuts across the north end of the property. The result is a property isolated on three sides from other forest lands, which will allow for urbanization to occur with minimal impacts to nearby forest operations. The property does have some terrain limitations; however, such limitations are common on both exception and resource lands in the vicinity of Newport. The property is outside of mapped landslide and tsunami inundation hazard areas.

Considering the above, boundary locational requirements outlined in OAR 660-024-0065 and 660-024-0067 have been adequately addressed for this UGB amendment.

Attachments

Attachment A – UGB Study Area

Attachment B – Exception Lands South of Newport

Attachment C – Exception Lands East of Newport

Attachment D – Exception Lands North of Newport



851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

January 11, 2021

Project #: 23915

Derrick Tokos, AICP
City of Newport
169 SW Coast Highway
Newport, OR 97365

RE: Newport Land Swap/UGB Amendment Transportation Analysis Summary

Dear Derrick,

The following letter has been prepared to help the Newport City Council members understand the transportation analysis that has been prepared for the proposed zone swap/urban growth boundary amendment. This land use proposal is the subject of the City Council hearing on January 19, 2021.

Background/Overview

Hancock Forest Management is proposing a land use application that would remove 71.39 acres of land in the southern portion of Newport's urban growth boundary (UGB) and bring in approximately 40 acres located adjacent to the northeast quadrant of the City's UGB. Consistent with state and local requirements, such an action will first require a Transportation Planning Rule (TPR) analysis to address the big picture transportation impacts associated with bringing the 40-acre site into the City of Newport's Urban Growth Boundary (UGB) and zoning it for future residential development. This 20-year analysis of the site looks at a theoretical maximum buildout scenario associated with the proposed future residential zoning designation. A preliminary transportation assessment consistent with the TPR requirements has been prepared by the project team and has been included in the hearing packet. However, this report not yet been finalized or submitted for formal review¹ due to the fact that the City of Newport is currently in the process of updating its Transportation System Plan (TSP) and it is anticipated that this new plan will provide better long-term direction regarding future infrastructure assumptions. Following finalization of the TSP update (anticipated to be in 2021), the preliminary TPR analysis will be updated (as necessary) and submitted for formal review to the City of Newport and Oregon Department of Transportation.

Once the TPR analysis has been submitted and ultimately approved, the City of Newport will require a formal transportation impact analysis that specifically studies the transportation impacts of a future

¹ Oregon state law allows for the TRP analysis to be deferred to zoning state after a the property has been formally included in the local UGB.

development application. While the TPR analysis looks at a theoretical maximum buildout under the proposed zoning scenario, the transportation impact study will look at what is specifically being proposed in the development application and will identify/address offsite mitigation needs and/or land use limitations as necessary.

We hope this summary clarifies transportation analysis process. Please let us know if you have any questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Matt Hughart, AICP
Principal Planner

January 19, 2021

Michael C. Robinson

Admitted in Oregon

T: 503-796-3756

C: 503-407-2578

mrobinson@schwabe.com

VIA E-MAIL

Mr. Dean Sawyer, Mayor
Newport City Council
Newport City Hall
169 SW Coast Highway
Newport, OR 97365

RE: Ordinance No. 2175 (the "Ordinance") amending the City of Newport (the "City") Urban Growth Boundary (the "UGB") to facilitate a residential land exchange by removing 71.4 acres from the UGB and adding 43.4 acres to the UGB; letter in support of the Ordinance on behalf of the Applicant

Dear Mayor Sawyer and Members of the Newport City Council:

This office represents Boston Timber Opportunities, LLC, the Applicant. This letter asks that the City Council follow the recommendations of the Community Development Director ("CDD") and the Newport Planning Commission (the "Planning Commission") to approve the amendments to the Newport UGB by removing land from the UGB that the property owner has said he will not develop at urban residential densities and replaced with the Applicant's property that will be developed for up to 200 single-family dwellings.

The Applicant and its team members will be available to answer questions by staff, the public and the City Council at the public hearing on January 19, 2021.

1. The CDD and the Planning Commission support the Ordinance and the Applicant agrees with the CDD report to the City Council.

The Planning Commission unanimously recommended approval of the Ordinance to the City Council at its December 14, 2020 public hearing after hearing a report from the CDD and testimony from the Applicant, the public and neighbors. As explained below, the Applicant understands the neighbors' testimony and will commit to certain actions to address their concerns.

The CDD's Report to the City Council recommends approval of the Ordinance. The Applicant agrees with the Staff Report. The CDD Report finds that the Applicant's property is appropriate for residential development (CDD Report at Page 3).

2. State agencies and public organizations do not oppose the Application.

The Applicant and the CDD have coordinated the Application with the Oregon Department of Land Conservation and Development ("DLCD"). DLCD has asked for certain changes to the

findings supporting the Ordinance. Staff has made those changes (CDD Report at Page 3) and the Applicant agrees with those changes.

The Applicant's traffic engineer has coordinated with the Oregon Department of Transportation ("ODOT") on transportation issues. ODOT has not commented on and does not oppose the Application.

Two public organizations have testified on the Application. The Fair Housing Council of Oregon ("FHCO") supports the Application because it will add to the City's housing inventory.

The Oregon Coastal Alliance ("OCA") does not oppose the Application.

3. The Application is consistent with City and State law.

This Application requires the City Council to find that there is a need for the Applicant's land to meet the City's housing needs and that the Applicant's land is the best place to do so. As explained in the CDD Staff Report, the Application fully meets all of the City and State law approval criteria and by including it within the UGB, the City will provide more land to meet its housing needs, especially where the owner of the 71.4 acres to be removed from the UGB has said he will not develop his property at urban residential densities. DLCD, which oversees compliance with state law requirement for UGB amendments, does not oppose this Application.

The Application shows that all public facilities, including water, sanitary sewer and storm sewer can be provided to the Applicant's property.

4. The Applicant appreciated the neighbors' testimony to the Planning Commission and will make commitments that address their issues.

Several neighbors testified to the Planning Commission and raised various issues. The Applicant appreciates their testimony and commits to the following actions to address their issues. The Applicant contacted the persons who testified to the Planning Commission during the first full week in January and offered to meet with them. Only one person responded to the offer and he declined to meet. The Applicant remains open to a meeting with the neighbors at any time.

A. Transportation Planning Rule. State law allows the Applicant to defer the Transportation Planning Rule (the "TPR") to the zoning map amendment stage, which will occur with annexation of the property. The Applicant's transportation engineer has conducted a transportation study and has coordinated with the City Engineer and ODOT. In this case, deferral of the TPR allows the Applicant to address the TPR when the City has completed its Transportation System Plan (the "TSP") update (CDD Report at Page 2).

B. Multi-family dwellings. The neighbors testified that they oppose apartments on the Applicant's property. The Applicant commits that multi-family dwellings will not be developed on its property.

C. Traffic impacts. The neighbors testified that they are concerned about traffic impacts. The Applicant commits to continuing to work with the City and ODOT on the

Mr. Dean Sawyer, Mayor
January 19, 2021
Page 3

implementation of the City's TSP and its TPR analysis *must* demonstrate that all affected local and state highway intersections will operate at acceptable levels of service.

D. Geotechnical study. The neighbors asked for a geotechnical study of the Applicant's property. The property has an area that is unsuitable for residential development and this area can be avoided while developing the remainder of the Applicant's property. Further, the Applicant commits to conducting a geotechnical study as part of the subdivision process.

E. Affordable Housing. The Applicant has committed to working with the City to provide affordable housing.

5. Conclusion.

The evidence demonstrates that the Applicant's property should be added to the UGB because it is appropriate for urban residential development, will help the City provide more housing and replaces land within the UGB that will not be developed at urban residential densities. The City Council can also find that the applicable approval criteria have been satisfied and that the issues identified by neighbors can be reasonably addressed.

The Applicant respectfully requests that the City Council follow the recommendations of the CDD and the Planning Commission and approve the Ordinance.

Very truly yours,



Michael C. Robinson

MCR/jmhi

cc: Mr. Derek Tokos (*via email*)
Ms. Lisa Phipps (*via email*)
Ms. Casey Fisher (*via email*)
Mr. Jerry Anderson (*via email*)
Ms. Mercedes Sera (*via email*)
Mr. Aaron Murphy (*via email*)
Mr. Matt Hughart (*via email*)

PDX\034840\246078\MCR\29929859.1

Derrick Tokos

From: Peggy Hawker
Sent: Sunday, January 17, 2021 8:48 AM
To: Derrick Tokos; Spencer Nebel
Subject: Fwd: Contact Us - Web Form

FYI

Sent from my iPad

Begin forwarded message:

From: tanager89@gmail.com
Date: January 17, 2021 at 8:01:12 AM PST
To: City Council <CityCouncil@newportoregon.gov>
Subject: Contact Us - Web Form

City of Newport, OR :: Contact Us - Web FormThe following information was submitted on 1/17/2021 at 8:01:12 AM-----To: City CouncilName: Katherine RobertsEmail: tanager89@gmail.comPhone: 541.574.1046Subject: Housing in NE 31st and Harney area-----Message: I am a resident of Pacific Homes Beach Club. I have concerns about the number of residents in this area with only minimum outlets in case of emergencies. As we saw with the fires just north of us this summer, people trying to obey the mandatory evacuation order were unable to do so due to the number trying to exit to 101.

This area is heavily wooded. The same situation could occur here. Please do not allow additional housing to be built in this area.

Thank you,
Katherine Roberts

From:
To: [Public comment](#)
Subject: Building more housing at 36th and Harney here in Newport
Date: Sunday, January 17, 2021 5:03:41 PM

There is already about 700 people living in an area with one exit in case of an emergency-highway 101. To add more people is a travesty.

Please reconsider.

Younga Hennessey

Newport OR 97365

From:
To: Public comment
Subject: No More
Date: Sunday, January 17, 2021 11:10:53 PM

I am opposed to any further development in the Agate Beach Area and the Surrounding Communities! I've lived in Newport since 1985 and in 1999 moved into my home at Pacific Homes Beach Club. Since the horrendous fires north of us it has become frighteningly evident that we would not have been able to escape the same fire here. And now you are adding to the numbers who would perish in a fire or other emergency need to evacuate!

I ardently hope you will consider the safety of the community already living in the Agate Beach and surrounding area!

~ Sharon Lowry

Newport, Oregon 97365

From:
To: Public comment
Subject: City of Newport Council Meeting 1.19.21
Date: Sunday, January 17, 2021 8:00:57 PM

We are opposing the development of any additional housing in the the Agate Beach area that would use 31th St or 36th St to exit/enter into 101. Trying to get onto 101 from Pacific Homes Beach Club is already often very difficult and dangerous. How can 31st and 36th support hundreds of more cars entering 101? There will be huge entry delays, will be very dangerous even deadly. Do not develop this area more until there are solutions for the large added traffic entering 101.

Sincerely

Ramune and Paul Arlauskas

Newport, Or

From:
To: Public comment;
Subject: Land Swap
Date: Sunday, January 17, 2021 4:29:52 PM

It is obviously your intention to make this quaint small town into the next Salem, regardless of whether the safety rules are adhered to or not. I am talking about the FIRE RISK. No one will be able to reach safety if there are another 500+ residents in the area.

I invite you all to come up and try to access onto Highway 101 (and come at the same time and in separate vehicles) and see how long it takes you to go south on 101 (or north) especially during the summer months when the fire danger is highest.

It is highly unlikely that you will pay attention to this email, but as a home owner who is blind, this is a real concern to me

Norman Jones& shadow (Guide dog).
PHBC Resident

From:
To: Public comment
Subject: City of Newport Council Meeting 1.19.21
Date: Sunday, January 17, 2021 8:37:24 PM

I am opposed to the additional heavy development in the Agate Beach area around Pacific Homes Beach Club. I am a resident of Pacific Homes Beach Club. I am concerned about any type of evacuation. 101 is already very difficult to get on to from 31st or 36th. They are the only 2 streets for entry into 101 from PCHB, and the homes/apartments on that east side. What will happen during a Sunami or fire as 1000's of people try to use 31st or 36th to get onto 101. No lights, single lanes,... Stop that developments in Agate Beach area, the streets can not support it. It will cost lives!

Joni Krosniunas

Newport, Oregon

From:
To: [Public comment](#)
Subject: Comments for 1-19-2021 meeting
Date: Sunday, January 17, 2021 7:57:04 PM

I am opposed to any further development in the Agate Beach area and surrounding Communities.

Thank you for your consideration.

Deborah Hicks
Pacific Homes Beach Club

Newport, OR 97365

From:
To: [Public comment](#)
Subject: 36th & Harney St
Date: Sunday, January 17, 2021 3:57:12 PM

As a homeowner in PHBC, I am opposed to any further development in this area. It's going to put people in great danger should there be a fire or other natural disaster. Pacific Homes Beach Club is primarily an elderly community, and our safety as such should be of great concern.

Diane Bradley & Helen Ware

Newport, OR 97365

Sent from my iPhone

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:11 AM
To: Peggy Hawker; Derrick Tokos
Subject: FW: development

From: Susan Sprague <sspragues1@gmail.com>
Sent: Monday, January 18, 2021 8:51 AM
To: Public comment <publiccomment@newportoregon.gov>
Subject: development

I am opposed to any more development in the Agate Beach area....
Any disaster will kill us all waiting to escape.
I understand people need affordable housing, but 36th/Harney
will be a death trap for 1000 people if this continues.

Susan Sprague
224 NE 33rd St

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:10 AM
To: Peggy Hawker; Derrick Tokos
Subject: FW: council meeting/development of Agate Beach area

From: Maggie Pulaski <143deerfriends@gmx.com>
Sent: Monday, January 18, 2021 11:10 AM
To: Public comment <publiccomment@newportoregon.gov>
Subject: council meeting/development of Agate Beach area

We are opposed to any further development in the Agate Beach Area and the Surrounding Communities.

Packing so many more people into our confined area is a threat to everyone's life. We presently have too many people (690) to be able to evacuate in a timely manner if ordered to do so. Now add 500 from Wyndhaven & 200 from the 36th & Harney property and we will be in a death trap if we need to evacuate fast for a fire or tsunami threat. Our roads & environmental surroundings simply will not allow a safe quick exit for that many.

Thank you for your consideration.

Mr. and Mrs. Robert Pulaski

3417 NE Douglas St.

Newport, OR 97365

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:10 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: Agate Beach Development

From: Bonnie Andersen <totallygrateful@gmail.com>
Sent: Monday, January 18, 2021 11:51 AM
To: Public comment <publiccomment@newportoregon.gov>
Subject: Agate Beach Development

"I am opposed to any further development in the Agate Beach Area and the Surrounding Communities"

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:09 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: Wyndhaven phase 2 & 3 and 36th & Harney property

From: Daniel Wood <oddthings12@gmail.com>
Sent: Monday, January 18, 2021 12:01 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: Wyndhaven phase 2 & 3 and 36th & Harney property

As the owner of a home at Pacific Home Beach Club I object to these proposed subdivision developments in the Agate Beach area for the following reasons.

A: Insufficient road infrastructure and highway access to Highway 101, including lack of traffic signals on both frontages to 31st and 36th. In the event of an emergency this severely inhibits mandatory evacuation **at present population densities**.

B: The west side of NE Harney Street is geologically unstable and has minor landslides. Situated on the slope of Big Creek, with it's associated overstressed sewage issues, NE Harney itself is unstable: known to settle just east of the 101 intersection, requiring fill and resurfacing in the recent past.

C: Further development in this area will detract from the quality of life in this section of homes and accelerate the probability of larger slides thus endangering existing homes in PHBC, notably on NE Douglas.

D: It is time for Newport to take action to limit rapid development, step back and study master roads and waste infrastructure plans. Plan and address evacuation routes and quality of life issues before allowing future development in the Agate Beach area..

Respectfully Yours, Daniel Wood
owner 3356 NE Coos Street Newport Oregon

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:09 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: more proposed rental units in Agate Beach

From: Sandy Amsden <going2bok@yahoo.com>
Sent: Monday, January 18, 2021 1:02 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: more proposed rental units in Agate Beach

I am opposed to the building of more rental housing in the Harney Street area at 36th Street.

I live in Pacific Homes Beach Club and the traffic in the summertime is horrific sometimes. When the Echo Mountain fire hit Lincoln City, the traffic coming south was relentless. We could not get out of our area if we wanted to turn left on Highway 101.

Building more rentals puts a huge burden on our area - the water and sewage system and the traffic. Please do not put our area in danger by adding more traffic to this area that has only one way out.

Sandra Amsden
422 NE 35th Street
Newport, Oregon

541-264-8033
going2bok@yahoo.com

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:08 AM
To: Peggy Hawker; Derrick Tokos
Subject: FW: opposition to more apartments on 36th & Harney

From: Elmer Amsden <elmerparts@yahoo.com>
Sent: Monday, January 18, 2021 1:20 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: opposition to more apartments on 36th & Harney

I live in Pacific Homes Beach Club. I am opposed to the request to build more apartments behind us on Harney street. This would put a hardship on our water and sewer supply and on our traffic conditions. When the Echo Mountain fire hit Lincoln City, we were not able to get out of our area for several hours as the traffic from Lincoln City was all sent our way.

Until an additional exit route is built for this area, I oppose any multi-dwelling units being built.

Elmer Amsden
422 NE 35th Street
Newport, OR

elmerparts@yahoo.com
541-264-8033

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:08 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: 36th and Harney Development

-----Original Message-----

From: terry <tzwetzig@gmail.com>
Sent: Monday, January 18, 2021 1:53 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: 36th and Harney Development

Recently we have seen development on Harney that has raised concerns for the safety of the residents in this and the immediately adjacent area.

Access to the highway is required in case of medical or disasters, fire, earthquakes or even tsunamis. The current population density is problematic due to the recent construction already approved and started. This is just tip of the iceberg. The dam has already been listed as pending failure.

These listed items as well as infrastructure challenges, water supply in dry years, existing road condition and issues with medical and fire response would make further development questionable.

Thank you for giving me the opportunity to express my misgivings on the projected development.

Terry Zwetzig
3426 NE Douglas St
Newport, Oregon
541-990-8442

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:08 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: Annexed Property being developed.

-----Original Message-----

From: Doreen Farnam <doreenfarnam@hotmail.com>
Sent: Monday, January 18, 2021 3:07 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: Annexed Property being developed.

To Whom it May Concern

I am very much concerned about the newly annexed property to be developed on 31st and Harney. With that number of residents, it would make it extremely difficult to evacuate should there ever be a need for some catastrophic occasion. Please make note of this at your meeting on Tuesday.
Thank you,
Doreen Farnam.

Sent from my iPad

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:08 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: Comment for 1/19/21 city council meeting
Attachments: Letter in opposition.doc

From: Polly Studley <polly265@hotmail.com>
Sent: Monday, January 18, 2021 9:17 PM
To: Public comment <publiccomment@newportoregon.gov>
Subject: Comment for 1/19/21 city council meeting

Please read the attached letter into the record for agenda item 6c relating to ordinance # 2175 at the city council meeting 1/29/21.

Let me know if you have any problems opening the attached or have any questions.

Thank you,
Paulette Studley
541-961-6376

My name is Paulette Studley. I have lived at 1185 NE Lakewood Dr in Newport for over 25 yrs. I am opposed to the request for amendment for Newport Urban Growth Boundary. There are a couple of issues that I would like to address tonight.

Traffic: Harney is a narrow road with little to no shoulders. In many places there is a guardrail right off the traffic lane with nowhere for pedestrians to go if a vehicle should get too close. There is a blind corner with guardrails right by the new 66unit Wyndhaven apartment complex that is being built. Kids from Little Creek apartment walk that road and I fear for their safety. We have not yet seen the increase in traffic that will come when this new apartment complex is occupied, yet the City is wanting to add 43.4 acres of high density housing with no plans to address both vehicle and pedestrian traffic and safety. This issue should be addressed and a solution implemented for traffic and pedestrian safety before discussing any change in Newport's Urban Growth Boundary in this area.

Housing: Newport needs more single family housing for the hard working citizens of our city. Buying and investing in a home is the American dream where you can raise a family and financially grow the equity in a home. This would ensure a more stable work force where families are tied to our community. I am opposed to the proposed high density residential land use that is being proposed tonight.

I urge this city council to vote no!

Thank you for your time.

Derrick Tokos

From: Public comment
Sent: Tuesday, January 19, 2021 8:11 AM
To: Derrick Tokos; Peggy Hawker
Subject: FW: 1.19.21 Council Meeting
Attachments: City of Newport Council Meeting 1.19.21 .pdf

From: George Dwyer <agatebeachsafetycoalition@gmail.com>
Sent: Monday, January 18, 2021 8:47 AM
To: Public comment <publiccomment@newportoregon.gov>; gsmail53@gmail.com
Subject: 1.19.21 Council Meeting

Please find the attached file/document for presentation at the upcoming 1.19.21 Council meeting.

Thank you,
George Dwyer

Find Us On Facebook

"Awareness is the First Step of Preparedness"

George Dwyer

Agate Beach Safety Coalition, LLC

Awareness is the First Step Of Preparedness

agatebeachsafetycoalition@gmail.com

Newport, OR 97365

Via Email Only

City of Newport, OR

1/17/2021

Mr. Dean Sawyer, Mayor
Newport City Council Members

Re: Comments for 1.19.21 Council Meeting

To City of Newport Council & Mayor:

Please Follow the Links Below to the Pages Regarding Development of the Agate Beach, Lakeview Hills & Big Creek Areas

[Exhibit A 3 pages](#)

[Exhibit B 4 pages](#)

[Exhibit C 1 page](#)

Thank you,

Agate Beach Safety Coalition, LLC
George Dwyer, President

Agate Beach Safety Coalition, LLC

Awareness is the First Step Of Preparedness

agatebeachsafetycoalition@gmail.com

Newport, OR 97365

EXHIBIT A

The Transportation Impact Study (TIS) chart below provided to the city by Kittleson & Associates traffic engineers provides the US101 north & southbound lane turning times in seconds for both NE 36th Street & NE 31st Street. It also includes a factor with a traffic signal & without. 3J Consulting clearly states adding more vehicles (residents) to the area “Exceeds the Threshold” of the “Volume to Capacity” for the existing road conditions and does not provide an adequate qualified solution.

Based on the information provided by the Kittleson analysis, the time it would take during “peak” (this would be far worst during an emergency evacuation) includes both a 123 second (2 minute) delay & a 182 second (3 minute) delay per turning vehicle.

The Kittleson analysis chart fails to show any emergency evacuation scenario to safely evacuate the present population in an E3 evacuate now scenario. The existing turning times under the analyzed normal conditions are unacceptable. Factor in an emergency evacuation and the time would be off the charts unacceptable at the very least. To further include the proposed Wyndhaven Ridge population & the residents for the proposed 200 new homes would be simply for the lack of a better word “insanity”.

One (1) traffic signal with turning lanes fails miserably to solve the problem & two (2) signals with turning lanes would just compound the delays.

To approve any further planned developments or permit for construction of any more low income housing (Wyndhaven phase 2 & 3) would display a total lack of regard for public safety.

The 3J Consulting, Goal 12 (Transportation) report below lacks any workable solution that addresses the current road condition problem and most certainly does not address a workable solution for adding more population to the area. The Agate Beach Safety Coalition, LLC recommends no further development and a building moratorium be put in place for the area until a workable, realistic solution by qualified engineering firm is found.

Adequate sanitary sewer system facilities exist to serve Site A with the provision of appropriate system development charges, facilities, and connections.

Stormwater

The City does not have an adopted Stormwater Master Plan, but the proposed inclusion of Site A into the UGB and future development will require the provision of a surface drainage and storm sewer system pursuant to Section 13.05.040 of the Newport Municipal Code. It is anticipated that stormwater runoff from Site A will be collected, detained and released to match the pre-developed site runoff condition using surface water ponds, weirs and flow control manholes.



Goal 12: Transportation

Applicant's Finding: Goal 12 encourages the provision of a safe, convenient, and economic transportation system and implements provisions of other statewide planning goals related to transportation planning in order to plan and develop facilities in coordination with urban and rural development.

The Transportation Planning Rule (TPR), OAR 600-012-0060, requires that, where an amendment to a comprehensive plan would significantly affect an existing or planned transportation facility, the local government shall put in place measures that assure that allowed land uses are consistent with the function, capacity, and performance standards of the facility. This application is for an amendment to the comprehensive plan and urban growth boundary and, as such, the proposed changes must comply with the TPR.

This application includes a Transportation Impact Study (TIS) completed by Kittelson & Associates on October 18, 2019. The TIA measures impacts to the transportation system by estimating the change in vehicle trips, resulting from this proposed UGB and comprehensive plan designation change. The analysis compares the transportation system performance under the current comprehensive plan designation reasonable worst-case scenario to the performance under the proposed comprehensive plan designation reasonable worst-case scenario.

As detailed in the submitted Transportation Impact Study (TIS), the following table shows the requisite reasonable worst-case scenario analysis.

	Comprehensive Plan Designation	Zoning	Land Use (ITE Code)	Units	Daily Trips	PM Trips Entering	PM Trips Exiting
Existing	N/A	T-C	-	-	-	-	-
Proposed	Low Density Residential	R-2	210	200	1,968	125	73
Change				+200	+1,968	+125	+73

While the Applicant may or may not construct 200 dwelling units, this is the reasonable worst-case scenario and therefore must be analyzed as the comparison to the existing reasonable worst-case scenario. Based on the above table, 1,968 additional daily trips are forecast to be generated by the comprehensive plan change under reasonable worst-case scenario development assumptions. This number exceeds the threshold of 400 daily trips per the TPR to trigger a significant impact, and requires intersection operational analysis.

The following intersections were analyzed for impacts based on this proposed adjustment:

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major	0.01 (SBLT)	8.78 (SBLT)	0.03 (SBLT)	11.5 (SBLT)
	0.90 minor	0.59 (WB)	54.5 (WB)	0.72 (WB)	123.0 (WB)
US 101 / NE 31 st Street	0.80 major	0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
	0.90 minor	0.61 (WB)	72.3 (WB)	0.79 (WB)	182.2 (WB)
US 101 / NE 25 th Street	0.80 intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)

The analysis included in the submitted TIA concludes that based on the long-term traffic impact detailed in the report, the proposed land exchange will result in a significant impact on the surrounding transportation system that will require mitigation. The report recommends the following improvements:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects
 - Widen the westbound NE 36th Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional Projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under the 30th

The present road conditions are inadequate to handle the existing population in an emergency evacuation. Adding the proposed Wyndhaven population plus Two Hundred (200) more vehicles far exceeds the capacity of any of the suggested improvements could handle.

Agate Beach Safety Coalition, LLC

Awareness is the First Step Of Preparedness

agatebeachsafetycoalition@gmail.com

Newport, OR 97365

EXHIBIT B

As we have seen wildfires annually progress to the North over the last few years, we have witnessed Southern California wildfires become Northern California wildfires. Northern California wildfires become Southern Oregon wildfires and Southern Oregon wildfires become Central & Western Oregon wildfires which we all witnessed in 2020. This trend shows no sign of stopping and as confirmed our own City of Newport Fire Chief Rob Murphy. (See his memorandum below) Wildfires are something we have to plan and be prepared for in the future when planning our future communities population capacities.

This is especially true when making decisions for our future community development plans. We cannot have too many people packed into a confined area that they cannot escape from in a “Ready Set Go” or E3 evacuation order. Taking this into consideration when deciding where to allow any development shows proper planning was taken.

The Agate Beach, Lakeview Dr & Big Creek residential areas are already over capacity to be safely evacuated in the event of a “Leave Now” scenario.

Agate Beach Safety Coalition, LLC Strongly recommends No further development be permitted in the Agate Beach, Lakeview Dr & Big Creek residential areas.



Memorandum

Thursday, September 17, 2020

To: Spencer Nebel, City Manager

From: Rob Murphy, Fire Chief

Re: Report on Fire Department response to the Echo Mountain Complex Fire

On Monday, September 7 Lincoln County experienced a historic east wind event. This event caused wide spread damage including power outages, downed wires, damaged trees, and fires. The two biggest were the Kimberling Mountain Fire and the Echo Mountain Fire. Both of these fires started just before midnight on September 7. They quickly grew and started spreading west along the Salmon River Drainage that includes Highway 18. First arriving units from North Lincoln Fire & Rescue quickly realized the severity of the situation and began emergency evacuations and requested more resources.

Over the next 6 days fire resources from Lincoln County, along with Tillamook, Yamhill, Polk, and Benton County all sent apparatus and personnel to help NLF&R. Newport Fire Department sent resources for 5 days in a row. On Tuesday, September 8, NFD had an Engine, a brush unit, a water tender, a Chief Officer all working the Echo Mountain Fire. We also sent an engine to cover Depoe Bay Fire District and staffed another engine and a rescue unit to cover Newport. All this was possible because the staff and volunteers of Newport Fire Department stepped up and answered the call when our neighbors needed help. We received support from our families, local businesses and members of the community who brought us food, water and other supplies. The support we received was very much appreciated.

As of this morning, the Echo Mountain Complex fire burned 2,552 acres. It is 45% contained. There are currently 575 personnel working the fire including hand crews, engine crews, water tenders and dozers. There are still 1,500 structures that are threatened. The Incident Management Team is currently listing 100 structures destroyed, however damage assessment is still in process and that number is expected to rise.

While this fire is still considered active, already discussions are beginning about what are the lessons to be learned from this. The analysis and review will take some time to complete, but it is imperative we do this, and do it right. We have to ask ourselves the hard questions such as what could we have done better, what gaps and vulnerabilities exist and how do we fix them. And

finally, we have to ask ourselves, can this happen again. This is probably one of the most important questions. I will tell you the answer is YES. We need to rid ourselves of the misnomer that wildfire is not a threat on the Oregon Coast. Wildfire has happened, and it will happen again. If Echo Mountain Fire had started 30 miles to the South, east of Newport, we would be the community who had lost homes and burned our forests. There have been documented major wildfires that burned the Oregon Coast as far back as the 1840's. Just three years ago, the 2,500 Road Fire threatened the City of Depoe Bay. Chief Pimlot (recently retired Chief of Cal-Fire) wrote that Southern California's wildfire problem is now Northern California's wildfire problem. So, then logic tells us that Northern California's wildfire problem is now Southern Oregon's wildfire problem, and so on. In 2017, the Chetco Bar Fire burned hundreds of thousands of acres and threatened the city of Brookings Oregon. This just emphasizes how real the threat of wildfire is here.

Once we accept that wildfire is a legitimate risk and that risk must be managed, what do we do? First, we need to recognize this danger is not just a problem for the Fire Department to deal with. This affects the entire community. We need to involve all levels of the community and local government. Second, we need to complete a thorough and objective review of the Echo Mountain Fire and our response so we can identify gaps, risks, and develop an action plan. I propose we focus on three main areas: Education, Preparation, and Mitigation.

EDUCATION:

- Educate residents on the dangers of wildfire, teach them about the "Ready, Set, Go" evacuation system, and encourage them to sign up for Lincoln Alerts for early notifications.
- Teach families to have a Ready, Set, Go plan. Know where your important documents are, know ahead of time what things you would want to load up if the call to evacuate came, and make sure all members of your family know the meeting place.
- Teach property owners what they need to do to develop and maintain a "survivable space". What trees and shrubs should be cut back, what plants are fire resistive, what types of vent covers prevent fire brands from entering your attic, etc.

PREPERATION:

- Perform a thorough and objective after action review of the City response to the Echo Mountain Fire. What went well, what should we have done different, analyze gaps and needs. Develop an action plan.
- Perform the same review on a County wide level. Because this fire was truly a County and region wide response.
- Develop a wildfire response plan. This differs from a Community Wildfire Protection Plan. A response plan spells out how each City Department would respond in the event of a wildfire. This plan then becomes an addendum to the City Emergency Operations Plan.

MITIGATION:

- Property owners develop and maintain “Survivable Spaces” around their homes.
- Identify City properties at risk for wildfire and perform risk reduction measures. These may include: fuels reduction, maintaining and improving access roads, establishing preemptive closures of high-risk areas anytime the Fire Danger Level reaches “High”.
- The Fire Department has established 3 goals to have in place before the beginning of next fire season. First, have wildland PPE (Helmet, brush jacket, pants, boots) for all members who would fight a wildfire. Second, all members are trained to the Basic Wildland Firefighter Level (S-130, S-190). All officers are trained to the Engine Boss Level (S-290). Third, obtain and have in service a Type VI brush engine.

The damage that resulted from the Echo Mountain Complex Fire is tragic, and the people and community will be recovering for some time to come. We must do our part and recognize that wildfire is a legitimate threat to the Oregon Coast and the City of Newport. We all have a duty to recognize the hazards wildfire brings and work together to mitigate the risk and be better prepared to respond to future events. We cannot tell our selves “I didn’t believe it would ever happen here”.

Agate Beach Safety Coalition, LLC

Awareness is the First Step Of Preparedness

agatebeachsafetycoalition@gmail.com

Newport, OR 97365

EXHIBIT C

Exhibit “C” is a presentation in video format relating information about the Agate Beach, Lakeview Dr. & Big Creek area existing community populations, existing escape routes and the recent Western Oregon wildfire events of 2020.

Please follow this link:

[Proper Planning or Gross Negligence](#)



851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

January 11, 2021

Project #: 23915

Derrick Tokos, AICP
City of Newport
169 SW Coast Highway
Newport, OR 97365

RE: Newport Land Swap/UGB Amendment Transportation Analysis Summary

Dear Derrick,

The following letter has been prepared to help the Newport City Council members understand the transportation analysis that has been prepared for the proposed zone swap/urban growth boundary amendment. This land use proposal is the subject of the City Council hearing on January 19, 2021.

Background/Overview

Hancock Forest Management is proposing a land use application that would remove 71.39 acres of land in the southern portion of Newport's urban growth boundary (UGB) and bring in approximately 40 acres located adjacent to the northeast quadrant of the City's UGB. Consistent with state and local requirements, such an action will first require a Transportation Planning Rule (TPR) analysis to address the big picture transportation impacts associated with bringing the 40-acre site into the City of Newport's Urban Growth Boundary (UGB) and zoning it for future residential development. This 20-year analysis of the site looks at a theoretical maximum buildout scenario associated with the proposed future residential zoning designation. A preliminary transportation assessment consistent with the TPR requirements has been prepared by the project team and has been included in the hearing packet. However, this report not yet been finalized or submitted for formal review¹ due to the fact that the City of Newport is currently in the process of updating its Transportation System Plan (TSP) and it is anticipated that this new plan will provide better long-term direction regarding future infrastructure assumptions. Following finalization of the TSP update (anticipated to be in 2021), the preliminary TPR analysis will be updated (as necessary) and submitted for formal review to the City of Newport and Oregon Department of Transportation.

Once the TPR analysis has been submitted and ultimately approved, the City of Newport will require a formal transportation impact analysis that specifically studies the transportation impacts of a future

¹ Oregon state law allows for the TRP analysis to be deferred to zoning state after a the property has been formally included in the local UGB.

development application. While the TPR analysis looks at a theoretical maximum buildout under the proposed zoning scenario, the transportation impact study will look at what is specifically being proposed in the development application and will identify/address offsite mitigation needs and/or land use limitations as necessary.

We hope this summary clarifies transportation analysis process. Please let us know if you have any questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Matt Hughart, AICP
Principal Planner

Derrick Tokos

From: Young, Kevin <kevin.young@state.or.us>
Sent: Thursday, December 17, 2020 4:47 PM
To: Derrick Tokos; Phipps, Lisa
Cc: Sherri Marineau
Subject: RE: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

Hi Derrick,

I've had a chance to review the supplemental maps and narrative and have some feedback. Generally, I think the maps and analysis address most of the identified issues. However:

- On Page 1 of Attachment Q, it is not accurate to state that the lack of proximity to existing services is a basis to exclude exception lands. Instead, you must demonstrate that it is "impracticable to provide necessary public facilities or services to the land..." In my opinion, you have done that with the analysis of the cost of service to the "surfland" area, as well as discussion of potential revenues to support such infrastructure. However, I recommend that you revise the first sentence of the second paragraph to delete "because the land is not proximate to existing services." I think the same logic applies for the exception lands to the east, and you have provided a good factual basis regarding the difficulty of providing urban services to these areas.
- I'm not clear if there are any lands in the study area that are neither exception areas, nor Forest zoned. There is a statement in the next to the last paragraph that, "What is left are resource lands, which are almost exclusively forest zoned properties." If there are differently zoned lands in the study area, they should be identified and addressed.
- What I do not see is a comparative analysis of the remaining forest lands within the study area. You note that, "for the most part, these sites possess the same terrain and service limitations as exception lands that have been excluded." I have no reason to doubt the veracity of that statement, but the analysis required is to look at all similarly-situated viable candidate sites, and apply the Goal 14 locational factors to them. Language like "almost exclusively forest zoned properties" and "for the most part, these sites possess the same terrain and service limitations" does not demonstrate that a full analysis of these issues has been done.

The Goal 14 locational factors are as follows:

Boundary Location The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197A.320 or, for the Metropolitan Service District, ORS 197.298, and with consideration of the following factors:

- (1) Efficient accommodation of identified land needs;
- (2) Orderly and economic provision of public facilities and services;
- (3) Comparative environmental, energy, economic and social consequences; and
- (4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

I hope this is helpful, but feel free to call me if you have any questions.



Kevin Young, AICP

Senior Urban Planner | Community Services Division | Cell: 503-602-0238

Pronouns: He/Him

kevin.young@state.or.us | www.oregon.gov/LCD

DLCD is moving to cell phones and replacing our land lines. Please update your records to ensure you can reach me in the future at 503-602-0238.

From: Derrick Tokos [mailto:D.Tokos@NewportOregon.gov]
Sent: Tuesday, December 8, 2020 5:16 PM
To: Phipps, Lisa <lhipps@dlcd.state.or.us>
Cc: Young, Kevin <kyoung@dlcd.state.or.us>; Sherri Marineau <S.Marineau@NewportOregon.gov>
Subject: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

Hi Lisa,

I posted the staff report to our website. Here is a link: <https://www.newportoregon.gov/dept/cdd/default.asp>

It will also be included with the the formal packets when they are posted later in the week. Monday night's hearing will be held by video-conference. It will start at 7pm. I recall you mentioned that you might attend. Here is the dial-in information:

OCM Zoom is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
<https://us02web.zoom.us/j/83361336313>

Meeting ID: 833 6133 6313
One tap mobile
+16699006833,,83361336313# US (San Jose)
+12532158782,,83361336313# US (Tacoma)

Dial by your location
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 929 205 6099 US (New York)
+1 301 715 8592 US (Washington D.C.)
+1 312 626 6799 US (Chicago)

Meeting ID: 833 6133 6313
Find your local number: <https://us02web.zoom.us/j/83361336313>

Let me know if you have any questions.

Derrick I. Tokos, AICP
Community Development Director
City of Newport
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0626 fax: 541.574.0644
d.tokos@newportoregon.gov

NOTICE OF A PUBLIC HEARING

CITY OF NEWPORT: This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing. The City of Newport City Council will hold a public hearing on Tuesday, January 19, 2021, at 6:00 p.m. in the City Hall Council Chambers to consider File No. 1-UGB-20/1-CP-20 as submitted by Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative), for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential. Property outside the UGB that is to be added to the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10. The properties are located at Tax Map 10-11-33-00, Tax Lot 100, owned by Boston Timber Opportunities, LLC, and Tax Map 10-11-33-00, Tax Lot 101, owned by the City of Newport (Site "A"); and Tax Map 12-11-05-00, Tax Lot 801, (853 SE 98th St) owned by Terrence Lettenmaier (Site "B"). Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement. Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the City Council. Written testimony sent to the Community Development (Planning) Department, City Hall, 169 SW Coast Hwy, Newport, OR 97365, must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application. Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department (address above). Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address. Contact Derrick Tokos, Community Development Director (541) 574-0626, email address HYPERLINK "mailto:d.tokos@newportoregon.gov" d.tokos@newportoregon.gov (mailing address above). J8 (92-08)

AFFIDAVIT OF PUBLICATION
News-Times, Newport, Oregon

COUNTY OF LINCOLN

SS.

STATE OF OREGON

I, **Natalie Lane**, being duly sworn, depose and say that I am the legal clerk of The News Times, a newspaper of general circulation, as defined by ORS 193.010 and 193.020; printed and published at 831 NE Avery Street, Newport in the aforesaid county and state and that **NOTICE: (92-08) NOTICE OF A PUBLIC HEARING J8**; a printed copy of which is hereto annexed was published in the entire issue(s) of said newspaper for 1 week(s) in the following issue(s): **01/08/2021**.

Subscribed and sworn before me this 8TH day of January, 2021

Nicole Orr, Notary Public of Oregon
(My commission expires August 19, 2022).



OFFICIAL STAMP
NICOLE ORR
NOTARY PUBLIC - OREGON
COMMISSION NO. 978271
MY COMMISSION EXPIRES AUGUST 19, 2022

**CITY OF NEWPORT
NOTICE OF A PUBLIC HEARING**

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(For publication once on Friday, January, 8, 2021)

uss her research The webinars are
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io-economically through April. Informa-
nt nearshore tion about the full series
ish found from can be found online at ti-
lifornia, Mexico nyurl.com/y2pb6uze

the larger Samaritan Linn counties.
Community Benefit
program, which en-
compasses the organi-
zation's efforts to build
healthier communi-
ties by providing di-

Focus on preven-
tion, with an emphasis
on improving the health
status in the community
that includes equity, di-
versity and inclusion.

bors For Kids, Oregon
Cascades West Council
of Governments - Meals
on Wheels, Samaritan
House and Senior Corps
of Linn, Benton and
Lincoln Counties.

ES

1/8/2021

Passmore PO Box 1004
Newport, Oregon 97365.
J8 J15 J22 (01-22)

PUBLIC NOTICE

The Depoe Bay Fire District Board of Directors will hold a Board WORKSHOP at 4 pm immediately followed by their monthly REGULAR Board Meeting on Tuesday, January 12, 2021, at the Gleneden Beach Fire Station, 6445 Gleneden Beach Loop, Gleneden Beach, OR 97388. PLEASE NOTE: To promote social distancing guidelines currently in place at federal and state levels, the Board asks that individuals who wish to attend the meeting contact the District Administrative Assistant at least forty-eight hours prior to the noticed meeting time by phone at 541-764-2202 or by email at info@depoebayfire.com. J8 (98-08)

NOTICE OF PUBLIC HEARING

DEPOE BAY CITY COUNCIL, Tuesday, February 2, 2021, 7:00 p.m. APPLICATION: Neighbors for Kids APPLICATION: request for approval of code text amendments to the Light Industrial Zone (L-1) and Retail Commercial Zone (C-1) if approved, would result in a change to Depoe Bay's Zoning Ordinance. APPLICABLE CRITERIA: Depoe Bay Zoning Ordinance No. 24 (as amended) a. Section 3.110 Retail Commercial Zone (C-1) b. Section 3.210. Light Industrial Zone L-1 c) Section 4.030. Off-Street Parking and Off-Street Loading Requirements d) Article 6. Conditional Uses c) Article 9: Amendments Depoe Bay Comprehensive Plan; LOCATION: 634 SE Highway 101, identified on Lincoln County Assessor's Map 09-11-08CA as tax lot 07400. APPLICATION MATERIALS: Application materials, documents and evidence submitted by or on behalf of the applicant are available for inspection at City Hall and can be obtained at cost. Copies of the staff report for this case are also available for review and may be purchased at Depoe Bay City Hall, 570 SE Shell Avenue, Depoe Bay, OR seven days prior to the hearing. TESTIMONY: The Depoe Bay Planning Commission held public hearings on November 11 & 19, 2020 for the requested text amendments and the requested conditional use, and recommended approval to the Depoe Bay City

Council. Testimony to the City Council may be submitted in written or oral form. Oral testimony will be taken during the course of the public hearings. Failure to raise an issue in a hearing, either in person or in writing, or failure to provide statements/evidence sufficient to afford the City Council an opportunity to respond to the issues precludes appeal to the Land Use Board of Appeals on that issue. The comment period for written testimony expires February 2, 2021, 5:00 p.m. Send letters to Depoe Bay City Hall, P.O. Box 8, Depoe Bay OR 97341 or email recorder@cityofdepoebay.org. CONTACT: Jaime White (541) 765-2361 TIME/PLACE: Tuesday, February 2, 2021, 7:00 p.m., Depoe Bay City Hall, 570 SE Shell Avenue, Depoe Bay, OR. D31 J8 J15 (96-15)

SUMMONS BY PUBLICATION

IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR THE COUNTY OF LINCOLN, Case No. 20CV42015, BEVERLY A. ULBRICHT, TRUSTEE OF THE BEVERLY A. ULBRICHT LIVING TRUST, Plaintiff, v. ALMA ANDERSON, the unknown heirs of ALMA ANDERSON and ALSO ALL OTHER PERSONS CLAIMING ANY RIGHT, TITLE, LIEN OR INTEREST IN THE PROPERTY DESCRIBED IN THE COMPLAINT HEREIN, Defendants. IN THE NAME OF THE STATE OF OREGON: You are hereby required to appear and defend against the complaint filed against you in the above-entitled cause within 30 days from the date of first publication of this summons on you; and if you fail to appear and defend, the plaintiff will apply to the court for the relief demanded in the complaint. The complaint seeks to quiet title in the plaintiff of a parcel of real property to the west of Lot 4, Block 2, NEL-SCOTT BEACH, Lincoln County, Oregon, identified as Lincoln County Property Tax Number 07-11-27-BA-00399-00, Property Tax Account Number R516245, and described in a deed recorded in Deed Volume 82, page 542, Deed Records of Lincoln County, Oregon. Plaintiff's quiet title claim is based on adverse possession. NOTICE TO DEFENDANTS: READ THESE PAPERS CAREFULLY! You must "appear" in this

case or the other side will win automatically. To "appear" you must file with the court a legal document called a "motion" or "answer." The "motion" or "answer" or reply must be given to the court clerk or administrator within 30 days of the date of first publication specified herein along with the required filing fee. It must be in proper form and have proof of service on the plaintiff's attorney or, if the plaintiff does not have an attorney, proof of service on the plaintiff. If you have any questions, you should see an attorney immediately. If you need help in finding an attorney, you may contact the Oregon State Bar's Lawyer Referral Service online at www.oregonstatebar.org or by calling (503) 684-3763 (in the Portland metropolitan area) or toll-free elsewhere in Oregon at (800) 452-7636. The date of first publication of this summons is December 31, 2020. This summons is issued pursuant to ORCP7. Ouderkirk & Hollen by s/Jeffrey C. Hollen, OSB#761757, attorney for plaintiff. PO Box 1167, Newport, OR 97365. D31 J8 J15 J22 (94-22)

NOTICE OF A PUBLIC HEARING

CITY OF NEWPORT; This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing. The City of Newport City Council will hold a public hearing on Tuesday, January 19, 2021, at 6:00 p.m. in the City Hall Council Chambers to consider File No. 1-UGB-20/1-CP-20, as submitted by Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative), for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential. Property outside the UGB that is to be added to the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB

is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10. The properties are located at Tax Map 10-11-33-00, Tax Lot 100, owned by Boston Timber Opportunities, LLC, and Tax Map 10-11-33-00, Tax Lot 101, owned by the City of Newport (Site "A"); and Tax Map 12-11-05-00, Tax Lot 801, (853 SE 98th St) owned by Terrence Lettenmaier (Site "B"). Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement. Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of

Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the City Council. Written testimony sent to the Community Development (Planning) Department, City Hall, 169 SW Coast Hwy, Newport, OR 97365, must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application. Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department (address above). Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address. Contact Derrick Tokos, Community Development Director (541) 574-0626, email address HYPERLINK "mailto:d.tokos@newportoregon.gov" d.tokos@newportoregon.gov (mailing address above). J8 (92-08)

NOTICE TO INTERESTED PERSONS
IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR THE COUNTY OF LINCOLN PROBATE DEPARTMENT, In the Mat-

ter of the Estate of Roy Walter Robertson, Case No. 20PB08839. Notice is hereby given that Mary Lee Scoville has been appointed personal representative. All persons having claims against the estate are required to present them with vouchers attached to the personal representative at PO Box 2348, Waldport, OR 97394 within four months after the date of first publication of this notice or the claims may be barred. All persons whose rights may be affected by the proceedings may obtain additional information from the records of the court, the personal representative, or the attorneys for the personal representative, Brian Haggerty, OSB #980588, Minor, Bandonis & Haggerty, P.C., PO Box 510, Newport, OR 97365, (541) 265-8888. Dated and first published December 24, 2020. D24 D31 J8 (88-08)

NOTICE TO INTERESTED PERSONS
IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR THE COUNTY OF LINCOLN PROBATE DEPARTMENT, In the Matter of the Estate of Thomas C. Ragghianti Case No. 20PB08840. Notice is hereby given that John Becker has been appointed personal representative. All persons having claims against the estate are required to present them with vouchers attached to the personal representative at 588 SE Vista Dr., Newport, OR 97365, within four months after the date of first publication of this notice or the claims may be barred. All persons whose rights may be affected by the proceedings may obtain additional information from the records of the court, the personal representative, or the attorneys for the personal representative, Brian Haggerty, OSB #980588, Minor, Bandonis & Haggerty, P.C., PO Box 510, Newport, OR 97365, (541) 265-8888. Dated and first published December 24, 2020. D24 D31 J8 (87-08)

LEGAL DEADLINES:

**WEDNESDAY
EDITION:
5:00pm
Thursday Prior**

**FRIDAY
EDITION:
5:00pm
Tuesday Prior**

**CITY OF NEWPORT
NOTICE OF A PUBLIC HEARING¹**

This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing.

NOTICE IS HEREBY GIVEN that the City Council of the City of Newport, Oregon, will hold a public hearing on January 19, 2021, to consider the following request.

File No.: 1-UGB-20 / 1-CP-20.

Applicant & Owner: Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative).

Location/Subject Properties: Tax Map 10-11-33-00, Tax Lot 100 (owned by Boston Timber Opportunities, LLC); Tax Map 10-11-33-00, Tax Lot 101 (owned by the City of Newport); and Tax Map 12-11-05-00, Tax Lot 801 (853 SE 98th St)(owned by Terrance Lettenmaier).

Request: A request for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential. Property outside the UGB that is to be added to the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10.

Applicable Criteria: Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement.

Testimony: Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the City Council. Written testimony sent to the Community Development (Planning) Department (address under "Reports/Materials") must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application.

Reports/Materials: Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department, City Hall, 169 S.W. Coast Hwy, Newport, Oregon, 97365. Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address.

Contact: Derrick Tokos, Community Development Director (541) 574-0626 (address above in "Reports/Materials").

Time/Place of Hearing: Tuesday, January 19, 2021; 6:00 p.m.; City Hall Council Chambers (address above in "Reports/Materials").

MAILED: December 28, 2020.

PUBLISHED: Friday, January 8, 2021.

¹ This notice is being sent to affected property owners within 300 feet of the subject property (according to Lincoln County tax records), affected public utilities and agencies, and affected city departments.



Site "A"
Tax Map 10-11-33-00, Tax Lot 100



SITE NOTE

The proposed site plan for the proposed development is based on the existing topography and the proposed stream alignment. The stream alignment is shown in blue and the stream buffer/steepest slopes are shown in green. The developable lot areas are shown in orange. The stream alignment is shown in blue and the stream buffer/steepest slopes are shown in green. The developable lot areas are shown in orange.

LEGEND

- DEVELOPABLE LOT AREA
21.6 ACRES
- STREAM BUFFER/STEEP SLOPES
8.4 ACRES
- POTENTIAL STREAM ALIGNMENT



SCALE: 1" = 200'
0 200

NEWPORT UGB SWAP

HANCOCK FOREST MANAGEMENT

07/25/19

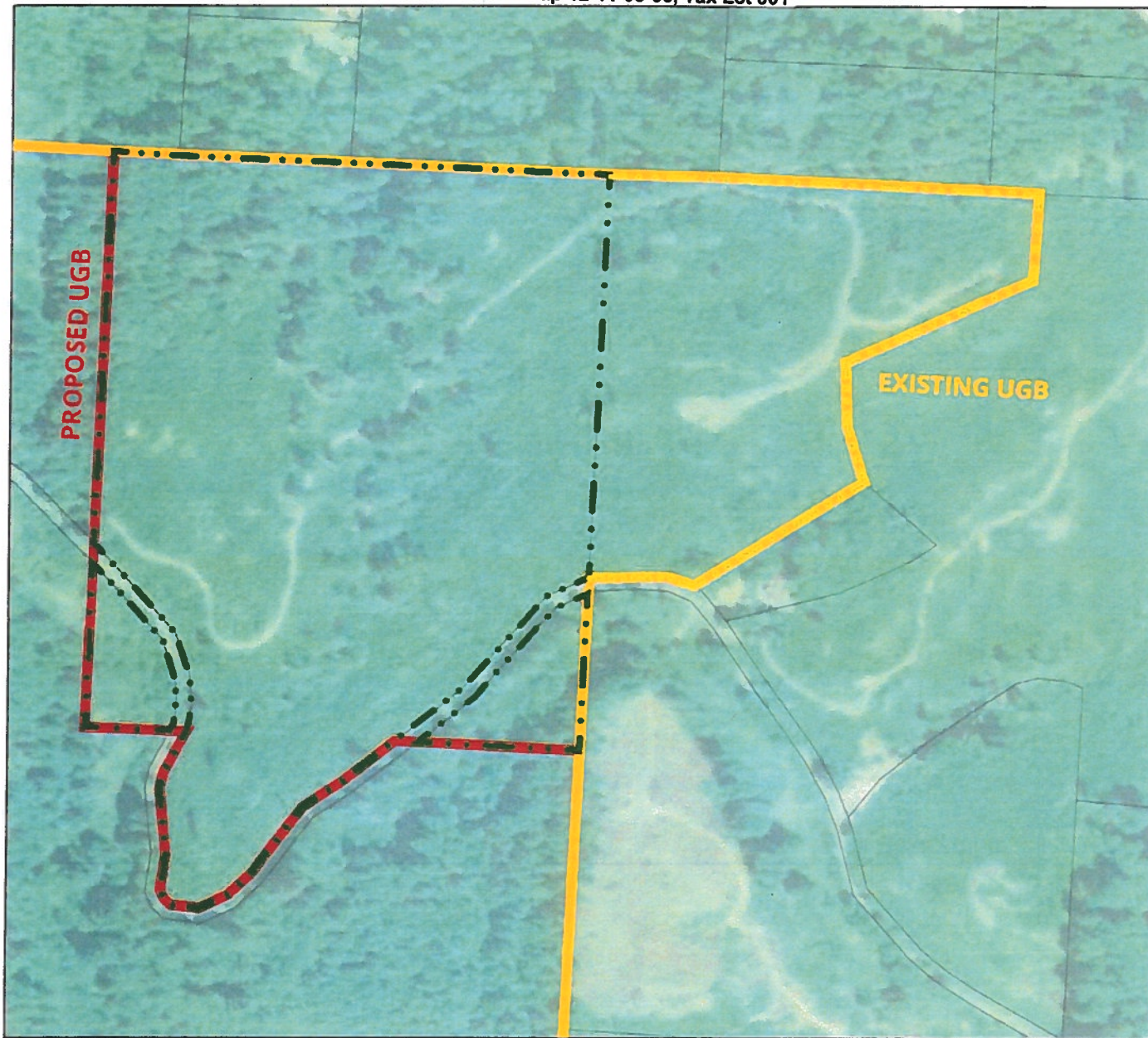
CONCEPTUAL SITE PLAN

3J CONSULTING

CIVIL ENGINEERING | WATER RESOURCES | LAND USE PLANNING

Site "B"

Tax Map 12-11-05-00, Tax Lot 801



EXISTING ZONING | COMP PLAN DESIGNATION

71 RURAL RESIDENTIAL (RR 10) |
ACRES HIGH DENSITY RESIDENTIAL (HDR)

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



HANCOCK UGB ADJUSTMENT

UGB AMENDMENT EXHIBIT

3J CONSULTING

CIVIL ENGINEERING WATER RESOURCES LAND USE PLANNING

SEPTEMBER 2020

ARNSDORF JOSEPH A &
ARNSDORF JESSICA L
1220 NE LAKEWOOD DR
NEWPORT, OR 97365

BAKER CARL F &
BAKER DIAN G
2935 NE LISI PL
NEWPORT, OR 97365

BARBER JERRY LEE &
BARBER SANDRA LEE
2930 NE LISI PL
NEWPORT, OR 97365

BODENSTAB MARK R &
BODENSTAB DORIS
7836 E BRALTON DR
NAMPA, ID 83686

HANCOCK FOREST MGMT
ATTN: CASEY FISHER
17700 SE MILL PLAIN BLVD
STE 180
VANCOUVER, WA 98683

BOYS DAVID A II &
BOYS LEILA M
1250 NE LAKEWOOD DR
NEWPORT, OR 97365

BRAXLING ARTHUR &
BRAXBEACH LLC
PO BOX 240
NEWPORT, OR 97365

BRUNELLE LAWRENCE W &
BRUNELLE CLAUDIA J
1150 NE LAKEWOOD DR
NEWPORT, OR 97365

BURTON LYNSEY
1200 NE LAKEWOOD DR
NEWPORT, OR 97365

CAUDURO RAYMOND &
CAUDURO PATRICIA A
1090 NE LAKEWOOD DR
NEWPORT, OR 97365

CENTRAL LINCOLN PUD
ATTN BRIAN BARTH
MGR ACCT & FINANCE
PO BOX 1126
NEWPORT, OR 97365

CITY OF NEWPORT
ATTN MINOR J CHRISTOPHER
236 W OLIVE ST
NEWPORT, OR 97365

CITY OF NEWPORT
CITY MANAGER
169 SW COAST HWY
NEWPORT, OR 97365

DUNSCOMB KATHRYN M TRUSTEE &
MARTIN TERENCE R TRUSTEE
ATTN RAMONA MARTIN
4100 N COAST HWY
NEWPORT, OR 97365

ETHERINGTON ROBERT C &
ETHERINGTON LINDA A
3249 NE BIG CREEK RD
NEWPORT, OR 97365

FERRIS WILLARD STUART &
FERRIS PETER K &
FERRIS KATHERINE
415 SE 98TH CT
SOUTH BEACH, OR 97366

GOODPASTURE KATHERINE E
415 SE 98TH CT
SOUTH BEACH, OR 97366

HESLEN AMIE L &
MARSHALL HEATH
1215 NE LAKEWOOD DR
NEWPORT, OR 97365

INGALLS DONNE J &
INGALLS KELSEY A
1235 NE LAKEWOOD DR
NEWPORT, OR 97365

JOHN HANCOCK LIFE INSUR CO
ATTN HANCOCK FOREST MGMT
17700 SE MILL PLAIN BLVD
STE 180
VANCOUVER, WA 98683

KEPLER RICHARD ALLEN
1175 NE LAKEWOOD DR
NEWPORT, OR 97365

KLAY JONATHAN MARK &
KLAY FREDRIKA
20143 47TH AVE NE
LK FOREST PK, WA 98155

LAKEWOOD HILLS INC
810 SE 5TH ST
NEWPORT, OR 97365

LC APARTMENTS LLC
1231B STATE ST
SANTA BARBARA, CA 93101

LEE DAVID J &
LEE ROSALINE H
PO BOX 2226
NEWPORT, OR 97365

LETTENMAIER TERRANCE M &
WEITKAMP LAURIE A
PO BOX 550
SOUTH BEACH, OR 97366

MERWIN PAMELA D COTTEE &
ROEBBER SUSAN COTTEE &
VANGORP ALISON COTSTEE
1135 NE LAKEWOOD DR
NEWPORT, OR 97365

NELSON NICKOLAS R
466 WASKOW DR
SAN JOSE, CA 95123

PEDERSON JOEL W
16151 SHELLCRACKER RD
JACKSONVILLE, FL 32226

PETTETT JAMES W &
PETTETT MICHELLE R
1080 NE LAKEWOOD DR
NEWPORT, OR 97365

PORCH ROBERT R
1100 NE LAKEWOOD DR
NEWPORT, OR 97365

RANDALL MARGARET J
840 S RANCHO DR
#4-409
LAS VEGAS, NV 89106

ROLL JOHN R &
ROLL NINA R
2930 NE KLAMATH PL
NEWPORT, OR 97365

RYAN REATHA L TSTEE
1155 NE LAKEWOOD DR
NEWPORT, OR 97365

SAVARA VIKRAM C TSTEE &
SAVARA NALINI V TSTEE
772 SW BROADWAY DR #2
PORTLAND, OR 97201

SELICH JACK M &
SELICH JUDITH N
PO BOX 358
SOUTH BEACH, OR 97366

SENN JAMES A &
SENN JONG SOON
8450 SW MARINE VIEW ST
SOUTH BEACH, OR 97366

SHAMAS RICHARD A &
SHAMAS IRIS T
6821 SYLVIA DR
HUNTINGTON BEACH, CA 92647

SLAYDEN CONSTRUCTION GROUP INC
PO BOX 247
STAYTON, OR 97383

SMITH ROBERT &
SMITH LEA
1240 NE LAKEWOOD DR
NEWPORT, OR 97365

STEEL STRING INC
2712 SE 20TH AVE
PORTLAND, OR 97202

STUDLEY DAVID J &
STUDLEY PAULETTE L
1185 NE LAKEWOOD DR
NEWPORT, OR 97365

TODD EDWARD L &
TODD SYDNEY E
337 NE SAN-BAY-O CIR
NEWPORT, OR 97365

WALKER STEPHEN D TSTEE &
WALKER CHRISTIE H TSTEE
1225 NE LAKEWOOD DR
NEWPORT, OR 97365

WEATHERS KAREN A
876 CHURCH ST
WOODBURN, OR 97071

WENELL GARY W TSTEE &
WENELL PAULA C TSTEE
620 124TH ST SW APT 29
EVERETT, WA 98204

WOODARD LISA A
1255 NE LAKEWOOD DR
NEWPORT, OR 97365

WOODLEY MICHAEL H &
WOODLEY WINNIFRED J
PO BOX 664
PRINEVILLE, OR 97754

WYNDHAVEN RIDGE LLC
PO BOX 247
STAYTON, OR 97383

YUILLE KRISTIN H &
GREEN NATHAN R
1245 NE LAKEWOOD DR
NEWPORT, OR 97365

ZEISER STEVEN K &
ZEISER KATHERINE K
3511 E 3RD ST
LONG BEACH, CA 90814

CAMERON LA FOLLETTE
OREGON COAST ALLIANCE
PO BOX 857
ASTORIA, OR 97103

SEAN T MALONE
ATTORNEY AT LAW
259 E FIFTH AVE, SUITE 200-C
EUGENE, OR 97401

3J CONSULTING, INC
ATTN: ANDREW TULL
9600 SW NIMBUS AVE, SUITE 100
BEAVERTON, OR 97008

DAVE & ANDREA LARSEN
Email: dna0713@mac.com

MICHEAL ROBINSON
SCHWABE, WILLIAMSON AND WYATT
1211 SW 5TH AVE, SUITE 1900
PORTLAND, OR 97204

JEAN DAHLQUIST
FAIR HOUSING COUNCIL OF OREGON
1221 SW YAMHILL ST #305
PORTLAND, OR 97205

File 1-UGB-20 / 1-CP-20

Adjacent Property Owners Within
300 Feet

NW Natural
ATTN: Dave Sanders
1405 SW Hwy 101
Lincoln City, OR 97367

Email: Lisa Phillips
DLCD Coastal Services Center
lisa.phillips@state.or.us

CenturyLink
ATTN: Corky Fallin
740 State St
Salem OR 97301

Lincoln County Assessor
Lincoln County Courthouse
225 W Olive St
Newport OR 97365

Lincoln County Surveyor
880 NE 7th St
Newport OR 97365

911 Dispatch
ATTN: Lynn Iverson
815 SW Lee St
Newport OR 97365

Lincoln County Clerk
Lincoln County Courthouse
225 W Olive St
Newport OR 97365

Central Lincoln PUD
ATTN: Randy Grove
PO Box 1126
Newport OR 97365

Charter Communications
ATTN: Keith Kaminski
355 NE 1st St
Newport OR 97365

Lincoln County School District
ATTN: Superintendent
PO Box 1110
Newport OR 97365

Lincoln County Commissioners
Lincoln County Courthouse
225 W Olive St
Newport OR 97365

Lincoln County Library District
PO Box 2027
Newport OR 97365

US Post Office
ATTN: Postmaster
310 SW 2nd St
Newport OR 97365

OR Parks & Recreation Dept.
ATTN: Steve Williams
5580 S Coast Hwy
South Beach OR 97366

Secretary of State
136 State St Capitol
Salem OR 9731

Lincoln County Planning Dept
210 SW 2nd St
Newport OR 97365

Seal Rock Water District
PO Box 190
Seal Rock OR 97365

Pioneer Telephone Co-Op
PO Box 631
Philomath OR 97370

Newport Rural Fire Protection
District
PO Box 923
Newport OR 97365

OREGON DIV OF STATE LANDS
775 SUMMER ST NE
SALEM OR 97310-1337

Mike Murzynsky
Finance Director

ODOT
ATTN: PLANNER
STATE HWY DIV DISTRICT 4
3700 SW PHILOMATH BLVD
CORVALLIS OR 97333-1194

US ARMY CORP OF ENGINEERS
PO BOX 2946
PORTLAND OR 97208-2946

Jason Malloy
Police Chief

Pioneer Telephone Co-Op
PO Box 631
Philomath OR 97370

Beth Young
Planner

Clare Paul/Chris Janigo
Public Works

Rob Murphy
Fire Chief

Joseph Lease
Building Official

File 1-UGB-20 / 1-CP-20
Affected Agencies

Sherri Marineau

From: Sherri Marineau
Sent: Monday, December 28, 2020 9:00 AM
To: Derrick Tokos; Spencer Nebel; Robert Murphy; Michael Murzynsky; Joseph Lease; Jason Malloy; Laura Kimberly; Michael Cavanaugh; Beth Young; Clare Paul; Chris Janigo
Subject: Urban Growth Boundary Amendment File No. 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - CC.pdf

Attached is a notice concerning a land use request. The notice contains an explanation of the request, a property description and map, and a date for the public hearing. Please review this information to see if you would like to make any comments. We must have your comments at least 10 days prior to the hearing period in order for them to be considered. **Should no response be received, a "no comment" will be assumed.**

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



Sherri Marineau

From: Sherri Marineau
Sent: Monday, December 28, 2020 8:59 AM
To: 'dna0713@mac.com'
Subject: City Council Hearing Notification: Urban Growth Boundary Amendment File 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - CC.pdf
Importance: High

Dave & Andrea,

Please see the attached public notice for the upcoming City Council public hearing for the Urban Growth Boundary amendment that you gave testimony for at the last Planning Commission hearing. Since I do not have your mailing address, I am emailing you the notice for your reference. Please let me know if you have any questions.

Thank you,

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



Sherri Marineau

From: Sherri Marineau
Sent: Monday, December 28, 2020 8:53 AM
To: 'odotr2planmgr@odot.state.or.us'; 'lisa.phipps@state.or.us'
Subject: Urban Growth Boundary Amendment File 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - CC.pdf

Attached is a notice concerning a land use request. The notice contains an explanation of the request, a property description and map, and a date for the public hearing. Please review this information to see if you would like to make any comments. We must receive comments prior to the last day of the comment period in order for them to be considered. **Should no response be received, a "no comment" will be assumed.**

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



MINUTES
City of Newport Planning Commission
Regular Session
Newport City Hall Council Chambers by Video Conference
December 14, 2020

Planning Commissioners Present by Video Conference: Jim Patrick, Lee Hardy, Jim Hanselman, Bill Branigan, Gary East, Bob Berman, and Mike Franklin.

City Staff Present by Video Conference: Community Development Director (CDD), Derrick Tokos; and Executive Assistant, Sherri Marineau.

Public Members Present by Video Conference: Aaron Murphy, Casey Fischer, Dave Larsen, Jerry Anderson, Kelsey Ingalls, Lisa Phipps, Matt Hughart, Mercedes Serra, Michael Robinson, Polly Studley, Terry Lettenmaier, and Kristin Yuille.

1. **Call to Order & Roll Call.** Chair Patrick called the meeting to order in the City Hall Council Chambers at 7:00 p.m. On roll call, Commissioners Hardy, Hanselman, Branigan, East, Berman, Franklin, and Patrick were present.

2. **Approval of Minutes.**

A. Approval of the Planning Commission Work and Regular Session Meeting Minutes of November 23, 2020.

MOTION was made by Commissioner Berman, seconded by Commissioner Franklin to approve the Planning Commission Work and Regular Session Meeting Minutes of November 23, 2020 with minor corrections. The motion carried unanimously in a voice vote.

3. **Citizen/Public Comment.** None were heard.

4. **Action Items.** None were heard.

5. **Public Hearings.** At 7:02 p.m. Chair Patrick opened the public hearing portion of the meeting.

Chair Patrick read the statement of rights and relevance. He asked the Commissioners for declarations of conflicts of interest, ex parte contacts, bias, or site visits. Berman and Hanselman reported a brief discussion with one another concerning the hearing item. Franklin reported a drive-by. Patrick called for objections to any member of the Planning Commission or the Commission as a whole hearing this matter; and none were heard.

A. **File 1-UGB-20/1-CP-20.**

Tokos pointed out that the Commission was making a recommendation to the City Council who would be making a decision. The approval would then go to the County and they would have their own process to approve with the County Commissioners. Tokos acknowledged a public comment letter that Oregon Coast Alliance submitted through their attorney, Sean Malone. They thought the land swap complied with the requirements. There was an email submitted by Jean Daulquist with the Fair Housing Council stating they didn't have any issues at this point. There was also an email exchange with Kristin Yuille about the transportation related standards that was shared with the Commission as well.

Tokos explained that if there was a favorable recommendation, prior to the City Council hearing they would put together an ordinance with explicate findings of facts and address any inconsistencies that might exist

between the applicant's findings and our analysis. He reviewed the staff report and explained how the land swap to adjust the Urban Growth Boundary (UGB) would bring 43.4 acres off of NE Harney Street into the UGB, and remove 71.4 acres in the undeveloped Wolf Tree Destination Resort south of the airport.

Hanselman asked if there was any geological information on the 43.4 acres. Tokos reported there was and it fell within an area where they had historic mapping from the State Department of Geology and Mineral Industries. There were geologic hazards in the area but they only fell just north of this property. Berman asked if there would be any more analysis when the time came to look at annexation. Tokos didn't believe there would be. The way the geologic hazards would be done would be more on a macro level by the State instead of site specific. Berman asked if they would be required to do a geologic report for the property. Tokos reported they wouldn't. Depending how the lots were developed, there would be some degree of analysis there. A lot of it would be triggered under building code, not the geologic hazards code.

Berman noted on Findings A3 there was wording that said there would be a "substantial equivalent" land swap. He asked if this was substantially equivalent or if it exceeded the threshold behind the work. Tokos clarified it was substantially equivalent in the context that it qualified for the land swap provisions in terms of the number of dwellings that could be built there. The big difference was the property to the south had no way of getting city services anytime soon. Branigan asked if the property in the R-4 zone was annexed into the city, could the zoning be changed at that time. Tokos explained they couldn't go to a R-1 zone because the nature of the State's rules allowed the city to go forth with a UGB proposal under the criteria as long as what was coming in has the same designation as what was going out. Tokos explained the R-4 was a flex zone. If it went through and they got the R-4 zoning at that time, they could build at a lower density. Tokos reported that the applicant's intent was to do some development with the property that was consistent with and complimentary to the property next to it in Lakewood Hills. This could be addressed in a development agreement at the time of annexation.

Proponents: Michael Robinson addressed the Commission and noted that he was a land use lawyer working for the applicant and the planning firm. He stated that they agreed with the staff findings and recommendations, and thought the Commission should give their approval to the City Council. Robinson noted that the applicant's intention was to provide workforce housing. Once they were past the UGB adjustment and on to annexation, they would work with the city to come up with an agreement on how they would handle workforce housing. They hoped the Commission would follow the staff recommendation to give a favorable recommendation to the Council for the land swap and comprehensive plan map amendment.

Mercedes Serra with 3J Consulting Firm addressed the Commission and she stated she represented the applicant on this project. She presented a slideshow to the Commission that included images of both properties boundaries that were part of the land swap; current size and zoning of each property; the housing potential; the public facilities for sewer, water, transportation for both sites; and the recreation needs and park inventory for the sites and their existing service levels.

Berman asked for the general idea of the number of units between single family detached and multi-family dwellings they envisioned. Serra reported that the vision was for single family detached with the option for single family attached. They were initially looking at around a 200 unit trip cap but they needed to see the final Transportation System Plan (TSP) to see what would be supported in the area. Casey Fisher, representative of the owner Boston Timber Opportunities, LLC addressed the Commission and reported that their desire was to meet what the city needed and planned to meet with the city to determine what this should be. They thought that single family units would be more prevalent in the development. Robinson added that the development would be limited to the traffic analysis requirements.

Branigan asked if there were any plans to divert traffic to Big Creek Road. Matt Hughart from Kittelson and Associates reported that when they scoped and prepared the study there, They made a number of assumptions. Given the current design, width and configuration of Big Creek Road, it was assumed that

there likely would be a very small percentage of trips generated from the future development that would use Big Creek Road in the south direction given that it was a directional street in its current state. Hughart explained they discussed with city staff about the likelihood of that road being updated. From the city's perspective they wanted to see the road upgraded but it wasn't clear there was a likelihood it would be done in the current time period. Tokos reported that the feedback the city was getting from public on the TSP update showed that they liked Big Creek Road as a one way south. If they could get a Harney extension put in around Forest Park there was a lot of support to see it more vehicle oriented and then have an ability to have Big Creek Road be more of a bike/pedestrian alignment. Work on these roads would happen further in the future. If this went forward, there would likely be a discussion on how it linked up on potential signalization on 36th Street. This was already a priority and candidate for signalization. Tokos reported that this wasn't the only development that would contribute to the vehicle trips. There was also 66 multi-family units currently under constructions to the south, and other properties to the north and south that would develop multi-family. Currently the city was collecting system development funds to help share in the cost for of the signalization of 36th Street. They expected people to use this signalization at this intersection to get onto Highway 101.

Berman noted that a bypass on Harney Street could be used to direct traffic off of Highway 101. He asked how they took this into account when they did their traffic study when there might be more traffic on Harney Street. Hughart explained they did their best with the information they had at the time. The study they prepared had to make some assumptions because some of the new information on the TSP wasn't available to them at that time. They expected that when the TSP was completed they would have to make adjustments at the TPR stage. Hughart noted they had more work to do but would work with city staff to make sure everything was accounted for. Hanselman thought that the traffic study said signals would be required at 36th and 31st Streets. He thought this put signals only a quarter of a mile apart on a busy road. Hanselman thought moving traffic on Highway 101 would be even more difficult due to this additional traffic. He hoped that future studies could come up with other allotments of trips because of this. Hughart reminded that the findings were preliminary and based on the information they had at that time. They understood that the TSP was looking at some revisions to the circulation network there. One of the things that would be made clear was if 36th Street was signalized, and the city didn't look at doing other signals in close proximity such as 31st Street, traffic probably wouldn't be the easiest at maneuvering at certain times of the year. They would have to adjust their study and redistribute more trips to the 36th Street intersection, and there may need to be some enhancements for capacity improvements at those intersections to accommodate an increase of trips due to this potential future development. This would be done post TSP. Tokos added that the traffic study Kittlesen did looked at the reasonably worst case scenario, and thought it was important to keep in mind when they would realistically expect that level of development to happen. The key was they had the ability to work with the developer and put in place thresholds of development and trip caps until it was signalized. This would be something similar to the Wilder development, and this would ensure that the TSP could take on the trips allowed underneath the cap.

Franklin noted that the properties north of NE Harney Street property were owned by Hancock Forest Management. He asked if the only reason they were adding the 43.4 acres property in at this time was because they stayed under the trip cap for a signal to go in. Robinson explained that the conceptual site plan illustrated how they could provide connections. He reported that they and the city were bound by State law on how much land they could bring in and be approved for.

Opponents: Dave Larsen addressed the Commission and reported that he lived in the neighborhood at Lakewood Hills. He wanted to get across the message that the discussion on where people would go on 36th Street was very naïve. When people wanted to go south it was easier to use the Big Creek Road. Larsen thought they should take into consideration that Big Creek Road was a problem road to start with, and there was another development currently being built with potential for another two developments in that area. This would increase the traffic on Big Creek Road dramatically and putting a light on 36th and 31st Street wouldn't change this. To think that Big Creek Road wouldn't have a ton a traffic with the increase in houses was extremely ignorant.

Polly Studley addressed the Commission and reported that she had owned her property for 30 years on Lakewood Drive and lived at it for 25 years. She asked if when they were talking about the water and sewer being adequate were they taking into account the apartment complexes currently being built and the others that were being proposed. Studley noted that you couldn't walk or ride your bikes on the narrow road there. She asked if there was any plans to widen the roads, and noted there were no shoulders. Studley reported that as far as Harney Street being expanded, they were told when they bought their property 30 years ago that Harney would go through. Because of this they shouldn't count on this happening in the future. Studley asked why they wouldn't change the zoning for Site "B" before it was brought into the city so they could bring it in as a R-1 or R-2 so they weren't in the data with more apartments. She thought traffic would be a big headache.

Tokos explained that with respect to the wastewater system, the lift stations were the big ticket items there. They had been upsized at Big Creek and Schooner Creek and could handle the wastewater affluent. They did take in consideration the apartment complex under construction and the other two sites that could go under construction for that purpose. Tokos reported that the water distribution in this area was capable of servicing quite a bit more than what it presently was. They did factor this in but it didn't mean the applicant wouldn't be on the hook to do some improvements. A lot of this would be internal to their own property and they talked about this in terms of lift stations. Tokos explained that in terms of the bike/pedestrian aspect, there was an existing trail system in and around Big Creek. The expectation was that there would be some improvements particularly for bikes and pedestrians, and there was a desire through the TSP update that there would be a parallel system so people wouldn't have to go out to Highway 101 because it wasn't the most desirable location to be walking or cycling. The applicant's role would be determined and they would have some responsibility in this, but not the sole responsibility. Tokos explained that in respect to transportation, this UGB amendment and comprehensive plan designation didn't get them to a point that they were ready to or could develop. The next step would be an annexation with zoning being applied. This was where they would have the trip cap and a development agreement in place that would spell out a lot of the details relative to this. The transportation planning rule that they would have to meet at that time requires that the transportation system be capable of accommodating the traffic. Tokos noted that with respect to the apartments, the applicant had said they were looking more at single family detached and attached units there, which were more conducive with the terrain at this property. Apartments or multi-family were more challenging in the steeper terrain. Tokos didn't believe they were going to see a whole lot of apartment development as part of this because it wasn't how this project was framed originally. He confirmed that the process for a land swap was mapped out to be a like for like zoning of R-4 because of state rules.

Studley said that Lakeview Hills has been a community that has come before the Council and the Planning Committee before to keep our road open and to not allow the apartment complex to have extra height. This is during a pandemic right now. Normally neighbors get together and knock on each other's doors and tell them what's been going on. We have not been able to do that. She was kind of surprised they didn't have as many neighbors there tonight. If they really wanted input during a pandemic and a holiday season, she didn't think they would get as much input as you would in their neighborhood. Studley stated she opposed this. She didn't mind single family homes. She thought this would be good but didn't agree with bringing it in as high density because they could change their minds and put in more apartments. Casey Fisher explained that it was never their intent to put in more apartments, it had always been single family and potentially attached. Their hope was to get more single-family housing for the city. She saw zero chance of apartments at any point.

Patrick added that this was a recommendation to the Council and there would be another opportunity to give additional testimony.

Kristin Yuile addressed the Commission. She stated, "Good evening Commission members. My name is Kristen Yuile and I am a resident of Lakewood Hills neighborhood. I reviewed the application. I do have several concerns that several neighbors have brought up as well regarding this development. Mainly around

just the safety and livability for the residents in that area. The main concern is the traffic impact study needs to be done before any more steps are taken in this process. Whether the applicant is allowed to defer it at this step is really not appropriate for this type of development because it's fundamental to determine whether this project should move forward. As a resident of the Big Creek area for several years I use the alternate route to 101, Big Creek Road on a daily basis, as does the majority of local residents in the area. I agree with previous comments by Dr. Larsen. There has been assumptions stated today regarding what routes our residents take and with little clue as to what is occurring. That's why you do a traffic impact study. Big Creek Road is not adequate currently to carry the traffic. There has been significant sliding on the last few years. The city has spent money to repair and yet it remains a one lane travel road. When I reached out to city staff they indicated that Big Creek Road would likely be converted into pedestrian and bike use only. If that's accurate and the plans are not to improve it, then a traffic study is even more imperative. As current residents and future residents we'll have no alternate route to and from town as 101 will be their only access. Originally the city carefully considered amending the UGB to include Site B, the 71.4 acres parcel. Now it's being swapped, hastily changed after a few months after you had already approved it. The criteria under land exchanges OAR 660.24.70 has not been met under sub A, meaning that the land is not substantially equivalent to the amount of residential buildable land that is being removed. In the application it identifies only 28 acres that may accommodate development. In this application they identify 12 acres as containing slopes that would prohibit any kind of development. So that would only leave around 28 acres. DLCD also indicated in their email that there is geological concerns in need of further work because of landslide typography. This will likely lead to even more land that would not be developable of the 28 acres that currently exist on Site A. Under ORS 197.298, land that is prone to landslide should not be included in the UGB and the portion of the 28 acres should be excluded. So, you know, we are going to be back here again, maybe go through the same process that you went through for Site B and then eventually part of this is not even going to be considered because it's not going to be developable. That's why this, our front work, needs to be done now by the developer. You know, as Planning Commission members you guys have discretion when reviewing land use applications. You can waive factors such as safety and livability for your residents. The applicant hasn't done it's necessary front end work to show that this proposal should be considered, let alone be approved. I request that you continue this hearing and require the applicant complete at a minimum a traffic impact study before recommendation is made to the City Council."

Rebuttal: Robinson thanked the public who gave testimony during the hearing. He noted that they heard what they were saying and he hoped to answer some questions. Robinson thought it was fair to say that there was an opportunity to talk to these public members personally by phone or Zoom and would try to set this up. He reminded that there would be further options to gain public testimony. Robinson explained that regarding Ms. Yuile's testimony on ORS 197.298 regarding landslide hazards, there is substantial evidence in the record that this was not a mapped or an identified landslide hazard area. If they believed that there were landslide here, historic or otherwise, they would have done more for the application in that regard. Robinson noted they heard testimony that DOGAMI did not include this in their mapping and thought this was substantial evidence there was not that kind of gap. He thought it was worth talking about why they hadn't completed the transportation planning rule. The State requires for the transportation planning rule that they match up land impacts with transportation needs. When you are dealing with a UGB map amendment like this the State law expressly allows you to defer it to a later stage. They wanted to wait until the zoning stage to have a better opportunity of what they intended to do with respect to development. The traffic study itself, demonstrating compliance with the TPR, would be better. They also wanted to see more work on TSP and by waiting they would have a traffic study that better related to the TSP. Robinson also noted that this gave them more time to coordinate with transportation within the city, which they intended to do. Because they heard the neighbors' concerns, they would do their best to talk to them. They would be working with the city and the state to make sure that their traffic study was accurate and demonstrated when the trips would go. If they are obligated to make improvements they would have to do so.

Robinson explained this was a two stage process. Right now they were recommending to the Council that they bring the property into the UGB. The second stage would be when they would provide roads and what

their contributions would be to the public improvements. This didn't happen at the UGB stage. Robinson noted that Site B wouldn't have an opportunity to meet the housing needs analysis because it wasn't in the city. This property owner had no desire to do anything with the property other than his home. Site A has sufficient land to do single family homes and was in an appropriate area because of its proximity to roads and public facilities to meet that housing needs. Robinson explained that OAR 660.024.0070(3)(A) said that the amount of UGB to meet a specific type of residential need should be substantially equivalent to the residential land removed. He thought that Tokos' staff report was correct and asked everyone to remember that what they were also talking about was the number of dwelling units. They could work with the parcel they were bringing in to make sure what the number of dwelling units would be, and this was what they would be looking at during the next stage. Robinson added that they had an obligation to do a full traffic study at the appropriate time, and they intended to do this. There would be a trip cap and a development agreement that they fully intended to do. All of this would be a public process with additional opportunities to talk to the Commission. Robinson would talk to his client about reaching out to folks as soon as it was reasonable. They thought the evidence was sufficient to give a favorable recommendation to the Council.

Chair Patrick closed the hearing at 8:22 p.m.

East thought swapping out Section A for Section B was a good idea because Section B no longer wanted to develop that property. Leaving it within the UGB wouldn't do us any good. It was too expensive to develop the property due to the lack of public facilities. It was a good time to swap the properties out and add Section A into the UGB where it would do some good.

Branigan thought the proposed findings satisfied the criteria. The biggest issue he had was with the traffic as the area continued to grow. Before they really proceeded the traffic impact analysis would be key to the process. Since this was just the UGB, they would have several other opportunities to understand the traffic impact before any final developments.

Franklin thought the swap was a perfect fit. He thought the traffic impact in that community was a valid concern. Franklin wanted the people who gave testimony to talk to their neighbors to allow more people to voice their opinion at the Council level. He thought the developers did a good job of communicating with them thus far. Franklin would vote to approve it.

Berman saw two major problems ultimately, but not in this phase. The first problem was the traffic. It sounded like they could analyze this with more information on how people used the roads. Berman was worried about Lisa Phipps' memo that noted that a review of the course level did show landslide typography on the whole site. The fact that this may not require any formal review bothered him and he thought they could address this when the time came. Berman thought this would help with housing which was a very high priority. He would recommend it.

Hanselman thought housing was needed in the community. This was in an area in town that had drawn attention for development. Transportation had been repeatedly mentioned as a problem up there. The geologic was the most important to him. Hanselman didn't want to see a property included that could become a liability. The geology might limit the number of houses that could be put out and they didn't know what it was yet. A report would have been helpful. Hanselman thought the trade of 43 to 71 acres stood up with what was needed by the community. It would be good to use the TSP time to help with improvement in that area because it was going to be developed. Hanselman would recommend this to the Council and reminded the public would still be able speak to the Council.

Hardy didn't have a problem with the application. She agreed there was a lot more due diligence that was needed as they went through the next steps that would be required from the standpoint of protecting not only the investor's interest but the community interest as well. There was a number of impacts in this neighborhood that people were concerned about. If these were addressed directly and clearly it would resolve some of these problems. Hardy had no problem forwarding this to Council.

Patrick didn't have a problem recommending this to the Council. He didn't have a problem with the substitution because they were trading an area they couldn't serve with something they could. The problem was that they had this giant chunk of ground in Newport that they counted as part of a reserve in Wolf Tree but it wasn't developable or wouldn't be developed anytime within the next 10 or 15 years. Patrick noted that a lot of the R-4 land in Newport was single family. He knew the transportation was an issue and didn't think they should be doing the traffic analysis when they didn't know what they were doing. He was in favor of making a recommendation.

MOTION was made by Commissioner Berman, seconded by Commissioner Hanselman to approve File 1-UGB-20/1-CP-20 with a positive recommendation to the City Council. The motion carried unanimously in a voice vote.

Franklin asked if the request to continue the hearing had any impact on the recommendation. Tokos explained that they were just making a recommendation at this point and didn't have an obligation at this point to continue the hearing. Before a final decision was made by the Council, an open record could be requested, but that would be with the Council.

6. **New Business.** None were heard.

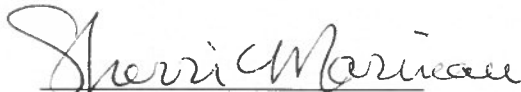
7. **Unfinished Business.** None were heard.

8. **Director Comments.** Tokos asked if there were any objections to not having a meeting on December 28th. The Commission have no objections. Tokos explained they would reconvene after the first of the year.

The Commission thanked Franklin for his service.

9. **Adjournment.** Having no further business, the meeting adjourned at 8:35 p.m.

Respectfully submitted,



Sherri Marineau
Executive Assistant

NOTICE OF A PUBLIC HEARING
CITY OF NEWPORT;
This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing. The City of Newport Planning Commission will hold a public hearing on Monday, December 14, 2020, at 7:00 p.m. in the City Hall Council Chambers to review and make a recommendation to the Newport City Council on File No. 1-UGB-20/1-CP-20 as submitted by Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative), for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential.

Property outside the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10. The properties are located at Tax Map 10-11-33-00, Tax Lot 100 (Site "A") and Tax Map 12-11-05-00, Tax Lot 801 (853 SE 98th St)(Site "B"). Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and

AFFIDAVIT OF PUBLICATION

News-Times, Newport, Oregon

COUNTY OF LINCOLN

SS.

STATE OF OREGON

I, **Natalie Lane**, being duly sworn, depose and say that I am the legal clerk of The News Times, a newspaper of general circulation, as defined by ORS 193.010 and 193.020; printed and published at 831 NE Avery Street, Newport in the aforesaid county and state and that **NOTICE: (62-04) NOTICE OF A PUBLIC HEARING D4**; a printed copy of which is hereto annexed was published in the entire issue(s) of said newspaper for 1 week(s) in the following issue(s): **12/04/2020**.

Subscribed and sworn before me this 4th day of **DECEMBER**, 2020.

Nicole Orr, Notary Public of Oregon
(My commission expires August 19, 2022).

forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement. Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties

an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the Planning Commission. Written testimony sent to the Community Development (Planning) Department, City Hall, 169 SW Coast Hwy, Newport, OR 97365, must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public

hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application. Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department (address above). Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address. Contact Derrick Tokos, Community Development Director (541) 574-0626, email address d.tokos@newportoregon.gov (mailing address above). D4 (62-04)



OFFICIAL STAMP
NICOLE ORR
NOTARY PUBLIC - OREGON
COMMISSION NO. 978271
MY COMMISSION EXPIRES AUGUST 19, 2022

**CITY OF NEWPORT
NOTICE OF A PUBLIC HEARING**

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The City of Newport Planning Commission will hold a public hearing on Monday, December 14, 2020, at 7:00 p.m. in the City Hall Council Chambers to review and make a recommendation to the Newport City Council on File No. 1-UGB-20/1-CP-20 as submitted by Boston Timber Opportunities, LLC (Casey Fisher, Member) (Andrew Tull, 3J Consulting, Inc. authorized representative), for a minor amendment to the configuration of the Newport Urban Growth Boundary, that will add approximately 43.4-acres and remove approximately 71.4-acres. Land area within the UGB is designated as High-Density Residential. Property outside the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential and on the City zoning map as High Density Residential (R-4) upon annexation into the city. The parcel to be removed from the UGB is intended to retain its zoning designation on the Lincoln County Comprehensive plan map as RR-10. Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement. Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the Planning Commission. Written testimony sent to the Community Development (Planning) Department, City Hall, 169 SW Coast Hwy, Newport, OR 97365, must be received by 5:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application. Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department (address above). Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address. Contact Derrick Tokos, Community Development Director (541) 574-0626, email address d.tokos@newportoregon.gov (mailing address above).

(For publication once on Friday, December 4, 2020)

Sean T. Malone

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Fax (650) 471-7366
seanmalone8@hotmail.com

December 14, 2020

Via Email

Derrick Tokos
Community Development Director
City of Newport
169 South Coast Highway
Newport, OR 97365
d.tokos@newportoregon.gov

Re: Oregon Coast Alliance Hearing Testimony in Support of Request to Adjust the Urban Growth Boundary and Comprehensive Plan Amendment, File No. 1-UGB-20/1-CP-20.

Dear Planning Commission of the City of Newport,

Oregon Coast Alliance (ORCA) is an Oregon nonprofit corporation whose mission is to protect coastal natural resources and work with residents to enhance community livability. ORCA hereby submits this hearing testimony in support of the consolidated applications identified above.

The request is to adjust the Urban Growth Boundary (UGB) to include a roughly 43-acre parcel in the UGB and to remove a roughly 71-acre parcel from the UGB. The request will also establish a Newport Comprehensive Pan Map designation of "High Density Residential" for the 43-acre property.

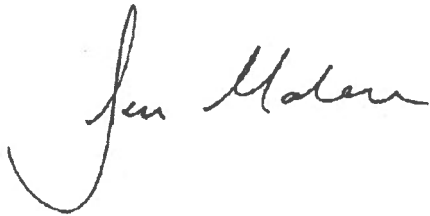
After reviewing the application and proposed findings prepared on behalf of Hancock Forest Management, Inc., ORCA believes that the applicant has demonstrated land need and has sufficiently analyzed potential boundary locations, pursuant to OAR 660-024-0040¹. The

¹ The requirements include: "Efficient accommodation of identified land needs," "Orderly and economic provision of public facilities and services," "Comparative environmental, energy, economic and social consequences," and "Compatibility of the proposed urban uses with nearby

the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB. While the UGB adjustment will result in a gross acreage loss of 28 acres, this will not significantly impact the overall supply of land -- and the inclusion of Site A into the UGB will further the City's needed housing by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers.

Because the proposed findings demonstrate compliance with the applicable criteria, ORCA respectfully requests that the Planning Commission recommend approval.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean Malone". The signature is fluid and cursive, with a large initial "S" and "M".

Sean T. Malone
Attorney for Oregon Coast Alliance

Cc:
Client

Comprehensive Plan establishes a need for 42 dwelling units annually between 2011 and 2031, 3/5 of which should be single-family detached units and 2/5 of which should be single-family attached and multi-family units. R-4 zoning would be applied to the property, which allows single-family detached units to multi-family units.

While the subject property is resource land (the lowest priority to be brought within the UGB), the property has services in place immediately adjacent and is capable of supporting development. Waste management stations have recently been upsized to address chronic overflow issues the City had experienced, and new water tank, pumps, and main lines have been constructed to address pressure issues. A paved collector roadway abuts the property, as does an electric utility substation. The property, while containing topography, is outside of mapped landslide hazard areas.

Non-resource lands within one mile of the UGB are not better situated because they are removed from City services, are parcelized, are complicated by bluff and dune-backed erosion hazards, landslide hazards, and subject to potential tsunami inundation. As such, it appears that there are no other properties that could be added as part of the UGB land exchange that would meet the City's housing needs.

ORCA also believes that the proposed findings for compliance with the Statewide Planning Goals are sufficient for the Planning Commission to recommend approval of the application to the City Council. Importantly, Goal 10 provides for the housing needs for communities throughout the state, and the proposal, combined with the high-density residential (R-4) designation, could result in 200 homes. Goal 11 is also pertinent here given level of services available to the subject property. The findings adequately demonstrate that transportation², water, sewer, and waste management services are available to the subject property.

Goal 14 requires a demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments, and also requires a demonstrated need for housing, employment opportunities, or uses such as public facilities, streets and roads, schools, parks or open space. OAR 660-024-0070(3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that

agricultural and forest activities occurring on farm and forest land outside of the UGB." ORCA agrees that the proposed findings adequately demonstrate compliance with these standards.

² The application includes a Transportation Impact Study completed by Kittelson & Associates. The Study addresses the reasonable worst-case scenario of developing 200 dwelling units. The number of daily trips exceeds the threshold that would trigger a significant impact, and the Study analyzes those significant impacts and proposes adequate mitigation.

Sherri Marineau

From: Sherri Marineau
Sent: Monday, December 14, 2020 11:48 AM
To: 'sherrimarineau@yahoo.com'
Subject: FW: FW: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

From: Derrick Tokos
Sent: Monday, December 14, 2020 11:41 AM
To: 'Jim Patrick' <jbpatrick@newportnet.com>; 'James Hanselman' <jj_oregon@yahoo.com>; 'Lee Hardy' <lee@yaquinabayproperties.com>; 'William Branigan' <phantom41@gmail.com>; 'gary.east460@gmail.com' <gary.east460@gmail.com>; 'Mike Franklin' (mike@newportchowderbowl.com)' <mike@newportchowderbowl.com>; 'Bob Berman' <CindyAndBob@earthlink.net>
Subject: FW: FW: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

FYI

From: Jean Dahlquist <jdahlqu1@gmail.com>
Sent: Monday, December 14, 2020 8:28 AM
To: Derrick Tokos <D.Tokos@NewportOregon.gov>
Subject: Re: FW: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

Good morning Derrick,

Normally we'd submit a comment letter if no findings were provided before the PC meeting. This is due to the fact that if draft findings are provided at that time, it leaves more space for planners and advocates to interact with the process before a decision is made. However, the applicant provided very detailed findings for this application, so we feel as if that is sufficient information to judge whether the amendment complies with Goal 10 or not. We'd encourage the planning department to consider providing findings earlier in the process in the future.

Thank you, and I hope your monday is off to a good start!

Jean Dahlquist

Fair Housing Council of Oregon

Phone: (414) 477-1567

E-mail: jdahlqu1@gmail.com

[Linkedin](#)

On Fri, Dec 11, 2020 at 2:20 PM Jean Dahlquist <jdahlqu1@gmail.com> wrote:

Good afternoon Derrick,

Thank you for the email and the clarification. I'll be able to include the context in my report to the board. I'll let you know what they decide.

Thanks again!

--Jean

On Wed, Dec 9, 2020 at 10:04 AM Derrick Tokos <D.Tokos@newportoregon.gov> wrote:

Hi Jean... the applicant's reference to "analysis of Site B" as an attachment could be clearer. What they are referring to is a combination of the map exhibits (Attachment "F" to the staff report) and the analysis on pages 48 and 49 of their findings.

Please feel free to email your comments. I won't be providing any additional findings prior to the Planning Commission hearing; however, assuming the Commission provides a favorable recommendation, I will prepare an ordinance supported by findings of fact prior to the Council hearing. While I will use the applicant's analysis as the basis for those findings, I'll also clarify points as needed, and address Commission and public feedback.

Derrick I. Tokos, AICP

Community Development Director

City of Newport

169 SW Coast Highway

Newport, OR 97365

ph: 541.574.0626 fax: 541.574.0644

d.tokos@newportoregon.gov

From: Jean Dahlquist <jdahlqu1@gmail.com>

Sent: Wednesday, December 09, 2020 9:22 AM

To: Derrick Tokos <D.Tokos@NewportOregon.gov>

Cc: Sherri Marineau <S.Marineau@NewportOregon.gov>

Subject: Re: FW: Staff Report for Boston Timber Opportunities UGB Amendment (File No. 1-UGB-20/1-CP-20)

Good morning,

Thank you for sending! It looks like there should be an attachment "analysis of Site B" that might provide some needed quantification. How could I get ahold of that?

I also have some feedback on the findings regarding the HNA data, however I noticed that these were the applicants findings. Is the staff planning on providing findings in addition to these? The feedback is fairly straightforward and simple, as long as the quantification in the attachment is clear.

Thank you,

--Jean

On Tue, Dec 8, 2020 at 5:13 PM Derrick Tokos <D.Tokos@newportoregon.gov> wrote:

Hi Jean,

I posted the staff report to the City's website. Here is a link: <https://www.newportoregon.gov/dept/cdd/default.asp>

It will also be included with the formal packets when they are posted towards the end of the week. Monday night's hearing will be held by video-conference. It will start at 7pm. Please let us know if you want to participate and I'll forward the dial-in information.

Derrick I. Tokos, AICP
Community Development Director
City of Newport
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0626 fax: 541.574.0644
d.tokos@newportoregon.gov

Derrick Tokos

From: Derrick Tokos
Sent: Friday, December 11, 2020 3:29 PM
To: 'Jim Patrick'; 'Bob Berman'; 'James Hanselman'; 'Lee Hardy'; 'Mike Franklin (mike@newportchowderbowl.com)'; 'William Branigan'; 'gary.east460@gmail.com'
Cc: Sherri Marineau
Subject: FW: UGB Boundary Amendment File 1-UGB-20/1-CP-20

FYI. I'll note this inquiry and response when I present the staff report.

Derrick

-----Original Message-----

From: Derrick Tokos
Sent: Thursday, December 10, 2020 5:08 PM
To: 'kristinyuille@gmail.com' <kristinyuille@gmail.com>
Subject: RE: UGB Boundary Amendment File 1-UGB-20/1-CP-20

Hi Kristin,

The applicant has elected to defer addressing Transportation Planning Rule (TPR) requirements, which get at off-site transportation impacts, until the property is annexed. That would be a separate, noticed series of public hearings. This means that if the Urban Growth Boundary land swap is approved the property will remain timberland for the time being.

With the applicant deferring TPR compliance, we at the City can work on some of the issues as part of an update to the City's Transportation System Plan. That is a project we are actively engaged in. As part of that effort we are asking ODOT to put in place an "alternate mobility standard" to allow more of our local traffic to be directed to US 101. We will also be looking to signalize US 101 at NE 36th. Given where this property is located, most vehicles will orient to NE 36th, particularly if we can get it signalized. Only a small percentage of the traffic would orient to Big Creek Road (their traffic engineer looked at that pretty carefully). When the applicant does get to the point where they are ready to annex, we would look to put in place a trip cap that would tie the adequacy of the transportation network to the number of units they can develop. We did something similar with the Wilder Planned development in South Beach.

We are looking at what Big Creek Road should be long term as part of the Transportation System Plan update. If we can get a Harney Street Connection around the east side of Forest Park to pencil out, then that could become the vehicle route and Big Creek could become more oriented to cyclists and pedestrians. That is the nature of the feedback we are getting from the public so far.

I hope this information is helpful. Let me know if you have any other questions.

Derrick I. Tokos, AICP
Community Development Director
City of Newport
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0626 fax: 541.574.0644
d.tokos@newportoregon.gov

-----Original Message-----

From: Chris Janigo

Sent: Thursday, December 10, 2020 4:41 PM

To: Derrick Tokos <D.Tokos@NewportOregon.gov>

Subject: FW: UGB Boundary Amendment File 1-UGB-20/1-CP-20

Please see the below information request.

-----Original Message-----

From: Kristin Yuille <kristinyuille@gmail.com>

Sent: Thursday, December 10, 2020 3:07 PM

To: Chris Janigo <C.Janigo@NewportOregon.gov>

Cc: RaeAnnPettett . <mrs.pettett@gmail.com>; Andrea Larsen <DNA0713@mac.com>; lakewoodhills@hotmail.com; Lea Smith <smithlea74@yahoo.com>; lisa3159@charter.net

Subject: UGB Boundary Amendment File 1-UGB-20/1-CP-20

Mr. Janigo,

I live in the Lakewood Hills subdivision and have been reviewing the above proposal. I don't see anything mentioned about Big Creek Road and the increased traffic that will result from this development. What are the plans to address those needs?

Thanks,
Kristin Yuille

NOTICE OF A PUBLIC HEARING

CITY OF NEWPORT; This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing. The City of Newport Planning Commission will hold a public hearing on Monday, December 14, 2020, at 7:00 p.m. in the City Hall Council Chambers to review and make a recommendation to the Newport City Council on File No. 1-UGB-20/1-CP-20 as submitted by Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative), for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential. Property outside the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10. The properties are located at Tax Map 10-11-33-00, Tax Lot 100 (Site "A") and Tax Map 12-11-05-00, Tax Lot 801 (853 SE 98th St)(Site "B"). Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) Land Need: Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement. Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the Planning Commission. Written testimony sent to the Community Development (Planning) Department, City Hall, 169 SW Coast Hwy, Newport, OR 97365, must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application. Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department (address above). Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address. Contact Derrick Tokos, Community Development Director (541) 574-0626, email address d.tokos@newportoregon.gov (mailing address above). **D4 (62-04)**

**CITY OF NEWPORT
NOTICE OF A PUBLIC HEARING¹**

This meeting will be conducted by video-conference. Please contact the Community Development Department at the phone number or email listed below for options on how you can participate in the hearing.

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Newport, Oregon, will hold a public hearing on December 14, 2020, to review and make a recommendation to the Newport City Council on the following request. A public hearing before the City Council will be held at a later date.

File No.: 1-UGB-20 / 1-CP-20.

Applicant & Owners: Boston Timber Opportunities, LLC (Casey Fisher, Member) (Mercedes Serra, 3J Consulting, Inc. authorized representative).

Location/Subject Properties: Tax Map 10-11-33-00, Tax Lot 100 and Tax Map 12-11-05-00, Tax Lot 801 (853 SE 98th St).

Request: A request for a major amendment to the Newport Urban Growth Boundary, that will add approximately 43.4-acres (Site "A") and remove approximately 71.4-acres (Site "B"). Land area within the UGB that is to be removed is designated as High-Density Residential. Property outside the UGB is designated for forest uses. The change accommodates amendments to the City's Comprehensive Plan maps for the parcel being added to show the site as High Density Residential. The parcel to be removed from the UGB is intended to receive a Comprehensive Plan designation consistent with its designation on the Lincoln County Zoning map as RR-10.

Applicable Criteria: Provisions of the "Urbanization" element of the Newport Comprehensive Plan require findings regarding the following for the proposed UGB amendment: A.) **Land Need:** Establishment and change of urban growth boundaries shall be based on the following: 1.) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and 2.) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets, and roads, schools, parks and open space, or any combination of the need categories in this subsection. B.) **Boundary Location:** The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors: 1) Efficient accommodation of identified land needs; 2) Orderly and economic provision of public facilities and services; 3.) Comparative environmental, energy, economic, and social consequences; and 4.) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB. C.) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement.

Testimony: Testimony and evidence must be directed toward the request above or other criteria, including criteria within the Comprehensive Plan and its implementing ordinances, which the person believes to apply to the decision. Failure to raise an issue with sufficient specificity to afford the city and the parties an opportunity to respond to that issue precludes an appeal, including to the Land Use Board of Appeals, based on that issue. Testimony may be submitted in written or oral form. Oral testimony and written testimony will be taken during the course of the public hearing. The hearing may include a report by staff, testimony from the applicant and proponents, testimony from opponents, rebuttal by the applicant, and questions and deliberation by the Planning Commission. Written testimony sent to the Community Development (Planning) Department (address under "Reports/Materials") must be received by 2:00 p.m. the day of the hearing to be included as part of the hearing or must be personally presented during testimony at the public hearing. Pursuant to ORS 197.763 (6), any person prior to the conclusion of the initial public hearing may request a continuance of the public hearing or that the record be left open for at least seven days to present additional evidence, arguments, or testimony regarding the application.

Reports/Materials: Material related to the proposed amendment may be reviewed or a copy purchased at the Newport Community Development (Planning) Department, City Hall, 169 S.W. Coast Hwy, Newport, Oregon, 97365. Please note that this is a legislative public hearing process and changes to the proposed amendment may be recommended and made through the public hearing process and those changes may also be inspected at no cost or copies may be purchased for reasonable cost at this address.

Contact: Derrick Tokos, Community Development Director (541) 574-0626 (address above in "Reports/Materials").

Time/Place of Hearing: Monday, December 14, 2020; 7:00 p.m.; City Hall Council Chambers (address above in "Reports/Materials").

MAILED: November 23, 2020.

PUBLISHED: Friday, December 4, 2020.

¹ This notice is being sent to affected property owners within 300 feet of the subject property (according to Lincoln County tax records), affected public utilities and agencies, and affected city departments.



Site "A"
Tax Map 10-11-33-00, Tax Lot 100

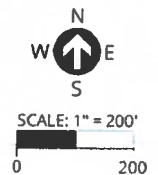


SITE NOTE

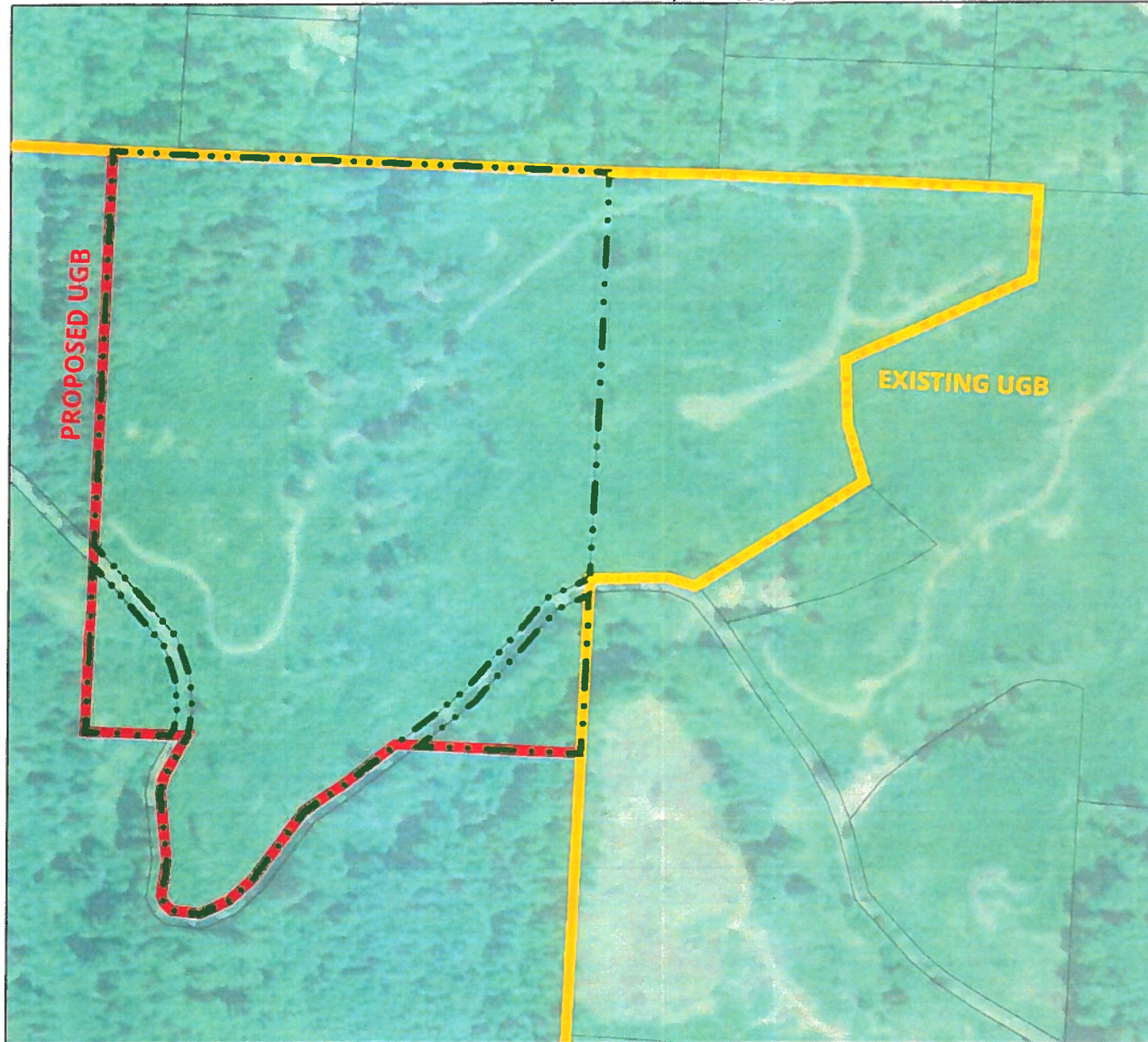
This site plan was prepared for the purpose of illustrating the potential for development of the site. It is not intended to be used for any other purpose. The site plan is based on the information provided by the client and is not a guarantee of accuracy. The site plan is subject to change without notice.

LEGEND

- DEVELOPABLE LOT AREA
21.6 ACRES
- STREAM BUFFER/STEEP SLOPES
8.4 ACRES
- POTENTIAL STREAM ALIGNMENT



Site "B"
Tax Map 12-11-05-00, Tax Lot 801

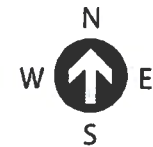


EXISTING ZONING | COMP PLAN DESIGNATION

71 RURAL RESIDENTIAL (RR 10) |
ACRES HIGH DENSITY RESIDENTIAL (HDR)

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



HANCOCK UGB ADJUSTMENT

UGB AMENDMENT EXHIBIT

3J CONSULTING

CIVIL ENGINEERING, WATER RESOURCES, LAND USE PLANNING

SEPTEMBER 2020

ARNSDORF JOSEPH A &
ARNSDORF JESSICA L
1220 NE LAKEWOOD DR
NEWPORT, OR 97365

BAKER CARL F &
BAKER DIAN G
2935 NE LISI PL
NEWPORT, OR 97365

BARBER JERRY LEE &
BARBER SANDRA LEE
2930 NE LISI PL
NEWPORT, OR 97365

BODENSTAB MARK R &
BODENSTAB DORIS
7836 E BRALTON DR
NAMPA, ID 83686

HANCOCK FOREST MGMT
ATTN: CASEY FISHER
17700 SE MILL PLAIN BLVD
STE 180
VANCOUVER, WA 98683

BOYS DAVID A II &
BOYS LEILA M
1250 NE LAKEWOOD DR
NEWPORT, OR 97365

BRAXLING ARTHUR &
BRAXBEACH LLC
PO BOX 240
NEWPORT, OR 97365

BRUNELLE LAWRENCE W &
BRUNELLE CLAUDIA J
1150 NE LAKEWOOD DR
NEWPORT, OR 97365

BURTON LYNSEY
1200 NE LAKEWOOD DR
NEWPORT, OR 97365

CAUDURO RAYMOND &
CAUDURO PATRICIA A
1090 NE LAKEWOOD DR
NEWPORT, OR 97365

CENTRAL LINCOLN PUD
ATTN BRIAN BARTH
MGR ACCT & FINANCE
PO BOX 1126
NEWPORT, OR 97365

CITY OF NEWPORT
ATTN MINOR J CHRISTOPHER
236 W OLIVE ST
NEWPORT, OR 97365

CITY OF NEWPORT
CITY MANAGER
169 SW COAST HWY
NEWPORT, OR 97365

DUNSCOMB KATHRYN M TRUSTEE &
MARTIN TERENCE R TRUSTEE
ATTN RAMONA MARTIN
4100 N COAST HWY
NEWPORT, OR 97365

ETHERINGTON ROBERT C &
ETHERINGTON LINDA A
3249 NE BIG CREEK RD
NEWPORT, OR 97365

FERRIS WILLARD STUART &
FERRIS PETER K &
FERRIS KATHERINE
415 SE 98TH CT
SOUTH BEACH, OR 97366

GOODPASTURE KATHERINE E
415 SE 98TH CT
SOUTH BEACH, OR 97366

HESLEN AMIE L &
MARSHALL HEATH
1215 NE LAKEWOOD DR
NEWPORT, OR 97365

INGALLS DONNE J &
INGALLS KELSEY A
1235 NE LAKEWOOD DR
NEWPORT, OR 97365

JOHN HANCOCK LIFE INSUR CO
ATTN HANCOCK FOREST MGMT
17700 SE MILL PLAIN BLVD
STE 180
VANCOUVER, WA 98683

KEPLER RICHARD ALLEN
1175 NE LAKEWOOD DR
NEWPORT, OR 97365

KLAY JONATHAN MARK &
KLAY FREDRIKA
20143 47TH AVE NE
LK FOREST PK, WA 98155

LAKEWOOD HILLS INC
810 SE 5TH ST
NEWPORT, OR 97365

LC APARTMENTS LLC
1231B STATE ST
SANTA BARBARA, CA 93101

LEE DAVID J &
LEE ROSALINE H
PO BOX 2226
NEWPORT, OR 97365

LETTENMAIER TERRANCE M &
WEITKAMP LAURIE A
PO BOX 550
SOUTH BEACH, OR 97366

MERWIN PAMELA D COTTEE &
ROEBBER SUSAN COTTEE &
VANGORP ALISON COTSTEE
1135 NE LAKEWOOD DR
NEWPORT, OR 97365

NELSON NICKOLAS R
466 WASKOW DR
SAN JOSE, CA 95123

PEDERSON JOEL W
16151 SHELLCRACKER RD
JACKSONVILLE, FL 32226

PETTETT JAMES W &
PETTETT MICHELLE R
1080 NE LAKEWOOD DR
NEWPORT, OR 97365

PORCH ROBERT R
1100 NE LAKEWOOD DR
NEWPORT, OR 97365

RANDALL MARGARET J
840 S RANCHO DR
#4-409
LAS VEGAS, NV 89106

ROLL JOHN R &
ROLL NINA R
2930 NE KLAMATH PL
NEWPORT, OR 97365

RYAN REATHA L TSTEE
1155 NE LAKEWOOD DR
NEWPORT, OR 97365

SAVARA VIKRAM C TSTEE &
SAVARA NALINI V TSTEE
772 SW BROADWAY DR #2
PORTLAND, OR 97201

SELICH JACK M &
SELICH JUDITH N
PO BOX 358
SOUTH BEACH, OR 97366

SENN JAMES A &
SENN JONG SOON
8450 SW MARINE VIEW ST
SOUTH BEACH, OR 97366

SHAMAS RICHARD A &
SHAMAS IRIS T
6821 SYLVIA DR
HUNTINGTON BEACH, CA 92647

SLAYDEN CONSTRUCTION GROUP INC
PO BOX 247
STAYTON, OR 97383

SMITH ROBERT &
SMITH LEA
1240 NE LAKEWOOD DR
NEWPORT, OR 97365

STEEL STRING INC
2712 SE 20TH AVE
PORTLAND, OR 97202

STUDLEY DAVID J &
STUDLEY PAULETTE L
1185 NE LAKEWOOD DR
NEWPORT, OR 97365

TODD EDWARD L &
TODD SYDNEY E
337 NE SAN-BAY-O CIR
NEWPORT, OR 97365

WALKER STEPHEN D TSTEE &
WALKER CHRISTIE H TSTEE
1225 NE LAKEWOOD DR
NEWPORT, OR 97365

WEATHERS KAREN A
876 CHURCH ST
WOODBURN, OR 97071

WENELL GARY W TSTEE &
WENELL PAULA C TSTEE
620 124TH ST SW APT 29
EVERETT, WA 98204

WOODARD LISA A
1255 NE LAKEWOOD DR
NEWPORT, OR 97365

WOODLEY MICHAEL H &
WOODLEY WINNIFRED J
PO BOX 664
PRINEVILLE, OR 97754

WYNDHAVEN RIDGE LLC
PO BOX 247
STAYTON, OR 97383

YUILLE KRISTIN H &
GREEN NATHAN R
1245 NE LAKEWOOD DR
NEWPORT, OR 97365

ZEISER STEVEN K &
ZEISER KATHERINE K
3511 E 3RD ST
LONG BEACH, CA 90814

CAMERON LA FOLLETTE
OREGON COAST ALLIANCE
PO BOX 857
ASTORIA, OR 97103

SEAN T MALONE
ATTORNEY AT LAW
259 E FIFTH AVE, SUITE 200-C
EUGENE, OR 97401

3J CONSULTING, INC
ATTN: ANDREW TULL
9600 SW NIMBUS AVE, SUITE 100
BEAVERTON, OR 97008

DAVE & ANDREA LARSEN
Email: dna0713@mac.com

MICHEAL ROBINSON
SCHWABE, WILLIAMSON AND WYATT
1211 SW 5TH AVE, SUITE 1900
PORTLAND, OR 97204

File 1-UGB-20 / 1-CP-20

Adjacent Property Owners Within
300 Feet

Sherri Marineau

From: Sherri Marineau
Sent: Monday, November 23, 2020 10:26 AM
To: 'odotr2planmgr@odot.state.or.us'; 'lisa.phipps@state.or.us'
Subject: Urban Growth Boundary Amendment File 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - PC.pdf

Attached is a notice concerning a land use request. The notice contains an explanation of the request, a property description and map, and a date for the public hearing. Please review this information to see if you would like to make any comments. We must receive comments prior to the last day of the comment period in order for them to be considered. **Should no response be received, a "no comment" will be assumed.**

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



Sherri Marineau

From: Sherri Marineau
Sent: Monday, November 23, 2020 10:01 AM
To: 'legals@newportnewstimes.com'; 'nlane@newportnewstimes.com'
Subject: Notice of Public Hearing-Publish on Friday, December 4, 2020 File No. 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - Publish -PC.doc

Natalie,

Here is a Notice of Public Hearing that I need to have published in your **Friday, December 4, 2020** publication. **Please send me a proof of the publication to review.**

Also, let me know if you can accommodate this publication date and if you need anything further.

Regards,

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



Sherri Marineau

From: Sherri Marineau
Sent: Monday, November 23, 2020 10:26 AM
To: Derrick Tokos; Spencer Nebel; Robert Murphy; Michael Murzynsky; Joseph Lease; Jason Malloy; Laura Kimberly; Michael Cavanaugh; Beth Young; Clare Paul; Chris Janigo
Subject: Urban Growth Boundary Amendment File 1-UGB-20 / 1-CP-20
Attachments: File 1-UGB-20--1-CP-20 Notice - PC.pdf

Attached is a notice concerning a land use request. The notice contains an explanation of the request, a property description and map, and a date for the public hearing. Please review this information to see if you would like to make any comments. We must have your comments at least 10 days prior to the hearing period in order for them to be considered. **Should no response be received, a "no comment" will be assumed.**

Sherri Marineau
City of Newport
Community Development Department
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0629 fax: 541.574.0644
s.marineau@newportoregon.gov



**SURVEY PREPARED FOR
HANCOCK TIMBER RESOURCE GROUP
LOCATED IN THE NW 1/4
SECTION 33, T10S, R11W, W.M.
LINCOLN COUNTY, OREGON**

APRIL 17, 2019
(10-11-33 TAX LOT 100)
"RESERVOIR SURVEY"

LINE TABLE

LINE	BEARING	DISTANCE
L1	S89°28'06"W	27.17'
L2	S89°05'30"W	110.07'
L3	S89°01'55"W	89.81'
L4	S89°09'34"W	90.13'
L5	S89°11'00"W	90.30'
L6	S89°04'10"W	89.83'
L7	S89°08'12"W	59.99'
L8	S89°07'34"W	60.00'
L9	N89°45'03"W	20.56'
L10	N00°18'05"W	49.97'
L11	N84°28'40"E	2.65'

(C.S. 15,977)

(L10) N00°24'14"W 50.00'

LEGEND

- MONUMENT SET: 5/8" X 30" RE-BAR WITH YELLOW PLASTIC CAP MARKED "NYHUS SURVEYING"
- ▲ MONUMENT FOUND: HELD FOR CONTROL, AS NOTED
- () RECORD INFORMATION, AS NOTED
- [] RECORD: BOOK 13, PAGE 19
"LAKEWOOD HILLS PHASE 2 / REPLAT"

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Gary Keith Nyhus
OREGON
JULY 28, 1991
GARY KEITH NYHUS
2516

RENEWAL DATE:
DEC. 31, 2020

0 100 200 300
SCALE IN FEET

NYHUS SURVEYING INC.
GARY NYHUS / STEVEN NYHUS / ERIC NYHUS

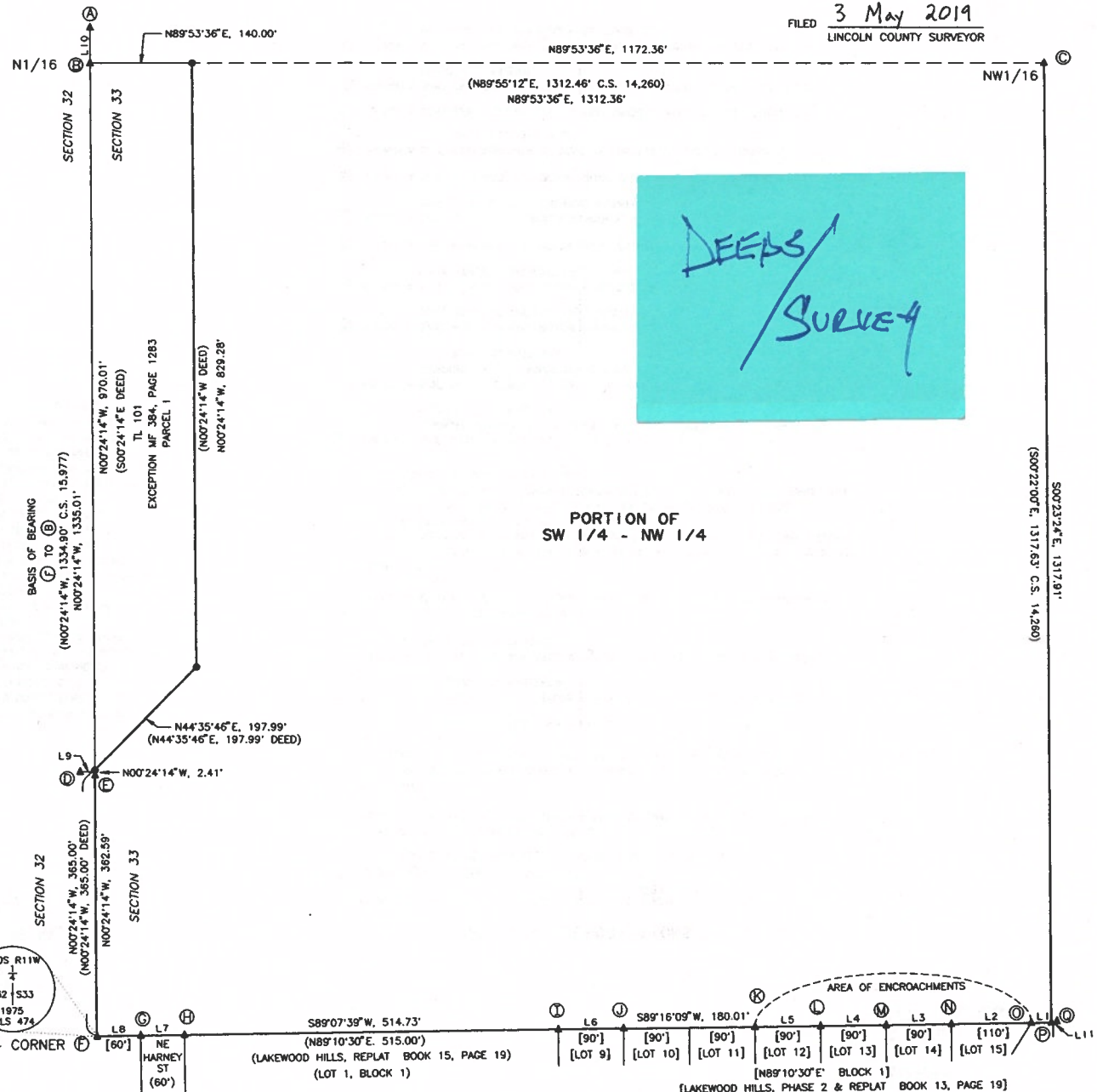
PROFESSIONAL LAND SURVEYORS
P.O. BOX 206
740 E. THISSELL RD. TIDEWATER, ORE 97330
(541) 528-3234

DRAWN BY: CM MAPPING - GREG MURRY - (541) 528-7082 / 20AASRV

CHECKED BY: GKN
DRAWN BY: GAM
DATE: 4-17-2019
SCALE: 1" = 100'
PROJECT: 19075

T10S R11W
S32 S33
1975
RLS 474

1/4 CORNER (F)
NE
HARNEY
ST
(60°)



C.S. # 20889
FILED 3 May 2019
LINCOLN COUNTY SURVEYOR

PORTION OF
SW 1/4 - NW 1/4

DEEDS
/ SURVEY

AREA OF ENCROACHMENTS
[LOT 9] [LOT 10] [LOT 11] [LOT 12] [LOT 13] [LOT 14] [LOT 15]
[N89°10'30"E BLOCK 1]
[LAKEWOOD HILLS, PHASE 2 & REPLAT BOOK 13, PAGE 19]

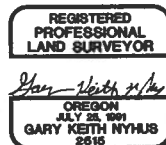
SURVEY PREPARED FOR
HANCOCK TIMBER RESOURCE GROUP
LOCATED IN THE NW 1/4
SECTION 33, T10S, R11W, W.M.
LINCOLN COUNTY, OREGON

APRIL 17, 2019
(10-11-33 TAX LOT 100)
"RESERVOIR SURVEY"

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO LOCATE AND MARK THE CORNERS OF A PORTION OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33, TOWNSHIP 10 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, EXCEPTING THE TRACT DESCRIBED AS "PARCEL 1" LINCOLN COUNTY MICROFILM VOLUME 384, PAGE 1283, AS SHOWN ON THE ACCOMPANYING PLAT. MONUMENTS FROM LINCOLN COUNTY SURVEYS 6398, 11747, 14260, 15830, AND 15977, AS WELL AS MONUMENTS FROM "LAKEWOOD HILLS PHASE 2" AND A REPLAT OF A PORTION OF "LAKEWOOD HILLS PHASE 2" (PLAT BOOK 15, PAGE 19) WERE FOUND AND HELD TO CONTROL THIS SURVEY. TWO ADDITIONAL MONUMENTS WERE FOUND AND ARE BELIEVED TO BE PART OF A SURVEY IN PROGRESS FOR A NEIGHBORING TRACT AS THEY APPEAR TO BE VERY RECENTLY SET. THE BOUNDARIES OF "PARCEL 1" IN MF 384, PAGE 1283 THAT ARE WITHIN THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33 WERE THEN CALCULATED AND SET BY HOLDING DEED RECORD ANGLES AND DISTANCES OFF OF THE WEST LINE OF SECTION 33. THE EASTERLY BOUNDARY OF THIS PARCEL WAS THEN INTERSECTED WITH THE NORTH LINE OF SAID SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND MONUMENTED AS SHOWN. THE NORTHERN PORTION OF "LAKEWOOD HILLS PHASE 2" OVERLAPS WITH THE SOUTHERLY BOUNDARY OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33 AS SHOWN ON C.S. 14,260. BESIDES THIS OVERLAP, THERE ARE NUMEROUS ENCROACHMENTS UP TO 50 FEET NORTHERLY ACROSS THE LINES OF LOTS 12, 13, 14, AND 15 OF "LAKEWOOD HILLS, PHASE 2". THESE ENCROACHMENTS INCLUDE WOVEN WIRE FENCES, CHAIN LINK FENCES, OUTBUILDINGS, DECKS, ETC.. BEARINGS, AS SHOWN, ARE BASED ON C.S. 15,977 RECORD BETWEEN MONUMENTS (B) AND (F). THIS SURVEY WAS PERFORMED USING A LEICA TS11 TOTAL STATION (3" ANGULAR PRECISION, 1 MM ± 1.5 PPM DISTANCE PRECISION) AS WELL AS A LEICA GS14 GNSS RECEIVER.

FIELD CREW
GARY NYHUS
ERIC NYHUS
STEVEN NYHUS
DANIEL ALVARADO



RENEWAL DATE:
DEC. 31, 2020

0 100 200 300
SCALE IN FEET

NYHUS SURVEYING INC.		CHECKED BY: GKN
GARY NYHUS / STEVEN NYHUS / ERIC NYHUS		DRAWN BY: GAM
PROFESSIONAL LAND SURVEYORS P.O. BOX 206 740 E. THISSELL RD. TIDEWATER, ORE 97390 (541) 528-3234		DATE: 4-17-2019
		SCALE: 1" = 100'
		PROJECT: 19075
DRAWN BY: GM MAPPING -GREG MURRY- (541) 528-7062 / 20AASRV		

C.S. # 20889
FILED 3 May 2019
LINCOLN COUNTY SURVEYOR

MONUMENT DESCRIPTIONS

- (A) FOUND: A 5/8" IRON ROD, 0.7' ABOVE GRADE (C.S. ~~8462~~ 15977)
- (B) NORTH 1/16 CORNER TO SECTIONS 32 & 33
FOUND: A 5/8" IRON ROD, 0.1' ABOVE GRADE (C.S. 15,977)
- (C) NORTHWEST 1/16 CORNER SECTION 33
FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "IE ENG", 0.1' ABOVE GRADE (C.S. 14,260)
FROM WHICH:
A 38" HEMLOCK WITH A HEALED BLAZE BEARS S 70° W, 23.7' (C.S. 14,260)
A ROTTED 8" ALDER STUB, 1.5' HIGH, BEARS S 74° E, 34.9' (C.S. 14,260)
NEW:
A 16" ALDER, BARKSCRIBED "NW 1/16 S33 8T", BEARS S 70° E, 31.7'
- (D) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "FERGUSON PLS 2279", FLUSH (SURVEY IN PROGRESS)
- (E) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "FERGUSON PLS 2279", FLUSH (SURVEY IN PROGRESS)
- (F) 1/4 CORNER TO SECTIONS 32 & 33
FOUND: A 2" IRON PIPE WITH A 2" BRASS CAP, MARKED AS SHOWN, 0.2' ABOVE GRADE (C.S. 6398)
FROM WHICH:
A 12" HEMLOCK SNAG, 8' HIGH, WITH A ROTTED FACE BEARS N 79° E, 62.1' (C.S. 1471)
A 2" ALUMINUM CAP MARKED "LINCOLN COUNTY RM, S45W, 53.6', S33, 1999", FLUSH, BEARS N 46° 13' E, 53.57' (C.S. 15,830)
A BENT 5/8" IRON ROD, FLUSH, BEARS S 45° 35' W, 21.41' (C.S. 15,830)
AN 18" POWER POLE "C3320038", WHICH IS THE WESTERLY POLE OF A DOUBLE POLE STRUCTURE, BEARS N 5° W, 107.1'
- (G) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "DENISON SURV NEWPORT OR", 0.1' ABOVE GRADE ("REPLAT OF/LAKEWOOD HILLS PHASE 2" PLAT BOOK 15, PAGE 19)
- (H) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "DENISON SURV NEWPORT OR", 0.2' ABOVE GRADE ("REPLAT OF/LAKEWOOD HILLS PHASE 2" PLAT BOOK 15, PAGE 19)
- (I) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 1.0' ABOVE GRADE ("LAKEWOOD HILLS PHASE 2")
- (J) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 0.7' ABOVE GRADE ("LAKEWOOD HILLS PHASE 2")
- (K) FOUND: A 5/8" IRON ROD, 0.6' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (L) FOUND: A BENT RUSTED 1/2" IRON ROD WITH YELLOW PLASTIC CAP MARKED "HOWELL LS 1994", 1.0' ABOVE GRADE (C.S. 11,747)
- (M) FOUND: A 5/8" IRON ROD, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (N) FOUND: A 5/8" IRON ROD WITH ILLEGIBLE YELLOW PLASTIC CAP, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (O) FOUND: A BENT 5/8" IRON ROD, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (P) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "IE ENG", 0.3' BELOW GRADE (C.S. 14,260)
- (Q) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 0.4' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")

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After recording return to:
Tony J. St-enkolk, Esq.
Legal Department -- Real Estate
Boise Cascade, L.L.C.
P.O. Box 50
Boise, ID 83728-0001

Until a change is requested, all tax statements shall
be sent to Grantee at the following address:

Boise Northwest Oregon Land & Timber, L.L.C.
c/o Boise Building Solutions Manufacturing, L.L.C.
Accounting (Tax) Department
3285 North Pacific Highway
P.O. Box 100
Medford, OR 97501-0203

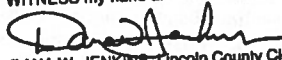
GRANTOR: Boise Cascade Corporation

GRANTEE: Boise Northwest Oregon Land &
Timber, L.L.C.

STATE OF OREGON } ss.
County of Lincoln

46 Pages

I, Dana W. Jenkins, County Clerk, in and for said county, do hereby
certify that the within instrument was received for record, and
recorded in the Book of Records of said county at Newport, Oregon.
WITNESS my hand and seal of said office affixed.


DANA W. JENKINS, Lincoln County Clerk



Doc : 200416962
Rect: 407986 271.00
11/05/2004 03:56:47pm

STATUTORY SPECIAL WARRANTY DEED

Recorded by First American
Title Insurance Co.
Order # 403818

(Lincoln County, Oregon)
(Site No. 6-3)

BOISE CASCADE CORPORATION, a Delaware corporation, having an address of 1111 West
Jefferson Street, Boise, Idaho 83728, ("Grantor"), conveys and specially warrants to **BOISE NORTHWEST
OREGON LAND & TIMBER, L.L.C.**, a Delaware limited liability company, having an address of 1111 West
Jefferson Street, Boise, Idaho 83728 ("Grantee"), the real property in Lincoln County, Oregon, more
particularly described on Exhibit A attached hereto and by this reference incorporated herein (the "Real
Property"), free of encumbrances except as specifically set forth herein.

TOGETHER with all right, title and interest, if any, of Grantor in and to any streets and roads abutting
the Real Property to the center lines thereof, and all access rights of Grantor in and to the Property (collectively,
the "Access Rights"); and

TOGETHER with the hereditaments and appurtenances and all the estate and rights of Grantor in and
to the Real Property, including, without limitation, timber rights, mineral rights and water rights (collectively,
the "Property Rights"), and together with the Real Property and Access Rights, the "Property";

SUBJECT only to taxes, assessments and other governmental charges not yet delinquent, and the
following exceptions, none of which, individually or in the aggregate, materially impair the current use (or
materially detract from the value as currently used) of the Property: (i) mechanic's, workmen's, repairmen's,
warehousemen's, carriers, or other like liens arising or incurred in the ordinary course of business for amounts
which are not yet delinquent; (ii) easements, quasi-easements, licenses, covenants, rights-of-way and other
similar restrictions, including any other agreements, conditions, restrictions or other matters which would be
shown by a current title report or other similar report or listing; (iii) any conditions that may be shown by a

(\\BO005FILE2\DATAROOM\Closing\deed:DEED:00154737:)

(DWS) NCS-96050-26117

current survey, title report or physical inspection; (iv) zoning, building and other similar restrictions; and (v) such encroachments, boundary line disputes, access restrictions or absence of access, adverse possession claims, easements, covenants, use restrictions, zoning restrictions and other third-party rights which are common to commercial timberlands (collectively, the "Permitted Exceptions").

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

The true and actual consideration for this transfer is \$99,496,977.00.

(Signatures on Next Page)

DATED: October 24, 2004

BOISE CASCADE CORPORATION, a
Delaware corporation

By: _____

Name: _____

Its: _____

Stanley Bell
Stanley Bell

SENIOR VICE PRESIDENT

WITNESS:

By: _____

Name: _____

By: _____

Name: _____

Barbara Thomas

Barbara Thomas

Gae Burton

Gae Burton

Corporate Seal



ATTEST:

By: _____

Name: _____

Its: _____

JS Munson

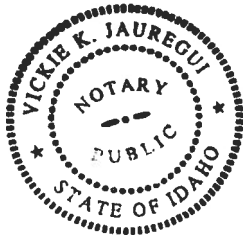
JS Munson

Assistant Secretary

STATE OF IDAHO)
) ss.
COUNTY OF ADA)

On this 29th day of October 2004, before me, the undersigned, a notary public in
and for said state, personally appeared Stanley Bell
and JS Humson, known to me to be
the Senior Vice President and Assistant Secretary, respectively,
of Boise Cascade Corporation, a Delaware corporation, that executed the above instrument on
behalf of said corporation and acknowledged to me that said corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official
seal the day and year in this certificate first above written.



Vickie K. Jauregui
NOTARY PUBLIC FOR IDAHO

Residing at: Boise, Idaho

My Commission Expires: 8/18/05

EXHIBIT A
LEGAL DESCRIPTION OF REAL PROPERTY

Timberlands
Lincoln County, Oregon
NCS96650 Local No. 7119-403818
Site No. 6-3-5-2

EXHIBIT A
LEGAL DESCRIPTION

PARCEL 1: 6-9-600

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 6 SOUTH, RANGE 9 WEST WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 2: 6-9-800

A STRIP OF LAND 100 FEET IN WIDTH, BEING 50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE, TO-WIT: BEGINNING AT A POINT ON THE SECTION LINE BETWEEN SECTIONS 15 AND 22 IN TOWNSHIP 6 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; SAID BEGINNING POINT BEING 1336 FEET EAST OF THE NORTHWEST CORNER OF SECTION 22, TOWNSHIP 6 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN; RUNNING THENCE SOUTH 33° 30' EAST A DISTANCE OF 200 FEET; THENCE SOUTH 25° 30' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 9° 0' EAST A DISTANCE OF 370 FEET; THENCE SOUTH 38° 45' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 51° 0' EAST A DISTANCE OF 185 FEET; THENCE SOUTH 24° 0' EAST A DISTANCE OF 300 FEET; THENCE SOUTH 30° 0' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 44° 0' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 54° 45' EAST A DISTANCE OF 165 FEET; THENCE SOUTH 38° 0' EAST A DISTANCE OF 200 FEET; THENCE SOUTH 33° 15' EAST A DISTANCE OF 300 FEET; THENCE SOUTH 35° 0' EAST A DISTANCE OF 200 FEET; THENCE SOUTH 9° 30' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 16° 45' EAST A DISTANCE OF 100 FEET; THENCE SOUTH 9° 0' EAST A DISTANCE OF 200 FEET; THENCE SOUTH 8° 0' EAST A DISTANCE OF 250 FEET; THENCE SOUTH 15° 0' EAST A DISTANCE OF 250 FEET; THENCE SOUTH 38° 15' EAST A DISTANCE OF 30 FEET TO THE QUARTER SECTION LINE RUNNING EAST AND WEST THROUGH SAID SECTION 22, AT A POINT 35 FEET WEST OF THE HUB OF SECTION 22, TOWNSHIP 6 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 3: 6-9-900

LOTS 1 AND 2 AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 6 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN; AND THE SOUTH ONE-HALF OF SECTION 22 TOWNSHIP 6 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN; LOTS 1, 2, 3, 4 AND THE SOUTH ONE HALF OF THE NORTH ONE HALF OF SECTION 23; AND THE SOUTH ONE-HALF OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, ALL IN LINCOLN COUNTY, OREGON.

PARCEL 4: 6-9-1300

THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 6 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 5: 6-9-1400

THE NORTHWEST QUARTER AND THE SOUTH ONE HALF OF SECTION 27; THE EAST ONE-HALF OF SECTION 28; THE EAST ONE-HALF OF THE EAST ONE-HALF OF SECTION 32; THE NORTH ONE-HALF AND THE SOUTHWEST QUARTER OF SECTION 33; THE NORTH ONE-HALF AND THE SOUTHWEST QUARTER OF SECTION 34, ALL IN TOWNSHIP 6 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 6: 6-9-2200

{\\BO005\\FILE2\\DATAROOM\\Closing\\Legal\\LEGAL:00166004:}

EXHIBIT A
Page 1

THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 6 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

PARCEL 7: 6-10-31C-1204

ALL OF THAT LAND IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 6 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING SOUTHERLY OF THE NORTH EDGE OF A ROADWAY, THE CENTERLINE OF WHICH IS DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE TOWNSHIP LINE, SAID POINT BEING A DISTANCE OF 565.0 FEET NORTH 89° 35' EAST OF THE TOWNSHIP CORNER COMMON TO TOWNSHIPS 6 SOUTH AND 7 SOUTH, AND RANGES 10 WEST AND 11 WEST; THENCE NORTH 31° 52' EAST FOR A DISTANCE OF 14.4 FEET; THENCE ON A 40 DEGREE CURVE TO THE RIGHT THROUGH AN ANGLE OF 38° 10' FOR A DISTANCE OF 95.4 FEET; THENCE NORTH 70° 02' EAST FOR A DISTANCE OF 211.6 FEET; THENCE ON A 40 DEGREE CURVE TO THE LEFT THROUGH AN ANGLE OF 30° 42' FOR A DISTANCE OF 76.8 FEET; THENCE NORTH 39° 20' EAST FOR A DISTANCE OF 4.4 FEET; THENCE ON A 30 DEGREE CURVE TO THE RIGHT THROUGH AN ANGLE OF 34° 33' FOR A DISTANCE OF 115.2 FEET; THENCE NORTH 73° 52' EAST FOR A DISTANCE OF 7.8 FEET; THENCE ON A 30 DEGREE CURVE TO THE RIGHT THROUGH AN ANGLE OF 39° 22' FOR A DISTANCE OF 131.2 FEET; THENCE SOUTH 66° 46' EAST FOR A DISTANCE OF 26.6 FEET, MORE OR LESS, OVER AND ACROSS THE EAST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 31 TO A POINT, SAID POINT BEING A DISTANCE OF 203.1 FEET NORTH 0° 38' WEST OF THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 31.

PARCEL 8: 6-10-31C-1300

BEGINNING AT THE QUARTER SECTION CORNER ON THE SOUTH LINE OF SECTION 31, TOWNSHIP 6 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, LINCOLN COUNTY, OREGON; THENCE NORTH 30 RODS ON THE EAST LINE OF THE SOUTHWEST QUARTER IN SAID SECTION 31; THENCE WEST 80 RODS; THENCE SOUTH 30 RODS TO THE SOUTH LINE OF SAID SECTION; THENCE EAST ON SAID SOUTH LINE, 80 RODS TO THE POINT OF BEGINNING. EXCEPTING ANY PORTION OUTSIDE THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 31.

PARCEL 9: 7-9-400

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 7 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 10: 7-9-800

LOT 4 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; LOTS 2 AND 3 AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 4, TOWNSHIP 7 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 11: 7-9-900, 901 AND 1001

LOT 1 AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; LOTS 2 AND 3, THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER; THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE WEST ONE-HALF OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 12: 7-9-1201

EXHIBIT A
Page 2

ALL THAT PORTION OF GOVERNMENTS LOTS 2, 3 AND 4, IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING SOUTH OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EAST BOUNDARY OF LOT 2, WHICH IS 871 FEET SOUTH OF THE NORTHEAST CORNER; THENCE NORTH 81° 30' WEST 150 FEET; THENCE NORTH 69° 15' WEST 292 FEET; THENCE NORTH 68° 45' WEST 155 FEET; THENCE NORTH 82° 30' WEST 200 FEET; THENCE SOUTH 80° 20' WEST 140 FEET; THENCE SOUTH 77° 10' WEST 100 FEET; THENCE SOUTH 84° 30' WEST 200 FEET; THENCE SOUTH 83° 30' WEST 200 FEET; THENCE SOUTH 62° 30' WEST 250 FEET; THENCE SOUTH 63° 20' WEST 185 FEET; THENCE NORTH 80° 45' WEST 326 FEET; THENCE NORTH 65° 40' WEST 120 FEET; THENCE SOUTH 86° 50' WEST 200 FEET; THENCE NORTH 82° 40' WEST 180 FEET; THENCE SOUTH 82° 15' WEST 483 FEET; THENCE SOUTH 72° 15' WEST 120 FEET; THENCE WEST 108 FEET TO A POINT WHICH IS THE WEST SIDE OF LOT 4, 937.4 FEET SOUTH OF THE NORTHWEST CORNER OF SECTION 6.

PARCEL 13 : 7-9-5200 & 7600

ALL OF SECTIONS 25 AND 36, TOWNSHIP 7 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 14: 7-10-900

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 16, TOWNSHIP 7 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 15: 7-10-1100

LOTS 3 AND 4; THE EAST ONE-HALF OF THE SOUTHWEST QUARTER; AND THE SOUTHEAST QUARTER, ALL IN SECTION 18, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 16: 7-10-1200

THE NORTH ONE-HALF OF THE NORTHWEST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 17: 7-10-1500

THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 7 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 18: 7-10-2000

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 19: 7-10-2100

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 20: 7-10-2-700

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 21: 7-10-6-500

U.S. LOT 7; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO BRUCE H. MATLACK, ET UX BY DEED RECORDED DECEMBER 17, 1987 IN MICROFILM VOLUME 188, PAGE 1308, LINCOLN COUNTY RECORDS.

ALSO, LOTS 2, 3 AND 4, SECTION 6, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO JAMES W. LEE, ET UX BY DEED RECORDED APRIL 6, 1970 IN MICROFILM VOLUME 17, PAGE 1977, LINCOLN COUNTY RECORDS.

ALSO, THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, EXCEPT THE FOLLOWING:

FIFTEEN FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE TO-WIT: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN SAID COUNTY, WHICH CORNER IS SO DESIGNATED BY U.S. FOREST SERVICE MARKER; THENCE PROCEEDING NORTHERLY ALONG LINE BETWEEN SECTIONS 5 AND 6, A DISTANCE OF 320 FEET TO A LOGGING ROAD BEARING NORTH 71° WEST, 160 FEET; THENCE NORTH 3° WEST, 85 FEET; THENCE NORTH 46° EAST, 251 FEET; THENCE NORTH 7° EAST, 90 FEET; THENCE NORTH 12° WEST, 80 FEET; THENCE NORTH 4° WEST, 136 FEET; THENCE NORTH 30° WEST, 167 FEET; THENCE NORTH 15° WEST, 126 FEET; THENCE NORTH 38° WEST, 128 FEET; THENCE NORTH 57° WEST, 70 FEET; THENCE SOUTH 84° WEST, 158 FEET; THENCE SOUTH 85° WEST, 75 FEET; THENCE NORTH 85° WEST, 181 FEET; THENCE SOUTH 72° WEST, 382 FEET; THENCE NORTH 60° WEST, 65 FEET; THENCE NORTH 15° EAST, 187 FEET; THENCE NORTH 00°, 100 FEET; THENCE NORTH 25° EAST, 114 FEET; THENCE NORTH 14° EAST, 381 FEET; THENCE NORTH 39° EAST, 231 FEET; THENCE NORTH 15° EAST, 100 FEET; THENCE NORTH 20° EAST, 133 FEET; THENCE NORTH 10° EAST, 151 FEET; THENCE NORTH 64° WEST, 132 FEET, WHICH POINT IS WESTERLY 491 FEET FROM THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 22: 7-10-12-500

THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER AND THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 23: 7-10-19-100

LOT 1 AND 23 THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 24: 7-10-19-1000

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THE NORTH ONE HALF OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 25: 7-10-19-900

U.S. GOVERNMENT LOTS 2, 3 AND 4 IN SECTION 19, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

SAVE AND EXCEPT THAT PORTION THEREOF LYING WITHIN THE BOUNDARIES OF COUNTY ROAD NO. 106;

AND FURTHER SAVE AND EXCEPT THE FOLLOWING DESCRIBED TRACT OF LAND, TO-WIT: BEGINNING AT THE NORTHEAST CORNER OF U.S. GOVERNMENT LOT 4 IN SAID SECTION 19; THENCE WEST ALONG THE NORTH LINE OF LOT 4, 560 FEET; THENCE SOUTH 935 FEET; THENCE EAST 180 FEET TO SCHOONER CREEK; THENCE NORTHERLY ALONG SCHOONER CREEK TO A POINT THAT IS 250 FEET SOUTH AND 180 FEET EAST OF THE POINT OF BEGINNING; THENCE SOUTH 50 FEET; THENCE EAST 480 FEET; THENCE NORTH 300 FEET TO THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 19; THENCE WEST ALONG SAID NORTH LINE 660 FEET TO THE POINT OF BEGINNING.

PARCEL 26: 7-10-19-408

THAT PART OF SECTION 19, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 19; THENCE WEST, 900 FEET, MORE OR LESS, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER TO A POINT WHICH IS 413 FEET EAST OF THE NORTHEAST CORNER OF GOVERNMENT LOT 4, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF PARCEL 1 AS DESCRIBED IN DEED TO TERRANCE-KIRBY-BLAIR, ET UX, RECORDED OCTOBER 13, 1977 IN VOLUME 80, PAGE 446, FILM RECORDS; THENCE NORTH 208.7 FEET; THENCE WEST 65 FEET, MORE OR LESS, TO THE SOUTHEAST CORNER OF PARCEL 2 AS DESCRIBED IN DEED TO DAVID STANNARD, ET UX, RECORDED DECEMBER 13, 1978 IN VOLUME 95, PAGE 1102, FILM RECORDS; THENCE NORTH 427.54 FEET ALONG THE EAST LINE OF PARCELS 2 AND 3 OF THE SAID DEED TO STANNARD TO THE NORTHEAST CORNER OF THE SAID PARCEL 3; THENCE WESTERLY FOLLOWING THE NORTH LINE OF THE LAST MENTIONED STANNARD PARCEL, 117.7 FEET TO A POINT; THENCE NORTH 24° WEST, 101.8 FEET TO A POINT; THENCE NORTH 03° WEST, 114.7 FEET TO A POINT; THENCE NORTH 42 1/2° EAST, 94.2 FEET TO A POINT; THENCE NORTH 64° EAST, 97.5 FEET TO A POINT; THENCE NORTH 14° WEST, 91.9 FEET TO A POINT; THENCE NORTH 57° EAST, 156.3 FEET TO A POINT; THENCE NORTH 35° EAST, 92.7 FEET TO A POINT; THENCE NORTH 49 1/2° EAST, 135.0 FEET TO A POINT; THENCE NORTH 64° WEST, 108 FEET, MORE OR LESS, TO THE CENTERLINE OF SCHOONER CREEK; THENCE IN A NORTHEASTERLY DIRECTION ALONG SAID CENTERLINE TO A POINT THAT IS WEST OF THE MOST WESTERLY CORNER OF THE TRACT DESCRIBED IN DEED TO LEONARD PARISH, ET UX, RECORDED APRIL 7, 1971 IN VOLUME 24, PAGE 1443, FILM RECORDS; THENCE EAST TO THE SAID MOST WESTERLY CORNER OF THE PARISH TRACT; THENCE SOUTHEASTERLY IN A STRAIGHT LINE ALONG THE SAID PARISH TRACT TO THE SOUTHWEST CORNER OF SAID PARISH TRACT; THENCE EAST 602.6 FEET, MORE OR LESS, ALONG THE SOUTH LINE OF SAID PARISH TRACT TO THE EAST LINE OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE AFORESAID SECTION 19; THENCE SOUTH ALONG THE SAID EAST LINE OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER TO THE POINT OF BEGINNING.
ALSO: THAT TRACT OF LAND DESCRIBED IN DEED RECORDED MAY 20, 1993 IN BOOK 261, PAGE 2212, MICROFILM RECORDS.

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EXCEPTING THEREFROM THAT TRACT OF LAND DESCRIBED IN DEED RECORDED MAY 20, 1993 IN BOOK 261, PAGE 2210, MICROFILM RECORDS.

PARCEL 27: 7-10-30-100, 600 AND 200

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: U. S. GOVERNMENT LOTS 1 AND 2 AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 7 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM ANY PORTION LYING WITHIN SCHOONER CREEK COUNTY ROAD NO. 106. ALSO EXCEPTING THEREFROM ANY PORTION OF SAID LOT 2 LYING EAST OF COUNTY ROAD NO. 106. ALSO EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY: BEGINNING AT THE SOUTHWEST CORNER OF U.S. GOVERNMENT LOT 2 IN SAID SECTION 30; THENCE EAST 23 RODS; THENCE NORTH 35 RODS; THENCE WEST 23 RODS TO THE WEST LINE OF SAID LOT 2; THENCE SOUTH 35 RODS TO THE POINT OF BEGINNING.

PARCEL 28: 7-10-30-500

THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 7 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SOUTHWEST QUARTER OF SECTION 30.

PARCEL 29: 7-11-12-100, 1000, 1100, 301 AND 601

U.S. LOT 6 OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTH ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

ALSO: THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO ROBERT G. MILLER, ELIZABETH I. MILLER, JAMES E. MILLER AND LILA G. MILLER, CO-PARTNERS, DOING BUSINESS AS WILLAMETTE PACIFIC LAND CO. BY DEED RECORDED DECEMBER 21, 1979 IN MICROFILM VOLUME 108, PAGE 1192, LINCOLN COUNTY RECORDS.

ALSO: U.S. GOVERNMENT LOT 7 AND THE NORTH HALF OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

ALSO: A TRACT OF LAND LOCATED IN SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, BEING THAT PART OF THE FOLLOWING DESCRIBED PARCEL LYING EAST OF THE CENTERLINE OF THE NORTHWEST NATURAL GAS COMPANY RIGHT-OF-WAY EASEMENT WHICH WAS RECORDED NOVEMBER 22, 1965 IN BOOK 261, PAGE 509, DEED RECORDS OF LINCOLN COUNTY, OREGON, SAID TRACT BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST,

WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE NORTH ALONG THE WEST LINE OF SAID SECTION 12, A DISTANCE OF 1380 FEET TO THE SOUTH LINE OF THE DOLAN TRACT DESCRIBED IN BOOK 103, PAGE 275, DEED RECORDS WHICH IS THE TRUE POINT OF BEGINNING; THENCE EAST ALONG THE SOUTH LINE OF SAID DOLAN TRACT TO THE WEST LINE OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 12; THENCE SOUTH ALONG SAID WEST LINE A DISTANCE OF 60 FEET, MORE OR LESS, TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 12; THENCE EAST ALONG THE SOUTH LINE TO THE NORTH-SOUTH CENTERLINE OF SAID SECTION 12; THENCE NORTH ALONG SAID CENTERLINE A DISTANCE OF 520 FEET, MORE OR LESS, TO THE NORTH LINE OF SAID DOLAN TRACT; THENCE WEST ALONG THE NORTH LINE OF SAID DOLAN TRACT TO THE EAST LINE OF THE EAST DEVILS LAKE COUNTY ROAD NO. 101; THENCE IN A SOUTHWESTERLY DIRECTION ALONG THE EAST LINE OF SAID COUNTY ROAD TO THE INTERSECTION OF THE EAST LINE OF SAID COUNTY ROAD AND THE WEST LINE OF SAID SECTION 12; THENCE SOUTH ALONG THE WEST LINE OF SAID SECTION 12 TO THE POINT OF BEGINNING.

ALSO: A TRACT OF LAND LOCATED IN SECTION 12, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, BEING THAT PART OF THE FOLLOWING DESCRIBED PARCEL LYING EAST OF THE CENTERLINE OF THE PACIFIC POWER AND LIGHT COMPANY RIGHT OF WAY, WHICH WAS RECORDED AUGUST 24, 1959 IN BOOK 202, PAGE 203, LINCOLN COUNTY DEED RECORDS, SAID TRACT BEING DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SECTION 12, SAID TOWNSHIP AND RANGE; THENCE NORTH ALONG THE WEST LINE OF SAID SECTION 12, 930 FEET, MORE OR LESS, TO THE SOUTH LINE OF THAT TRACT CONVEYED TO ERROL C. BRIGGS, ET UX BY DEED RECORDED MARCH 16, 1959 IN BOOK 198, PAGE 190, DEED RECORDS; THENCE EAST ALONG THE SOUTH LINE OF SAID BRIGGS TRACT, 1320 FEET, MORE OR LESS, TO THE SOUTHEAST CORNER OF SAID BRIGGS TRACT; THENCE SOUTH ALONG THE WEST 1/16TH LINE IN SAID SECTION 12, TO THE SOUTH LINE OF SAID SECTION 12; THENCE WEST, ALONG SAID SOUTH LINE TO THE POINT OF BEGINNING.

PARCEL 30: 7-11-13-300, 100, 200 AND 600

LOTS 3 AND 4 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO ROBERT G. MILLER, ELIZABETH I. MILLER, JAMES E. MILLER AND LILA G. MILLER, CO-PARTNERS, DOING BUSINESS AS WILLAMETTE PACIFIC LAND CO. RECORDED DECEMBER 21, 1979 IN MICROFILM VOLUME 106, PAGE 1192, LINCOLN COUNTY RECORDS.

ALSO: LOT 1 OF SECTION 13, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: LOTS 2 AND 5, THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 7 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: LOTS 6 AND 7, AND THE WEST HALF OF THE SOUTHEAST QUARTER, AND THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 13, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 31: 7-11-23-500, 1100 AND 1300

LOT 5 AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION LYING WITHIN THE COUNTY ROAD.

ALSO: THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION

23, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

ALSO: THE SOUTH HALF OF THE SOUTHWEST QUARTER; THE SOUTH ONE HALF OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SOUTHEAST QUARTER.

PARCEL 32: 7-11-24-100 AND 200

LOTS 1, 2, 3 AND 4; THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER; THE WEST HALF OF THE NORTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; AND THE WEST HALF OF THE SOUTHEAST QUARTER ALL IN SECTION 24, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 33: 7-11-26-200 AND 900

THE NORTH ONE HALF OF THE NORTHEAST QUARTER; THE NORTH HALF OF THE NORTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THE FOLLOWING: BEGINNING AT A POINT THAT IS 360 FEET EAST OF THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 26; RUNNING THENCE NORTH 660 FEET; THENCE EAST 660 FEET; THENCE SOUTH 660 FEET; THENCE WEST 660 FEET TO THE PLACE OF BEGINNING.

ALSO: LOT 1 OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION OF SAID LOT 1 LYING SOUTH OF SCHOONER CREEK COUNTY ROAD.

ALSO: THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM ANY PORTION LYING SOUTHERLY OF SCHOONER CREEK COUNTY ROAD.

ALSO: THE SOUTH 330 FEET OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER IN SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY: BEGINNING AT A POINT THAT IS 1320 FEET WEST OF THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 209 FEET; THENCE WEST 418 FEET; THENCE SOUTH 104.5 FEET; THENCE WEST 192 FEET; THENCE SOUTH 490.5 FEET; THENCE WEST 370 FEET; THENCE SOUTH 144 FEET; THENCE WEST 340 FEET, MORE OR LESS, TO THE CENTER LINE OF SAID SECTION 26; THENCE NORTH ON SAID CENTER LINE 948 FEET, TO THE 1/16TH SECTION LINE; THENCE EAST ON THE 1/16TH SECTION LINE 1320 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL 34: 7-11-25-103

THAT PORTION OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 7

SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING NORTH OF THE COUNTY ROAD.

PARCEL 35: 7-11-25-300

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER LYING NORTH OF SCHOONER CREEK ROAD NO. 106 OF SECTION 25, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 36: 7-11-25-700

THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 25, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 37: 7-11-25D-1100 & 1500

THE SOUTH HALF OF THE SOUTHEAST QUARTER, AND THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 7 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING, HOWEVER, FOUR TRACTS OF LAND HERETOFORE CONVEYED BY GRACE A. WILLIAMS, AS FOLLOWS:

A TRACT CONVEYED BY HER TO WALTER UMBER BY DEED DATED THE 7TH DAY OF JULY, 1939, AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT 50 FEET NORTH 89 DEG. 13' WEST OF THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 7 SOUTH, RANGE 11 WEST OF WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; RUNNING THENCE NORTH 100 FEET; THENCE NORTH 89 DEG. 13' WEST 871 FEET; THENCE SOUTH 100 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 7 SOUTH, RANGE 11 WEST; THENCE NORTH 89 DEG. 13' WEST 281 FEET (MORE OR LESS) TO THE EASTERLY LINE OF THE COUNTY ROAD; THENCE SOUTH 49 FEET (MORE OR LESS) TO THE NORTHERLY LINE OF A LOGGING TRUCK ROAD BUILT BY WERNER TIMBER COMPANY, AND FOLLOWING ITS NORTHERLY LINE; THENCE SOUTH 25 DEG. EAST 252 FEET; THENCE SOUTH 83 DEG. EAST 142 FEET; THENCE NORTH 72 DEG. EAST 376 FEET; THENCE NORTH 78 DEG. EAST 564 FEET; THENCE NORTH 26 FEET TO THE PLACE OF BEGINNING.

FURTHER EXCEPTING THEREFROM A TRACT CONVEYED BY HER TO O. M. GRIM BY DEED DATED APRIL 30, 1942, AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT THAT IS 919.7 FEET NORTH AND 571.8 FEET EAST OF THE QUARTER SECTION CORNER BETWEEN SECTIONS 25 AND 36, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE RUNNING NORTH 55 DEG. EAST ALONG A PUBLIC ROAD 235 FEET; THENCE SOUTH 57 DEG. EAST 643 FEET; THENCE WEST 405 FEET; THENCE NORTH 57 DEG. WEST 387 FEET TO THE PLACE OF BEGINNING.

FURTHER EXCEPTING THEREFROM A TRACT CONVEYED BY HER TO O.M. GRIM BY DEED DATED SEPTEMBER 10, 1945 AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT THAT IS 919.7 FEET NORTH AND 571.8 FEET EAST OF THE QUARTER SECTION CORNER BETWEEN SECTIONS 25 AND 36 OF TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, LINCOLN COUNTY, OREGON; THENCE NORTH 54 DEG. 00' EAST, ALONG A PUBLIC ROAD, 235 FEET TO THE TRUE POINT OF BEGINNING; THENCE ALONG PUBLIC ROAD NORTH 35 DEG. 00' EAST 175 FEET; THENCE NORTH 74 DEG. 00' EAST 249 FEET; THENCE ALONG WERNER TIMBER

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COMPANY TRUCK ROAD SOUTH 25 DEG. 00' EAST 252 FEET; THENCE SOUTH 83 DEG. 00' EAST 142 FEET; THENCE NORTH 72 DEG. 00' EAST 38 FEET (MORE OR LESS) TO NORTH-SOUTH 1/16TH LINE; THENCE SOUTH ON 1/16TH LINE 335 FEET; THENCE WEST TO A POINT BEING THE INTERSECTION OF A LINE EXTENDING SOUTH 57 DEG. 00' EAST 643 FEET FROM THE TRUE POINT OF BEGINNING.

FURTHER EXCEPTING THEREFROM A TRACT CONVEYED BY HER TO E.W. STEPHENS BY DEED DATED FEBRUARY, 1947 AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT THAT IS 919.7 FEET NORTH AND 571.8 FEET EAST OF THE QUARTER SECTION CORNER BETWEEN SECTIONS 25 AND 36, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 57 DEG. 00' EAST 387 FEET; THENCE SOUTH 65 DEG. 10' WEST 431 FEET; THENCE ALONG WERNER TIMBER COMPANY TRUCK ROAD SOUTH 83 DEG. 00' WEST 100 FEET; THENCE SOUTH 45 DEG. 30' WEST 212 FEET; THENCE NORTH 57 DEG. 00' WEST 32 FEET TO A PUBLIC ROAD; THENCE ALONG SAID PUBLIC ROAD NORTH 12 DEG. 30' EAST 300 FEET; THENCE ALONG SAID PUBLIC ROAD NORTH 48 DEG. 30' EAST 370 FEET TO PLACE OF BEGINNING.

FURTHER EXCEPTING THEREFROM THAT TRACT OF LAND CONVEYED TO THE CITY OF LINCOLN CITY IN DEED RECORDED JUNE 7, 1982 IN BOOK 133, PAGE 118, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

FURTHER EXCEPTING THEREFROM THAT TRACT OF LAND CONVEYED TO DUNN-LEBLANC, INC. IN DEED RECORDED MAY 25, 1985 IN BOOK 161, PAGE 482, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

FURTHER EXCEPTING THEREFROM THAT TRACT OF LAND CONVEYED TO DUNN LEBLANC, INC., DBA NORTH LINCOLN SANITARY SERVICE IN DEED RECORDED AUGUST 10, 1999 IN BOOK 387, PAGE 729, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 38: 7-11-35-100

THE NORTH HALF OF THE NORTHEAST QUARTER AND THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 35, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION LYING WITHIN DRIFT CREEK COUNTY ROAD NO. 109.

ALSO:

THE NORTHWEST QUARTER OF SECTION 35, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, EXCEPTING THEREFROM 16 ACRES DEDICATED AS THE TOWNSITE OF GRAND VIEW AND WHICH EXCEPTED LAND IS DESCRIBED AS FOLLOWS: BEGINNING AT THE CORNER TO FRACTIONAL SECTIONS 26 AND 35 IN TOWNSHIP 7 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN; RUNNING THENCE EAST 635 FEET; THENCE SOUTH 1030 FEET; THENCE WEST 763.6 FEET; THENCE NORTH 700 FEET TO THE CORNER OF FRACTIONAL SECTIONS 34 AND 35 IN TOWNSHIP 7 SOUTH, RANGE 11 WEST; THENCE IN A NORTHERLY DIRECTION ALONG THE MEANDER LINE OF SCHOONER CREEK TO THE POINT OF BEGINNING.

PARCEL 39: 7-11-35-400

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 40: 7-11-36-100

THE EAST ONE HALF OF THE EAST ONE HALF OF SECTION 36, TOWNSHIP 7 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT

PORTION CONVEYED TO LINCOLN COUNTY FOR RIGHT OF WAY FOR ROAD BY DEED RECORDED JANUARY 27, 1955 IN BOOK 168, PAGE 517, DEED RECORDS.

PARCEL 41: 7-11-36-500

THE NORTH ONE HALF OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 7 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY: BEGINNING AT THE NORTHEAST CORNER STAKE OF THE NORTH ONE HALF OF THE NORTHWEST QUARTER OF SAID SECTION 36 IN SAID TOWNSHIP AND RANGE; THENCE SOUTH 80 RODS; THENCE WEST 45 RODS; THENCE TO THE NORTH LINE OF SAID SECTION TO A POINT 35 RODS FROM THE PLACE OF BEGINNING; THENCE EAST TO THE PLACE OF BEGINNING.

PARCEL 42: 7-11-36-200

THE WEST HALF OF THE NORTHEAST QUARTER, THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER, AND THE EAST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 36, TOWNSHIP 7 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM ANY PORTION LYING WITH THE COUNTY ROAD.

PARCEL 43: 8-9-100

U.S. LOTS 1, 2 AND 5, AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, ALL IN SECTION 1, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 44: 8-9-1200

U.S. LOTS 2 AND 3 AND THE EAST ONE-HALF OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 45: 8-9-1300

THE WEST ONE-HALF OF THE NORTHEAST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER, ALL IN SECTION 7, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 46: 8-9-1400

THE EAST ONE-HALF OF THE NORTHEAST QUARTER AND THE EAST ONE-HALF OF THE SOUTHEAST QUARTER IN SECTION 7, AND THE WEST ONE-HALF OF THE NORTHWEST QUARTER AND THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 47: 8-9-1600

THE EAST ONE-HALF OF THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 48: 8-9-1700

THE SOUTHEAST QUARTER OF SECTION ⁹9; THE SOUTHWEST QUARTER OF SECTION 10; THE NORTHWEST QUARTER OF SECTION 15; AND THE NORTHEAST QUARTER OF SECTION 16, ALL IN TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 49: 8-9-1800

THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 50: 8-9-2200

THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 51: 8-9-2300

THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, SECTION 16, AND THE NORTH ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 52: 8-9-2400

THE NORTH ONE-HALF OF THE NORTHWEST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, SECTION 16, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 53: 8-9-2500

THE NORTH ONE-HALF THE SECTION 17, TOWNSHIP 8 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 54: 8-9-2600

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7; THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER, AND THE SOUTHWEST QUARTER OF SECTION 17; THE NORTHWEST QUARTER, THE NORTHEAST QUARTER, THE SOUTHEAST QUARTER, AND THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 55: 8-9-2900

U.S. LOT 4; THE EAST ONE-HALF OF THE SOUTHWEST QUARTER; THE NORTHEAST QUARTER; THE NORTH ONE-HALF OF THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER; AND THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER, SECTION 19, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 56: 8-9-3000

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19; AND THE SOUTH ONE-HALF OF THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 57: 8-9-3100

THE NORTH ONE-HALF; THE SOUTHEAST QUARTER; THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER; THE NORTH ONE-HALF OF THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER, IN SECTION 20; AND THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 8 SOUTH, RANGE 9 WEST

OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 58: 8-9-3300

THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 59: 8-9-4100 & 4200

THE NORTHEAST QUARTER AND THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 60: 8-9-4400 & 4500

THE SOUTHEAST QUARTER AND THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 61: 8-9-4600

THE SOUTHWEST QUARTER OF SECTION 29; U.S. LOTS 1 AND 2, AND THE EAST ONE-HALF OF THE NORTHWEST QUARTER; THE EAST ONE-HALF; THE EAST ONE-HALF OF THE EAST ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 62: 8-9-4700

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, AND THE WEST ONE-HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 63: 8-9-4800

U.S. LOTS 3 AND 4 IN SECTION 30, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 64 : 8-9-4900

THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 65: 8-9-5000

U.S. LOTS 3 AND 4, AND THE EAST ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 66: 8-9-5100

THE NORTHEAST QUARTER OF SECTION 31, AND THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 8 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 67: 8-10-200

U.S. LOTS 12 AND 13 IN SECTION 6, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 68: 8-10-800

U.S. LOT 1 IN SECTION 21, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 69: 8-10-1100

THE NORTH ONE HALF OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE NORTH ONE HALF OF THE NORTHEAST QUARTER IN SECTION 21; THE WEST ONE HALF OF THE NORTHWEST QUARTER IN SECTION 22, ALL IN TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 15, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 70: 8-10-1200 & 1299

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTH ONE-HALF OF THE NORTHEAST QUARTER; AND THE SOUTHWEST QUARTER, ALL IN SECTION 22, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 71: 8-10-1300

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER, SECTION 22; AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, SECTION 23, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 72: 8-10-1500

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 24, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 73: 8-10-1600

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 74: 8-10-1700

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 25; AND THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 75: 8-10-1800

THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER; THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER; THE SOUTH ONE-HALF OF THE NORTHEAST QUARTER, ALL IN SECTION 25; AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER IN SECTION 26, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 76: 8-10-1900

THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER; AND THE WEST ONE-HALF OF THE SOUTHEAST QUARTER, ALL IN SECTION 27; THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER; AND THE EAST ONE-HALF OF THE NORTHEAST QUARTER, ALL IN SECTION 28; AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, SECTION 34, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 77: 8-10-2100

U.S. LOTS 1 AND 4; THE SOUTH ONE-HALF OF THE NORTHEAST QUARTER; THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER; AND THE SOUTHEAST QUARTER, ALL IN SECTION 29, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 78: 8-10-2200

U.S. LOTS 2 AND 3, IN SECTION 29, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 79: 8-10-2400

THE NORTHEAST QUARTER; U.S. LOTS 5, 6 AND 7; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 30, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 80 : 8-10-2500

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 30, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 81: 8-10-2600

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER IN SECTION 30, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 82: 8-10-2900

THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 83: 8-10-3200

U.S. LOTS 3 AND 4 IN SECTION 33, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 84: 8-10-3300

THE NORTHEAST QUARTER; THE EAST ONE-HALF OF THE WEST ONE-HALF; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; ALL IN SECTION 33, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 85: 8-10-3400

THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER; THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER; AND THE NORTH ONE-HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 34, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 86: 8-10-16C-100

ALL OF LOT 6 OF SECTION 16, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPT THE PARTS OF SAID LOT 6 LYING IN THE HIGHWAY STRIP CONVEYED TO THE STATE OF OREGON BY DEED DATED OCTOBER 13, 1941, AND RECORDED AT PAGE 288 OF BOOK 89 OF THE RECORDS OF DEEDS OF LINCOLN COUNTY, OREGON,

AND EXCEPTING THE PARTS THEREOF LYING BETWEEN SAID HIGHWAY STRIP AND THE SILETZ RIVER;

ALSO: ALL OF LOT 5 OF SECTION 16, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPT SAID HIGHWAY STRIP AND A TRACT BOUNDED ON THE NORTHERLY SIDE BY THE SILETZ RIVER, ON THE SOUTHERLY SIDE BY SAID HIGHWAY STRIP, ON THE WEST BY THE WEST LINE OF LOT 5, AND ON THE EAST BY A LINE PARALLEL WITH THE SECTION LINE BETWEEN SECTIONS 16 AND 17 AND 1515 FEET EAST THEREFROM.

ALSO: BEGINNING AT A POINT ON THE SOUTH BANK OF THE SILETZ RIVER, WHICH POINT IS NORTH 1665.5 FEET AND EAST 357.7 FEET FROM THE CORNER COMMON TO SECTIONS 16, 17, 20 AND 21 IN TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, AND FROM SAID POINT A 60° SPRUCE TREE BEARS SOUTH 13 DEG. 15' EAST 72.5 FEET; THENCE SOUTH 33 DEG. 45' WEST TO THE NORTHERLY LINE OF THE SILETZ RIVER HIGHWAY RIGHT OF WAY; THENCE EASTERLY ALONG THE SAID NORTHERLY LINE OF SAID HIGHWAY TO A LINE PARALLEL WITH AND 1515 FEET EAST FROM THE WEST LINE OF SAID SECTION 16; THENCE NORTH ON SAID PARALLEL LINE TO THE SOUTH BANK OF THE SILETZ RIVER; THENCE FOLLOWING THE BANK OF SAID RIVER NORTHWESTERLY TO THE POINT OF BEGINNING.

EXCEPT ANY PORTION WITHIN THE BOUNDARIES OF THAT TRACT CONVEYED TO STATE OF OREGON BY DEED RECORDED OCTOBER 31, 1941 IN BOOK 89, PAGE 288, DEED RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 87: 8-10-17-300

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING: BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE NORTH ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17, 300 FEET TO AN IRON PIPE; THENCE ON A STRAIGHT LINE DIAGONALLY TO THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17; THENCE WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF THE NORTHEAST TO THE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT ACROSS LOT 7 OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 88: 8-10-17-500

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON;

ALSO: U.S. LOT 3 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTH ONE-HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, AND THAT PART OF U.S. LOT 9, SECTION 17, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, LYING NORTHERLY AND WESTERLY OF A LINE PARALLEL TO AND 100 FEET NORTHERLY AND WESTERLY FROM THE HIGH WATER LINE ON THE NORTHWESTERLY BANK OF THE SILETZ RIVER.

PARCEL 89: 8-10-17-900

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 17, AND THAT PORTION OF U.S. LOT 11, IN SECTION 17, ALL IN TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING EASTERLY OF THE SILETZ HIGHWAY

EXCEPTING THEREFROM ANY PORTION LYING WITHIN THE RIGHT OF WAY OF THE SILETZ HIGHWAY.

PARCEL 90: 8-10-18-800

THE EAST ONE HALF OF LOT 10; THE EAST ONE HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 18, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 91: 8-10-18-900

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE WEST ONE HALF OF THE NORTH ONE HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 18, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 92: 8-10-18-1000 AND 1200

GOVERNMENT LOTS 6, 7, 11, 12 AND 13; THE SOUTH ONE HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER; AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 93: 8-10-18-1100

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 94 : 8-10-19-100 AND 300

THE NORTH ONE HALF OF THE NORTHEAST QUARTER; THE NORTH ONE HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; AND LOT 11 IN SECTION 19, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 95: 8-10-19-200

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE NORTH ONE HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE NORTH ONE HALF OF LOT 10, IN SECTION 19, TOWNSHIP 8 SOUTH, RANGE 10 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 96: 8-10-19-500 AND 8-10-20-600

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND THAT PART OF GOVERNMENT LOT 1 LYING NORTH OF THE COUNTY ROAD IN SAID LOT 1 IN SECTION 19, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: THE SOUTH ONE HALF OF THE NORTHWEST QUARTER AND THAT PART OF GOVERNMENT LOTS 8 AND 9 LYING NORTH OF THE COUNTY ROAD IN SAID LOTS IN SECTION 20, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THOSE TRACTS CONVEYED TO B.W. FINKE BY DEEDS RECORDED SEPTEMBER 28, 1955 IN BOOK 70, PAGE 608 AND RECORDED JANUARY 31, 1942 IN BOOK 90, PAGE 213 DEED RECORDS FOR LINCOLN COUNTY, OREGON. ALSO EXCEPTING THAT PORTION LYING WITHIN LINCOLN BEACH SILETZ COUNTY ROAD NO. 201.

PARCEL 97: 8-10-19-1000

LOT 7 IN SECTION 19, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING A ROADWAY APPROXIMATELY 30 FEET WIDE SURVEYED BY THE COUNTY AND ON THE WEST LINE OF LOT 7 OF SECTION 19, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, SAID ROADWAY JOINING THE EAST LINE OF LOT 6 OF SAID SECTION, TOWNSHIP AND RANGE NOW OWNED BY GUST KETOLE;

FURTHER EXCEPTING THE FOLLOWING DESCRIBED PARCEL, TO-WIT:

BEGINNING AT A POINT WHERE THE EAST LINE OF THAT CERTAIN ROADWAY WHICH LEADS FROM THE MAIN SILETZ PUBLIC HIGHWAY NORTHERLY TO THE SILETZ RIVER ALONG THE WESTERLY SIDE OF THE ABOVE DESCRIBED PROPERTY INTERSECTS THE NORTH LINE OF SAID MAIN SILETZ PUBLIC HIGHWAY; THENCE EASTERLY ALONG THE NORTH LINE OF SAID MAIN SILETZ PUBLIC HIGHWAY 50 FEET; THENCE NORTHERLY AT RIGHT ANGLES THERETO 50 FEET; THENCE WESTERLY AT RIGHT ANGLES THERETO 50 FEET TO THE EAST BOUNDARY OF SAID ROADWAY SO LEADING TO THE SILETZ RIVER; THENCE SOUTHERLY ALONG SAID EAST BOUNDARY TO THE PLACE OF BEGINNING.

FURTHER EXCEPTING THEREFROM THAT TRACT OF LAND DESCRIBED IN DEED RECORDED JULY 26, 1993 IN BOOK 265, PAGE 827, MICROFILM RECORDS.

PARCEL 98: 8-10-20-400

THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED TRACT: BEGINNING AT AN IRON PIPE AT THE NORTHEAST CORNER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE WEST ALONG THE SECTION LINE 350 FEET TO AN IRON PIPE; THENCE SOUTH 15

DEG. 50' EAST 1393 FEET TO AN IRON PIPE MARKING THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 10 WEST; THENCE NORTH 2 DEG. 49' WEST 1321 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT ACROSS THE TRACT ABOVE EXCEPTED AND PART OF LOT 12, SECTION 20, TO THE SILETZ RIVER.

PARCEL 99: 8-10-20-800 & 8-10-20CD-300

THE SOUTH HALF OF LOT 6 AND LOT 4 OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 100: 8-10-31C-700

U.S. LOT 5 IN SECTION 31, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON;

EXCEPTING THEREFROM THE EAST 990 FEET THEREOF;

FURTHER EXCEPTING ANY PORTION LYING WITH THE HIGHWAY RIGHT OF WAY;

FURTHER EXCEPTING APPROXIMATELY ONE (1) ACRES SQUARE IN THE EXTREME NORTHWEST CORNER OF SAID LOT 5. THE ONE ACRE TRACT HEREIN EXCEPTED IS MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 5, SECTION 31, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE EAST 208 FEET ALONG THE NORTH LINE OF SAID LOT 5; THENCE SOUTH 208 FEET PARALLEL TO THE EAST LINE OF SAID LOT 5; THENCE WEST 208 FEET PARALLEL TO THE NORTH LINE OF SAID LOT 5; THENCE NORTH 208 FEET TO THE PLACE OF BEGINNING;

FURTHER EXCEPTING THE TRACT OF LAND CONVEYED TO ROBERT P. ADAMS AND MARY M. ADAMS IN DEED RECORDED NOVEMBER 6, 1969 IN BOOK 15, PAGE 1148, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON;

FURTHER EXCEPTING THAT PORTION DEED TO THE STATE OF OREGON, DEPARTMENT OF TRANSPORTATION IN DEED RECORDED OCTOBER 15, 1996 IN BOOK 326, PAGE 1687, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 101: 8-10-31C-800

THE EAST 990 FEET OF U.S. LOT 5, IN SECTION 31, TOWNSHIP 8 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 102: 8-11-100, 200, 400 AND 500

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF SECTION 14, AND THE NORTHWEST QUARTER OF SECTION 23 ALL IN TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 103: 8-11-900 AND 1000

ALL OF SECTION 22, TOWNSHIP 8 SOUTH RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 104: 8-11-1100, 1200, 1300 AND 1400

THE SOUTHWEST QUARTER; THE NORTHEAST QUARTER; THE NORTH ONE HALF OF THE SOUTHEAST QUARTER AND THE WEST ONE HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER; AND THE EAST ONE HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER; AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 23, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION LYING WITHIN IMMONEN ROAD NO. 204.

PARCEL 105: 8-11-1500, 1600 AND 2000

ALL OF SECTION 26, EXCEPT THE SOUTH ONE HALF OF THE SOUTHEAST QUARTER; AND THE NORTHWEST QUARTER OF SECTION 35, TOWNSHIP 8 SOUTH RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 106: 8-11-1700, 1800, 1900, 2200 AND 2300

ALL OF SECTIONS 27 AND 34 AND THE SOUTH ONE HALF OF SECTION 35, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 107: 8-11-2100

THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 26; AND THE NORTHEAST QUARTER OF SECTION 35, ALL IN TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 108: 8-11-1-600

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 1, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 109: 8-11-1-400

BEGINNING AT THE NORTHWEST CORNER OF SECTION 1, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 160 RODS ALONG THE WEST SIDE OF THE QUARTER SECTION LINE; THENCE EAST 100 RODS ALONG THE SOUTH SIDE OF THE QUARTER SECTION LINE; THENCE NORTHWESTERLY TO A POINT ON THE NORTH LINE OF THE QUARTER SECTION, THAT IS 60 RODS EAST OF THE POINT OF BEGINNING; THENCE WEST 60 RODS ALONG THE NORTH LINE TO THE POINT OF BEGINNING.

PARCEL 110: 8-11-2-300 AND 8-11-2B-700 AND 8-11-2C-100

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE EAST ONE HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE EAST ONE HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 2, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 111: 8-11-2B-500 & 501 AND 8-11-2C-200

THE WEST ONE HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE WEST ONE HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, EXCEPTING THE SOUTH ONE

HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER;
AND U.S. LOT 7, ALL IN SECTION 2, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN,
IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THOSE PORTIONS CONVEYED TO THE STATE
OF OREGON HIGHWAY COMMISSION BY DEEDS RECORDED IN BOOK 114, PAGE 562, DEED RECORDS
FOR LINCOLN COUNTY, OREGON.

PARCEL 112: 8-11-10-801 & 810

A PARCEL OF LAND IN THE WEST ONE HALF OF THE SOUTHEAST QUARTER AND GOVERNMENT LOT 4
IN SECTION 10, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, SAID PARCEL
BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF
THE WEST ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 8 SOUTH, RANGE 11
WEST, WILLAMETTE MERIDIAN; THENCE NORTH 89° 42' WEST ALONG THE SECTION LINE BETWEEN
SECTIONS 10 AND 15 IN SAID TOWNSHIP AND RANGE, A DISTANCE OF 306.5 FEET TO AN IRON ROD;
THENCE NORTH 18° 42' EAST 323.3 FEET TO AN IRON ROD AND POST MARKED AP8; THENCE NORTH
20° 59' EAST 253.2 FEET TO AN IRON PIPE AND POST MARKED AP7; THENCE NORTH 18° 39' WEST
266.5 FEET TO AN IRON PIPE AND POST MARKED AP6; THENCE NORTH 59° 03 1/2' WEST 355.7 FEET
TO AN IRON PIPE AND POST MARKED AP5; THENCE NORTH 62° 16 1/2' WEST 344.8 FEET TO AN IRON
PIPE AND POST MARKED AP4; THENCE NORTH 4° 34' EAST 496.9 FEET TO AN IRON PIPE AND POST
MARKED AP3; THENCE NORTH 9° 57' WEST 534.0 FEET TO AN IRON PIPE AND POST MARKED AP2;
THENCE NORTH 28° 24 1/2' WEST 236.5 FEET TO AN IRON PIPE AND POST MARKED AP1; THENCE
NORTH 60° 50' WEST 172.1 FEET TO AN IRON ROD WHICH IS THE MOST SOUTHERLY CORNER OF
THAT CERTAIN TRACT REFERRED TO AS PARCEL 1 IN DEED FROM BLANCHE E. KIRKPATRICK TO W.F.
JONES RECORDED OCTOBER 4, 1957 IN BOOK 187, PAGE 426, DEED RECORDS OF LINCOLN COUNTY;
THENCE NORTHEASTERLY ALONG THE SOUTHEAST LINE OF SAID W.F. JONES PROPERTY FOR A
DISTANCE OF 500 FEET TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF THE KERNVILLE COUNTY
ROAD NO. 19; THENCE SOUTHEASTERLY ALONG THE SOUTHWESTERLY BOUNDARY OF SAID
KERNVILLE COUNTY ROAD TO THE INTERSECTION OF THE SOUTHWESTERLY COUNTY ROAD
BOUNDARY WITH THE EAST LINE OF THE WEST ONE HALF OF THE SOUTHEAST QUARTER OF SAID
SECTION 10; THENCE SOUTHERLY ALONG SAID EAST LINE OF THE WEST ONE HALF OF THE
SOUTHEAST QUARTER OF SAID SECTION 10 TO THE POINT OF BEGINNING. EXCEPTING THEREFROM
THAT PORTION CONVEYED TO JOHN D. GRAY BY DEED RECORDED IN MICROFILM VOLUME 55, PAGE
1461, LINCOLN COUNTY RECORDS.

PARCEL 113: 8-11-10-1300

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 8 SOUTH,
RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING: BEGINNING AT THE NORTHEAST CORNER OF SAID
SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 10; THENCE SOUTH TO THE
COUNTY ROAD; THENCE ALONG SAID ROAD WESTERLY A DISTANCE OF 418 FEET; THENCE NORTH TO
THE NORTH LINE OF SAID SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 10;
THENCE EAST TO THE POINT OF BEGINNING.

ALSO EXCEPTING ANY PORTION LYING WITHIN COUNTY ROAD NO. 19.

PARCEL 114: 8-11-11-1500 AND 8-11-11D-700

THE SOUTH ONE HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 8 SOUTH, RANGE
11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO EDWARD WILLIAMS BY DEED RECORDED
OCTOBER 30, 1985 IN MICROFILM VOLUME 165, PAGE 2377, LINCOLN COUNTY RECORDS.

ALSO THAT PORTION OF LOT 13 OF SECTION 11, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON THAT LIES SOUTH OF THE FOLLOWING DESCRIBED LINE: BEGINNING AT A POINT THAT IS NORTH 44 RODS AND 10 FEET FROM THE QUARTER SECTION CORNER BETWEEN SECTIONS 11 AND 14; THENCE EAST TO THE EAST LINE OF SAID LOT 13.

PARCEL 115: 8-11-12-100

ALL OF THE EAST ONE HALF OF SECTION 12, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE KERNVILLE-GLENEDEN BEACH-LINCOLN BEACH WATER DISTRICT BY DEED RECORDED AUGUST 9, 1964 IN BOOK 247, PAGE 6, DEED RECORDS FOR LINCOLN EXCEPTING THEREFROM THAT TRACT OF LAND DESCRIBED IN DEED RECORDED JANUARY 25, 1991 IN BOOK 225, PAGE 2216, MICROFILM RECORDS.

PARCEL 116: 8-11-13-900, 1200 AND 1300

U.S. GOVERNMENT LOT 3 OF SECTION 12, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN; U.S. GOVERNMENT LOT 4; U.S. GOVERNMENT LOT 7; THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE WEST HALF OF THE SOUTHWEST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 117: 8-11-15-200

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT TRACT CONVEYED TO SALISHAN HILLS, INC. BY DEED RECORDED DECEMBER 14, 1977 IN MICROFILM VOLUME 82, PAGE 1011, LINCOLN COUNTY RECORDS.

PARCEL 118: 8-11-15-100

THE SOUTHEAST QUARTER; THE EAST ONE HALF OF THE NORTHEAST QUARTER; AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER ALL IN SECTION 15, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE KERNVILLE-GLENEDEN BEACH-LINCOLN BEACH WATER DISTRICT RECORDED FEBRUARY 20, 1981 IN MICROFILM VOLUME 121, PAGE 2164, LINCOLN COUNTY, OREGON.

PARCEL 119: 8-11-15B-300, 8-11-15C-100 AND 8-11-15B-100

THE SOUTHWEST QUARTER AND THE NORTHWEST QUARTER OF SECTION 15, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON. EXCEPTING THEREFROM THAT PORTION CONVEYED TO JAMES A. SANBURY AND KATHERINE SANBURY BY DEED RECORDED JULY 18, 1934 IN BOOK 68, PAGE 274, DEED RECORDS.

ALSO EXCEPTING THAT PORTION CONVEYED TO SALISHAN PROPERTIES, INC., AN OREGON CORPORATION BY DEEDS RECORDED MARCH 3, 1964 IN BOOK 242, PAGE 419 AND RECORDED JUNE 17, 1968 IN BOOK 290, PAGE 489, DEED RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF OREGON THROUGH ITS BOARD OF AERONAUTICS BY DEED RECORDED JULY 17, 1968 IN BOOK 291, PAGE 505, DEED RECORDS.

ALSO EXCEPTING THAT PORTION LYING WITHIN THE PLAT OF SALISHAN HILLS II.

PARCEL 120: 8-11-24-100, 200, 402 AND 500

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE EAST ONE HALF OF THE NORTHEAST QUARTER; LOT 4 AND THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; AND GOVERNMENT LOT 5 ALL IN SECTION 24, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 121: 8-11-25-200 AND 500

LOT 8; THE EAST ONE HALF OF THE NORTHEAST QUARTER; THE EAST ONE HALF OF THE WEST ONE HALF OF THE NORTHEAST QUARTER; THE NORTH ONE HALF OF THE SOUTHEAST QUARTER AND THE EAST ONE HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER, ALL IN SECTION 25, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF OREGON, DEPARTMENT OF TRANSPORTATION BY DEED RECORDED NOVEMBER 12, 1976 IN MICROFILM VOLUME 70, PAGE 355, LINCOLN COUNTY RECORDS.

PARCEL 122: (8-11-25-700)

U.S. LOT 5, IN SECTION 25, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 123: (8-11-25-900)

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER, AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER, IN SECTION 25, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 124: 8-11-28-100 AND 400

THE NORTH ONE HALF OF THE NORTHEAST QUARTER OF SECTION 28, IN TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

BEGINNING AT THE QUARTER CORNER BETWEEN SECTIONS 21 AND 28 IN TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE EAST 200 FEET; THENCE SOUTH 352 FEET; THENCE WEST 200 FEET TO THE NORTH AND SOUTH CENTER LINE OF SECTION 28; THENCE NORTH 352 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO CENTRAL LINCOLN PEOPLE'S UTILITY DISTRICT BY DEED RECORDED OCTOBER 20, 1981 IN MICROFILM VOLUME 128, PAGE 435, LINCOLN COUNTY RECORDS.

ALSO THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; AND THE EAST ONE HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 125: 8-11-32-900 AND 8-11-32DC-101

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER AND ALL OF THAT PORTION OF U.S. LOT 4 LYING SOUTHEASTERLY OF THE OREGON COAST HIGHWAY, ALL IN SECTION 32, TOWNSHIP 8 SOUTH,

RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

- 1) THAT PORTION CONVEYED TO GLEN M. BROWN, ET UX BY DEED RECORDED JANUARY 11, 1974 IN MICROFILM VOLUME 46, PAGE 1479, LINCOLN COUNTY RECORDS.
- 2) THAT PORTION CONVEYED TO ELSIE R. CHRISTIANSEN, ET AL BY DEED RECORDED DECEMBER 20, 1982 IN MICROFILM VOLUME 137, PAGE 1492, LINCOLN COUNTY RECORDS.
- 3) THAT PORTION CONVEYED TO ROBERT E. FORD, ET UX BY DEED RECORDED SEPTEMBER 19, 1969 IN MICROFILM VOLUME 14, PAGE 373, LINCOLN COUNTY RECORDS.
- 4) THAT PORTION CONVEYED TO GLEN M. BROWN, ET UX BY DEED RECORDED APRIL 1, 1971 IN MICROFILM VOLUME 24, PAGE 1229, LINCOLN COUNTY RECORDS.
- 5) THAT PORTION CONVEYED TO GLEN M. BROWN BY DEED RECORDED JUNE 9, 1976 IN MICROFILM VOLUME 65, PAGE 750, LINCOLN COUNTY RECORDS.
- 6) THAT PORTION CONVEYED TO JULIE A. HEINEMANN BY CONTRACT RECORDED MARCH 6, 1981 IN MICROFILM VOLUME 122, PAGE 698, LINCOLN COUNTY RECORDS.
- 7) THAT PORTION CONVEYED TO GERALD K. KOREVAAR, ET UX BY DEED RECORDED APRIL 19, 1965 IN BOOK 254, PAGE 158, DEED RECORDS.
- 8) THAT PORTION CONVEYED TO THE STATE OF OREGON BY DEED RECORDED DECEMBER 9, 1954 IN BOOK 167, PAGE 617, DEED RECORDS.

PARCEL 126: 8-11-33-600 AND 700

THE NORTHEAST QUARTER; THE EAST ONE HALF OF THE NORTHWEST QUARTER; THE NORTH ONE HALF OF THE SOUTHEAST QUARTER; THE NORTH ONE HALF OF THE SOUTHWEST QUARTER; AND THE SOUTH ONE HALF OF THE SOUTH ONE HALF, ALL IN SECTION 33, TOWNSHIP 8 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE KERNVILLE, GLENEDEN BEACH, LINCOLN BEACH WATER DISTRICT BY DEED RECORDED MAY 4, 1972 IN MICROFILM VOLUME 33, PAGE 243, LINCOLN COUNTY RECORDS.

PARCEL 127: 8-11-36-500 AND 601

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER; THE WEST ONE HALF OF THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 36, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 128: (8-11-36-400)

U.S. LOTS 4, 5, 6 AND 7, THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, AND THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, ALL IN SECTION 36, TOWNSHIP 8 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 129: (9-9-200 & 300)

THE NORTHEAST QUARTER AND THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 9 SOUTH,

RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 130: (9-9-400)

THE NORTH ONE-HALF AND THE SOUTHWEST QUARTER OF SECTION 5, AND ALL OF SECTION 6, TOWNSHIP 9 SOUTH, RANGE 9 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 131: (9-10-400)

U.S. LOT 2 AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 132: (9-10-600 & 601)

U.S. LOTS 3, 7, 6, AND 8, AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING ANY PORTION LYING WITHIN THE HIGHWAY RIGHT OF WAY.

FURTHER EXCEPTING THEREFROM THAT TRACT DESCRIBED IN DEED RECORDED AUGUST 24, 1988 IN BOOK 196, PAGE 425, MICROFILM RECORDS.

PARCEL 133: (9-10-1700)

THE NORTH ONE-HALF OF U.S. LOTS 15 AND 16, AND ALL OF U.S. LOTS 1, 2 AND 3, SECTION 16, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 134: (9-10-9-600)

U.S. LOTS 13, 14, 15 AND 16, SECTION 9, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 9, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, BEING THE SOUTHEAST CORNER OF LOT 16; THENCE WEST ON THE SECTION LINE 4 1/2 CHAINS; THENCE NORTH PARALLEL WITH THE EAST LINE OF SECTION 9, 13.20 CHAINS, MORE OR LESS, TO THE CENTER OF THE SILETZ RIVER; THENCE SOUTH 80 DEG. 45' EAST FOLLOWING THE CENTERLINE OF THE SILETZ RIVER TO THE EAST LINE OF SECTION 9; THENCE SOUTH ALONG THE EAST LINE OF SAID SECTION, 12.40 CHAINS, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL 135: (9-10-21-500)

U.S. LOTS 7 AND 8, SECTION 21, TOWNSHIP 9 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 136: 9-11-100 AND 200

LOTS 1, 2, 3 AND 4; AND THE SOUTH ONE HALF OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY OREGON. LOTS 1, 2, 3 AND 4 AND THE SOUTH ONE HALF OF THE NORTH ONE HALF; AND THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE

MERIDIAN, IN LINCOLN COUNTY, OREGON. THE SOUTHEAST QUARTER; THE SOUTH ONE HALF OF THE NORTHEAST QUARTER; THE NORTH ONE HALF OF THE SOUTHWEST QUARTER; AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER IN SECTION 4, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 137: (9-11-400)

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 138: (9-11-600)

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 3; AND U.S. LOT 2 AND 3, THE WEST ONE-HALF OF THE NORTHEAST QUARTER, THE NORTH ONE-HALF OF THE SOUTHEAST QUARTER, AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 10, ALL IN TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 139: 9-11-700

ALL OF SECTION 9, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 140: 9-11-800, 900 AND 1000

ALL OF SECTION 16; THE WEST ONE HALF OF SECTION 10; THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 10; THE WEST ONE HALF; THE NORTH ONE HALF OF THE NORTHEAST QUARTER OF SECTION 15; THE SOUTH ONE HALF OF THE NORTHEAST QUARTER OF SECTION 15; THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER; THE NORTHWEST OF THE NORTHEAST QUARTER; THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTH ONE HALF OF THE NORTHWEST QUARTER OF SECTION 14, ALL IN TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 141: 9-11-1300, 1400, 1500 AND 1700

ALL OF SECTION 21; THE WEST ONE HALF OF SECTION 22; THE NORTH ONE HALF OF SECTION 28; AND THE SOUTHEAST QUARTER OF SECTION 28, ALL IN TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 142: (9-11-1800)

THE NORTHWEST QUARTER, THE SOUTHWEST QUARTER, THE SOUTHEAST QUARTER, AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, ALL IN SECTION 33, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 143: (9-11-1900)

THE WEST ONE-HALF OF THE SOUTHWEST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 144: (9-11-2200)

U.S. LOT 8, AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER, SECTION 2, TOWNSHIP 9

SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 145: (9-11-2300)

U.S. LOT 1 IN SECTION 2, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 146: (9-11-2400)

U.S. LOTS 2, 3, 4, 5, 6, AND 7, AND THE SOUTH ONE-HALF OF THE NORTH ONE-HALF, THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER, AND THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER, ALL IN SECTION 2, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 147: 9-11-1-101, 102, 200 AND 300

U.S. GOVERNMENT LOT 1; THE NORTH ONE HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; LOTS 2 AND 3 AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER; AND LOT 4 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 1, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 148: (9-11-1-800)

U.S. LOT 5 IN SECTION 1, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 149: 9-11-5-200

THE SOUTH ONE HALF OF THE NORTHEAST QUARTER AND THE NORTH ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 9 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

- 1) THAT PARCEL CONVEYED TO HOWARD TAYLOR, ET UX BY DEED RECORDED JULY 7, 1971 IN MICROFILM VOLUME 26, PAGE 1309, LINCOLN COUNTY RECORDS.
- 2) THAT PARCEL CONVEYED TO WALTER H. REISINGER, ET UX BY DEED RECORDED OCTOBER 25, 1972 IN MICROFILM VOLUME 37, PAGE 758, LINCOLN COUNTY RECORDS.
- 3) THAT PARCEL CONVEYED TO GORDON G. AKERS, ET UX BY DEED RECORDED OCTOBER 30, 1972 IN MICROFILM VOLUME 37, PAGE 947, LINCOLN COUNTY RECORDS.
- 4) THAT PARCEL CONVEYED TO JANE DOW THACKERY BY DEED RECORDED FEBRUARY 11, 1974 IN MICROFILM VOLUME 47, PAGE 344, LINCOLN COUNTY RECORDS.
- 5) HOWARD E. TAYLOR, ET UX BY DEED RECORDED JUNE 20, 1975 IN MICROFILM VOLUME 57, PAGE 683, LINCOLN COUNTY RECORDS.

PARCEL 150: 9-11-8-100, 101, 400

THE EAST ONE HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE

SOUTHEAST QUARTER, ALL IN SECTION 8, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO CENTRAL LINCOLN PEOPLES UTILITY DISTRICT IN DEED RECORDED JUNE 10, 1955 IN BOOK 171, PAGE 416, DEED RECORDS.

ALSO EXCEPTING THAT PORTION CONVEYED TO DEPOE BAY DEVELOPMENT CO. BY DEED RECORDED FEBRUARY 1, 1956 IN BOOK 176, PAGE 355, DEED RECORDS.

PARCEL 151: (9-11-808-1499)

BEGINNING AT A POINT WHICH IS SOUTH 89 DEG. 55' EAST 395.26 FEET FROM THE CENTER OF SECTION 8, TOWNSHIP 9 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, THIS BEING THE TRUE POINT OF BEGINNING; THENCE SOUTH 1 DEG. 28' EAST, 865.0 FEET TO THE SOUTHEAST CORNER OF THE TRACT DESCRIBED IN MICROFILM VOLUME 30, PAGE 1772, LINCOLN COUNTY RECORDS; THENCE NORTH 89 DEG. 55' WEST, 308.0 FEET; THENCE SOUTH 1 DEG. 28' EAST, 40.0 FEET; THENCE SOUTH 89 DEG. 55' EAST 552.0 FEET; THENCE NORTH 0 DEG. 49' 30" EAST 40.0 FEET; THENCE NORTH 89 DEG. 55' WEST 203.0 FEET; THENCE NORTH 1 DEG. 28' WEST 865.0 FEET; THENCE NORTH 89 DEG. 55' WEST, 40.0 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION LYING WITHIN INDIAN TRAIL AVENUE AND DOUGLAS STREET.

PARCEL 152: (9-11-11-600 & 800)

THE SOUTH ONE-HALF OF THE NORTHEAST QUARTER AND U.S. LOT 8, IN SECTION 11, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: U.S. LOTS 10, 11, 12 AND 13 IN SECTION 11, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 153: 9-11-11-900 AND 1000

THE SOUTH ONE HALF OF THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 154: 9-11-17-500

THE EAST ONE HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE EAST ONE HALF OF THE SOUTHEAST QUARTER; THE NORTHEAST QUARTER EXCEPT THAT PORTION CONVEYED TO PUBLISHERS PAPER CO., A CORPORATION BY DEED RECORDED MARCH 31, 1965 IN BOOK 253, PAGE 346, DEED RECORDS; THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, LYING EAST OF THE OREGON COAST HIGHWAY; THE WEST ONE HALF OF THE SOUTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, LYING EAST OF THE OREGON COAST HIGHWAY; ALL THAT PART OF THE EAST 660 FEET OF GOVERNMENT LOT 2, LYING EAST OF THE OREGON COAST HIGHWAY; THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, LYING EAST OF THE OREGON COAST HIGHWAY, EXCEPTING THEREFROM THAT PORTION CONVEYED TO THOMAS G. FORD, ET UX BY DEED RECORDED JUNE 12, 1956 IN BOOK 178, PAGE 516 AND ALSO EXCEPTING THAT PORTION CONVEYED TO SIDNEY H. NEAL, ET UX BY DEED RECORDED OCTOBER 18, 1950 IN BOOK 141, PAGE 540, DEED RECORDS, ALL BEING IN SECTION 17, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 155: 9-11-20-100 AND 9-11-29-100

THE NORTHEAST QUARTER; THE EAST ONE HALF OF THE NORTHWEST QUARTER; THE EAST ONE HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE NORTH ONE HALF OF THE SOUTHEAST QUARTER; AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 20, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO THE EAST ONE HALF OF THE NORTHEAST QUARTER OF SECTION 29, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 156: (9-11-20-300)

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER, IN SECTION 20, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 157 : (9-11-29-200)

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE EAST ONE-HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 29, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 158: (9-11-32-800)

ALL OF THE FOLLOWING DESCRIBED PROPERTY LYING EASTERLY OF HIGHWAY 101:
THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER, U.S LOT 4, THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER, AND THE EAST ONE-HALF OF THE SOUTHEAST QUARTER, ALL IN SECTION 32, TOWNSHIP 9 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 159: 10-8-301, 10-8-23-301 AND 10-8-24-301

ALL THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 13; THE NORTHWEST QUARTER OF SECTION 24; AND THE SOUTH ONE HALF OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 10 SOUTH, RANGE 8 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING NORTH AND WEST OF THE STATE FOREST ROAD.

EXCEPTING THEREFROM ANY PORTIONS LYING WITHIN ROADS, STREETS AND HIGHWAYS.

PARCEL 160: 10-9-3900

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER AND THE WEST ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 15, AND GOVERNMENT LOTS 18 AND 19 OF SECTION 22, TOWNSHIP 10 SOUTH, RANGE 9 WEST, OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 161: (10-10-1300)

THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL: 162: (10-11-200)

THE NORTHWEST QUARTER; THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER; AND THE WEST

ONE-HALF OF THE SOUTHEAST QUARTER, ALL IN SECTION 3, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

PARCEL 163: (10-11-300)

U.S. LOT 7 AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, IN SECTION 3; AND THE NORTH ONE-HALF OF THE NORTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 10, ALL IN TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

PARCEL 164: (10-11-400)

ALL OF U.S. LOT 4, IN SECTION 4, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED RECORDED JUNE 15, 1921 IN BOOK 41, PAGE 121, DEED RECORDS OF LINCOLN COUNTY, OREGON;

FURTHER EXCEPTING THEREFROM THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED RECORDED MAY 21, 1958 IN BOOK 191, PAGE 577, DEED RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 165: (10-11-600)

THE WEST ONE-HALF, THE WEST ONE-HALF OF NORTHEAST QUARTER, THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER, THE WEST ONE-HALF OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER, ALL IN SECTION 9; AND THE NORTH ONE-HALF OF SECTION 16, ALL IN TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED RECORDED OCTOBER 27, 1975 IN BOOK 60, PAGE 692, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 166: (10-11-700)

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 9, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 167: 10-11-800, 1100, 1200, 2100, 2200, 2300, 2400, 2500, 2600, 2700

THE SOUTH ONE HALF OF SECTION 15; THE SOUTH ONE HALF OF SECTION 16; LOTS 1, 2, 3, 4, 5, 6, 7 AND 8, THE SOUTH ONE HALF OF THE NORTHEAST QUARTER, THE SOUTHEAST QUARTER, THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, AND THE SOUTH ONE HALF OF THE NORTHWEST QUARTER OF SECTION 22; THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23; THE NORTHEAST QUARTER, THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, THE SOUTH ONE HALF OF THE NORTHWEST QUARTER, OF SECTION 27; ALL OF SECTION 21, EXCEPTING THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER; ALL IN TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 168: (10-11-900)

THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER, THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER, THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, AND THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER, ALL IN SECTION 10, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 169: (10-11-1000)

U.S. LOT 4, SECTION 10, AND THE NORTHWEST QUARTER OF SECTION 15, ALL IN TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 170: 10-11-2800, 2900, 3100 & 3101 AND 3500

THE SOUTH ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTH ONE HALF OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

THE NORTH ONE HALF OF THE NORTH ONE HALF; THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; THE WEST ONE HALF OF THE WEST ONE HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, EXCEPTING THAT PORTION CONVEYED TO WILLIAM R. MARTIN, ET UX BY DEED RECORDED FEBRUARY 27, 1967 IN BOOK 275, PAGE 320, DEED RECORDS, ALL IN SECTION 28; AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 21, ALL IN TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 171: (10-11-3000)

THE EAST ONE-HALF OF THE SOUTHWEST QUARTER; THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THE EAST ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; AND THE EAST ONE-HALF OF THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 28, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 172: (10-11-5-100)

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER AND THE NORTH ONE-HALF OF THE NORTH ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER IN SECTION 5, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PARCEL OF LAND DEEDED TO CENTRAL LINCOLN PEOPLE'S UTILITY DISTRICT IN DEED RECORDED DECEMBER 24, 1973 IN BOOK 46, PAGE 881, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 173: (10-11-5DC-113)

BEING THE EAST 60 FEET OF EVEN WIDTH OF THE FOLLOWING DESCRIBED TRACT:

BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 5, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON, THAT IS NORTH 113.46 FEET, EAST 801.91 FEET, SOUTH 0°28' WEST, 120.0 FEET, AND NORTH 89°32' WEST, 100.0 FEET FROM THE MEANDER CORNER SET AT THE SOUTHWEST CORNER OF SAID SECTION 5, SAID POINT OF BEGINNING BEING THE SOUTHEAST CORNER OF THE PARCEL CONVEYED TO BEVERLY BEACH WATER DISTRICT BY DEED RECORDED DECEMBER 22, 1970, IN BOOK 22, PAGE 1670, MICROFILM RECORDS; THENCE,

NORTH ALONG THE EAST LINE OF SAID WATER DISTRICT PARCEL 123.75 FEET, MORE OR LESS, TO THE SOUTH LINE OF MARINE DRIVE SOUTH AS SHOWN ON THE PLAT OF FINNISTERRE; THENCE, EAST ALONG SAID SOUTH LINE TO ITS INTERSECTION WITH THE SOUTHERLY PROLONGATION OF THE EAST LINE OF PACIFIC AVENUE; THENCE, SOUTH ALONG THE SOUTHERLY PROLONGATION OF THE EAST LINE OF PACIFIC AVENUE 120 FEET, MORE OR LESS, TO THE SOUTH LINE OF SECTION 5; THENCE, WEST ALONG THE SOUTH LINE OF SECTION 5, 575 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

EXCEPTING THE EAST 240 FEET THEREOF.

PARCEL 174: (10-11-8-100)

BEGINNING AT A POINT ON THE WEST LINE OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, SAID POINT BEING 932.33 FEET, MORE OR LESS, SOUTHERLY OF THE NORTHWEST CORNER OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER OF SAID SECTION 8; THENCE SOUTH 89 DEG. 32' 30" EAST 180 FEET; THENCE SOUTH 0 DEG. 23' 30" WEST, 104.66 FEET TO THE EASTERLY BOUNDARY LINE OF RELOCATED HIGHWAY 101; THENCE NORTHWESTERLY ALONG SAID RIGHT OF WAY 126.52 FEET TO THE WESTERLY LINE OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER; THENCE SOUTH TO THE EAST-WEST CENTER LINE OF SAID SECTION 8; THENCE EAST ALONG SAID CENTER LINE TO THE EAST QUARTER CORNER OF SAID SECTION 8; THENCE NORTH ALONG THE SECTION LINE TO THE NORTHEAST CORNER THEREOF; THENCE WESTERLY ALONG THE NORTH LINE OF SAID SECTION 8 TO THE NORTHWEST CORNER OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER; THENCE SOUTH ALONG THE WEST LINE OF THE EAST ONE-HALF OF THE NORTHEAST QUARTER TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM U.S. HWY 101 RIGHT OF WAY.

PARCEL 175: (10-11-8D-100)

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM A TRACT OF LAND MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON ROD THAT IS 1533.60 FEET NORTH OF THE INITIAL PINT OF CARMEL BEACH (SAID INITIAL POINT BEING NORTH 89 DEG. 44' WEST 1324.60 FEET FROM THE SOUTHEAST CORNER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 11 WEST); THENCE EAST 208 FEET; THENCE NORTH 200 FEET; THENCE WEST 208 FEET TO THE WEST LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8; THENCE SOUTH ALONG SAID WEST LINE 200 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL 176: (10-11-17-100)

THE EAST ONE-HALF OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 177: 10-11-17-600 AND 10-11-17CA-901

THE NORTH ONE HALF OF THE SOUTHEAST QUARTER AND THE EAST ONE HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 11 WEST IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO ELLIS BEAUMONT BY DEED RECORDED AUGUST 27, 1957 IN BOOK 187, PAGE 18, DEED RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO RICHARD T. SMITH, ET UX BY DEED RECORDED JUNE 7, 1974 IN MICROFILM VOLUME 49, PAGE 1552, LINCOLN COUNTY RECORDS.

ALSO THAT PORTION OF THE WESTERLY 100 FEET OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND U.S. LOT 3 OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON LYING EASTERLY OF THE EASTERLY RIGHT OF WAY LINE OF OREGON U.S. HIGHWAY 101 AND ALSO LYING NORTHERLY OF A LINE SITUATED 50 FEET SOUTHERLY AND PARALLEL TO THE CENTERLINE OF AN EXISTING ROAD AS DESCRIBED IN DEED FROM ATLANTIC WESTERN COMPANY TO LONGVIEW FIBRE COMPANY IN BOOK 102, PAGE 232, DEED RECORDS.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF OREGON, HIGHWAY COMMISSION BY DEED RECORDED MAY 23, 1946 IN BOOK 111, PAGE 365, DEED RECORDS.

PARCEL 178: (10-11-17AB-3000)

LOT 1, BLOCK 3, CAR-MEL BEACH, IN LINCOLN COUNTY, OREGON.

PARCEL 179: 10-11-20-100, 1001 & 1501

ALL OF LOT 1, LYING NORTH OF THE SILETZ RESERVATION LINE, EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF OREGON, BY AND THROUGH ITS DEPARTMENT OF TRANSPORTATION BY DEED RECORDED JUNE 1, 1982 IN MICROFILM VOLUME 132, PAGE 2252, LINCOLN COUNTY RECORDS. THE NORTH ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 11 WEST IN LINCOLN COUNTY, OREGON.

ALSO THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO THE SOUTH ONE HALF OF THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING AND RESERVING UNTO THE GRANTOR HEREIN, THAT PART OF THE FOLLOWING DESCRIBED PROPERTY THAT IS WITHIN THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN:

BEGINNING AT THE QUARTER CORNER COMMON TO SECTIONS 20 AND 29 OF TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN; THENCE SOUTH $0^{\circ} 13' 35''$ WEST ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 29, 644.40 FEET TO THE NORTH LINE OF THAT PARCEL DESCRIBED IN BOOK 144, PAGE 1040 OF LINCOLN COUNTY DEED RECORDS; THENCE SOUTH $89^{\circ} 46' 25''$ EAST, 995 FEET TO THE CENTER OF THE MAIN STREAM; THENCE NORTHERLY AND WESTERLY DOWN SAID STREAM TO THE NORTH-SOUTH CENTERLINE OF SECTION 20; THENCE SOUTH $0^{\circ} 24' 06''$ WEST, 1705 FEET TO THE POINT OF BEGINNING.

PARCEL 180: 10-11-29-103, 300 AND 400

THE NORTH ONE HALF OF THE NORTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER ALL IN SECTION 29, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

A) THAT PORTION CONVEYED TO DONALD G. TARPLAY BY DEED RECORDED MAY 1, 1939 IN BOOK 81, PAGE 66, DEED RECORDS.

B) THAT PORTION CONVEYED TO ROBERT B. DOLL BY DEED RECORDED DECEMBER 9, 1982 IN MICROFILM VOLUME 137, PAGE 834, LINCOLN COUNTY RECORDS.

C) THAT PORTION CONVEYED TO LONGVIEW HILLS, INC. BY DEED RECORDED SEPTEMBER 29, 1983 IN MICROFILM VOLUME 144, PAGE 1040, LINCOLN COUNTY RECORDS.

D) THAT PORTION RESERVED UNTO GRANTOR HEREIN, DESCRIBED AS FOLLOWS, THAT IS WITHIN THE NORTH ONE-HALF OF THE NORTHEAST QUARTER OF SECTION 29, TOWNSHIP 10 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN:

BEGINNING AT THE QUARTER CORNER COMMON TO SECTIONS 20 AND 29 OF TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN; THENCE SOUTH $0^{\circ} 13' 35''$ WEST ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 29, 644.40 FEET TO THE NORTH LINE OF THAT PARCEL DESCRIBED IN BOOK 144, PAGE 1040 OF LINCOLN COUNTY DEED RECORDS; THENCE SOUTH $89^{\circ} 46' 25''$ EAST, 995 FEET TO THE CENTER OF THE MAIN STREAM; THENCE NORTHERLY AND WESTERLY DOWN SAID STREAM TO THE NORTH-SOUTH CENTERLINE OF SECTION 20; THENCE SOUTH $0^{\circ} 24' 06''$ WEST, 1705 FEET TO THE POINT OF BEGINNING.

PARCEL 181: (10-11-33-100)

THE NORTH ONE-HALF OF THE NORTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

ALSO: AN EASEMENT AND RIGHT OF WAY OVER AND ACROSS THE EXISTING ROADWAY CONNECTING THE PROPERTY AND THE BIG CREEK COUNTY ROAD, AS FURTHER DESCRIBED IN DEED TO OREGON PULP AND PAPER COMPANY, RECORDED AUGUST 8, 1957 IN BOOK 186, PAGE 451, DEED RECORDS OF LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT TRACT OF LAND DESCRIBED IN DEED RECORDED JUNE 30, 1999 IN BOOK 384, PAGE 1283, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 182: (10-11-34-400)

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:
BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 10 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH ALONG THE CENTER SECTION LINE 715 FEET; THENCE EAST 1110 FEET PARALLEL TO THE SOUTH LINE OF SAID SECTION 34; THENCE NORTH 715 FEET TO THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 34; THENCE WEST 1110 FEET TO THE POINT OF BEGINNING.

PARCEL 183: (11-11-21-1000)

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 21, TOWNSHIP 11 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 184: (11-11-27-2100)

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AN UNDIVIDED ONE-THIRD INTEREST IN AND TO THE FOLLOWING DESCRIBED REAL PROPERTY:

BEGINNING AT A POINT IN THE CENTER OF THE SOUTHERN PACIFIC COMPANY'S RAILROAD TRACT WHICH SAID POINT IS 5.60 CHAINS WEST OF THE EAST LINE OF LOT SIX (6) IN SECTION 27, TOWNSHIP 11 SOUTH, RANGE 11 WEST OF WILLAMETTE MERIDIAN IN OREGON, RUNNING THENCE NORTH 100 FEET, THENCE RUNNING WESTERLY 100 FEET FROM THE CENTER OF SAID RAILROAD TRACT AND PARALLEL THERETO FOR THE FULL DISTANCE THROUGH THE BALANCE OF LOT SIX AND LOT FIVE, TO THE WEST LINE OF SAID LOT FIVE, THENCE SOUTH ALONG SAID WEST LINE OF LOT FIVE TO MEAN HIGH WATER MARK ON YAQUINS BAY, THENCE EASTERLY ALONG MEAN HIGH WATER MARK TO A POINT SOUTH OF BEGINNING. THENCE NORTH TO PLACE OF BEGINNING; SAVE AND EXCEPT THE RIGHT-OF-WAY OF THE SOUTHERN PACIFIC COMPANY RAILROAD FORTY FEET, IN WIDTH, (TWENTY FEET ON EACH SIDE OF THE CENTER LINE OF THE TRACK AS NOW LOCATED AND OPERATED) THROUGH THE FULL LENGTH OF SAID TRACT OF LAND.

ALSO ALL OF THE TIDE AND OVERFLOWED LANDS BETWEEN MEAN HIGH WATER MARK AND MEAN LOW WATER MARK LOCATED IN FRONT OF AND ADJOINING LOTS FIVE, SIX AND SEVEN; ALL OF ABOVE DESCRIBED LANDS LYING AND BEING IN SECTION 27, TOWNSHIP 11 SOUTH, RANGE 11 WEST OF WILLAMETTE MERIDIAN IN OREGON, AND IN LINCOLN COUNTY.

PARCEL 185: (12-8-7400)

THE NORTH ONE-HALF AND THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 12 SOUTH, RANGE 8 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 186: (12-11-2300)

THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 187: (12-11-2900)

U.S. LOT 3 IN SECTION 4, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 188: (12-11-3600)

THE SOUTHEAST QUARTER, THE WEST ONE-HALF OF THE NORTHEAST QUARTER, AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 9, ALL IN TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 189: (12-11-5800)

U.S. LOTS 1 AND 2, THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER, THE EAST ONE-HALF OF THE SOUTHEAST QUARTER, AND THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 16, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 190: (12-11-6300)

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 16, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 191: (12-11-6600)

U.S. LOTS 1 AND 2, AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 192: (12-11-7200)

U.S. LOTS 3 AND 4, AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 193: (12-11-5-100)

U.S. LOTS 1 AND 2, AND THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE FOLLOWING TRACTS OF LAND:

A TRACT OF LAND MORE PARTICULARLY DESCRIBED IN DEED RECORDED DECEMBER 6, 1965 IN BOOK 262, PAGE 166, DEED RECORDS FOR LINCOLN COUNTY, OREGON;

A TRACT OF LAND MORE PARTICULARLY DESCRIBED IN DEED RECORDED APRIL 22, 1966 IN BOOK 266, PAGE 131, DEED RECORDS FOR LINCOLN COUNTY, OREGON;

A TRACT OF LAND MORE PARTICULARLY DESCRIBED IN DEED RECORDED APRIL 22, 1966 IN BOOK 262, PAGE 130, DEED RECORDS FOR LINCOLN COUNTY, OREGON;

PARCEL 194: (12-11-5-500)

THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 195: (12-11-5-801)

U.S. LOT 3 AND THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER LYING NORTHERLY OF THIEL CREEK COUNTY ROAD, ALL IN SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 196: (12-11-5-802)

THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 197: (12-11-5-1000)

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 198: (12-11-7-200)

THE EAST ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 199: (12-11-18-200)

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 200: (12-11-19-100)

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 19, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 19.

PARCEL 201: (12-11-19-400)

THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 19, LYING SOUTHERLY OF BEAVER CREEK, ALL IN TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 202: (12-11-19C-100)

THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 19, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 203: (12-11-20-400)

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 204: (12-11-29-700)

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 205: (12-11-30-600)

THE WEST ONE-HALF OF THE NORTHWEST QUARTER OF SECTION 29, AND THE NORTHEAST QUARTER, THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, ALL IN TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 206: (12-11-30-1300)

U.S. LOT 3 AND THE WEST ONE-HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM PARCEL 1 OF DEED RECORDED APRIL 27, 1998 IN BOOK 356, PAGE 1300, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 207: (12-11-31-800)

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 31, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 208: (13-10-1100)

THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 13 SOUTH, RANGE 10 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON

PARCEL 209: (13-11-4300)

THE EAST ONE-HALF OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 36, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 210: (13-11-4700)

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 33, AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, ALL IN TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 211: (13-11-5200)

THE SOUTHWEST QUARTER, THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER, AND THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 32, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 212: (13-11-6201)

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 213: (13-11-6-300)

U.S. LOT 4 IN SECTION 6, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM PARCEL 2 OF DEED RECORDED MAY 4, 1978 IN BOOK 87, PAGE 500, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 214: (13-11-7-1000)

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 215: (13-11-21-700)

U.S. LOT 1 IN SECTION 21, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THAT PORTION LYING WITHIN COUNTY ROAD NO. 705.

PARCEL 216: (13-11-21-800)

THE EAST ONE-HALF OF THE NORTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

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EXCEPTING THAT PORTION LYING WITHIN COUNTY ROAD NO. 705.

PARCEL 217: (13-11-21-900)

THE NORTH 660 FEET OF U.S. LOTS 4 AND 5, IN SECTION 21, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THAT PORTION LYING WITHIN COUNTY ROAD NO. 705.

PARCEL 218: (13-11-22-400)

ALL OF U.S. LOTS 4 AND 5, AND THE NORTH 660 FEET OF U.S. LOT 6, ALL IN SECTION 22, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 219: (13-11-27-2100)

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 27, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 220: (13-11-29-200)

THE WEST ONE-HALF OF THE NORTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 29, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM BEGINNING AT THE NORTHWEST CORNER OF SECTION 29, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 1 DEG. 34' EAST ALONG THE WEST LINE OF SAID SECTION, 120.92 FEET; THENCE SOUTH 77 DEG. 41' 30" EAST 109.96 FEET; THENCE NORTH 21 DEG. 24' 30" EAST 145 FEET, MORE OR LESS, TO THE NORTH LINE OF SAID SECTION 29; THENCE WEST ALONG THE NORTH LINE OF SAID SECTION 29, 165 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

FURTHER EXCEPTING THEREFROM ANY PORTION DESCRIBED IN DEEDS RECORDED JANUARY 19, 1962 IN BOOK 222, PAGE 2, AND RECORDED SEPTEMBER 20, 1961 IN BOOK 219, PAGE 104, DEED RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 221: (13-11-30-900)

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, LYING EAST OF CRESTLINE DRIVE.

PARCEL 222: (13-11-30-1200)

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM ANY PORTION DESCRIBED IN DEED RECORDED JANUARY 19, 1962 IN BOOK 222, PAGE 2, DEED RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 223: (13-11-31-100 & 300)

THE NORTH ONE-HALF OF THE NORTHEAST QUARTER OF SECTION 31, TOWNSHIP 13 SOUTH, RANGE

11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THE TRACT OF LAND DESCRIBED IN DEED RECORDED MAY 25, 1964 IN BOOK 244, PAGE 621, DEED RECORDS.

FURTHER EXCEPTING THEREFROM THE TRACT OF LAND DESCRIBED IN DEED RECORDED APRIL 8, 1993 IN BOOK 259, PAGE 1587, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

EXCEPTING ANY PORTION LYING WITHIN CRESTLINE DRIVE.

PARCELS 224: (13-11-31-500)

THE NORTH ONE-HALF OF THE SOUTHEAST QUARTER IN SECTION 31, TOWNSHIP 13 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 225: (14-11-200)

U.S. LOTS 3, 4, 5, 6, 7, 8, 9 AND 10, SECTION 3, AND U.S. LOTS 1, 2 AND 3, SECTION 4, ALL IN TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 226: (14-11-300)

U.S. LOTS 19, 20, 21 AND 22, SECTION 3 TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 227: (14-11-400)

U.S. LOTS 23, 24, 25 AND 26, IN SECTION 4, TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 228: (14-11-800)

U.S. LOT 4, SECTION 4, AND U.S. LOTS 1 AND 2, SECTION 5, ALL IN TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED RECORDED NOVEMBER 30, 1978 IN BOOK 95, PAGE 142, MICROFILM RECORDS OF LINCOLN COUNTY, OREGON.

PARCEL 229: (14-11-900)

U.S. LOTS 2, 4, 5 AND 6, AND THE EAST ONE-HALF OF LOT 3, IN SECTION 6, TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 230: (14-11-1300)

THE NORTHEAST QUARTER, THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER, AND THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER, SECTION 22, TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 231: (14-11-32-1000)

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 232: (14-12-400)

U.S. LOTS 5, 6, 11 AND 12, EXCEPT THE WEST 660 FEET OF THE NORTH 660 FEET OF LOT 5, IN SECTION 1, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM THAT TRACT OF LAND DESCRIBED IN DEED RECORDED DECEMBER 26, 2000 IN BOOK 412, PAGE 1969, MICROFILM RECORDS.

PARCEL 233: (14-12-600)

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, AND THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 234: (14-12-1000)

THE NORTH ONE-HALF OF THE NORTHEAST QUARTER, THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, AND THE SOUTHEAST QUARTER OF SECTION 35, AND THE WEST ONE-HALF OF SECTION 36, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 235: (14-12-1202)

THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER, THE EAST ONE-HALF OF THE SOUTHWEST QUARTER, AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, ALL IN SECTION 35, AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER, IN SECTION 34, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON. TOGETHER WITH EASEMENT, INCLUDING THE TERMS AND PROVISIONS THEREOF, AS CONTAINED IN EASEMENT EXCHANGE AGREEMENT, RECORDED APRIL 3, 1986 IN BOOK 169, PAGE 1976, MICROFILM RECORDS, AND MODIFIED BY INSTRUMENT RECORDED JUNE 25, 1990 IN BOOK 218, PAGE 1338, MICROFILM RECORDS.

PARCEL 236: (14-12-1A-1200)

U.S. LOT 8, SECTION 1, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 237: (14-12-11-400)

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 238: (14-12-26-1000)

THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF SECTION 26, LYING SOUTHERLY OF THE YACHATS RIVER, IN TOWNSHIP 14 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN IN LINCOLN COUNTY, OREGON.

PARCEL 239: (8-9-5500)

THE NORTHWEST QUARTER AND THE SOUTH HALF OF SECTION 36, TOWNSHIP 8 SOUTH, RANGE 9 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

PARCEL 240: (14-11-2600)

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 31, TOWNSHIP 14 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 31; THENCE NORTH ALONG THE EAST LINE OF SAID SECTION TO A POINT 200 FEET SOUTH FROM THE HIGH WATER MARK OF THE YACHATS RIVER; THENCE WESTERLY ON A COURSE THAT IS 200 FEET SOUTH FROM THE YACHATS RIVER, TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 31; THENCE SOUTH ON THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 31 TO THE QUARTER SECTION CORNER ON THE SOUTH LINE OF SAID SECTION 31; THENCE EAST ALONG THE SOUTH LINE OF SAID SECTION 31 TO THE POINT OF BEGINNING.

58
Recorded by First American
Title Insurance Co.
Order # 1731505



After recording return to:
Terrance M. Lettenmaier and Laurie
A. Weitkamp
PO Box 550
South Beach, OR 97366

Until a change is requested all tax statements
shall be sent to the following address:
Terrance M. Lettenmaier and Laurie A.
Weitkamp
PO Box 550
South Beach, OR 97366
File No.: 7111-1731505 (LDG)
Date: June 30, 2011

Lincoln County, Oregon
07/15/2011 12:46:53 PM
DOC-WD

2011-06639

Cnt=1 Pgs=3 Stn=19 LELY

\$15.00 \$11.00 \$15.00 \$10.00 \$7.00 - Total ...

THIS SPACE



00046452201100066390030036

I, Dana W. Jenkins, County Clerk, do hereby certify
that the within instrument was recorded in the Lincoln
County Book of Records on the above date and time.
WITNESS my hand and seal of said office affixed.

Dana W. Jenkins, Lincoln County Clerk



STATUTORY WARRANTY DEED

Big Picture Properties, LLC, a Washington limited liability company, Grantor, conveys and warrants to Terrance M. Lettenmaier and Laurie A. Weitkamp, husband and wife as tenants by the entirety, Grantee, the following described real property free of liens and encumbrances, except as specifically set forth herein:

See Legal Description attached hereto as Exhibit A and by this reference incorporated herein.

Subject to:

1. Covenants, conditions, restrictions and/or easements, if any, affecting title, which may appear in the public record, including those shown on any recorded plat or survey.

The true consideration for this conveyance is **\$230,000.00**. (Here comply with requirements of ORS 93.030)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007, AND SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930 AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007, AND SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009.

Dated this 13th day of July, 2011.

Big Picture Properties, LLC, a Washington
limited liability company

Scott A. Price

By: Scott A. Price, Managing Member

STATE OF Washington)
County of King)ss.
)

This instrument was acknowledged before me on this 13th day of July, 2011
by Scott A. Price as Managing Member of Big Picture Properties, LLC, on behalf of the limited liability
company.

Susan M. Morris

Notary Public for Washington

My commission expires: Aug 6, 2013

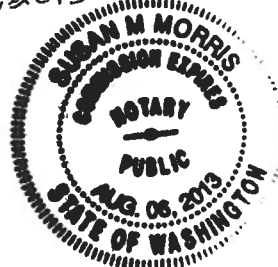


EXHIBIT A

LEGAL DESCRIPTION: Real property in the County of Lincoln, State of Oregon, described as follows:

U.S. LOT 3 AND THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER LYING NORTHERLY OF THIEL CREEK COUNTY ROAD, ALL IN SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THEREFROM ANY PORTION FALLING WITHIN S.E. 98TH STREET (THIEL CREEK ROAD AND COUNTY ROAD 601).

TOGETHER WITH THAT PORTION OF GOVERNMENT LOT 2 DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF GOVERNMENT LOT 2; THENCE EASTERLY ALONG THE NORTH LINE OF SAID LOT TO THE NORTHWEST CORNER OF GOVERNMENT LOT 1; THENCE SOUTH ALONG THE WEST LINE OF SAID LOT 1, 655 FEET; THENCE WESTERLY, PARALLEL WITH THE NORTH LINE OF GOVERNMENT LOT 2 TO THE WEST LINE OF SAID LOT; THENCE NORTHERLY ALONG SAID WEST LINE TO THE POINT OF BEGINNING, ALL IN SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST OF THE WILLAMETTE MERIDEIAN, IN LINCOLN COUNTY, OREGON.

EXCEPTING THAT PORTION, IF ANY, OF THE TRACT DESCRIBED IN VOLUME 261, PAGE 844, FILM RECORDS.

WFE 11/20/16 PT

GRANTOR:

Fox N. Bush, LLC

GRANTEE:

Terrance M. Lettenmaier
and Laurie A. Weitkamp

AFTER RECORDING

RETURN TO:

Minor, Bandonis & Haggerty, PC
POB 510
Newport OR 97365

UNTIL A CHANGE IS REQUESTED

SEND TAX STATEMENTS TO:

Terry Lettenmaier
PO Box 550
South Beach, OR 97366

The true consideration for this conveyance, stated in terms of dollars, is none, but there is other good and valuable consideration, being the exchange of land to effect an adjustment of the common boundary between the larger tracts of the Grantor and the Grantee, the receipt and adequacy of which is hereby acknowledged.

WARRANTY DEED

STATUTORY FORM

(Conveyance to Adjust Property Line)

Fox N. Bush, LLC, an Oregon limited liability company, Grantor, conveys and warrants to Terrance M. Lettenmaier and Laurie A. Weitkamp, tenants by the entirety, Grantee, the following described real property situated in Lincoln County, Oregon, to-wit:

Property Conveyed:

That certain parcel as more particularly described in Exhibit A, attached hereto and by this reference made a part hereof, ("Proposed Fox N. Bush, LLC to Lettenmaier," prepared by Nyhus Surveying, Inc.).

Subject to:

1. Any easements which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.

Lincoln County, Oregon

11/04/2016 02:01:07 PM

2016-10536

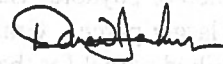
DOC-LOT/ADJ

Cnt=1 Pgs=7 Stn=0

\$35.00 \$11.00 \$10.00 \$20.00 \$7.00

\$83.00

I, Dana W. Jenkins, County Clerk, do hereby certify that the within instrument was recorded in the Lincoln County Book of Records on the above date and time. WITNESS my hand and seal of said office affixed.



Dana W. Jenkins, Lincoln County Clerk



2. Taxes for the year 2016-17, which are a lien as of July 1, 2016, but which are not yet determined or payable. Such taxes are assessed and levied against the above-described parcel as part of a larger parcel. Grantor shall be responsible to pay in full any taxes imposed on the above-described parcel for the 2016-17, and any previous, tax year.

3. Subject property is either situated within the Urban Renewal Boundaries or within the shared area of the City of Newport and is subject to the terms and provisions thereof.

4. The rights of the public, in and to that portion of the herein described property lying within the limits of roads and highways.

5. Right of way agreement, including the terms and provisions thereof, dated January 5, 1995, recorded February 22, 1995, in Book 295, page 955, Microfilm Records of Lincoln County, Oregon, between Boise Cascade Corporation and Simpson Timber Company, amended by document recorded November 6, 2008, as Document No. 2008-12867, microfilm records.

6. An easement created by instrument, including the terms and provisions thereof, recorded April 19, 1955, in Book 170, page 301, records of Lincoln County, Oregon, in favor of adjacent property for right to take water for domestic purposes from a certain stream (covers additional land).

7. An easement created by instrument, including the terms and provisions thereof, dated January 29, 2007, recorded February 5, 2007, as Document No. 200701949, Microfilm Records, re-recorded February 23, 2007, as Document No. 200702851, microfilm records of Lincoln County, Oregon, in favor of Green Diamond Resource Company, a Washington corporation for non-exclusive easement over an existing logging road (covers additional land).

8. Reservation of oil, gas and other minerals as set forth in instrument dated August 28, 2006, recorded August 31, 2006, as document No. 200613383, Records of Lincoln County, Oregon (covers additional land).

Property Originally Owned:

Lettenmaier Weitkamp (Grantee) Tract:

That parcel as more particularly described in Exhibit A attached to that certain Statutory Warranty Deed recorded July 15, 2011, in Lincoln County, Oregon, as Document No. 2011-06639.

Fox N. Bush, LLC, (Grantor) Tract:

That certain parcel described in Exhibit A attached to that certain Bargain and Sale Deed recorded March 6, 2007, in the Lincoln County, Oregon, Book of Records as Document No. 2007-03372.

BUT EXCEPTING THEREFROM that certain property conveyed to Michael Moore and Barbara Moore, by bargain and sale deed

recorded June 9, 2015, in the Lincoln County, Oregon, Book of Records as Document No. 2015-05586

TOGETHER WITH that parcel conveyed by bargain and sale deed from Michael Moore and Barbara Moore to Fox N. Bush, LLC, recorded June 9, 2015, in the Lincoln County Book of Records as Document 2015-05587.

The New Boundary Line Between the Lettenmaier and Weitkamp Tract and the Fox N. Bush, LLC, Tract, as Adjusted, is Described as Follows:

Upon completion of the property line adjustments, the common boundary line between the Lettenmaier and Weitkamp Tract and the Fox N. Bush, LLC, Tract, as adjusted, is described as set forth in the attached Exhibit labeled "Proposed Boundary Between Lettenmaier and Fox N. Bush, LLC," prepared by Nyhus Surveying, Inc.

Required Information (ORS 92.190(4)) and Additional Information:


No new parcel is created hereby. The Grantor and the Grantee own adjacent tracts of land, each consisting of approximately seventy acres. The parties have obtained approval for a property line adjustment, such that they each will exchange a six acre parcel from their existing tracts. The six acre parcel hereby conveyed from the Grantor to the Grantee will be and become a part of the Grantee's existing tract and will be removed from the Grantor's existing tract, and a similar transfer will take place such that by separate instrument the Grantor will acquire from the Grantee a six acre parcel, which becomes part of the Grantor's tract. Approval for the property line adjustment (together with amendment of the City of Newport Urban Growth Boundary, a Zone Change and a Comprehensive Plan Change) was obtained through Lincoln County Proceedings in Case File #1-LUPC-ZC-16.

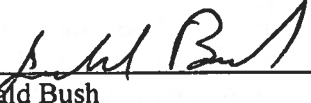
BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Dated this 31st day of October, 2016.

GRANTOR:

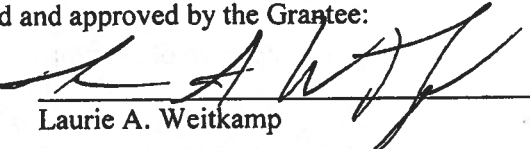
Fox N. Bush, LLC

By: 
John L. Fox
Authorized Representative and Member

By: 
Jerald Bush
Authorized Representative and Member

The foregoing lot line adjustment deed is accepted and approved by the Grantee:


Terrance M. Lettenmaier


Laurie A. Weitkamp

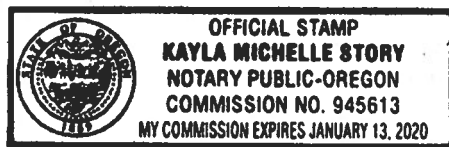
STATE OF OREGON)

) ss.

County of Lincoln)

10-13, 2016.

Personally appeared the above named Terrance M. Lettenmaier and Laurie A. Weitkamp, and each for himself acknowledged the foregoing instrument to be their voluntary act and deed.




Notary Public for Oregon

STATE OF OREGON)

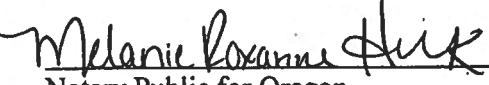
) ss.

County of COOS)

10/31, 2016.

Personally appeared the above named Jerald Bush, who is an authorized representative and member of Fox N. Bush, LLC, an Oregon limited liability company, and said that the foregoing instrument was signed on behalf of said limited liability company, pursuant to lawful authority; and acknowledged the foregoing instrument to be his and its voluntary act and deed.




Notary Public for Oregon

STATE OF OREGON)

SS.

10-14, 2016.

County of Benton

Personally appeared the above named John L. Fox, who is an authorized representative and member of Fox N. Bush, LLC, an Oregon limited liability company, and said that the foregoing instrument was signed on behalf of said limited liability company, pursuant to lawful authority; and acknowledged the foregoing instrument to be his and its voluntary act and deed.



Mel Shoup
Notary Public for Oregon

5 - WARRANTY DEED



Nyhus Surveying, Inc.

Gary K. Nyhus, PLS

P.O. Box 206 / 740 E. Thissell Rd. • Tidewater, OR 97390 • 541-528-3234 • (Fax) 541-528-3234
nyhussurveying@peak.org

LEGAL DESCRIPTION PREPARED FOR TERRY LETTENMAIER

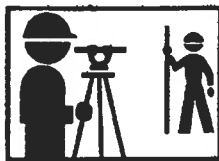
PROPOSED FOX 'N BUSH, LLC TO LETTENMAIER.

BEGINNING AT THE NORTHEAST CORNER OF GOVERNMENT LOT 2, SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH $89^{\circ} 41' 45''$ WEST, 180.00 FEET ALONG THE NORTH LINE OF SAID SECTION 5; THENCE SOUTH $00^{\circ} 00' 00''$ WEST, 240.00 FEET; THENCE SOUTH $63^{\circ} 10' 16''$ WEST, 547.70 FEET; THENCE SOUTH $00^{\circ} 00' 00''$ WEST, 170.39 FEET TO THE SOUTHERLY BOUNDARY OF THE LETTENMAIER AND WEITKAMP TRACT DESCRIBED IN LINCOLN COUNTY DEED DOCUMENT 2011-06639 AND THE TRUE POINT OF BEGINNING; THENCE SOUTH $89^{\circ} 41' 51''$ WEST, 680.12 FEET, ALONG SAID SOUTHERLY BOUNDARY, TO THE SOUTHWEST CORNER OF THE AFORESAID LOT 2; THENCE SOUTH $00^{\circ} 02' 38''$ EAST, 440 FEET, MORE OR LESS, ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 5 TO THE NORTHERLY BOUNDARY OF SOUTHEAST 98TH STREET; THENCE EASTERLY, 340 FEET, MORE OR LESS, ALONG SAID NORTHERLY BOUNDARY TO THE MOST WESTERLY CORNER OF THE SIMMONS TRACT DESCRIBED IN LINCOLN COUNTY MICROFILM VOLUME 261, PAGE 0844; THENCE NORTHEASTERLY, 500 FEET, MORE OR LESS, ALONG THE CENTER OF A ONE LINK STREAM TO THE MOST NORTHERLY CORNER OF SAID SIMMONS TRACT; THENCE NORTHERLY, 180 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Gary Keith Nyhus
OREGON
JULY 25, 1981
GARY KEITH NYHUS
2515

EXHIBIT A
TO PROPERTY LINE ADJUSTMENT DEED



Nyhus Surveying, Inc.

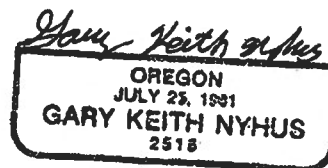
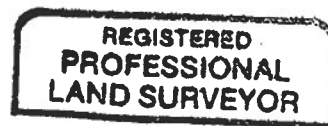
Gary K. Nyhus, PLS

P.O. Box 206 / 740 E. Thissell Rd. • Tidewater, OR 97390 • 541-528-3234 • (Fax) 541-528-3234
nyhussurveying@peak.org

LEGAL DESCRIPTION PREPARED FOR TERRY LETTENMAIER

PROPOSED BOUNDARY BETWEEN LETTENMAIER AND FOX 'N BUSH, LLC.

BEGINNING AT THE NORTHEAST CORNER OF GOVERNMENT LOT 2, SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 89° 41' 45" WEST, 180.00 FEET ALONG THE NORTH LINE OF SAID SECTION 5 TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 00° 00' 00" WEST, 240.00 FEET; THENCE SOUTH 63° 10' 16" WEST, 547.70 FEET; THENCE SOUTH 00° 00' 00" WEST, 170.39 FEET; THENCE SOUTHERLY, 180 FEET, MORE OR LESS, TO THE MOST NORTHERLY CORNER OF THE SIMMONS TRACT DESCRIBED IN LINCOLN COUNTY MICROFILM VOLUME 261, PAGE 0844.



WJE 111204 PT

GRANTOR:

Terrance M. Lettenmaier
and Laurie A. Weitkamp

GRANTEE:

Fox N. Bush, LLC

AFTER RECORDING

RETURN TO:

Fox N. Bush, LLC
777 NE 2nd Street, Suite F
Corvallis, OR 97333

UNTIL A CHANGE IS REQUESTED

SEND TAX STATEMENTS TO:

Fox N. Bush, LLC
777 NE 2nd Street, Suite F
Corvallis, OR 97333

The true consideration for this conveyance, stated in terms of dollars, is none, but there is other good and valuable consideration, being the exchange of land to effect an adjustment of the common boundary between the larger tracts of the Grantor and the Grantee, the receipt and adequacy of which is hereby acknowledged.

**WARRANTY DEED
STATUTORY FORM
(Conveyance to Adjust Property Line)**

Terrance M. Lettenmaier and Laurie A. Weitkamp, tenants by the entirety, Grantor, conveys and warrants to Fox N. Bush, LLC, an Oregon limited liability company, Grantee, the following described real property situated in Lincoln County, Oregon, to-wit:

Property Conveyed:

That certain parcel as more particularly described in Exhibit B, attached hereto and by this reference made a part hereof, ("Proposed Lettenmaier to Fox N. Bush, LLC," prepared by Nyhus Surveying, Inc.). There is no Exhibit A attached hereto.

Subject to:

1. Any easements which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.

Lincoln County, Oregon

11/04/2016 02:05:07 PM

DOC-LOT/ADJ

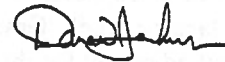
2016-10537

Cnt=1 Pgs=7 Stn=0

\$35.00 \$11.00 \$10.00 \$20.00 \$7.00

\$83.00

I, Dana W. Jenkins, County Clerk, do hereby certify that the within instrument was recorded in the Lincoln County Book of Records on the above date and time. WITNESS my hand and seal of said office affixed.



Dana W. Jenkins, Lincoln County Clerk



2. Taxes for the year 2016-17, which are a lien as of July 1, 2016, but which are not yet determined or payable. Such taxes are assessed and levied against the above-described parcel as part of a larger parcel. Grantor shall be responsible to pay in full any taxes imposed on the above-described parcel for the 2016-17, and any previous, tax year.

3. Subject property is either situated within the Urban Renewal Boundaries or within the shared area of the City of Newport and is subject to the terms and provisions thereof.

4. The rights of the public, in and to that portion of the herein described property lying within the limits of roads and highways.

5. Right of way agreement, including the terms and provisions thereof, dated January 5, 1995, recorded February 22, 1995, in Book 295, page 955, Microfilm Records of Lincoln County, Oregon, between Boise Cascade Corporation and Simpson Timber Company, amended by document recorded November 6, 2008, as Document No. 2008-12867, microfilm records.

6. An easement created by instrument, including the terms and provisions thereof, recorded April 19, 1955, in Book 170, page 301, records of Lincoln County, Oregon, in favor of adjacent property for right to take water for domestic purposes from a certain stream (covers additional land).

7. An easement created by instrument, including the terms and provisions thereof, dated January 29, 2007, recorded February 5, 2007, as Document No. 200701949, Microfilm Records, re-recorded February 23, 2007, as Document No. 200702851, microfilm records of Lincoln County, Oregon, in favor of Green Diamond Resource Company, a Washington corporation for non-exclusive easement over an existing logging road (covers additional land).

8. Utility easement agreement, including the terms and provisions thereof, dated September 11, 2013, recorded September 16, 2013, as Document No. 2013-09149, Lincoln County Records between Terry Lettenmaier and Laurie Weitkamp and Steel String, Inc., an Oregon corporation (covers additional land).

Property Originally Owned:

Lettenmaier Weitkamp (Grantor) Tract:

That parcel as more particularly described in Exhibit A attached to that certain Statutory Warranty Deed recorded July 15, 2011, in Lincoln County, Oregon, as Document No. 2011-06639.

Fox N. Bush, LLC, (Grantee) Tract:

That certain parcel described in Exhibit A attached to that certain Bargain and Sale Deed recorded March 6, 2007, in the Lincoln County, Oregon, Book of Records as Document No. 2007-03372.

BUT EXCEPTING THEREFROM that certain property conveyed to Michael Moore and Barbara Moore, by bargain and sale deed

recorded June 9, 2015, in the Lincoln County, Oregon, Book of Records as Document No. 2015-05586

TOGETHER WITH that parcel conveyed by bargain and sale deed from Michael Moore and Barbara Moore to Fox N. Bush, LLC, recorded June 9, 2015, in the Lincoln County Book of Records as Document 2015-05587.

The New Boundary Line Between the Lettenmaier and Weitkamp Tract and the Fox N. Bush, LLC, Tract, as Adjusted, is Described as Follows:

Upon completion of the property line adjustments, the common boundary line between the Lettenmaier and Weitkamp Tract and the Fox N. Bush, LLC, Tract, as adjusted, is described as set forth in the attached Exhibit labeled "Proposed Boundary Between Lettenmaier and Fox N. Bush, LLC," prepared by Nyhus Surveying, Inc.

Required Information (ORS 92.190(4)) and Additional Information:

No new parcel is created hereby. The Grantor and the Grantee own adjacent tracts of land, each consisting of approximately seventy acres. The parties have obtained approval for a property line adjustment, such that they each will exchange a six acre parcel from their existing tracts. The six acre parcel hereby conveyed from the Grantor to the Grantee will be and become a part of the Grantee's existing tract and will be removed from the Grantor's existing tract, and a similar transfer will take place such that by separate instrument the Grantor will acquire from the Grantee a six acre parcel, which becomes part of the Grantor's tract. Approval for the property line adjustment (together with amendment of the City of Newport Urban Growth Boundary, a Zone Change and a Comprehensive Plan Change) was obtained through Lincoln County Proceedings in Case File #1-LUPC-ZC-16.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Dated this 31st day of October, 2016.

GRANTOR

Terrance M. Lettenmaier

Laurie A. Weitkamp

The foregoing lot line adjustment deed is accepted and approved by the Grantee:

Fox N. Bush, LLC

By:

John L. Fox

Authorized Representative and Member

By:

Jerald Bush

Authorized Representative and Member

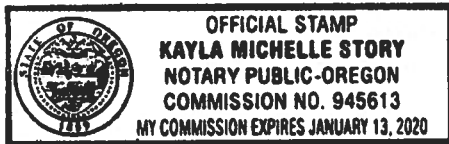
STATE OF OREGON)

) ss.

County of Lincoln)

10-13, 2016.

Personally appeared the above named Terrance M. Lettenmaier and Laurie A. Weitkamp, and each for himself and herself acknowledged the foregoing instrument to be their voluntary act and deed.



[Signature]
Notary Public for Oregon

STATE OF OREGON)

) ss.

County of Coos)

10/31, 2016.

Personally appeared the above named Jerald Bush, who is an authorized representative and member of Fox N. Bush, LLC, an Oregon limited liability company, and said that the foregoing instrument was signed on behalf of said limited liability company, pursuant to lawful authority; and acknowledged the foregoing instrument to be his and its voluntary act and deed.



[Signature]
Notary Public for Oregon

STATE OF OREGON)

) ss.

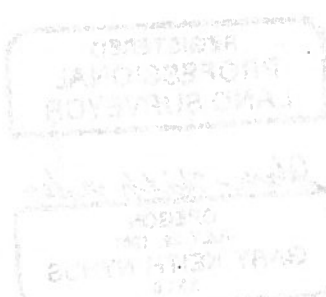
10-14, 2016.

County of Benton)

Personally appeared the above named John L. Fox, who is an authorized representative and member of Fox N. Bush, LLC, an Oregon limited liability company, and said that the foregoing instrument was signed on behalf of said limited liability company, pursuant to lawful authority; and acknowledged the foregoing instrument to be his and its voluntary act and deed.



Geryl Sharp
Notary Public for Oregon





Nyhus Surveying, Inc.

Gary K. Nyhus, PLS

P.O. Box 206 / 740 E. Thissell Rd. • Tidewater, OR. 97390 • 541-528-3234 • (Fax) 541-528-3234
nyhussurveying@peak.org

LEGAL DESCRIPTION PREPARED FOR TERRY LETTENMAIER

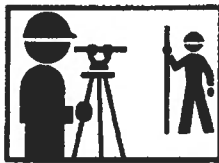
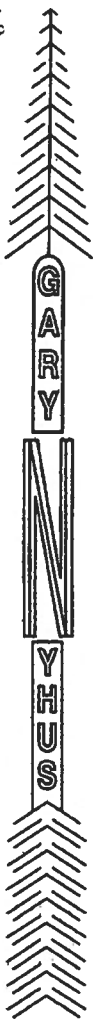
PROPOSED LETTENMAIER TO FOX 'N BUSH, LLC.

BEGINNING AT THE NORTHEAST CORNER OF GOVERNMENT LOT 2, SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH 89° 41' 45" WEST, 180.00 FEET ALONG THE NORTH LINE OF SAID SECTION 5; THENCE SOUTH 00° 00' 00" WEST, 240.00 FEET; THENCE SOUTH 63° 10' 16" WEST, 547.70 FEET; THENCE SOUTH 00° 00' 00" WEST, 170.39 FEET TO THE SOUTHERLY BOUNDARY OF THE LETTENMAIER AND WEITKAMP TRACT DESCRIBED IN LINCOLN COUNTY DEED DOCUMENT 2011-06639; THENCE NORTH 89° 41' 51" EAST, 670.00 FEET, ALONG SAID SOUTHERLY BOUNDARY, TO THE EAST LINE OF THE AFORESAID LOT 2; THENCE NORTH 00° 06' 32" WEST, 655.00 FEET TO THE POINT OF BEGINNING

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Gary Keith Nyhus
OREGON
JULY 28, 1981
GARY KEITH NYHUS
2518

EXHIBIT B
TO PROPERTY LINE ADJUSTMENT DEED



Nyhus Surveying, Inc.

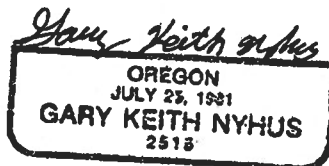
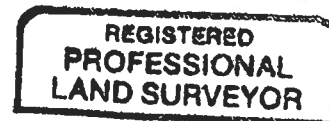
Gary K. Nyhus, PLS

P.O. Box 206 / 740 E. Thissell Rd. • Tidewater, OR 97390 • 541-528-3234 • (Fax) 541-528-3234
nyhussurveying@peak.org

LEGAL DESCRIPTION PREPARED FOR TERRY LETTENMAIER

PROPOSED BOUNDARY BETWEEN LETTENMAIER AND FOX 'N BUSH, LLC.

BEGINNING AT THE NORTHEAST CORNER OF GOVERNMENT LOT 2, SECTION 5, TOWNSHIP 12 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, IN LINCOLN COUNTY, OREGON; THENCE SOUTH $89^{\circ} 41' 45''$ WEST, 180.00 FEET ALONG THE NORTH LINE OF SAID SECTION 5 TO THE TRUE POINT OF BEGINNING; THENCE SOUTH $00^{\circ} 00' 00''$ WEST, 240.00 FEET; THENCE SOUTH $63^{\circ} 10' 16''$ WEST, 547.70 FEET; THENCE SOUTH $00^{\circ} 00' 00''$ WEST, 170.39 FEET; THENCE SOUTHERLY, 180 FEET, MORE OR LESS, TO THE MOST NORTHERLY CORNER OF THE SIMMONS TRACT DESCRIBED IN LINCOLN COUNTY MICROFILM VOLUME 261, PAGE 0844.



B384 P1283

10-11-33

10-11-32AA

~~pin TL 100~~ 101

TL 602

GRANTOR: Boise Cascade Corporation,
a Delaware CorporationAFTER RECORDING
RETURN TO:UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:GRANTEE: The City of Newport,
a Municipal Corporation and
Political Subdivision of the
State of OregonCity Recorder
City of Newport
810 SW Alder Street
Newport, OR 97365City Recorder
City of Newport
810 SW Alder Street
Newport, OR 97365

ORIGINAL IN

WARRANTY DEED

BOISE CASCADE CORPORATION, a Delaware corporation ("Grantor"), conveys and warrants to the CITY OF NEWPORT, a municipal corporation and political subdivision of the State of Oregon ("Grantee"), the following described real property, free of encumbrances except as specifically set forth herein, situated in Lincoln County, Oregon, to wit:

Parcel I and Parcel II, as more particularly described in the attached Exhibit A.

SUBJECT TO:

1. As disclosed by the assessment and tax roll, the Premises herein have been specially assessed as forest land. If the land becomes disqualified for this special assessment under the statute, an additional tax plus interest may be levied for the last five or lesser number of years in which the land was subject to this special land use assessment (Affects Parcel I)

2. Subject property is either situated within the urban renewal boundaries or within the shared area of the City of Newport and is subject to the terms and provisions thereof.

3. An easement created by instrument, including the terms and provisions thereof, Recorded July 9, 1941, Book 88, Page 240, in favor of West Coast Power Company, to construct, reconstruct, operate and maintain electric power lines. (Exact location unknown).

4. Limited access in deed to State of Oregon, by and through its Department of Transportation, Highway Department, which provides that no right or easement of right of access to, from or across the State Highway other than expressly therein provided for shall attach to the abutting property, Recorded May 8, 1951, Book 145, Page 168; and modified by instrument Recorded November 10, 1959, Book 204, Page 378; and modified again by instrument Recorded May 1, 1967, Book 277, Page 268.

5. An easement created by instrument, including the terms and provisions thereof, Dated April 11, 1960, Recorded April 25, 1960, Book 207, Page 496, in favor of Central Lincoln People's Utility District, for power and communication lines. (Affects Parcel I)

6. An easement created by instrument, including the terms and provisions thereof, Dated August 1, 1986, Recorded August 11, 1986, Book 173, Pages 1291, 1297 and 1303, in favor of Central Lincoln People's Utility District, for electric transmission line. (Affects Parcel I)

7. An easement created by instrument, including the terms and provisions thereof, Dated May 15, 1996, Recorded September 8, 1997, Book 343, Page 851, in favor of TCI Cablevision of Oregon, to construct, operate, maintain, and repair communication cable. (Affects both parcels)

8. The rights of the public in and to that portion of the herein described property lying within the limits of public roads, streets or highways.

9. Covenants, conditions, easements and restrictions, including the terms and provisions thereof, but omitting restrictions, if any, based on race, color, religion, national origin and mental or physical handicap, contained in an instrument between Central Lincoln People's Utility District and Boise Cascade Corporation, Recorded August 11, 1986, Book 173, Page 1289. (Affects Parcel II)

10. The rights created by letter agreement executed between Boise Cascade Corporation and the City of Newport, Dated June 17, 1999.

The true and actual consideration for this conveyance is \$13,500.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS OR LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

DATED this 17th day of June 1999.

BOISE CASCADE CORPORATION



By

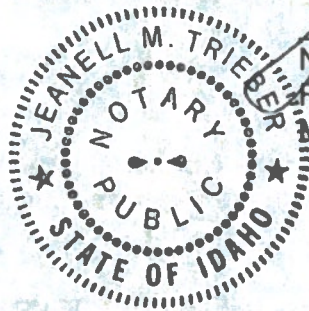
Robert L. Lewis
SENIOR Vice President

STATE OF IDAHO)
) ss.
COUNTY OF ADA)

June 17, 1999

Personally appeared R. B. Parrish who, being sworn, stated that he is the Senior Vice President of Boise Cascade Corporation and that the seal affixed hereto is its seal and that this instrument was voluntarily signed and sealed on behalf of the corporation by authority of its Board of Directors.

Before me:



Jeanell M. Triebel
Notary Public
Residing at Boise
My Commission Expires 10/1/2003

B384 P1286

EXHIBIT A

Parcel I

Commencing at a point on the section line between Sections 32 and 33, Township 10 South, Range 11 West, Willamette Meridian, Lincoln County, Oregon, said point being North 00° 24' 14" West, 365.00 feet from the one-quarter corner between said Sections 32 and 33, said point also being the true point of beginning of the following described tract; thence North 44° 35' 46" East, 197.99 feet; thence North 00° 24' 14" West, 1038.60 feet; thence South 89° 35' 46" West, 140.00 feet to said section line; thence South 00° 24' 14" East, along said section line 1178.60 feet to the true point of beginning.

10-11-33
T.L. 100

The parcel of land to which this description applies contains 3.56 acres, more or less.

Parcel II

A tract of land lying in the Northeast Quarter of the Northeast Quarter of Section 32, Township 10 South, Range 11 West, Willamette Meridian, Lincoln County, Oregon, more particularly described as follows:

10-11-32AA
T.L. 602

The South fifty feet (50') of the East 208.70 feet of the following described tract:

Starting at the Southeast corner of the Northeast Quarter of the Northeast Quarter of Section 32, Township 10 South, Range 11 West, Willamette Meridian, thence North 89° 29' 00" West, 1766.60 feet along the North one-sixteenth line of Section 32; thence North 51° 02' 00" East, 156.90 feet; thence along a curve to the right, the long chord of which bears North 82° 54' 00" East, 165.90 feet; thence South 66° 00' 00" East, 180.00 feet; thence South 89° 29' 00" East, 1107.90 feet; thence North 00° 29' 0" East, 158.70 feet to an iron pipe; thence South 89° 29' 00" East, 208.70 feet to an iron pipe; thence South 00° 29' 00" West, 208.70 feet to the beginning point.


The parcel of land to which this description applies contains .24 acres, more or less.

STATE OF OREGON } ss.
County of Lincoln

I, Dana W. Jenkins, County Clerk, in and for said county, do hereby certify that the within instrument was received for record, and recorded in the Book of Records of said county at Newport, Oregon.

Book 384 Page 1283

WITNESS my hand and seal of said office affixed.


DANA W. JENKINS, Lincoln County Clerk



Doc : 6212166
Rect: 93747 26.00
06/30/1999 03:20:01pm

10-11-33

MINOR, BANDONIS, CONNELL & FETSCH, P.C.

JOHN CHRISTOPHER MINOR
MICHAEL J. BANDONIS
ROBERT W. CONNELL
ELIZABETH A. FETSCH
BRIAN HAGGERTY

ATTORNEYS AT LAW
236 WEST OLIVE STREET
P.O. Box 510
NEWPORT, OR 97365

TELEPHONE: (541) 265-8888
FAX: (541) 265-9433
cminor@newportlaw.com

October 20, 1999

Patricia Bearden
City Recorder
810 SW Alder Street
Newport, OR 97365

Re: Harney Dr. Reconstruction Replacement
Our File No. 98 NPT/L 866b

Dear Patty:

Enclosed please find the original Policy of Title Insurance issued in favor of the City for the Boise Cascade road right-of-way acquisition.

I assume you have the original deed, and this should be kept with the deed, and also a copy of the Sale Agreement should be kept with those documents, and also by the City of Newport Engineering Department. As disclosed in Exception No. 10 of the Title Report, we had an unrecorded Sale (Letter) Agreement dated June 17, 1999, which contained some agreements between us and Boise Cascade which survived the closing of the transaction. Therefore, we need to keep the existence of this agreement in mind in future matters relating to the use and regulation of the property.

Sincerely,

MINOR, BANDONIS, CONNELL & FETSCH, P.C.



J. Christopher Minor

JCM/amm
Enclosures

F:\SHARED\AMY\WINDOCS\10-1199\CNPTBOIS L01
FN 98 npt/l 866b



Boise Cascade Corporation

General Offices

1111 W. Jefferson Street
P.O. Box 50
Boise, Idaho 83728-0001
208/384-6161
Fax: 208/384-7298
Telex: 170 362 VIA TRT

June 17, 1999

City of Newport
810 SW Alder Street
Newport, OR 97365

**Subject: NE HARNEY DRIVE & NE 36th STREET CONNECTION PROJECT
Agreement to Sell Real Property**

Gentlemen:

This letter sets forth in writing the agreement reached by representatives of Boise Cascade Corporation ("Boise Cascade") and the City of Newport, a municipality ("Buyer"), whereby Boise Cascade will sell to Buyer certain real property described as Parcel I and Parcel II on Exhibit A attached hereto (the "Property"). The terms and conditions agreed upon by the parties are as follows:

1. Buyer shall pay to Boise Cascade as the total purchase price for the Property \$13,500.00, which amount shall be paid by immediately negotiable check at the Closing (hereinafter defined).
2. Boise Cascade shall convey title to Buyer at the Closing by a general warranty deed free and clear of any and all claims, liens, or encumbrances whatsoever, except real estate taxes and assessments for the current year and all other encumbrances, restrictions, and reservations of record.
3. It is understood that Boise Cascade now uses Parcel II and a part of Parcel I for purposes of access to Boise Cascade's other real property. The Buyer agrees that the Property being acquired shall be used by Buyer primarily for public road purposes, to the end that Boise Cascade shall continue to have access to its other property for any purposes it deems necessary. Until the City shall develop the Property being acquired for such public road purposes, Boise Cascade shall have the right of access to its other property over, upon and across the Property. Upon creation of the contemplated public road, Boise Cascade shall have the right to use the public road for access to its remaining property. Buyer will impose no weight restriction or vehicle size

limitation on any portion of any public road located on Parcels I and II that will unreasonably exclude gross weight vehicles that meet the state standards as legal highway loads for an extended period of time.

4. The Buyer will construct a chain link fence at its sole expense to separate the Property known as Parcel I, from the remaining lands owned and held by Boise Cascade to prevent and restrict nonbusiness access onto Boise Cascade lands. Said chain link fence shall be approximately 6 feet in height, and run approximately 80 feet on the North line of Parcel I, 1038 feet on the East line of Parcel I, and 198 feet on the Southwest line of Parcel I. Said fence shall be constructed on the land of Boise Cascade, immediately adjacent to the boundary, and following construction, shall be and become the property of Boise Cascade. Additionally, Buyer agrees to construct two mutually agreed upon gated access points along said fence, approximately 20 feet in width, to provide Boise Cascade reasonable access from any City street which is subsequently constructed on Parcel I, into Boise Cascade land located in portions of the West Half of the Northwest Quarter and portions of the Northeast Quarter of the Northwest Quarter of Section 33, Township 10 South, Range 11 West, Willamette Meridian.

5. The Closing of this transaction shall occur as soon as reasonably practicable at the offices of Lincoln County Title and Escrow Company, Newport, Oregon, and in no event later than 30 days following the execution of this agreement (herein called "Closing" and "Closing Date").

6. Boise Cascade shall deliver a preliminary title report on the Property not less than five business days prior to the Closing. In the event the preliminary title report discloses any claims, liens, encumbrances, reservations, or restrictions against the property not acceptable to Buyer, then Buyer shall so notify Boise Cascade. Boise Cascade may elect to cure any claim, lien, encumbrance, reservation, or restriction objected to by Buyer prior to the Closing, or terminate this Agreement if Buyer is unwilling to accept the Property subject to all claims, liens, encumbrances, reservations, and restrictions listed in the preliminary title report without reduction in the purchase price specified in paragraph 1 hereof. Within a reasonable time after the Closing, Boise Cascade shall deliver to Buyer a title policy in the amount of the purchase price insuring title to the Property in Buyer subject only to the claims, liens, encumbrances, reservations, and restrictions of record permitted herein.

7. All real estate taxes and assessments for the current year shall be prorated as of the Closing. Buyer specifically acknowledges the Property has been classified as forest land, and in the event Buyer shall hereafter change the use of said Property, Buyer shall be solely responsible for any taxes due as a result of the change in use. Boise Cascade shall pay the cost of the title insurance policy and one-half of any Closing fees, including escrow fees imposed upon the sale and transfer of the Property to Buyer. Buyer shall pay all recording fees, transfer taxes and assessments, deed stamps, and one-half of any closing fees, including escrow fees.

8. Boise Cascade reserves the right to all merchantable timber now located upon the Property, subject to Buyer's right to cut such timber. Buyer shall have the right to cut any and all timber upon the Property. Boise Cascade shall provide Buyer a merchantable timber definition based on species, length and diameter as outlined in Exhibit B. Timber so cut, shall be cut into logs of lengths specified by Boise Cascade (but not less than eight-foot lengths) and decked along a roadside in an area on Boise Cascade adjacent land accessible by a conventional self-loading log truck. Boise Cascade shall be responsible for the payment of any harvest severance tax incurred as a result of the harvesting and removal of said timber. Boise Cascade shall bear the entire risk of loss to any and all merchantable timber now located upon the Property.

9. Buyer shall be entitled to possession of the Property to be transferred hereunder on the Closing Date.

10. Buyer hereby represents and warrants to Boise Cascade that it has not committed or incurred any liability to any broker, finder, appraiser, or other agent for any brokerage fees, finder's fees, or other commissions with respect to the transaction contemplated by this Agreement, and Buyer agrees to indemnify and hold Boise Cascade harmless from and against any claims asserted against Boise Cascade for such fees or commissions by any such person. Boise Cascade hereby represents and warrants to Buyer that it has not committed or incurred any liability to any broker, finder, appraiser, or other agent for any brokerage fees, finder's fees, or other commissions with respect to the transaction contemplated by this Agreement, and Boise Cascade agrees to indemnify and hold Buyer harmless from and against any claims asserted against Buyer for such fees or commissions by any such person.

11. Boise Cascade warrants, to the best of its knowledge and belief, that no hazardous waste, hazardous substance or pollution, as defined in the Comprehensive Environmental Response, Compensation and Liability Act, or any other similar statute or regulation, is present upon, in or under the Property. Boise Cascade makes no other representations or warranties regarding the physical condition of the Property. Buyer takes the Property "as is."

12. All terms and conditions of this Agreement shall survive the Closing of this transaction.

13. Neither party shall record this Agreement nor any copy hereof without the express written consent of the other party.

Page 4
June 17, 1999

14. Any modification or amendment to this Agreement shall be made only by a writing signed by both parties hereto.

If the foregoing correctly states our entire Agreement, please sign and date the enclosed copy of this letter in the space provided below and return it to the undersigned.

Very truly yours,

BOISE CASCADE CORPORATION

 Rob Lavinish
SENIOR Vice President

enclosure

Agreed to and accepted this 30 day of June, 1999.

CITY OF NEWPORT

By Sam S. Sasaki
Title City Manager

EXHIBIT A

Parcel I

Commencing at a point on the section line between Sections 32 and 33, Township 10 South, Range 11 West, Willamette Meridian, Lincoln County, Oregon, said point being North 00° 24' 14" West, 365.00 feet from the one-quarter corner between said Sections 32 and 33, said point also being the true point of beginning of the following described tract; thence North 44° 35' 46" East, 197.99 feet; thence North 00° 24' 14" West, 1038.60 feet; thence South 89° 35' 46" West, 140.00 feet to said section line; thence South 00° 24' 14" East, along said section line 1178.60 feet to the true point of beginning.

The parcel of land to which this description applies contains 3.56 acres, more or less.

Parcel II

A tract of land lying in the Northeast Quarter of the Northeast Quarter of Section 32, Township 10 South, Range 11 West, Willamette Meridian, Lincoln County, Oregon, more particularly described as follows:

The South fifty feet (50') of the East 208.70 feet of the following described tract:

Starting at the Southeast corner of the Northeast Quarter of the Northeast Quarter of Section 32, Township 10 South, Range 11 West, Willamette Meridian, thence North 89° 29' 00" West, 1766.60 feet along the North one-sixteenth line of Section 32; thence North 51° 02' 00" East, 156.90 feet; thence along a curve to the right, the long chord of which bears North 82° 54' 00" East, 165.90 feet; thence South 66° 00' 00" East, 180.00 feet; thence South 89° 29' 00" East, 1107.90 feet; thence North 00° 29' 0" East, 158.70 feet to an iron pipe; thence South 89° 29' 00" East, 208.70 feet to an iron pipe; thence South 00° 29' 00" West, 208.70 feet to the beginning point.

The parcel of land to which this description applies contains .24 acres, more or less.

EXHIBIT B

All logs of all species are to be bucked to maximize preferred lengths, then any remainder to the lengths specified below, limbed flush on all four sides and bucked square, utilized to the minimum noted diameters.

MINIMUM TOP DIAMETER ALL SPECIES = 5"

Note: These lengths include 1' trim

Preferred Length:	35' 0"
Primary Lengths:	27' 0", 18' 0"
Secondary Lengths:	9' 0"
Utilization Lengths:	40' 0", 31' 0", 22' 10", 13' 10"

POLICY OF TITLE INSURANCE ISSUED BY

STEWART TITLE

INSURANCE COMPANY OF OREGON

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, STEWART TITLE INSURANCE COMPANY OF OREGON, an Oregon corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

IN WITNESS WHEREOF, Stewart Title Insurance Company of Oregon has caused this policy to be signed and sealed by its duly authorized officers as of the date of Policy shown in Schedule A.

Craig Chisholm

President

STEWART TITLE
INSURANCE COMPANY OF OREGON

Stewart Morris Jr.

Chairman of the Board

Countersigned:

Jamie Brown

Authorized Signatory

INCOLN COUNTY TITLE & ESCROW CO.
Company



City, State NEWPORT, OREGON

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the Insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (b) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

CONDITIONS AND STIPULATIONS

1. DEFINITION OF TERMS.

The following terms when used in this policy mean:

(a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.

(b) "insured claimant": an insured claiming loss or damage.

(c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.

(d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument (f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.

(g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT.

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured against by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

**STEWART TITLE
GUARANTY COMPANY**

This Certificate is attached to and constitutes a part of Title Insurance Policy No. O-7801 0002893 (the "Policy") of STEWART TITLE INSURANCE COMPANY OF OREGON ("CEDER").

Name of Insured:

CITY OF NEWPORT, a municipal corporation and political subdivision of the State of Oregon

In consideration of the premium paid under the Policy, it is hereby understood and agreed that STEWART TITLE GUARANTY COMPANY ("REINSURER"), of Houston, Texas, reinsures all liability under the Policy and that in the event STEWART TITLE INSURANCE COMPANY OF OREGON shall fail to pay any valid claim under the Policy by reason of loss or damage insured against, then such loss covered by the terms of the Policy shall be the responsibility of STEWART TITLE GUARANTY COMPANY.

In Witness whereof, STEWART TITLE GUARANTY COMPANY has caused this Assumption Certificate to be signed and sealed by its duly authorized officers to be effective as of the Date of Policy numbered above.

**STEWART TITLE
GUARANTY COMPANY**

ss. Stewart Morris Jr.

Chairman of the Board

ss. Malcolm S. Morris

President

Countersigned:

*Lincoln County Title & Escrow Co.
Newport, Oregon*

By:


Authorized Countersignature

PROVISIONS OF THIS CERTIFICATE ARE ATTACHED

ASSUMPTION CERTIFICATE PROVISIONS

1. Direct Access

Provided Insured shall give to Reinsurer notification of any claim under the Policy within a reasonable time after notice of the claim is given to or received by Ceder and is pursuing its remedies under the Policy, then in the event that under the terms of the Policy Insured has sustained a loss or losses, the liability of Reinsurer under this Agreement shall be extended to and in favor of Insured. Failure to so notify as provided in this paragraph shall not defeat the rights of the Insured hereunder unless Reinsurer shall be actually prejudiced by the failure, and then only to the extent of the prejudice. Thereafter, if Insured requests payment of Reinsurer's liability under the Certificate directly to Insured, then this Certificate may be enforced by Insured directly against Reinsurer, without diminution, defense, setoff or counterclaim which Reinsurer may have against Ceder. Any defense to liability which Ceder has against Insured shall inure to Reinsurer.

Reinsurer agrees that Insured shall have the right to commence a legal action to enforce this Certificate against it in the state in which the land is located or in any state where Reinsurer is qualified to do business, provided that when any service of process is made in any action, a copy is sent by Registered or Certified Mail to Reinsurer at its address set forth in Provision 2 hereof.

2. Notices - Where Sent

Any notice given hereunder shall be given to Reinsurer and shall include the Policy number and the number of this Certificate and shall be addressed to STEWART TITLE GUARANTY COMPANY at P.O. Box 2029, Houston, Texas 77252-2029

3. Rights of Insured Not Prejudiced

Ceder is authorized to furnish Insured a duplicate of the Agreement which authorizes the issuance of this Certificate.

No modification of such Agreement shall prejudice the rights of Insured under the Policy or conferred upon Insured under the provisions of such Agreement.

4. Laws Applicable

The terms of the Agreement and this Certificate shall be governed by the laws of the situs of the real property described in the Policy.

City of Newport
810 SW Alder Street
Newport, OR 97365

SCHEDULE A

Policy No: O-7801 0002893
File No: 212579
Effective Date: JUNE 30, 1999
at 3:20:01 P.M.

Amount: \$13,500.00
Premium: \$200.00

1. Name of Insured:

CITY OF NEWPORT, a municipal corporation and political subdivision of the
State of Oregon

2. The estate or interest in the land which is covered by this policy is:

Fee Simple

3. Title to the estate or interest in the land is vested in:

CITY OF NEWPORT, a municipal corporation and political subdivision of the
State of Oregon

4. The land referred to in this policy is described as follows:

The Property described in Exhibit 'A' attached hereto and made a part
hereof.

Continued on page 2

LINCOLN COUNTY TITLE & ESCROW CO.

NEWPORT OFFICE - 255 S.W. Coast Hwy. #100 - P.O. Box 1006 - Newport, Oregon 97365 - (541) 265-2288 - FAX 265-9570
LINCOLN CITY OFFICE - 2015 N.W. 39th St. #100 - Lincoln City, Oregon 97367 - (541) 994-8928 - FAX 994-7075
SOUTH COUNTY OFFICE - P.O. Box 744 - 185-A SW Hwy 101 - Waldport, Oregon 97394 - (541) 563-2722 - FAX 563-4472

SCHEDULE B

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

GENERAL EXCEPTIONS

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by public records. Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, easements or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.
3. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments or any other facts which a correct survey would disclose and which are not shown by the public records.
5. Statutory liens or other liens or encumbrances, or claims thereof, which are not shown by the public records.

SPECIAL EXCEPTIONS:

1. As disclosed by the assessment and tax roll, the premises herein have been specially assessed as forest land. If the land becomes disqualified for this special assessment under the statute, an additional tax plus interest may be levied for the last five or lesser number of years in which the land was subject to this special land use assessment.
(Affects Parcel I)
2. Subject property is either situated within the urban renewal boundaries or within the shared area of the City of Newport and is subject to the terms and provisions thereof.

(Affects Parcel II)

3. An easement created by instrument, including the terms and provisions thereof,
Recorded : July 9, 1941 Book: 88 Page: 240
In Favor of: West Coast Power Company
For : construct, reconstruct, operate and
maintain electric power lines
(Exact location unknown)

(Affects Parcel I)
4. Limited access in deed to State of Oregon, by and through its Department of Transportation, Highway Department which provides that no right or easement of right of access to, from or across the State Highway other than expressly therein provided for shall attach to the abutting property,
Recorded : May 8, 1951 Book: 145 Page: 168

Modified by instrument,
Recorded : November 10, 1959 Book: 204 Page: 378
Modified by instrument,
Recorded : May 1, 1967 Book: 277 Page: 268
5. An easement created by instrument, including the terms and provisions thereof,
Dated : April 11, 1960
Recorded : April 25, 1960 Book: 207 Page: 496
In Favor of: Central Lincoln Peoples Utility District
For : power and communication lines
(Affects Parcel I)
6. An easement created by instrument, including the terms and provisions thereof,
Dated : August 1, 1986
Recorded : August 11, 1986 Book: 173 Page: 1291, 1297 and 1303
In Favor of: Central Lincoln Peoples Utility District
For : electric transmission line
(Affects Parcel I)
7. An easement created by instrument, including the terms and provisions thereof,
Dated : May 15, 1996
Recorded : September 8, 1997 Book: 343 Page: 851
In Favor of: TCI Cablevision of Oregon
For : construct, operate, maintain, and repair
a communication cable
(Affects both parcels)
8. The rights of the public in and to that portion of the herein described property lying within the limits of public roads, streets or highways.

Policy No. 212579
Page No. 4

9. Covenants, conditions, easements and restrictions, including the terms and provisions thereof, but omitting restrictions, if any, based on race, color, religion, national origin and mental or physical handicap, imposed by instrument,

Recorded : August 11, 1986
(Affects Parcel II)

Book: 173

Page: 1289

10. Unrecorded Sale (Letter) Agreement dated June 17, 1999, including the terms and provisions thereof, between Boise Cascade Corporation and the City of Newport as disclosed by Warranty Deed,

Recorded : June 30, 1999

Book: 384

Page: 1283

Exhibit 'A'

PARCEL I:

Commencing at a point on the section line between Sections 32 and 33, Township 10 South, Range 11 West, Willamette Meridian, Lincoln County, Oregon, said point being North 00 deg. 24' 14" West, 365.00 feet from the one-quarter corner between said Sections 32 and 33, said point also being the true point of beginning of the following described tract; thence North 44 deg. 35' 46" East, 197.99 feet; thence North 00 deg. 24' 14" West 1038.60 feet; thence South 89 deg. 35' 46" West, 140.00 feet to said section line; thence South 00 deg. 24' 14" East along said section line 1178.60 feet to the true point of beginning.

PARCEL II:

A tract of land lying in the Northeast quarter of the Northeast quarter of Section 32, Township 10 South, Range 11 West of the Willamette Meridian in Lincoln County, Oregon. More particularly described as follows:

The South 50 feet of the East 208.7 feet of the following described tract.

A parcel of land described as follows:

Starting at the Southeast corner of the Northeast quarter of the Northeast quarter of Section 32, Township 10 South, Range 11 West, Willamette Meridian; thence North 89 deg. 29' West 1766.6 feet along the North one-sixteenth line of Section 32; thence North 51 deg. 02' East, 156.9 feet; thence along a curve right the long chord of which bears North 82 deg. 54' East, 165.9 feet; thence South 66 deg. 00' East, 180.00 feet; thence South 89 deg. 29' East 1107.9 feet; thence North 0 deg. 29' East 158.7 feet to an iron pipe; thence South 89 deg. 29' East 208.7 feet to an iron pipe; thence South 0 deg. 29' West 208.7 feet to the beginning point.

LINCOLN COUNTY TITLE & ESCROW CO

This sketch is provided, without charge, for your information. It is not intended to show all matters related to the property including, but not limited to, area, dimensions, easements, encroachments, or location of boundaries. It is not a part of, nor does it modify, the commitment or policy to which it is attached. The Company assumes no liability for any matter related to this sketch. Reference should be made to an accurate survey for further information.

Order Number: 212579 Scale: 1" = 400'

County Assessor's Map

10-11-33 TL 100 (PTN) N33 T10S R1
LINCOLN COL

1" = 400'

See Map 10 11

29 28
32 33

WEST 79 TOCH

100
120 AC

200
40.93 AC

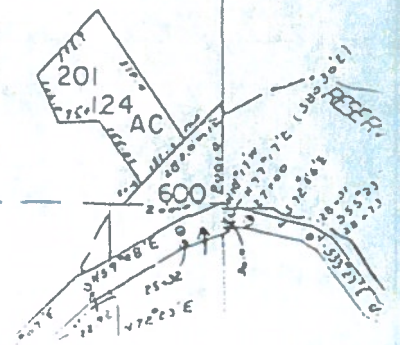
PI

Map 10 11 32

Year 80.00 CH

SEE MAP

301
2.00 AC



LINCOLN COUNTY TITLE & ESCROW CO.

This sketch is provided, without charge, for your information. It is not intended to show all matters related to the property including, but not limited to, area, dimensions, easements, encroachments, or location of boundaries. It is not a part of, nor does it modify, the commitment or policy to which it is attached. The Company assumes no liability for any matter related to this sketch. Reference should be made to an accurate survey for further information.

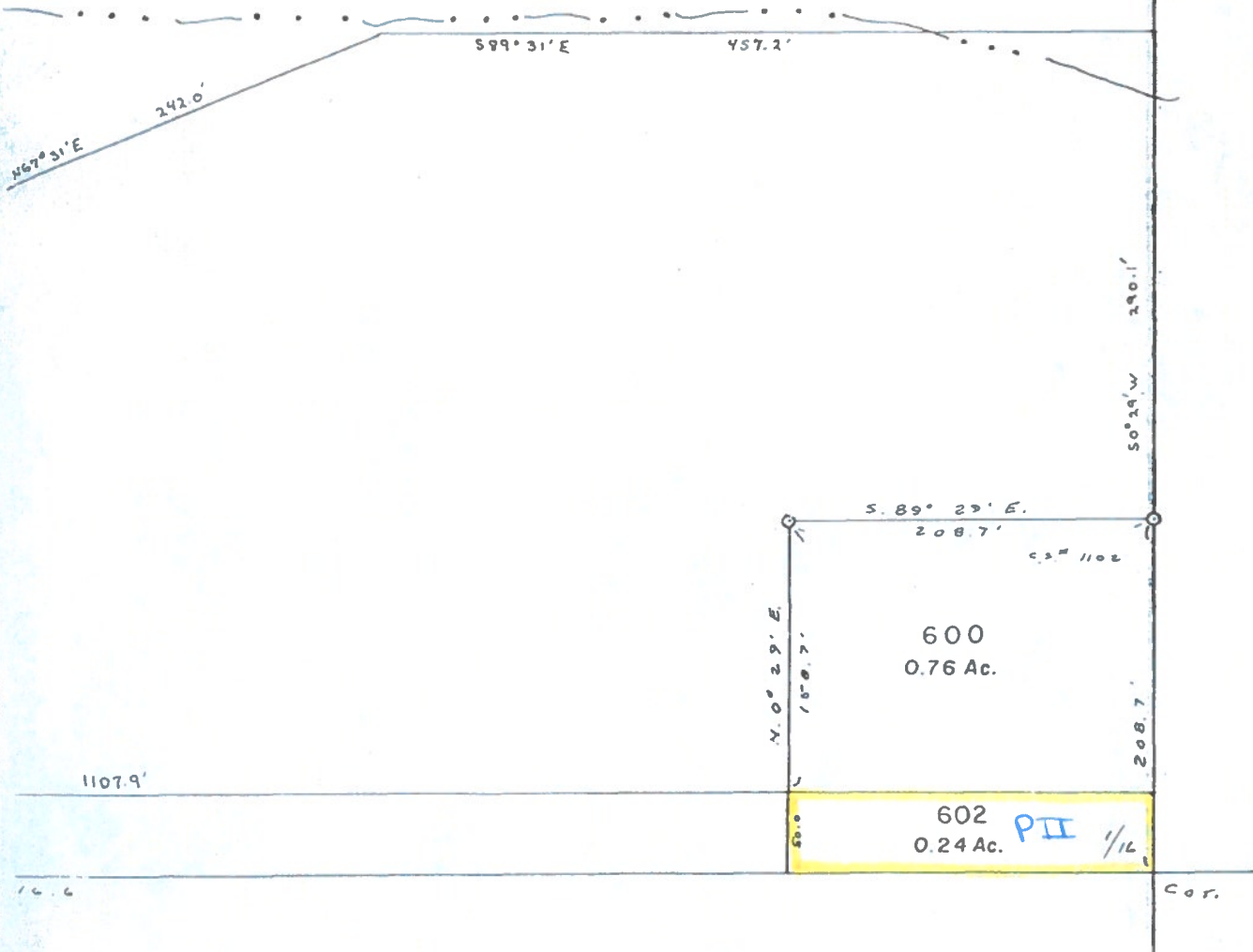
Order Number: 212579 Scale 1" = 100'

County Assessor's Map

10-11-32 AA TL 602

AGATE BEACH WATER DIST.

104



SEE MAP 10 11 33

CONDITIONS AND STIPULATIONS Continued
(continued and concluded from reverse side of Policy Face)

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:
(i) the Amount of Insurance stated in Schedule A; or,
(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy and improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

(i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or

(ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorney's fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

(a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters, when the Amount of Insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES, WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to the Company at P.O. Box 2570, Tualatin, OR 97062-2570.



STEWART TITLE
INSURANCE COMPANY OF OREGON

INCORPORATED 1997

**POLICY
OF
TITLE
INSURANCE**

STEWART TITLE
INSURANCE COMPANY OF OREGON

October 19, 2020

Michael C. Robinson
Admitted in Oregon
T: 503-796-3756
C: 503-407-2578
mrobinson@schwabe.com

VIA E-MAIL

Mr. Derrick I. Tokos AICP
Community Development Director
City of Newport, Oregon
169 SW Coast Highway
Newport, OR 97365

RE: Application by Hancock Forest Management, Inc., for an Amendment to the City of Newport (the "City") Urban Growth Boundary (the "UGB") by Adding and Removing Land from the UGB

Dear Mr. Tokos:

Thank you for reviewing the Application. The Applicant appreciates your thorough review. The Applicant's responses to the incompleteness items are shown below. The revised Application and its five exhibits are attached for your review.

1. **Incompleteness Item 1:** *"Please provide a metes and bounds legal description of the portion of your client's property that will be brought into the Urban Growth Boundary. I see that it was surveyed by Gary Nyhus in 2019 (Survey Record 20889), so I imagine that he could put together a text legal description for you in short order. We also need a metes and bounds legal description of the land area that is being removed from the Urban Growth Boundary. You should be able to pull that together from the Lettenmaier deed documents."*

Applicant Response: The revised application includes a legal description (**Application Attachment B**).

2. **Incompleteness item 2:** *"The boundary of the area illustrated as Site B does not accurately reflect the configuration of the UGB at that location. Specifically, it does not pick up the land swap/UGB amendment Lettenmaier completed in 2016 (Ord. #2101). A copy of that ordinance and a "Site B" map showing the actual configuration of the property and UGB at this location is enclosed. Maps in the application and, if necessary, the acreage figures, should be updated so that they reflect current conditions."*

Applicant Response: The revised Application contains a revised property and UGB map and updated acreage figures (**Application Attachment E**).

3. **Incompleteness Item 3:** *"The UGB application should be amended to include the 3.56 acre city owned property immediately west of your clients property as part of Site A. It is presently outside the UGB and city limits. This is the parcel that contains NE Harney Street. Attached is a map and the deed with a legal description of the property (it is referenced as Parcel 1 in the deed). Your acreage calculations and maps will also need to be updated. Urban services will be extended to the property through this parcel; therefore, it is necessary that it be brought into the UGB at the same time."*

Applicant Response: Statewide Planning Goal 11, "Public Facilities and Services," and its implementing administrative rule do not prohibit the extension of water lines outside of a UGB in order to serve lands inside a UGB and the administrative rule expressly allows that for sanitary sewer lines to be located outside of a UGB, provided that certain requirements are met. OAR 660-011-0060(3)(a) and (b). However, the revised Application includes the City-owned property, based on the Applicant's understanding that the City does not become an applicant for the UGB amendment and that the City will consent to the inclusion of its property in the Application (**Application Attachment E**).

4. **Incompleteness Item 4:** *"Please explain why Goal 5 analysis is not required for the area being added to the UGB. OAR 660-24-0020(C) suggests that it is applicable to areas being added. Wetlands are a resource that we discussed and I thought that you were delineating them."*

Applicant Response: Identification of a Statewide Planning Goal 5, "Natural Resources, Scenic and Historic Areas and Open Space," resource site in the area added to the UGB is sufficient. OAR 660-023-0250(3)(c). However, the Applicant is unaware of any Goal 5 wetlands on the property. The Applicant will delineate any wetlands in the area added to the UGB when it submits a subdivision application.

5. **Incompleteness Item 5:** *"I don't read Goal 8, recreational needs, as being specific to recreational facilities and thus not applicable. The addition of 200 dwellings at this location is going to generate a need for recreational facilities. How will this be addressed? Establishing a trail network that ties into the Big Creek trail system to the west would be one approach. Another might be to indicate that there is sufficient area to accommodate a new park site proportional to the impact of the new development. We just wrapped up a Park System Master Plan. It is on our website at: https://www.newportoregon.gov/dept/cdd/documents/ParkSystem/Final/Newport_PSMP_v9_FINAL.pdf. Since your site is outside the UGB, it wasn't included in the analysis. However, you might want to take a look at the metrics to see if you could make a case that Big Creek Park is proximate enough to accommodate the need. That would be another way to address the issue."*

Applicant Response: The revised Application addresses Statewide Planning Goal 8, "Recreational Needs."

6. **Incompleteness Item 6:** *"With respect to Goal 11, the analysis should more explicitly address the adequacy of the public water and wastewater distribution system that Site A will be utilizing. Do you anticipate the need to upsize the gravity sewer main to accommodate effluent from the additional homes? Similarly, with regard to water, do you anticipate the need for a pump station(s) to achieve adequate water pressure? With respect to these type of "facility" improvements, do you anticipate that the cost of such work can be reasonably borne by the developer? And with stormwater, has hydraulic analysis been performed to confirm there is downstream capacity or will you be detaining run-off on site...or both? Additional detail of this nature would be helpful. It relates to your analysis on Pages 7 and 8 and page 15 to 17."*

Applicant Response: The revised Application includes additional findings on Statewide Planning Goal 11 by addressing your questions contain in this Incompleteness Item.

7. **Incompleteness Item 7:** *"It would be helpful if you could clarify the point you are making in the third full paragraph on Page 12 and the last paragraph on Page 42. This relates to the requirement that local governments apply the same Comprehensive Plan designations to the land being brought into the UGB as the land being taken out of the UGB. Mike Robinson and I had talked about this and I don't recall where we left the issue. As the application is currently drafted, the Comprehensive Plan designations would be different, with the Lettenmaier property being "High-Density Residential" and the proposed site coming in as "Low-Density Residential." The case that you are making is that the terrain is such that high-density development could not be reasonably achieved on the Lettenmaier property due to terrain, so we really are looking at apples to apples. That is risky, and I wonder if the safer approach would be to ask for a "High-Density Residential" Comprehensive Plan map designation so they are the same. As I recall TPR was a potential barrier to that option, but the TPR requirements are now being deferred. If you choose to go down this path, then later, when you annex, we could apply the R-4 zoning but do a development agreement that limits the number of dwelling units (Note: our R-4 zoning allows single-family and multi-family dwellings). That would then position you to address TPR requirements. If you take this approach, then you'll need to update the narrative, including swapping out references to R-2 zoning."*

Applicant Response: The revised Application explains the basis for the two requested map designations but the Applicant will agree to a Transportation Planning Rule (the "TPR") "Trip Cap" when the TPR is applied to the property to be included within the UGB.

8. **Incompleteness item 8:** *"Your application refers to a Boundary Location Analysis (Attachment E); however, it does not appear that we received that document. Please include the attachment with your resubmittal."*

Applicant Response: The revised Application includes a Boundary Location Analysis (Application Attachment E).

9. **Incompleteness item 9:** *"Please confirm whether or not you are asking for a "Low Density Residential" or a "High Density Residential" Comprehensive Plan Map designation. The former will accommodate an R-1 or R-2 zoning designation whereas the latter allows for R-3 or R-4 zoning."*

Applicant Response: The revised Application proposes the High Density Residential designation.

10. **Incompleteness item 10:** *"Newport is a coastal community so it would be prudent for you to address those goals in your analysis (i.e. Goals 16 – 19). Goal 17 may require some analysis; however, you should be able to address the others with a sentence or two."*

Applicant Response: Statewide Planning Goal 19, "Ocean Resources," is not applicable to a UGB amendment. OAR 660-024-0020(2). Statewide Planning Goals 16, "Estuarine Resources," 17, "Coastal Shorelands," and 18, "Beaches and Dunes," are not applicable unless the land added to the UGB is within a Coastal Shorelands boundary. OAR 660-024-0020(1)(f). The area to be added to the UGB is not within a Coastal Shorelands boundary based on the Applicant's review of the City's acknowledged Comprehensive Plan (Application at Pages 17 and 18).

Please let us know if you have any questions about the response to the incompleteness items and the revised Application. We would be happy to schedule a call to further discuss the Application. Otherwise, please schedule the Application for the next available Newport Planning Commission hearing following the required 35-day notice to the Oregon Department of Conservation and Land Development ("DLCD").

Very truly yours,



Michael C. Robinson

MCR/jmhi
Enclosures

cc: Ms. Casey Fisher (via email) (w/enclosures)
Ms. Mercedes Sera (via email) (w/enclosures)
Mr. Aaron Murphy (via email) (w/enclosures)
Mr. Matt Hughart (via email) (w/enclosures)

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- Attachment A – Land Use Application
- Attachment B – County Assessor’s Tax Map
- Attachment C – County Assessor’s List of Surrounding Property Owners
- Attachment D – Traffic Impact Analysis
- Attachment E – Exhibit Maps

GENERAL INFORMATION

Property Owner and Applicant: **Hancock Forest Management, Inc.**
17700 SE Mill Plain Boulevard, Suite 180
Vancouver, WA 98683
Contact: Casey Fisher
Phone: 360-260-4594
Email: cfisher@hnrgr.com

Applicant's
Planning Representative: **3J Consulting, Inc.**
9600 SW Nimbus Ave, Suite 100
Beaverton, OR 97008
Contact: Andrew Tull
Phone: 503-545-1907
Email: andrew.tull@3j-consulting.com

Applicant's
Legal Representative: **Schwabe, Williamson and Wyatt**
1211 SW 5th Avenue Suite 1900
Portland, OR 97204
Contact: Mike Robinson
Phone: 503-796-3756
Email: mrobinson@shwabe.com

SITE INFORMATION

SITE A

Parcel Number: 10s11w33 100 and 10s11w33 101
Size: 43.36 acres
Current Zoning Designation: Lincoln County Timber Conservation (T-C)
Existing Use: Vacant Timber Land

SITE B

Parcel Number: 12s11w05 801
Size: 71.39 acres
Current Zoning Designation: Lincoln County Rural Residential (RR-10)
Newport Comprehensive Plan High Density Residential
Designation:
Existing Use: Vacant

INTRODUCTION

APPLICANT'S REQUEST

Hancock Forest Management is requesting an adjustment to the urban growth boundary (UGB) map to include a 43.4-acre parcel (SITE A) in the UGB and to remove a 71.4-acre parcel (SITE B) from the UGB. Upon annexation into the City of Newport. The Applicant's intent for the subject site is to process subsequent applications for annexation along with requests to amend the City's Comprehensive Plan maps to show the site as High Density Residential and on the City zoning map as High Density Residential (R-4). The parcel to be removed from the UGB is intended to retain its zoning designation on the Lincoln County Comprehensive plan map as RR-10.

SITE DESCRIPTION/SURROUNDING LAND USE

The 43.36-acre subject site (SITE A) is outside the UGB and is zoned Commercial-Timber (T-C) in the Lincoln County Comprehensive Plan. The TC zone is a forest resource zone compliant with the Statewide Planning Goal 4 (Forest Lands) and is reserved for forest operations or forest practices per Section 1.1375(1) of the Lincoln County Zoning Ordinance consistent with ORS 527.722.

The 71.4-acre parcel (SITE B) is located within the UGB and is designated as High-Density Residential (HDR) in the Newport Comprehensive Plan. The site has a Lincoln County zoning designation of Rural Residential (RR-10).

Under the Oregon land use system, the justification for a UGB adjustment is a two-step process: (1) demonstrate land need; and (2) analyze potential boundary locations. This proposal includes an amendment to the Newport Comprehensive Plan Map and Lincoln County Comprehensive Plan Map, which amends the Newport UGB, adding approximately 43.4-acre and removing approximately 71.4-acres. As proposed, the subject site (SITE A) would be retain its existing zoning designation. Site B would be removed from the UGB and retain its designation as Rural Residential (RR-10).

APPLICABLE CRITERIA

The following sections of Newport's Zoning and Development Ordinance, the Newport Comprehensive Plan and the Statewide Planning Goals have been extracted as they have been deemed to be applicable to the proposal. Following each **bold** applicable criteria or design standard, the Applicant has provided a series of draft findings. The intent of providing code and detailed responses and findings is to document, with absolute certainty, that the proposed development has satisfied the approval criteria for an Urban Growth Boundary Adjustment and Comprehensive Plan Map Amendment.

OREGON STATEWIDE PLANNING GOALS

Goal 1: Citizen Involvement

Applicant's Finding: The intent of Goal 1 is to ensure that citizens have meaningful opportunities to participate in land use planning decisions. The stated purpose of the goal is:

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Goal 1 has five stated objectives that are applicable to the proposed UGB adjustment:

1. *Citizen Involvement – To provide for widespread citizen involvement.*
2. *Communication – To assure effective two-way communication with citizens.*
3. *Citizen Influence – To provide the opportunity for citizens to be involved in all phases of the planning process.*
4. *Technical Information – To assure that technical information is available in an understandable form.*
5. *Feedback Mechanisms – To assure that citizens will receive a response from policy-makers.*

This land use application is subject to a City of Newport Type IV land use review, which includes a significant citizen involvement component. This process has been established by the city and determined to be consistent with this goal. The mandatory public notice of the action and decision, and the hearing on this case before the Newport Planning Commission and City Council are all avenues of citizen participation satisfying the applicable objectives listed above.

Goal 2: Land Use Planning

Applicant's Finding: Goal 2 requires that all incorporated cities establish and maintain comprehensive land use plans and implementing ordinances and that land use decisions must be made in accordance with these plans and ordinances. It also requires cities to coordinate with other affected government entities in legislative land use processes. The stated purpose of the goal is:

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The review of this application will follow the process established in the Newport Comprehensive Plan and Zoning Ordinance. The findings presented in this application provide an adequate factual basis for decisions and actions by the Newport Planning Commission and City Council. In the process of developing the UGB adjustment proposal and findings, the City complied with Goal 2.

Goal 3: Agricultural Lands and 4: Forest Lands

Applicant's Finding: As stated in 660-024-0020(b), Goals 3 and 4 are not applicable when establishing or amending an urban growth boundary.

Goal 5: Open Spaces and Historic Areas & Natural Resources.

Applicant's Finding: Goal 5 requires local governments to inventory and protect natural resources. The subject site does not fall within any lands designated as open spaces, historic areas, or natural resource areas. A resource delineation will be provided at the time of the development of the property.

Goal 6: Air, Water and Land Resources Quality

Applicant's Finding: Goal 6 requires local comprehensive plans and implementation measures to be consistent with state and federal regulations. By complying with applicable air, water and land resource quality policies in the Newport Comprehensive Plan, Goal 6 will be properly addressed.

Goal 7: Areas Subject to Natural Disasters and Hazards

Applicant's Finding: Goal 7 requires that jurisdictions apply appropriate safeguards when planning development in areas that are subject to natural hazards such as flood hazards. The subject site does not fall within any identified natural hazard areas.

Goal 8: Recreational Needs

Applicant's Finding: Goal 8 requires jurisdictions establish policies and procedures for the planning and zoning of state and local parks in order to address the needs of the citizens of the state. The City of Newport has addressed the Goal 8 requirements in the Newport Parks System Master Plan.

While the site is not located within the UGB and was not analyzed as part of the planning effort, it is identified as the location of a potential future trail connecting to Big Creek Reservoir Open Space. Big Creek Open Space is a 536-acre natural area adjacent to the subject site. The proposed trail connection can be incorporated in the future development of the site.

A Level of Service Analysis was provided in the Newport Parks System Master Plan. The existing park system was analyzed using seven park categories for the 2017

population as well as the 2035 projected population. Per the SCORP 2013-2017 suggested standards, the level of service of park acres per 1,000 residents within the City is met or exceeded for each park category.

The destination resort siting requirements are not applicable to the proposed development.

Goal 9: Economy of the State

Applicant's Finding: The proposal does not involve employment lands; therefore, Goal 9 is not applicable.

Goal 10: Housing

Applicant's Finding: The purpose of Goal 10 is to provide for housing needs for communities throughout the state. This goal requires jurisdictions to inventory developable lands to accommodate housing of a variety of types, densities, and prices commensurate with the financial capabilities of Oregon households. When there is a deficiency of buildable land to accommodate residential development within a city's UGB, that city is required to address the deficiency either through policy change within the UGB or through a UGB expansion.

According to the City's 2011 Housing Needs Analysis, the City has an adequate supply of high-density residential land. The proposed removal of approximately 70 acres of high-density residential land from the UGB will not result in a shortfall of high-density residential land, based on the City's 20-year projected growth. Additionally, much of the land proposed for removal has significant development constraints that would impact the total number of units the parcel could support. Attached to this application is a more detailed analysis of Site B with an estimate of the total number of units the parcel could support.

Site A is proposed for inclusion within the UGB with an assumption that upon annexation, it will receive a high density residential (R-4) designation. This would allow the development of the parcel at a net density of approximately 200 total homes (i.e. 1 unit per 5,000 SF for single-family homes).

Therefore, while there may be a change in the total gross acreage as a result of the UGB Adjustment, the overall outcome in terms of units produced will be substantially similar. Additionally, the inclusion of Site A into the UGB will result in development of needed housing in a much shorter timeframe than Site B due to the relative feasibility and economic efficiency of serving Site A with public facilities and services and its proximity to retail, employment opportunities, services, and transportation linkages.

The addition of 43.4-acre acres of high-density residential land into the UGB will provide an addition of land available for residential development within proximity to City services. Newport's Housing Needs Analysis identifies an increased need for workforce housing.

Goal 11: Public Facilities and Services

Applicant's Finding: The purpose of Goal 11 is to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. The goal requires that public facilities and services in urban areas are provided at levels necessary and suitable for existing and future urban uses. It also requires jurisdictions to adopt public facilities plans in coordination with urbanization.

Transportation

The City adopted a Transportation System Plan in 2012, which meets the requirements of Goal 11 and OAR 660-011. As detailed in the Site A transportation analyses of Goals 12 and 14 as well as the attached Transportation Impact Study (Attachment D), adequate transportation facilities can be made available to serve Site A with the provision of identified improvements.

Water

The City adopted a Water System Master Plan in 2008, which meets the requirements of Goal 11 and OAR 660-011.

Site A falls within the City's main pressure zone (Main Storage Tanks) which can serve elevations up to 183 feet above sea level. Dwellings within the development above 183 feet will be served via a booster pump station. A pressure tank will be installed near the highest site elevation to serve homes including fire protection.

As shown in the attached Boundary Location Analysis (Attachment E), adequate water system facilities exist adjacent to Site A and can be served with the provision of appropriate system development charges, facilities, and connections.

Sanitary Sewer

The City recently adopted a Sanitary Sewer Master Plan (SSMP) in 2018, which meets the requirements of Goal 11 and OAR 660-011.

Wastewater is anticipated to be conveyed to the existing PVC gravity line located near the north west corner of Site A. Flow will then be conveyed through the gravity system, beneath Highway 101 and discharge into the Big Creek Pumpstation. The anticipated flow from the proposed development was determined to be approximately 32,000 gpd or 0.032 mgd. This calculation was adopted in accordance with an assumed 2.19 people per household in accordance with the SSMP – High Density Residential, Medium Density Residential and Low Density Residential, average calculation.

Table 5.1 of the SSMP identifies the existing peak flow of Big Creek PS to be 2.60 mgd with a maximum capacity of 3.50 mgd or a net capacity of 0.9 mgd.

Table 5.2 of the SSMP identifies the 20-year Conditions Planning Scenario and peak flow of Big Creek Pumpstation to be 3.00 mgd with a maximum capacity of 3.5 mgd or a net capacity of 0.5 mgd.

Adequate sanitary sewer system facilities exist to serve Site A with the provision of appropriate system development charges, facilities, and connections.

Stormwater

The City does not have an adopted Stormwater Master Plan, but the proposed inclusion of Site A into the UGB and future development will require the provision of a surface drainage and storm sewer system pursuant to Section 13.05.040 of the Newport Municipal Code. It is anticipated that stormwater runoff from Site A will be collected, detained and released to match the pre-developed site runoff condition using surface water ponds, weirs and flow control manholes.

Goal 12: Transportation

Applicant's Finding: Goal 12 encourages the provision of a safe, convenient, and economic transportation system and implements provisions of other statewide planning goals related to transportation planning in order to plan and develop facilities in coordination with urban and rural development.

The Transportation Planning Rule (TPR), OAR 600-012-0060, requires that, where an amendment to a comprehensive plan would significantly affect an existing or planned transportation facility, the local government shall put in place measures that assure that allowed land uses are consistent with the function, capacity, and performance standards of the facility. This application is for an amendment to the comprehensive plan and urban growth boundary and, as such, the proposed changes must comply with the TPR.

This application includes a Transportation Impact Study (TIS) completed by Kittelson & Associates on October 18, 2019. The TIA measures impacts to the transportation system by estimating the change in vehicle trips, resulting from this proposed UGB and comprehensive plan designation change. The analysis compares the transportation system performance under the current comprehensive plan designation reasonable worst-case scenario to the performance under the proposed comprehensive plan designation reasonable worst-case scenario.

As detailed in the submitted Transportation Impact Study (TIS), the following table shows the requisite reasonable worst-case scenario analysis.

	Comprehensive Plan Designation	Zoning	Land Use (ITE Code)	Units	Daily Trips	PM Trips Entering	PM Trips Exiting
Existing	N/A	T-C	-	-	-	-	-
Proposed	Low Density Residential	R-2	210	200	1,968	125	73
Change				+200	+1,968	+125	+73

While the Applicant may or may not construct 200 dwelling units, this is the reasonable worst-case scenario and therefore must be analyzed as the comparison to the existing reasonable worst-case scenario. Based on the above table, 1,968 additional daily trips are forecast to be generated by the comprehensive plan change under reasonable worst-case scenario development assumptions. This number exceeds the threshold of 400 daily trips per the TPR to trigger a significant impact, and requires intersection operational analysis.

The following intersections were analyzed for impacts based on this proposed adjustment:

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major	0.01 (SBLT)	8.78 (SBLT)	0.03 (SBLT)	11.5 (SBLT)
	0.90 minor	0.59 (WB)	54.5 (WB)	0.72 (WB)	123.0 (WB)
		0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
US 101 / NE 31 st Street	0.80 major	0.61 (SBLT)	72.3 (SBLT)	0.79 (SBLT)	182.2 (SBLT)
	0.90 minor	0.61 (WB)	72.3 (WB)	0.79 (WB)	182.2 (WB)
		0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
US 101 / NE 25 th Street	0.80 intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)

The analysis included in the submitted TIA concludes that based on the long-term traffic impact detailed in the report, the proposed land exchange will result in a significant impact on the surrounding transportation system that will require mitigation. The report recommends the following improvements:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects
 - Widen the westbound NE 36th Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional Projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under the 30th

highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane.
- Alternative to meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under the 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Conditions
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions of maintain the existing target under other than peak season conditions.

While the Applicant has detailed a series of potential improvements to address capacity at the identified intersections, the preference would be for the City and ODOT to consider alternative mobility targets at the specified intersections as the City updates their Transportation System Plan.

The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Goal 13: Energy

Applicant's Finding: Goal 13 requires land and uses developed on the land to be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles. Energy consequences of the proposed urban growth area adjustment have been considered in the Goal 14 alternatives analysis ESEE process.

Goal 14: Urbanization

Applicant's Finding: Goal 14 requires cities to establish and maintain urban growth boundaries to provide land for urban development needs and separate urban and urbanizable land from rural land. The stated purpose of the goal is:

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

The goal provides two "Land Need" factors and four "Boundary Location" factors in evaluating changes to the urban growth boundary. Goal 14 and related statutes and administrative rules establish a specific method and hierarchy for boundary review. Findings for the proposed UGB adjustment are organized according to that hierarchy.

Land Need Criteria

Goal 14 requires that changes to the UGB shall be based on the following:

1. *Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments.*
2. *Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection. In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.*

However, OAR 660-024-0070 (3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential), and designated as “High Density Residential” on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2 (Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates annexing Site A with a “High Density Residential” Comprehensive Plan designation and R-4 Zoning Designation. Site A is approximately 28 acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High-Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 28 acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers. The applicant provides a more detailed analysis of Site B later in this narrative to confirm that the inclusion of Site A would meet a substantially equivalent need.

Boundary Location Criteria

OAR 660-024-0040 requires conducting a boundary location analysis evaluating alternative boundary locations in order to determine any change to a city’s UGB. These analyses must be conducted in a manner consistent with ORS 197.298 and consider the following four factors:

1. *Efficient accommodation of identified land needs*
2. *Orderly and economic provision of public facilities and services*
3. *Comparative environmental, energy, economic and social consequences*
4. *Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside of the UGB.*

The section below describes boundary location analysis factors for the purpose of comparing the site proposed for inclusion to the UGB to other viable sites.

Site A

General Description

- (a) On the date initially scheduled for final adoption of the amendment specified by the local government in the initial notice of the amendment required by OAR 660-018-0020; or
- (b) If more recent than the date determined in subsection (a), at the beginning of the 20-year period specified in the appropriate coordinated population forecast for the urban area as determined under rules in OAR chapter 660, division 32, unless ORS 197.296 requires a different date for local governments subject to that statute.
- (3) A local government may review and amend the UGB in consideration of one category of land need (for example, housing need) without a simultaneous review and amendment in consideration of other categories of land need (for example, employment need).
- (4) The determination of 20-year residential land needs for an urban area must be consistent with the appropriate 20-year coordinated population forecast for the urban area determined under rules in OAR chapter 660, division 32, and with the requirements for determining housing needs in Goals 10 and 14, OAR chapter 660, division 7 or 8, and applicable provisions of ORS 197.295 to 197.314 and 197.475 to 197.490.

Applicant's Finding: OAR 660-024-0070(3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

As detailed later in this narrative, the inclusion of Site A meets these requirements; therefore, the City may utilize its current 20-year population forecast and housing needs analysis for the purposes of this UGB Adjustment.

- (5) Except for a metropolitan service district described in ORS 197.015(13), the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9 and OAR chapter 660, division 9, and must include a determination of the need for a short-term supply of land for employment uses consistent with OAR 660-009-0025. Employment land need may be based on an estimate of job growth over the planning period; local government must provide a reasonable justification for the job growth estimate but Goal 14 does not require that job growth estimates necessarily be proportional to population growth. Local governments in Crook, Deschutes or Jefferson Counties may determine the need for Regional Large-Lot Industrial Land by following the provisions of OAR 660-024-0045 for areas subject to that rule.
- (6) Cities and counties may jointly conduct a coordinated regional EOA for more than one city in the county or for a defined region within one or more counties, in conformance with Goal 9, OAR chapter 660, division 9, and applicable provisions of ORS 195.025. A

defined region may include incorporated and unincorporated areas of one or more counties.

- (7) The determination of 20-year land needs for transportation and public facilities for an urban area must comply with applicable requirements of Goals 11 and 12, rules in OAR chapter 660, divisions 11 and 12, and public facilities requirements in ORS 197.712 and 197.768. The determination of school facility needs must also comply with 195.110 and 197.296 for local governments specified in those statutes.

Applicant's Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

- (8) The following safe harbors may be applied by a local government to determine housing need under this division:

- (a) A local government may estimate persons per household for the 20-year planning period using the persons per household for the urban area indicated in the most current data for the urban area published by the U.S. Census Bureau.
- (b) If a local government does not regulate government-assisted housing differently than other housing types, it is not required to estimate the need for government-assisted housing as a separate housing type.
- (c) If a local government allows manufactured homes on individual lots as a permitted use in all residential zones that allow 10 or fewer dwelling units per net buildable acre, it is not necessary to provide an estimate of the need for manufactured dwellings on individual lots.
- (d) If a local government allows manufactured dwelling parks required by ORS 197.475 to 197.490 in all areas planned and zoned for a residential density of six to 12 units per acre, a separate estimate of the need for manufactured dwelling parks is not required.
- (e) A local government outside of the Metro boundary may estimate its housing vacancy rate for the 20-year planning period using the vacancy rate in the most current data published by the U.S. Census Bureau for that urban area that includes the local government.
- (f) A local government outside of the Metro boundary may determine housing needs for purposes of a UGB amendment using the combined Housing Density and Housing Mix safe harbors described in this subsection and in Table 1, or in combination with the Alternative Density safe harbor described under subsection (g) of this section and in Table 2. To meet the Housing Density safe harbor in this subsection, the local government may Assume For UGB Analysis that all buildable land in the urban area, including land added to the UGB, will develop at the applicable average overall density specified in column B of Table 1. Buildable land in the UGB, including land added to the UGB, must also be Zoned to Allow at least the average overall maximum density specified as Zone To Allow in column B of Table 1. Finally, the local

government must adopt zoning that ensures buildable land in the urban area, including land added to the UGB, cannot develop at an average overall density less than the applicable Required Overall Minimum density specified in column B of Table 1. To meet the Housing Mix safe harbor in this subsection, the local government must Zone to Allow the applicable percentages of low, medium and high density residential specified in column C of Table 1.

- (g) When using the safe harbor in subsection (f), a local government may choose to also use the applicable Alternative Density safe harbors for Small Exception Parcels and High Value Farm Land specified in Table 2. If a local government chooses to use the Alternative Density safe harbors described in Table 2, it must:
 - (A) Apply the applicable Small Exception Parcel density assumption and the High Value Farm Land density assumption measures specified in the table to all buildable land that is within these categories, and
 - (B) Apply the Housing Density and Mix safe harbors specified in subsection (f) of this section and specified in Table 1 to all buildable land in the urban area that does not consist of Small Exception Parcels or High Value Farm Land.
- (h) As an alternative to the density safe harbors in subsection (f) and, if applicable, subsection (g), of this section, a local government outside of the Metro boundary may assume that the average overall density of buildable residential land in the urban area for the 20-year planning period will increase by 25 percent over the average overall density of developed residential land in the urban area at the time the local government initiated the evaluation or amendment of the UGB. If a local government uses this Incremental Housing Density safe harbor, it must also meet the applicable Zoned to Allow density and Required Overall Minimum density requirements in Column B of Table 1 and, if applicable, Table 2, and must use the Housing Mix safe harbor in Column C of Table 1.
- (i) As an alternative to the Housing Mix safe harbor required in subsection (f) of this section and in Column C of Table 1, a local government outside the Metro boundary that uses the housing density safe harbor in subsection (f), (g) or (h) of this section may estimate housing mix using the Incremental Housing Mix safe harbor described in paragraphs (A) to (C) of this subsection, as illustrated in Table 3:
 - (A) Determine the existing percentages of low density, medium density, and high density housing on developed land (not “buildable land”) in the urban area at the time the local government initiated the evaluation or amendment of the UGB;
 - (B) Increase the percentage of medium density housing estimated in paragraph (A) of this subsection by 10 percent, increase the percentage of high density housing estimated in paragraph (A) of this subsection by five percent, as illustrated in Table 3, and decrease the percentage of low density single family housing by a proportionate amount so that the overall mix total is 100 percent, and

- (C) Zone to Allow the resultant housing mix determined under subparagraphs (A) and (B) of this subsection.
- (j) Tables 1, 2 and 3 are adopted as part of this rule, and the following definitions apply to terms used in the tables:
 - (A) "Assume For UGB Analysis" means the local government may assume that the UGB will develop over the 20-year planning period at the applicable overall density specified in Column B of Tables 1 and 2.
 - (B) "Attached housing" means housing where each unit shares a common wall, ceiling or floor with at least one other unit. "Attached housing" includes, but is not limited to, apartments, condominiums, and common-wall dwellings or row houses where each dwelling unit occupies a separate lot.
 - (C) "Average Overall Density" means the average density of all buildable land in the UGB, including buildable land already inside the UGB and buildable land added to the UGB, including land zoned for residential use that is presumed to be needed for schools, parks and other institutional uses.
 - (D) "Coordinated 20-year Population Forecast" and "20-year Population Forecast" under Column A of the Tables refers to the appropriate population forecast for the urban area determined under rules in OAR chapter 660, division 32.
 - (E) "Density" means the number of dwelling units per net buildable acre.
 - (F) "High Value Farm Land" has the same meaning as the term defined in ORS 195.300(10).
 - (G) "Required Overall Minimum" means a minimum allowed overall average density, or a "density floor," that must be ensured in the applicable residential zones with respect to the overall supply of buildable land for that zone in the urban area for the 20-year planning period.
 - (H) "Single Family Detached Housing" means a housing unit that is free standing and separate from other housing units, including mobile homes and manufactured dwellings under ORS 197.475 to 197.492.
 - (I) "Small Exception Parcel" means a residentially zoned parcel five acres or less with a house on it, located on land that is outside a UGB prior to a proposed UGB expansion, subject to an acknowledged exception to Goal 3 or 4 or both.
 - (J) "Zone To Allow" or "Zoned to Allow" means that the comprehensive plan and implementing zoning shall allow the specified housing types and densities under clear and objective standards and other requirements specified in ORS 197.307(4) and (6).

Applicant's Finding: The applicant acknowledges the permitted safe harbors listed above.

- (9) The following safe harbors may be applied by a local government to determine its employment needs for purposes of a UGB amendment under this rule, Goal 9, OAR chapter 660, division 9, Goal 14 and, if applicable, ORS 197.296.

- (a) A local government may estimate that the current number of jobs in the urban area will grow during the 20-year planning period at a rate equal to either:
 - (A) The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department; or
 - (B) The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under rules in OAR chapter 660, division 32.
- (b) A local government with a population of 10,000 or less may assume that retail and service commercial land needs will grow in direct proportion to the forecasted urban area population growth over the 20-year planning period. This safe harbor may not be used to determine employment land needs for sectors other than retail and service commercial.
- (10) As a safe harbor during periodic review or other legislative review of the UGB, a local government may estimate that the 20-year land needs for streets and roads, parks and school facilities will together require an additional amount of land equal to 25 percent of the net buildable acres determined for residential land needs under section (4) of this rule, and in conformance with the definition of "Net Buildable Acre" as defined in OAR 660-024-0010(6).

Applicant's Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

660-024-0050

Land Inventory and Response to Deficiency

- (1) When evaluating or amending a UGB, a local government must inventory land inside the UGB to determine whether there is adequate development capacity to accommodate 20-year needs determined in OAR 660-024-0040. For residential land, the buildable land inventory must include vacant and redevelopable land, and be conducted in accordance with OAR 660-007-0045 or 660-008-0010, whichever is applicable, and ORS 197.296 for local governments subject to that statute. For employment land, the inventory must include suitable vacant and developed land designated for industrial or other employment use, and must be conducted in accordance with OAR 660-009-0015.
- (2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:
 - (a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;

- (b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.
- (3) As safe harbors when inventorying land to accommodate industrial and other employment needs, a local government may assume that a lot or parcel is vacant if it is:
 - (a) Equal to or larger than one-half acre, if the lot or parcel does not contain a permanent building; or
 - (b) Equal to or larger than five acres, if less than one-half acre of the lot or parcel is occupied by a permanent building.
- (4) If the inventory demonstrates that the development capacity of land inside the UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040, the local government must amend the plan to satisfy the need deficiency, either by increasing the development capacity of land already inside the city or by expanding the UGB, or both, and in accordance with ORS 197.296 where applicable. Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB. If the local government determines there is a need to expand the UGB, changes to the UGB must be determined by evaluating alternative boundary locations consistent with Goal 14 and applicable rules at OAR 660-024-0060 or 660-024-0065 and 660-024-0067.
- (5) In evaluating an amendment of a UGB submitted under ORS 197.626, the director or the commission may determine that a difference between the estimated 20-year needs determined under OAR 660-024-0040 and the amount of land and development capacity added to the UGB by the submitted amendment is unlikely to significantly affect land supply or resource land protection, and as a result, may determine that the proposed amendment complies with section (4) of this rule.

Applicant's Finding: The proposed UGB Adjustment would result in the inclusion of Site A, a 43.4-acre parcel of vacant timber land zoned Timber Conservation (T-C) and the exclusion of Site B, a 71.4 acre parcel of unincorporated lands within the UGB. Site B is zoned for Rural Residential (RR-10) and designated as High Density Residential in the Newport Comprehensive Plan. As the County has no deficiencies of land identified for Timber Conservation, the conversion of these lands to an urban designation will have no net negative impacts.

- (6) When land is added to the UGB, the local government must assign appropriate urban plan designations to the added land, consistent with the need determination and the requirements of section (7) of this rule, if applicable. The local government must also apply appropriate zoning to the added land consistent with the plan designation or may maintain the land as urbanizable land until the land is rezoned for the planned urban uses, either by retaining the zoning that was assigned prior to inclusion in the boundary or by applying other interim zoning that maintains the land's potential for planned urban development. The requirements of ORS 197.296 regarding planning and zoning also apply when local governments specified in that statute add land to the UGB.

- (7) Lands included within a UGB pursuant to OAR 660-024-0065(3) to provide for a particular industrial use, or a particular public facility, must be planned and zoned for the intended use and must remain planned and zoned for that use unless the city removes the land from the UGB.**
- (8) As a safe harbor regarding requirements concerning “efficiency,” a local government that chooses to use the density and mix safe harbors in OAR 660-024-0040(8) is deemed to have met the Goal 14 efficiency requirements under:**
 - (a) Sections (1) and (4) of this rule regarding evaluation of the development capacity of residential land inside the UGB to accommodate the estimated 20-year needs; and**
 - (b) Goal 14 regarding a demonstration that residential needs cannot be reasonably accommodated on residential land already inside the UGB, but not with respect to:**
 - (A) A demonstration that residential needs cannot be reasonably accommodated by rezoning non-residential land, and**
 - (B) Compliance with Goal 14 Boundary Location factors.**

660-024-0070

UGB Adjustments

- (1) A local government may adjust the UGB at any time to better achieve the purposes of Goal 14 and this division. Such adjustment may occur by adding or removing land from the UGB, or by exchanging land inside the UGB for land outside the UGB. The requirements of section (2) of this rule apply when removing land from the UGB. The requirements of Goal 14 and this division [and ORS 197.298] apply when land is added to the UGB, including land added in exchange for land removed. The requirements of ORS 197.296 may also apply when land is added to a UGB, as specified in that statute. If a local government exchanges land inside the UGB for land outside the UGB, the applicable local government must adopt appropriate rural zoning designations for the land removed from the UGB prior to or at the time of adoption of the UGB amendment and must apply applicable location and priority provisions of OAR 660-024-0060 through 660-020-0067.**
- (2) A local government may remove land from a UGB following the procedures and requirements of ORS 197.764. Alternatively, a local government may remove land from the UGB following the procedures and requirements of 197.610 to 197.650, provided it determines:**
 - (a) The removal of land would not violate applicable statewide planning goals and rules;**
 - (b) The UGB would provide a 20-year supply of land for estimated needs after the land is removed, or would provide roughly the same supply of buildable land as prior to the removal, taking into consideration land added to the UGB at the same time;**

- (c) **Public facilities agreements adopted under ORS 195.020 do not intend to provide for urban services on the subject land unless the public facilities provider agrees to removal of the land from the UGB and concurrent modification of the agreement;**
- (d) **Removal of the land does not preclude the efficient provision of urban services to any other buildable land that remains inside the UGB; and**
- (e) **The land removed from the UGB is planned and zoned for rural use consistent with all applicable laws.**

Applicant's Finding: The applicant proposes a UGB adjustment by exchanging land inside the UGB for land outside the UGB. The proposed exchange would result in the inclusion of a 43.4-acre parcel currently zoned Timber Conservation (Site A) and the exclusion of a 71.4-acre parcel currently zoned Rural Residential (Site B). The removal of Site B follows the procedures and requirements of ORS 197.764 as detailed in this narrative.

Site B is proposed for removal from the UGB. It is currently zoned for rural residential use (RR-10).

The lands proposed for removal from the UGB are located on the southeastern perimeter of the Newport UGB near other undeveloped lands designated for high-density residential use. Due to the parcel's location on the periphery of the UGB and north of a stream and wetland, it is unlikely that the removal of Site B from the UGB will significantly impact the provision of urban services to other buildable lands inside the UGB.

- (3) **Notwithstanding sections (1) and (2) of this rule, a local government considering an exchange of land may rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided:**
 - (a) **The amount of buildable land added to the UGB to meet:**
 - (A) **A specific type of residential need is substantially equivalent to the amount of buildable residential land removed, or**
 - (B) **The amount of employment land added to the UGB to meet an employment need is substantially equivalent to the amount of employment land removed, and**
 - (b) **The local government must apply comprehensive plan designations and, if applicable, urban zoning to the land added to the UGB, such that the land added is designated:**
 - (A) **For the same residential uses and at the same housing density as the land removed from the UGB, or**
 - (B) **For the same employment uses as allowed on the land removed from the UGB, or**
 - (C) **If the land exchange is intended to provide for a particular industrial use that requires specific site characteristics, only land zoned for commercial or industrial use may be removed, and the land added must be zoned for the**

particular industrial use and meet other applicable requirements of ORS 197A.320(6).

Applicant's Finding:

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential) and designated as "High Density Residential" on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2 (Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates the eventual designation for Site A with a "High Density Residential" Comprehensive Plan designation and R-4 Zoning Designation. Site A is approximately 28-acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High-Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 28-acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers.

To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent
 - Slopes between ten and twenty five percent are considered "partially constrained" and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-4 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction approximately 200 single family homes, which is substantially equivalent to the estimated buildout of Site B.

660-024-0080

LCDC Review Required for UGB Amendments

A metropolitan service district that amends its UGB to include more than 100 acres, or a city with a population of 2,500 or more within its UGB that amends the UGB to include more than 50 acres shall submit the amendment to the Commission in the manner provided for periodic review under ORS 197.628 to 197.650 and OAR 660-025-0175.

Applicant's The proposed UGB adjustment will include an additional 43.4-acres to the UGB.

Finding: Therefore, the requirements for this section do not apply, and the reviewing body will be the Department of Land Conservation and Development (LCDC).

OREGON REVISED STATUES

197.298 Priority of land to be included within urban growth boundary.

- (1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary of Metro except under the following priorities:**
 - (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.**
 - (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.**
 - (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).**
 - (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.**
- (2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.**

- (3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
- (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;
 - (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or
 - (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.
- (4) When a city includes land within the urban growth boundary of the city pursuant to ORS 197.295 to 197.314, the city shall prioritize lands for inclusion as provided in ORS 197A.320.

Applicant's Finding: UGB adjustments must comply with applicable local criteria as outlined in the City of Newport Comprehensive Plan and Development Code.

The process for expanding the UGB has been described under Policy 4 (Urbanization) of the Newport Comprehensive Plan. Newport categorizes UGB Amendments as minor or major. The City and County Planning Director are responsible for assigning a designation to the proposed application. The City and County have categorized the proposed adjustment as a minor UGB Amendment.

The proposed UGB adjustment and comprehensive plan map amendment has been initiated by the property owners of each parcel. Consistent with Statewide Planning Goal 14 and Policy 4.4 of the Newport Comprehensive Plan, both the city and county governing bodies are required to hold public hearings, and both must agree for an amendment to become final.

Chapter 8 of the Newport Comprehensive Plan specifies three types of procedures for map amendments. The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this land use narrative.

The Urbanization Element requires that changes to the Comprehensive Plan map shall be considered by Planning Commission and City Council at public hearings. Notices and other procedural requirements shall be made in accordance with Section 2-6-1 of the Newport Zoning Ordinance. The Urbanization Element also requires findings of fact be developed in support of the decision and outlines the requirements for findings.

197.626 Submission of land use decisions that expand urban growth boundary or designate urban or rural reserves.

- (1) A local government shall submit for review and the Land Conservation and Development Commission shall review the following final land use decisions in the

manner provided for review of a work task under ORS 197.633 and subject to subsection (3) of this section:

- (a) An amendment of an urban growth boundary by a metropolitan service district that adds more than 100 acres to the area within its urban growth boundary;
- (b) An amendment of an urban growth boundary by a city with a population of 2,500 or more within its urban growth boundary that adds more than 50 acres to the area within the urban growth boundary;
- (c) A designation of an area as an urban reserve under ORS 195.137 to 195.145 by a metropolitan service district or by a city with a population of 2,500 or more within its urban growth boundary;
- (d) An amendment of the boundary of an urban reserve by a metropolitan service district;
- (e) An amendment of the boundary of an urban reserve to add more than 50 acres to the urban reserve by a city with a population of 2,500 or more within its urban growth boundary; and
- (f) A designation or an amendment to the designation of a rural reserve under ORS 195.137 to 195.145 by a county, in coordination with a metropolitan service district, and the amendment of the designation.

Applicant's Finding: The proposed UGB amendment will not result in an addition to the UGB exceeding 100 acres. Therefore, the requirements of this section do not apply.

197.764 Application to remove property from within urban growth boundary

1) A local government may approve an application to remove a lot or parcel from within an urban growth boundary if:

a) The application is submitted by the owner of the lot or parcel;

Applicant's Finding: The proposed UGB Adjustment application has been initiated by both property owners of Sites A and B. The requirements of this section are met.

b)

A) The lot or parcel is adjacent to the edge of the urban growth boundary; or

B) The lot or parcel is adjacent to another lot or parcel that is removed under this section;

Applicant's Finding: Site B, the parcel proposed for removal from the urban growth boundary, is located at the edge of the existing urban growth boundary. The requirements of this section are met.

c) The lot or parcel is assessed under ORS 308A.050 (Legislative intent) to 308A.128 (Certain district assessments inapplicable to exclusive farm use zone farmland) for its value for farm use;

Applicant's Finding: Neither parcel has been assessed under ORS 308A.050 to 308A.128.

d) The lot or parcel is not within the boundaries of a city; and

Applicant's Finding: The parcel proposed for removal is not located within the Newport City Limits. The requirements of this section are met.

e) The lot or parcel is not included in an area identified for urban services under ORS 197.754 (Land identified for urban services).

Applicant's Finding: The parcel proposed for removal is not included in an area identified for urban services. The requirements of this section are met.

2) A local government, in deciding whether to approve an application under subsection (1) of this section, shall consider:

a) The projected costs and other consequences of extending urban services to the affected lot or parcel;

Applicant's Finding: Site B is located at the southeastern periphery of the Newport UGB in the area identified as the "Wolf Tree Destination Resort". While this parcel and much of the surrounding area was designated for High Density Residential use in the Newport Comprehensive Plan, the area remains largely undeveloped and without public facilities and services.

The site has several features that would make the extension of urban services infeasible. Because the site is on the periphery of the UGB and far from developed urban areas, the costs associated with extending these services from the nearest development to the north would be infeasible. Additionally, the site has several geographic constraints to the installation of public facilities, including varying slope and the presence of wetlands and a creek that would greatly increase the costs to serve the parcel.

b) The potential value in the investment of providing urban services to the affected lot or parcel;

Applicant's Finding: The southern portion of the UGB designated for High Density Residential use remains largely undeveloped today due to the costs associated with providing urban services to the area as well as the area's location far from services, retail, and transportation linkages. This issue is identified in the Housing element of the Newport Comprehensive Plan.

c) Any requirement for expanding the urban growth boundary in other areas to compensate for any loss in buildable lands; and

Applicant's Finding: To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent

- Slopes between ten and twenty five percent are considered “partially constrained” and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-4 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction of 200 units, which is substantially equivalent to the estimated buildout of Site B.

d) The projected costs and other consequences of providing urban services to other areas brought in under an expanded urban growth boundary.

Applicant's Finding: The costs associated with the development of both properties is likely to be extremely similar. Both properties will require the extension of urban services, new roadways, and franchise utilities to be delivered.

3)

a) Land that is removed from within an urban growth boundary pursuant to an application approved under this section shall be removed from any inventory of buildable lands maintained by the local government.

Applicant's Finding: The inventory of buildable lands maintained by the City of Newport will be revised to reflect the changes associated with the proposed UGB Adjustment. The requirements of this section are met.

b) A local government that approves an application under this section shall either expand the urban growth boundary to compensate for any resulting reduction in available buildable lands or increase the development capacity of the remaining supply of buildable lands. [1999 c.503 §1; 2001 c.104 §70]

Applicant's Finding: The reduction in buildable lands from the removal of Site B from the UGB will be offset by the buildable land brought into the UGB via the inclusion of Site A. While these two lands share different acreages and Comprehensive Plan designations, they would produce a similar type and quantity of residential dwellings.

Site B is currently zoned for rural residential use (RR-10), but designated for High Density Residential Use in the Newport Comprehensive Plan. If incorporated, it is unlikely that the site would be assigned either a Medium Density Multi-Family Residential (R-3) or High Density Multi-Family Residential (R-4) zoning designation due to their siting criteria. Specifically, the stated intent of these zones outline the following:

R-3/"Medium Density Multi-Family Residential." This district is intended for medium density multi-family residential development. It is planned for areas that are able to accommodate the development of apartments. New R-3 zones should be near major streets, on relatively flat land, and near community or neighborhood activity centers.

R-4/"High Density Multi-Family Residential." This district is intended to provide for high density multi-family residential and some limited commercial development. New R-4 zones should be on major streets, on relatively flat land, and near commercial centers.

Multifamily development would face significant challenges on Site B due to the steep slopes and topography of the site. City staff has suggested the land would be zoned High Density Single-Family Residential (R-4) with a stated intent to serve as a transitional area between low density and higher density residential districts. Based on the 2011 housing needs assessment ECONorthwest completed for the City in 2011, R-4 would be the appropriate zoning for Site B.

Therefore, the anticipated zone of Site B would be identical to the anticipated zoning for Site A and the anticipated scopes of development would be the similar in yield and impact.

Another potential concern is regarding the imbalance of acreage between the two sites. The applicant has provided an analysis in this narrative comparing the expected net density of each site confirming that each parcel would produce a substantially similar number of dwellings.

NEWPORT COMPREHENSIVE PLAN

URBANIZATION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

Goal: To promote the orderly and efficient expansion of Newport's city limits.

Policy 4: The development of land in the urban area shall conform to the plans, policies, and ordinances of the City of Newport.

Implementation Measure 4b: Amendments to UGB Boundaries or Policies. This subsection delineates the procedure for joint city and county review of amendments to the urban growth boundary or urbanization policies as the need arises.

1) Major Amendments:

- a) Any UGB change that has widespread and significant influence beyond the immediate area. Examples include:**

- (1) Quantitative changes that allow for substantial changes in the population or development density.
- (2) Qualitative changes in the land use, such as residential to commercial or industrial.
- (3) Changes that affect large areas or many different ownerships.

b) A change in any urbanization policy.

- 2) **Minor Boundary Line Adjustments:** The city and county may consider minor adjustments to the UGB using procedures similar to a zone change. Minor adjustments focus on specific, small properties not having significant impact beyond the immediate area.

Applicant's Finding: The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this section.

- 3) **Determination of Major and Minor Amendments:** The planning directors for the city and county shall determine whether or not a change is a minor or major amendment. If they cannot agree, the planning commissions for the city and county shall rule on the matter. The request shall be considered a major amendment if the planning commissions cannot agree.

Applicant's Finding: The applicant acknowledges the authority of the city and county planning directors and commissions to determine whether a change is a minor or major amendment.

- 4) **Initiation, Application, and Procedure:** Individual or groups of property owners, agencies that are affected, the planning commissions, or the city or county governing bodies may initiate amendments. Applicants for changes are responsible for completing the necessary application and preparing and Submitting the applicable findings with the application. The planning commissions for the city and county shall review the request and forward recommendations to the Newport City Council and the Lincoln County Board of Commissioners. The city and county governing bodies shall hold public hearings on the request. Amendments become final only if both bodies approve the request.

Applicant's Finding: The purpose of this application is to provide all necessary information and findings for the approval of the proposed UGB Adjustment. The requirement of this section is met.

- 5) **Findings shall address the following:**

- a) **Land Need:** Establishment and change of urban growth boundaries shall be based on the following:
 - (1) **Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and**

Applicant's Finding: As discussed in greater detail under Goal 14 of this narrative, the proposed UGB Adjustment will serve an estimated population over the planning period specified in the City's housing element of the Comprehensive Plan by providing needed housing.

(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks and open space, or any combination of the need categories in this subsection;

Applicant's Finding: The proposed inclusion of Site A into the UGB, eventual designation as high density residential (R-4), and subsequent development of housing on this site provides an effective response to the regional issue of limited housing supply and increasing housing costs affecting the City of Newport and Lincoln County. According to the 2013-2017 American Community Survey, median monthly housing costs total \$869 and 37.5% of households pay 30 percent or more of their household income in housing costs. Among households with a mortgage, 33.4% have household costs exceeding 35 percent of their household income. Compounding this issue is the prevalence of housing units that are utilized as second homes or vacation homes. The vacancy rate of households in Newport is 21 percent, suggesting a large proportion of needed housing to serve Newport residents are owned by non-residents. This further constrains supply and exacerbates the affordability crisis Newport faces.

The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents.

b) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

(1) Efficient accommodation of identified land needs;

Applicant's Finding: The inclusion of Site A would provide a large site that has minimal development constraints, is easily serviceable by existing public facilities and services, and is located near existing development and economic opportunities in Newport. Additionally, because the site is not currently parcelized, the associated return on investment for the development of the tract is much greater than alternative locations, making development significantly more likely in the near future than sites with high parcelization. The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

(2) Orderly and economic provision of public facilities and services;

Applicant's Finding: The proposed UGB Adjustment would provide for a more orderly and economic provision of public facilities and services in comparison to existing conditions. Site A is located at the periphery of the Newport UGB and City Limits. The site is currently adjacent to a developed collector, NE Harney Street, and it is located to adjacent development.

Transportation

Site A is currently adjacent to a developed collector, NE Harney Street, and it is located adjacent to existing development. According to the attached Transportation Impact Analysis (Attachment D), the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 43.4-acre site has the potential to create a significant effect on the surrounding transportation network. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2039 with the implementation of improvements identified in the TIA.

Capacity of existing facilities to serve areas already inside the UGB

Operational analyses outlined in the Traffic Impact Analysis (Attachment D) indicate that all of the study intersections currently operate at acceptable mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The attached TIA estimates background traffic volumes for the 2039 planning horizon year using an 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. With the proposed UGB adjustment, assuming that the 43.4-acre site is zoned under the City of Newport's R-4 High Density Single Family Residential zone, the TIA determined the site could support up to 200 single family homes in a reasonable worst-case scenario. This has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Impacts to existing facilities that serve nearby areas already inside the UGB

Operations of the study intersections under the 2039 R-4 High Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Water

According to a City map of existing water services in Newport, a 12-inch water main runs along NE Harney Street as well as two hydrants located along this main adjacent to Site A. This would allow for the extension of water service to the parcel once it develops.

Capacity of existing facilities to serve areas already inside the UGB

Sections 5 and 6 of the 2008 Newport Water System Master Plan describe the existing water system and water demand. The City holds water rights allowing for a maximum of 19.24 cfs from six streams, but can only utilize 16.54 cfs from three due to location constraints. The City stores water from these streams in the Big Creek reservoir to draw from during the dry and high-water-demand summer months. The plan estimates that the average monthly water consumption for a typical dwelling ranges between 3,695 gallons in winter months to 6,270 gallons in summer months with an average demand of 4,600 gallons per month. During the summer months, the maximum daily demand (MDD) can reach a total 6.27 cfs, but the average daily demand (ADD) throughout the year is 3.33 cfs. In instances where the City's demand exceeded water available from streams, supply drew from the Big Creek reservoir to meet demand.

The plan projects this demand to increase to a MDD 8.99 cfs and an ADD of 4.72 cfs by 2030. Based on the capacity of the Big Creek reservoir during its driest year on record, it is possible to support the anticipated maximum demand in 2030 by diverting water from the Siletz River to recharge the reservoir, but following that, the City will need to consider alternatives to provide sufficient water supply. The Capital Improvement Plan (Section 9) identifies a \$12 million upgrade to the existing Big Creek Water Treatment Plant that will allow for the sufficient accommodation of water needs as development continues.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Assuming the average monthly water consumption outlined in the Newport Water System Master Plan, the inclusion of Site A into the UGB and development could result in a total increase in water demand of 1,254,000 gallons per month (0.06 cfs) during peak months and 920,000 gallons per month (0.05 cfs) on average. While significant, the capacity to serve Site A currently exists, and the Capital Improvement Plan identifies improvements that will ensure the adequate provision of water well into the future. Therefore, with the provision of appropriate system development charges and water line extension, the existing water system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing 12-inch water main along NE Harney Street will result in additional water demand on the pipe and local distribution network. Any significant

demands upon the City's existing water network can be addressed by the developer at the time of development.

Sanitary Sewer

The City recently updated their Sanitary Sewer Master Plan (SSMP) in order to update wastewater elements of the Comprehensive Plan and develop a priority for capital improvement projects. According to the SSMP dated February 9, 2018, there is a gravity sewer extending to the northwest corner of Site A, which would allow for the extension of sanitary sewer to Site A once it develops. The line was constructed circa 1990 and is composed of Polyvinyl Chloride (PVC). This gravity main connects to a Vance Avery Wastewater Treatment Facility located in South Beach.

Capacity of existing facilities to serve areas already inside the UGB

The City provides sanitary sewer collection system services to approximately 10,000 people spread across an area of approximately 11.2 square miles. The City oversees over 62 miles of gravity pipelines ranging in size from approximately 3 to 36 inches in diameter, 1,400 manholes, 9 major pump stations, 16 minor pump stations, and 12 miles of sanitary force mains. The plan identifies minor deficiencies in the sanitary sewer system, but provides a series of recommended improvements prioritized by assessed risk of overflow to ensure that there will be sufficient capacity to accommodate new development.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The Master Plan models buildout scenarios over a 20-year period to identify possible surcharging and flooding during large storm events (i.e. a 1-in-10 year storm). The plan uses these scenarios to provide recommended improvements to ensure the existing system will be able to accommodate new development as it occurs, prioritizing the most critical facilities for improvement. Therefore, with the provision of appropriate system development charges and sanitary sewer extension, the existing sanitary sewer system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

(3) Comparative environmental, energy, economic, and social consequences; and

Applicant's Finding:

Economic

As discussed earlier in this analysis, the full development of Site A with housing will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

While a T-C designation on Site A will result in the preservation of resource land, the R-4 land use provides a greater economic benefit to the community through increased housing options, and the loss of resource land will be offset through the movement of Site B out of the urban growth boundary. The proposed adjustment and future use promote more efficient and coordinated use of land and minimizes urban sprawl.

Social

There are developed neighborhoods to the north and the west of Site A, and the development of housing on what was originally resource land would result in a change of character for existing residents, most notably a loss of rural lifestyle or low-density residential development. Additionally, forest and natural areas can provide people with access to nature and stress relief, though the anticipated loss would be minimal in this case as this land is managed forest with no public access.

There is the potential to dedicate future park space and scenic areas as development occurs. Specifically, in areas that have topographical constraints that make development infeasible, dedicated natural open space and scenic vistas can be provided to serve as an essential resource to Newport communities. Additionally, the provision of trails connecting to the existing Ocean to Bay Trail network to the southwest could mitigate loss of forested area by providing access to nature and other recreational amenities to Newport residents.

Environmental

There are no identified wetlands on Site A. However, just south of the parcel is a City designated wetland that extends from the property line to NE Harney Street. The development of Site A could impact this wetland as the increase in impervious surface increases runoff and flow rates downstream.

The development of Site A will require the clearing of trees, which will have associated erosion, air quality, and greenhouse gas impacts. These impacts can be mitigated through the careful provision of open space in areas that are not suitable for development. These areas could be planted with native vegetation and trees that would provide better environmental services than the current timber plantation. This would offset some of the environmental impact associated with the clearing of trees to accommodate development.

Additionally, the exclusion of Site B will offset the development of Site A by precluding development on Site B and preserving the area for forest land uses. Site B is currently included in the UGB and zoned for rural residential development, which would result in much larger development footprints and disturbance to the surrounding area should they be developed. Therefore, the proposed adjustment provides the opportunity to limit the future clearing of trees and sprawling patterns

of development on Site B and provide more compact residential development with a lower environmental footprint per unit through the development of Site A.

Energy

The inclusion of Site A into the UGB is expected to result in new housing replacing areas currently used as timber resource land except where topography constrains development. There is a power transmission line and transformer to the north of Site A, but it is unlikely to be impacted by residential development. Within the site, redevelopment could support as many as 200 dwelling units, which would have an increased energy impact in the form of construction, dwelling unit energy use, and transportation.

There is a bus stop along Hwy 101 that is approximately a ten minute walk from the western periphery of Site A, and an existing Ocean to Bay Trail network that can provide options for non-automobile travel, reducing some of the energy impacts associated with transportation.

(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Applicant's Finding: The proximity of single-family dwellings to adjacent forest lands creates the potential for conflict between the two uses in the form of noise, pollution from logging equipment, truck and automobile traffic, and hazards associated with forest lands such as falling or windthrown trees and wildfire. Additionally, the proximity of new housing may present challenges to active forest management if those activities are a nuisance to adjacent uses. The key towards mitigating these conflicts is separation and buffering. The power transmission line located north of Site A provides an excellent buffer area in which felling is less likely to occur to avoid damage to the lines. This allows trees to grow in this buffer, providing additional shielding and impacts associated with forest activity to the north of the power line. In addition to this, Chapter 14.18 requires buffering between residential and non-residential uses, providing an opportunity to increase the separation between residential and forest uses and mitigate potential conflicts.

c) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement.

Applicant's Finding: As detailed earlier in this narrative, the proposed UGB Adjustment demonstrates substantial compliance with applicable Statewide Planning Goals. The requirement of this section is met.

SUMMARY AND CONCLUSION

Based upon the materials submitted herein, the Applicant respectfully requests approval from the City's Planning Department of this application for an Urban Growth Boundary Adjustment.



City of Newport Land Use Application

Applicant Name(s):	Property Owner Name(s) <i>if other than applicant</i>
Boston Timber Opportunities, LLC	Contact: Casey Fisher
Applicant Mailing Address:	Property Owner Mailing Address:
17700 SE Mill Plain Blvd, Suite 180	Vancouver, WA 98683
Applicant Phone No.	Property Owner Phone No.
360-260-4594	
Applicant Email	Property Owner Email
cfisher@hnrq.com	
Authorized Representative(s): <i>Person authorized to submit and act on this application on applicant's behalf</i>	
3J Consulting, Inc. Contact: Andrew Tull	
Authorized Representative Mailing Address:	
9600 SW Nimbus Ave, Suite 100	
Authorized Representative Telephone No.	
503-545-1907	
Authorized Representative Email. andrew.tull@3j-consulting.com	

Project Information

Property Location: <i>Street name if address # not assigned</i>	
NE Harney St	
Tax Assessor's Map No.: 10s11w33	Tax Lot(s): 100
Zone Designation: Timber Conservation (T-C)	Legal Description: <i>Add additional sheets if necessary</i>
Comp. Plan Designation: Timber Conservation	Lincoln County
Brief description of Land Use Request(s):	
Examples:	UGB Amendment to incorporate the subject property (Site A) to the UGB. A currently rural residential parcel (Site B - 12s11w05 801) will be exchanged.
1. <i>Move north property line 5 feet south</i>	
2. <i>Variance of 2 feet from the required 15-foot front yard setback</i>	
Existing Structures: if any	
N/A	
Topography and Vegetation:	
Forested	

Application Type (please check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Interpretation | <input checked="" type="checkbox"/> UGB Amendment |
| <input type="checkbox"/> Appeal | <input type="checkbox"/> Minor Replat | <input type="checkbox"/> Vacation |
| <input type="checkbox"/> Comp Plan/Map Amendment | <input type="checkbox"/> Partition | <input type="checkbox"/> Variance/Adjustment |
| <input type="checkbox"/> Conditional Use Permit | <input type="checkbox"/> Planned Development | <input type="checkbox"/> PC |
| <input type="checkbox"/> PC | <input type="checkbox"/> Property Line Adjustment | <input type="checkbox"/> Staff |
| <input type="checkbox"/> Staff | <input type="checkbox"/> Shoreland Impact | <input type="checkbox"/> Zone Ord/Map |
| <input type="checkbox"/> Design Review | <input type="checkbox"/> Subdivision | <input type="checkbox"/> Amendment |
| <input type="checkbox"/> Geologic Permit | <input type="checkbox"/> Temporary Use Permit | <input type="checkbox"/> Other |

FOR OFFICE USE ONLY

File No. Assigned: 1-UGB-20/1-CP-20		
Date Received: 5/29/2020	Fee Amount: \$1,516	Date Accepted as Complete:
Received By: DT	Receipt No.	Accepted By:

City Hall
169, SW Coast Hwy
Newport, OR 97365
541.574.0629



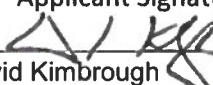

City of Newport Land Use Application

I understand that I am responsible for addressing the legal criteria relevant to my application and that the burden of proof justifying an approval of my application is with me. I also understand that this responsibility is independent of any opinions expressed in the Community Development and Planning Department Staff Report concerning the applicable criteria.

I certify that, to the best of my knowledge, all information provided in this application is accurate.
Boston Timber Opportunities, LLC

By Hancock Natural Resource Group, Inc.
Its Manager

March 20, 2020

Applicant Signature(s)	Date
By: 	
Name: David Kimbrough	
Title: Vice President	
Property Owner Signature(s) (if other than applicant)	Date
	
	3/27/2020
Authorized representative Signature(s) (if other than applicant)	Date

Please note application will not be accepted without all applicable signatures.

Please ask staff for a list of application submittal requirements for your specific type of request.



City of Newport Land Use Application

Applicant Name(s):	Property Owner Name(s) <i>if other than applicant</i>
Terrance Lettenmaier	Terrance Lettenmaier
Applicant Mailing Address:	Property Owner Mailing Address:
PO Box 550 South Beach, OR 97366	853 SE 98th St. South Beach, OR 97366
Applicant Phone No.	Property Owner Phone No.
541-961-5833	541-961-5833
Applicant Email	Property Owner Email
lett@peak.org	lett@peak.org
Authorized Representative(s): <i>Person authorized to submit and act on this application on applicant's behalf</i>	
3J Consulting, Inc. Contact: Andrew Tull	
Authorized Representative Mailing Address:	
9600 SW Nimbus Ave, Suite 100	
Authorized Representative Telephone No.	
503-545-1907	
Authorized Representative Email: andrew.tull@3j-consulting.com	

Project Information

Property Location: <i>Street name if address # not assigned</i>	
853 SE 98th Street	
Tax Assessor's Map No.: 12s11w05	Tax Lot(s): 801
Zone Designation: RR-10	Legal Description: <i>Add additional sheets if necessary</i>
Comp. Plan Designation: High Density Res.	Lincoln County
Brief description of Land Use Request(s):	
Examples: UGB Amendment to remove the subject property from the UGB	
1. Move north property line 5 feet south	
2. Variance of 2 feet from the required 15-foot front yard setback	

Existing Structures: if any

One existing dwelling

Topography and Vegetation:

Forested

Application Type (please check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Interpretation | <input checked="" type="checkbox"/> UGB Amendment |
| <input type="checkbox"/> Appeal | <input type="checkbox"/> Minor Replat | <input type="checkbox"/> Vacation |
| <input type="checkbox"/> Comp Plan/Map Amendment | <input type="checkbox"/> Partition | <input type="checkbox"/> Variance/Adjustment |
| <input type="checkbox"/> Conditional Use Permit | <input type="checkbox"/> Planned Development | <input type="checkbox"/> PC |
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| <input type="checkbox"/> Staff | <input type="checkbox"/> Shoreland Impact | <input type="checkbox"/> Zone Ord/Map |
| <input type="checkbox"/> Design Review | <input type="checkbox"/> Subdivision | <input type="checkbox"/> Amendment |
| <input type="checkbox"/> Geologic Permit | <input type="checkbox"/> Temporary Use Permit | <input type="checkbox"/> Other |

FOR OFFICE USE ONLY

File No. Assigned: 1-CP-20

Date Received: 5/29/20	Fee Amount: 1,262	Date Accepted as Complete:
Received By: DT	Receipt No.	Accepted By:

City Hall
169, SW Coast Hwy
Newport, OR 97365
541.574.0629



City of Newport Land Use Application

I understand that I am responsible for addressing the legal criteria relevant to my application and that the burden of proof justifying an approval of my application is with me. I also understand that this responsibility is independent of any opinions expressed in the Community Development and Planning Department Staff Report concerning the applicable criteria.

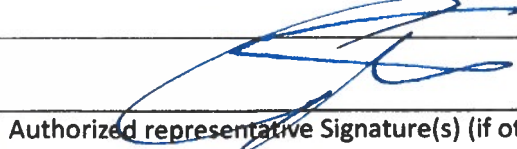
I certify that, to the best of my knowledge, all information provided in this application is accurate.


Applicant Signature(s)

March 16, 2020
Date

Property Owner Signature(s) (if other than applicant)

Date

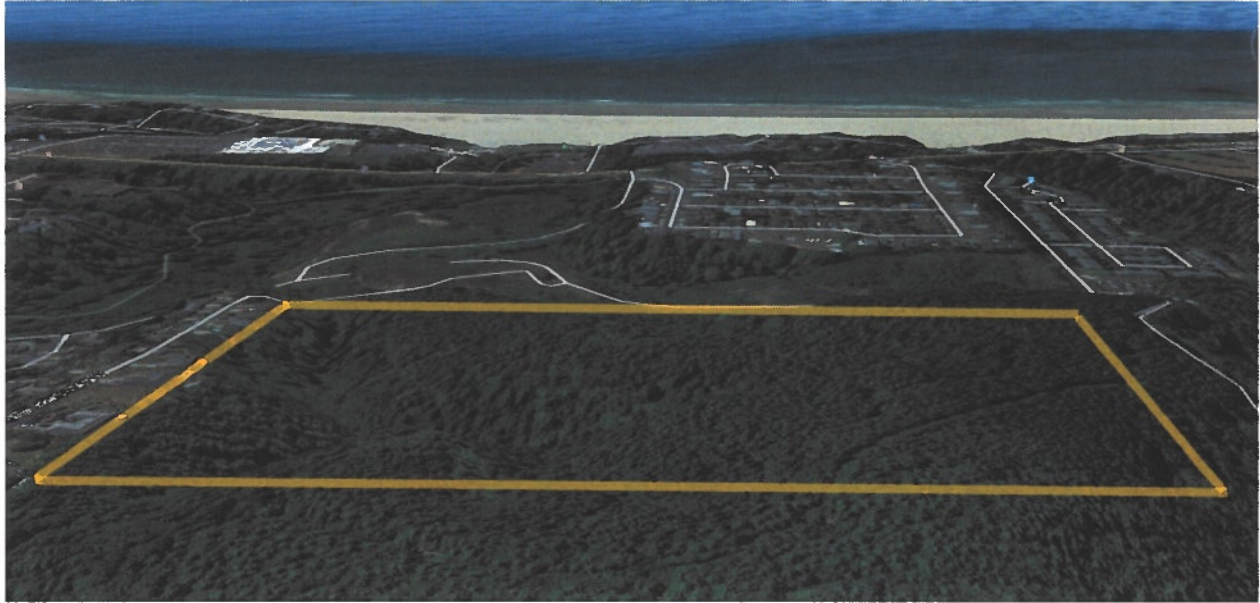

Authorized representative Signature(s) (if other than applicant)

3/27/2020

Date

Please note application will not be accepted without all applicable signatures.

Please ask staff for a list of application submittal requirements for your specific type of request.



A REQUEST FOR A COMPREHENSIVE PLAN AMENDMENT AND AN AMENDMENT TO THE URBAN GROWTH BOUNDARY

SUBMITTED TO THE CITY OF NEWPORT, OREGON

3J Consulting, Inc.

9600 SW Nimbus Ave, Suite 100

Beaverton, OR 97008

Contact: Andrew Tull

Phone: 503-946-9365 x203

Email: andrew.tull@3j-consulting.com

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Attachments

Attachment A – Land Use Application

Attachment B – County Assessor's Tax Map

Attachment C – County Assessor's List of Surrounding Property Owners

Attachment D – Traffic Impact Analysis

Attachment E – Exhibit Maps

GENERAL INFORMATION

Property Owner and Applicant: **Hancock Forest Management, Inc.**
17700 SE Mill Plain Boulevard, Suite 180
Vancouver, WA 98683
Contact: Casey Fisher
Phone: 360-260-4594
Email: cfisher@hnrg.com

Applicant's
Planning Representative: **3J Consulting, Inc.**
9600 SW Nimbus Ave, Suite 100
Beaverton, OR 97008
Contact: Andrew Tull
Phone: 503-545-1907
Email: andrew.tull@3j-consulting.com

Applicant's
Legal Representative: **Schwabe, Williamson and Wyatt**
1211 SW 5th Avenue Suite 1900
Portland, OR 97204
Contact: Mike Robinson
Phone: 503-796-3756
Email: mrobinson@shwabe.com

SITE INFORMATION

SITE A

Parcel Number:	10s11w33 100
Size:	39.8 acres
Current Zoning Designation:	Lincoln County Timber Conservation (T-C)
Existing Use:	Vacant Timber Land

SITE B

Parcel Number:	12s11w05 801
Size:	71.39 acres
Current Zoning Designation:	Lincoln County Rural Residential (RR-10)
Newport Comprehensive Plan Designation:	High Density Residential
Existing Use:	Vacant

INTRODUCTION

APPLICANT'S REQUEST

Hancock Forest Management is requesting an adjustment to the urban growth boundary (UGB) map to include a 40-acre parcel (SITE A) in the UGB and to remove a 71.4-acre parcel (SITE B) from the UGB. Upon annexation into the City of Newport. The Applicant's intent for the subject site is to process subsequent applications for annexation along with requests to amend the City's Comprehensive Plan maps to show the site as Low Density Residential and on the City zoning map as Medium Density Residential (R-2). The parcel to be removed from the UGB is intended to retain its zoning designation on the Lincoln County Comprehensive plan map as RR-10.

SITE DESCRIPTION/SURROUNDING LAND USE

The 40-acre subject site (SITE A) is outside the UGB and is zoned Commercial-Timber (T-C) in the Lincoln County Comprehensive Plan. The TC zone is a forest resource zone compliant with the Statewide Planning Goal 4 (Forest Lands) and is reserved for forest operations or forest practices per Section 1.1375(1) of the Lincoln County Zoning Ordinance consistent with ORS 527.722.

The 71.4-acre parcel (SITE B) is located within the UGB and is designated as High-Density Residential (HDR) in the Newport Comprehensive Plan. The site has a Lincoln County zoning designation of Rural Residential (RR-10).

Under the Oregon land use system, the justification for a UGB adjustment is a two-step process: (1) demonstrate land need; and (2) analyze potential boundary locations. This proposal includes an amendment to the Newport Comprehensive Plan Map and Lincoln County Comprehensive Plan Map,

which amends the Newport UGB, adding approximately 40-acres and removing approximately 71.4-acres. As proposed, the subject site (SITE A) would be retain its existing zoning designation. Site B would be removed from the UGB and retain its designation as Rural Residential (RR-10).

APPLICABLE CRITERIA

The following sections of Newport's Zoning and Development Ordinance, the Newport Comprehensive Plan and the Statewide Planning Goals have been extracted as they have been deemed to be applicable to the proposal. Following each **bold** applicable criteria or design standard, the Applicant has provided a series of draft findings. The intent of providing code and detailed responses and findings is to document, with absolute certainty, that the proposed development has satisfied the approval criteria for an Urban Growth Boundary Adjustment and Comprehensive Plan Map Amendment.

OREGON STATEWIDE PLANNING GOALS

Goal 1: Citizen Involvement

Applicant's Finding: The intent of Goal 1 is to ensure that citizens have meaningful opportunities to participate in land use planning decisions. The stated purpose of the goal is:

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Goal 1 has five stated objectives that are applicable to the proposed UGB adjustment:

1. *Citizen Involvement – To provide for widespread citizen involvement.*
2. *Communication – To assure effective two-way communication with citizens.*
3. *Citizen Influence – To provide the opportunity for citizens to be involved in all phases of the planning process.*
4. *Technical Information – To assure that technical information is available in an understandable form.*
5. *Feedback Mechanisms – To assure that citizens will receive a response from policy-makers.*

This land use application is subject to a City of Newport Type IV land use review, which includes a significant citizen involvement component. This process has been established by the city and determined to be consistent with this goal. The mandatory public notice of the action and decision, and the hearing on this case before the Newport Planning Commission and City Council are all avenues of citizen participation satisfying the applicable objectives listed above.

Goal 2: Land Use Planning

Applicant's Finding: Goal 2 requires that all incorporated cities establish and maintain comprehensive land use plans and implementing ordinances and that land use decisions must be made in accordance with these plans and ordinances. It also requires cities to coordinate with other affected government entities in legislative land use processes. The stated purpose of the goal is:

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The review of this application will follow the process established in the Newport Comprehensive Plan and Zoning Ordinance. The findings presented in this application provide an adequate factual basis for decisions and actions by the Newport Planning Commission and City Council. In the process of developing the UGB adjustment proposal and findings, the City complied with Goal 2.

Goal 3: Agricultural Lands and 4: Forest Lands

Applicant's Finding: As stated in 660-024-0020(b), Goals 3 and 4 are not applicable when establishing or amending an urban growth boundary.

Goal 5: Open Spaces and Historic Areas & Natural Resources.

Applicant's Finding: Goal 5 requires local governments to inventory and protect natural resources. The subject site does not fall within any lands designated as open spaces, historic areas, or natural resource areas.

Goal 6: Air, Water and Land Resources Quality

Applicant's Finding: Goal 6 requires local comprehensive plans and implementation measures to be consistent with state and federal regulations. By complying with applicable air, water and land resource quality policies in the Newport Comprehensive Plan, Goal 6 will be properly addressed.

Goal 7: Areas Subject to Natural Disasters and Hazards

Applicant's Finding: Goal 7 requires that jurisdictions apply appropriate safeguards when planning development in areas that are subject to natural hazards such as flood hazards. The subject site does not fall within any identified natural hazard areas.

Goal 8: Recreational Needs

Applicant's Finding: The proposal does not include recreation lands or facilities; therefore, Goal 8 is not applicable.

Goal 9: Economy of the State

Applicant's Finding: The proposal does not involve employment lands; therefore, Goal 9 is not applicable.

Goal 10: Housing

Applicant's Finding: The purpose of Goal 10 is to provide for housing needs for communities throughout the state. This goal requires jurisdictions to inventory developable lands to accommodate housing of a variety of types, densities, and prices commensurate with the financial capabilities of Oregon households. When there is a deficiency of buildable land to accommodate residential development within a city's UGB, that

city is required to address the deficiency either through policy change within the UGB or through a UGB expansion.

According to the City's 2011 Housing Needs Analysis, the City has an adequate supply of both low density residential and high-density residential land. The proposed removal of approximately 70 acres of high-density residential land from the UGB will not result in a shortfall of high-density residential land, based on the City's 20-year projected growth. Additionally, much of the land proposed for removal has significant development constraints that would impact the total number of units the parcel could support. Attached to this application is a more detailed analysis of Site B with an estimate of the total number of units the parcel could support.

Site A is proposed for inclusion within the UGB with an assumption that upon annexation, it will receive a medium density residential (R-2) designation. This would allow the development of the parcel at a net density of approximately 200 total homes (i.e. 1 unit per 5,000 SF).

Therefore, while there may be a change in the total gross acreage as a result of the UGB Adjustment, the overall outcome in terms of units produced will be substantially similar. Additionally, the inclusion of Site A into the UGB will result in development of needed housing in a much shorter timeframe than Site B due to the relative feasibility and economic efficiency of serving Site A with public facilities and services and its proximity to retail, employment opportunities, services, and transportation linkages.

The addition of 40 acres of low-density residential land into the UGB will provide an addition of land available for single-family residential development within proximity to City services. Newport's Housing Needs Analysis identifies an increased need for workforce housing.

Goal 11: Public Facilities and Services

Applicant's Finding: The purpose of Goal 11 is to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. The goal requires that public facilities and services in urban areas are provided at levels necessary and suitable for existing and future urban uses. It also requires jurisdictions to adopt public facilities plans in coordination with urbanization.

Transportation

The City adopted a Transportation System Plan in 2012, which meets the requirements of Goal 11 and OAR 660-011. As detailed in the Site A transportation analyses of Goals 12 and 14 as well as the attached Transportation Impact Study (Attachment D), adequate transportation facilities can be made available to serve Site A with the provision of identified improvements.

Water

The City adopted a Water System Master Plan in 2008, which meets the requirements of Goal 11 and OAR 660-011. As shown in the attached Boundary Location Analysis (Attachment E), adequate water system facilities exist to serve Site A with the provision of appropriate system development charges, facilities, and connections.

Sanitary Sewer

The City recently adopted a Sanitary Sewer Master Plan in 2018, which meets the requirements of Goal 11 and OAR 660-011. Adequate sanitary sewer system facilities exist to serve Site A with the provision of appropriate system development charges, facilities, and connections.

Stormwater

The City does not have an adopted Stormwater Master Plan, but the proposed inclusion of Site A into the UGB and future development will require the provision of a surface drainage and storm sewer system pursuant to Section 13.05.040 of the Newport Municipal Code.

Goal 12: Transportation

Applicant's Finding: Goal 12 encourages the provision of a safe, convenient, and economic transportation system and implements provisions of other statewide planning goals related to transportation planning in order to plan and develop facilities in coordination with urban and rural development.

The Transportation Planning Rule (TPR), OAR 600-012-0060, requires that, where an amendment to a comprehensive plan would significantly affect an existing or planned transportation facility, the local government shall put in place measures that assure that allowed land uses are consistent with the function, capacity, and performance standards of the facility. This application is for an amendment to the comprehensive plan and urban growth boundary and, as such, the proposed changes must comply with the TPR.

This application includes a Transportation Impact Study (TIS) completed by Kittelson & Associates on October 18, 2019. The TIA measures impacts to the transportation system by estimating the change in vehicle trips, resulting from this proposed UGB and comprehensive plan designation change. The analysis compares the transportation system performance under the current comprehensive plan designation reasonable worst-case scenario to the performance under the proposed comprehensive plan designation reasonable worst-case scenario.

As detailed in the submitted Transportation Impact Study (TIS), the following table shows the requisite reasonable worst-case scenario analysis.

	Comprehensive Plan Designation	Zoning	Land Use (ITE Code)	Units	Daily Trips	PM Trips Entering	PM Trips Exiting
Existing	N/A	T-C	-	-	-	-	-
Proposed	Low Density Residential	R-2	210	200	1,968	125	73
Change				+200	+1,968	+125	+73

While the Applicant may or may not construct 200 dwelling units, this is the reasonable worst-case scenario and therefore must be analyzed as the comparison to the existing reasonable worst-case scenario. Based on the above table, 1,968 additional daily trips are forecast to be generated by the comprehensive plan change under reasonable worst-case scenario development assumptions. This number exceeds the threshold of 400 daily trips per the TPR to trigger a significant impact, and requires intersection operational analysis.

The following intersections were analyzed for impacts based on this proposed adjustment:

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major	0.01 (SBLT)	8.78 (SBLT)	0.03 (SBLT)	11.5 (SBLT)
	0.90 minor	0.59 (WB)	54.5 (WB)	0.72 (WB)	123.0 (WB)
		0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
US 101 / NE 31 st Street	0.80 major	0.61 (SBLT)	72.3 (SBLT)	0.79 (SBLT)	182.2 (SBLT)
	0.90 minor	0.61 (WB)	72.3 (WB)	0.79 (WB)	182.2 (WB)
		0.02 (SBLT)	8.94 (SBLT)	0.06 (SBLT)	12.6 (SBLT)
US 101 / NE 25 th Street	0.80 intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn

V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)

The analysis included in the submitted TIA concludes that based on the long-term traffic impact detailed in the report, the proposed land exchange will result in a significant impact on the surrounding transportation system that will require mitigation. The report recommends the following improvements:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects
 - Widen the westbound NE 36th Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional Projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under the 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left and right-turn lane.
 - Install a traffic signal
- Additional projects to meet the currently adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane.
- Alternative to meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under the 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Conditions
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions of maintain the existing target under other than peak season conditions.

While the Applicant has detailed a series of potential improvements to address capacity at the identified intersections, the preference would be for the City and

ODOT to consider alternative mobility targets at the specified intersections as the City updates their Transportation System Plan.

The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Goal 13: Energy

Applicant's Finding: Goal 13 requires land and uses developed on the land to be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles. Energy consequences of the proposed urban growth area adjustment have been considered in the Goal 14 alternatives analysis ESEE process.

Goal 14: Urbanization

Applicant's Finding: Goal 14 requires cities to establish and maintain urban growth boundaries to provide land for urban development needs and separate urban and urbanizable land from rural land. The stated purpose of the goal is:

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

The goal provides two "Land Need" factors and four "Boundary Location" factors in evaluating changes to the urban growth boundary. Goal 14 and related statutes and administrative rules establish a specific method and hierarchy for boundary review. Findings for the proposed UGB adjustment are organized according to that hierarchy.

Land Need Criteria

Goal 14 requires that changes to the UGB shall be based on the following:

1. *Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments.*
2. *Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection. In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. Prior to expanding an urban growth boundary, local governments shall demonstrate*

that needs cannot reasonably be accommodated on land already in urban growth boundary.

However, OAR 660-024-0070 (3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential), and designated as “High Density Residential” on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2 (Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates annexing Site A with a “High Density Residential” Comprehensive Plan designation and R-2 Zoning Designation. Site A is approximately 31.6 acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 31.6 acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers. The applicant provides a more detailed analysis of Site B later in this narrative to confirm that the inclusion of Site A would meet a substantially equivalent need.

Boundary Location Criteria

OAR 660-024-0040 requires conducting a boundary location analysis evaluating alternative boundary locations in order to determine any change to a city's UGB. These analyses must be conducted in a manner consistent with ORS 197.298 and consider the following four factors:

1. *Efficient accommodation of identified land needs*
2. *Orderly and economic provision of public facilities and services*

3. *Comparative environmental, energy, economic and social consequences*
4. *Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside of the UGB.*

The section below describes boundary location analysis factors for the purpose of comparing the site proposed for inclusion to the UGB to other viable sites.

Site A

General Description

Site A is a 39.8 acre site located east of the existing Newport UGB. The parcel is zoned Commercial-Timber (T-C) in the Lincoln County Comprehensive Plan. The TC zone is a forest resource zone compliant with the Statewide Planning Goal 4 (Forest Lands) and is reserved for forest operations or forest practices per Section 1.1375(1) of the Lincoln County Zoning Ordinance consistent with ORS 527.722. The parcel is largely wooded with young Douglas fir and two seasonal streams draining to the southwest corner of the site. The parcel is moderately sloped with approximately 12 acres of containing slopes that would prohibit development, whereas the remaining 28 acres have slopes that could accommodate development.

Efficient accommodation of identified land needs

The anticipated inclusion of Site A into the UGB, designation as medium density residential (R-2), and subsequent development of housing on this site provides an effective response to the regional issue of limited housing supply and increasing housing costs affecting the City of Newport and Lincoln County. According to the 2013-2017 American Community Survey, median monthly housing costs total \$869 and 37.5% of households pay 30 percent or more of their household income in housing costs. Among households with a mortgage, 33.4% have household costs exceeding 35 percent of their household income. Compounding this issue is the prevalence of housing units that are utilized as second homes or vacation homes. The vacancy rate of households in Newport is 21 percent, suggesting a large proportion of needed housing to serve Newport residents are owned by non-residents. This further constrains supply and exacerbates the affordability crisis Newport faces.

The inclusion of Site A would provide a large site that has minimal development constraints, is easily serviceable by existing public facilities and services, and is located near existing development and economic opportunities in Newport. Additionally, because the site is not currently parcelized, the associated return on investment for the development of the tract is much greater than alternative locations, making development significantly more likely in the near future than sites with high parcelization. The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing

near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

Orderly and economic provision of public facilities and services

Transportation

Site A is currently adjacent to a developed collector, NE Harney Street, and it is located adjacent to existing development. According to the attached Transportation Impact Analysis (Attachment D), the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 40-acre site has the potential to create a significant effect on the surrounding transportation network. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2039 with the implementation of mitigation measures identified in the TIA.

Capacity of existing facilities to serve areas already inside the UGB

Operational analyses outlined in the Traffic Impact Analysis (Attachment D) indicate that all of the study intersections currently operate at acceptable mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The attached TIA estimates background traffic volumes for the 2039 planning horizon year using an 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. With the proposed UGB adjustment, assuming that the 40-acre site is zoned under the City of Newport's R-2 Medium Density Single Family Residential zone, the TIA determined the site could support up to 200 single family homes in a reasonable worst case scenario. This has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Impacts to existing facilities that serve nearby areas already inside the UGB

Operations of the study intersections under the 2039 R-2 Medium Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets.

The eastbound approach to the unsignalized US 101/NE 36th Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. This represents a significant impact to the operations of the intersection. Rather than addressing these impacts through this application, the applicant proposes to leave the existing zoning in place until the property is annexed to the City. Therefore,

pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Water

According to a City map of existing water services in Newport, a 12-inch water main runs along NE Harney Street as well as two hydrants located along this main adjacent to Site A. This would allow for the extension of water service to the parcel once it develops.

Capacity of existing facilities to serve areas already inside the UGB

Sections 5 and 6 of the 2008 Newport Water System Master Plan describe the existing water system and water demand. The City holds water rights allowing for a maximum of 19.24 cfs from six streams, but can only utilize 16.54 cfs from three due to location constraints. The City stores water from these streams in the Big Creek reservoir to draw from during the dry and high-water-demand summer months. The plan estimates that the average monthly water consumption for a typical dwelling ranges between 3,695 gallons in winter months to 6,270 gallons in summer months with an average demand of 4,600 gallons per month. During the summer months, the maximum daily demand (MDD) can reach a total 6.27 cfs, but the average daily demand (ADD) throughout the year is 3.33 cfs. In instances where the City's demand exceeded water available from streams, supply drew from the Big Creek reservoir to meet demand.

The plan projects this demand to increase to a MDD 8.99 cfs and an ADD of 4.72 cfs by 2030. Based on the capacity of the Big Creek reservoir during its driest year on record, it is possible to support the anticipated maximum demand in 2030 by diverting water from the Siletz River to recharge the reservoir, but following that, the City will need to consider alternatives to provide sufficient water supply. The Capital Improvement Plan (Section 9) identifies a \$12 million upgrade to the existing Big Creek Water Treatment Plant that will allow for the sufficient accommodation of water needs as development continues.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Assuming the average monthly water consumption outlined in the Newport Water System Master Plan, the inclusion of Site A into the UGB and development could result in a total increase in water demand of 1,254,000 gallons per month (0.06 cfs) during peak months and 920,000 gallons per month (0.05 cfs) on average. While significant, the capacity to serve Site A currently exists, and the Capital Improvement Plan identifies improvements that will ensure the adequate provision of water well into the future. Therefore, with the provision of appropriate system development charges and water line extension, the existing water system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing 12-inch water main along NE Harney Street will result in additional water demand on the pipe and local distribution network however these impacts should be able to be accommodated without significant impacts upon the surrounding system.

Sanitary Sewer

The City recently updated their Sanitary Sewer Master Plan in order to update wastewater elements of the Comprehensive Plan and develop a priority for capital improvement projects. According to a publicly-available draft dated March 22, 2018, there is a gravity sewer extending to the northwest corner of Site A, which would allow for the extension of sanitary sewer to Site A once it develops. The line was constructed circa 1990 and is composed of Polyvinyl Chloride (PVC). This gravity main connects to a Vance Avery Wastewater Treatment Facility located in South Beach.

Capacity of existing facilities to serve areas already inside the UGB

The City provides sanitary sewer collection system services to approximately 10,000 people spread across an area of approximately 11.2 square miles. The City oversees over 62 miles of gravity pipelines ranging in size from approximately 3 to 36 inches in diameter, 1,400 manholes, 9 major pump stations, 16 minor pump stations, and 12 miles of sanitary force mains. The plan identifies minor deficiencies in the sanitary sewer system, but provides a series of recommended improvements prioritized by assessed risk of overflow to ensure that there will be sufficient capacity to accommodate new development.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The Master Plan models buildout scenarios over a 20-year period to identify possible surcharging and flooding during large storm events (i.e. a 1-in-10 year storm). The plan uses these scenarios to provide recommended improvements to ensure the existing system will be able to accommodate new development as it occurs, prioritizing the most critical facilities for improvement. Therefore, with the provision of appropriate system development charges and sanitary sewer extension, the existing sanitary sewer system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing gravity sewer will result in an increase demand on the existing capacity of the pipe however the system is believed to be adequately sized to handle the demands associated with a new subdivision. These demands can be evaluated in detail and the system may be upsized in order to enable the development.

Stormwater

The Applicant has sufficient room on the property to treat and detain stormwater consistent with the City's applicable regulations. The impacts to stormwater management will be evaluated and managed at the time of development of the property.

Comparative environmental, energy, economic and social consequences

Economic

As discussed earlier in this analysis, the full development of Site A with housing will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

While a T-C designation on Site A will result in the preservation of resource land, the R-2 land use provides a greater economic benefit to the community through increased housing options. The proposed adjustment and future use promote more efficient and coordinated use of land and minimizes urban sprawl.

Social

There are developed neighborhoods to the north and the west of Site A, and the development of housing on what was originally resource land would result in a change of character for existing residents, most notably a loss of rural lifestyle or low-density residential development. Additionally, forest and natural areas can provide people with access to nature and stress relief, though the anticipated loss would be minimal in this case as this land is managed forest with no public access.

There is the potential to dedicate future park space and scenic areas as development occurs. Specifically, in areas that have topographical constraints that make development infeasible, dedicated natural open space and scenic vistas can be provided to serve as an essential resource to Newport communities. Additionally, the provision of trails connecting to the existing Ocean to Bay Trail network to the southwest could mitigate loss of forested area by providing access to nature and other recreational amenities to Newport residents.

Environmental

There are no identified wetlands on Site A. However, just south of the parcel is a City designated wetland that extends from the property line to NE Harney Street. The development of Site A could impact this wetland as the increase in impervious surface increases runoff and flow rates downstream.

The development of Site A will require the clearing of trees, which will have associated erosion, air quality, and greenhouse gas impacts. These impacts can be mitigated through the careful provision of open space in areas that are not suitable for development. These areas could be planted with native vegetation and trees that would provide better environmental services than the current timber plantation. This would offset some of the environmental impact associated with the clearing of trees to accommodate development.

Additionally, the exclusion of Site B and will offset the development of Site A by precluding development on Site B and preserving the area for forest land uses. Site B is currently included in the UGB and zoned for rural residential development, which would result in much larger development footprints and disturbance to the surrounding area should they be developed. Therefore, the proposed adjustment provides the opportunity to limit the future clearing of trees and sprawling patterns of development on Site B and provide more compact residential development with a lower environmental footprint per unit through the development of Site A.

Energy

The inclusion of Site A into the UGB is expected to result in new housing replacing areas currently used as timber resource land except where topography constrains development. There is a power transmission line and transformer to the north of Site A, but it is unlikely to be impacted by residential development. Within the site, redevelopment could support as many as 200 dwelling units, which would have an increased energy impact in the form of construction, dwelling unit energy use, and transportation.

There is a bus stop along Hwy 101 that is approximately a ten minute walk from the western periphery of Site A, and an existing Ocean to Bay Trail network that can provide options for non-automobile travel, reducing some of the energy impacts associated with transportation.

Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The proximity of single-family dwellings to adjacent forest lands creates the potential for conflict between the two uses in the form of noise, pollution from logging equipment, truck and automobile traffic, and hazards associated with forest lands such as falling or windthrown trees and wildfire. Additionally, the proximity of new housing may present challenges to active forest management if those activities are a nuisance to adjacent uses. The key towards mitigating these conflicts is separation and buffering. The power transmission line located north of Site A provides an excellent buffer area in which felling is less likely to occur to avoid damage to the lines. This allows trees to grow in this buffer, providing additional shielding and impacts associated with forest activity to the north of the power line. In addition to this, Chapter 14.18 requires buffering between residential and non-

residential uses, providing an opportunity to increase the separation between residential and forest uses and mitigate potential conflicts.

Alternative UGB Expansion Areas

ORS 197.298 establishes a priority of land to be included within an urban growth boundary that Boundary Location Analyses must consider:

- 1) Designated urban reserve land
 - * Note: Areas around Newport do not contain Urban Reserves as defined in OAR 660-021
- 2) Acknowledged exception area or nonresource land
- 3) Marginal land
 - * Note: Areas around Newport do not contain Marginal land as defined in ORS 197.247
- 4) Designated agriculture or forestry land

This section also permits the inclusion of lower priority land in the following circumstance:

- 3) *Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:*
 - a) *Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;*
 - b) *Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or*
 - c) *Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands*

Policy 15 under Goal 14: Urbanization of the Comprehensive Plan encourages land use patterns and development plans which take advantage of density and location to reduce the need for travel and dependency on the private automobile, facilitate energy-efficient public transit systems, and permit building configurations which increases the efficiency of energy use. The subject property to be brought into the UGB is located directly adjacent to the City Limits and developed residential land. The subject property to be removed from the Urban Growth Boundary is not located near existing services or major transportation facilities.

Site B is located at the southeastern periphery of the Newport UGB. It is far from existing development and features several constraints that limit the provision of public services including wetlands, a creek at the southern area of the parcel, and fairly steep slopes. These factors result in lands that would be prohibitively expensive to develop at higher densities in the near future.

Goals 15 through 19

Applicant's Finding: Goals 15 through 19 are related to the Willamette Greenway and coastal resources. The subject site is located inland and is not located near any identified coastal resources; therefore, these goals do not apply to the subject site and no further analysis is required.

STATE ADMINISTRATIVE RULES OAR CHAPTER 660

660-006-0020

Plan Designation Within an Urban Growth Boundary

Goal 4 does not apply within urban growth boundaries and therefore, the designation of forest lands is not required.

Applicant's Finding: The proposed site for inclusion into the UGB (Site A) would be redesignated by the City of Newport as "Low Density Residential" in the Comprehensive Plan and zoned "Medium Density Residential" (R-2) upon annexation into the City.

Division 12 – Transportation Planning

660-012-0060

Plan and Land Use Regulation Amendments

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

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

Applicant's Finding: The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

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

Applicant's Finding: The proposed land exchange will not result in any changes to the standards that implement the functional classification system.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the

amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Applicant's Finding: The proposed land exchange of the 40-acre site would result in future traffic volumes that are consistent with the functional classifications of the roadways in the study area.

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Applicant's Finding: The proposed land exchange of the 40-acre site would not result in the degradation of any of the operations of the US 101/NE 36th Street and US 101/NE 31st Street intersections below their respective mobility targets. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Applicant's Finding: Without any mitigation measures in place, the proposed land exchange would result in further degradation of failing operations at the US 101/NE 31st Street intersection, the US 101/NE 25th Street intersection and US 101/NE 20th Street intersection. As the City is updating their TSP, the Applicant has suggested that the City consider the adoption of alternative mobility standards which would potentially remedy this issue prior to the rezoning of the subject property. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

- (2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility measured at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed in (a) through (e) below, unless the amendment meets the balancing test in subsection (2)(e) of this section or qualifies for partial mitigation in section (11) of this rule. A local government using subsection (2)(e), section (3), section (10) or section (11) to approve an amendment recognizes that additional motor vehicle traffic**

congestion may result and that other facility providers would not be expected to provide additional capacity for motor vehicles in response to this congestion.

- (a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.
- (b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or mechanism consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.
- (c) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.
- (d) Providing other measures as a condition of development or through a development agreement or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements. Local governments shall, as part of the amendment, specify when measures or improvements provided pursuant to this subsection will be provided.
- (e) Providing improvements that would benefit modes other than the significantly affected mode, improvements to facilities other than the significantly affected facility, or improvements at other locations, if:
 - (A) The provider of the significantly affected facility provides a written statement that the system-wide benefits are sufficient to balance the significant effect, even though the improvements would not result in consistency for all performance standards;
 - (B) The providers of facilities being improved at other locations provide written statements of approval; and
 - (C) The local jurisdictions where facilities are being improved provide written statements of approval.

Applicant's Finding: The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

The applicant acknowledges the responsibility of the City for amending the current adopted TSP to reflect the proposed improvements in accordance with the provisions listed above.

- (3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without

assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility where:

- (a) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;
- (b) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures;
- (c) The amendment does not involve property located in an interchange area as defined in paragraph (4)(d)(C); and
- (d) For affected state highways, ODOT provides a written statement that the proposed funding and timing for the identified mitigation improvements or measures are, at a minimum, sufficient to avoid further degradation to the performance of the affected state highway. However, if a local government provides the appropriate ODOT regional office with written notice of a proposed amendment in a manner that provides ODOT reasonable opportunity to submit a written statement into the record of the local government proceeding, and ODOT does not provide a written statement, then the local government may proceed with applying subsections (a) through (c) of this section.

Applicant's Finding: The proposed land exchange of the 40-acre site would result in future traffic volumes that are consistent with the function, capacity and performance standards of the roadways in the study area. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB. Therefore, the requirements of this section do not apply.

(4) Determinations under sections (1)–(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

- (a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.
- (b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:
 - (A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement

- program or capital improvement plan or program of a transportation service provider.
- (B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or mechanism is in place or approved. These include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.
 - (C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.
 - (D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.
 - (E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.
- (c) Within interstate interchange areas, the improvements included in (b)(A)–(C) are considered planned facilities, improvements and services, except where:
- (A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or
 - (B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.
- (d) As used in this section and section (3):
- (A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;
 - (B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and
 - (C) Interstate interchange area means:
 - (i) Property within one-quarter mile of the ramp terminal intersection of an existing or planned interchange on an Interstate Highway; or

(ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.

- (e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)–(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

Applicant's Finding: The applicant acknowledges the authority of the City of Newport to render a determination regarding the anticipated effect of the proposed UGB amendment on the transportation network.

- (5) The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028.

Applicant's Finding: The applicant does not propose an exception to allow development on rural lands under this division.

- (6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in sections (1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in subsections (a)–(d) below;

- (a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrian-friendly development. The 10% reduction allowed for by this section shall be available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;
- (b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in subsection (a) above;

- (c) Where a local government assumes or estimates lower vehicle trip generation as provided in subsection (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixed-use, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in OAR 660-012-0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 660-012-0045(3) and (4) or through conditions of approval or findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and
- (d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to subsection (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

Applicant's Finding: The applicant does not propose a mixed-use development. Therefore, the requirements of this section do not apply.

- (7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria listed in subsections (a)-(c) below shall include an amendment to the comprehensive plan, transportation system plan the adoption of a local street plan, access management plan, future street plan or other binding local transportation plan to provide for on-site alignment of streets or accessways with existing and planned arterial, collector, and local streets surrounding the site as necessary to implement the requirements in OAR 660-012-0020(2)(b) and 660-012-0045(3):
 - (a) The plan or land use regulation amendment results in designation of two or more acres of land for commercial use;
 - (b) The local government has not adopted a TSP or local street plan which complies with OAR 660-012-0020(2)(b) or, in the Portland Metropolitan Area, has not complied with Metro's requirement for street connectivity as contained in Title 6, Section 3 of the Urban Growth Management Functional Plan; and
 - (c) The proposed amendment would significantly affect a transportation facility as provided in section (1).

Applicant's Finding: The site, at the time of development, would only propose the creation of a local street network. No update to the City's TSP or future streets plan is required as part of this application.

(8) A "mixed-use, pedestrian-friendly center or neighborhood" for the purposes of this rule, means:

(a) Any one of the following:

(A) An existing central business district or downtown;

(B) An area designated as a central city, regional center, town center or main street in the Portland Metro 2040 Regional Growth Concept;

(C) An area designated in an acknowledged comprehensive plan as a transit oriented development or a pedestrian district; or

(D) An area designated as a special transportation area as provided for in the Oregon Highway Plan.

(b) An area other than those listed in subsection (a) above which includes or is planned to include the following characteristics:

(A) A concentration of a variety of land uses in a well-defined area, including the following:

(i) Medium to high density residential development (12 or more units per acre);

(ii) Offices or office buildings;

(iii) Retail stores and services;

(iv) Restaurants; and

(v) Public open space or private open space which is available for public use, such as a park or plaza.

(B) Generally include civic or cultural uses;

(C) A core commercial area where multi-story buildings are permitted;

(D) Buildings and building entrances oriented to streets;

(E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;

(F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;

(G) One or more transit stops (in urban areas with fixed route transit service); and

(H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

Applicant's Finding: The applicant does not propose a mixed-use development. Therefore, the requirements of this section do not apply.

(9) Notwithstanding section (1) of this rule, a local government may find that an amendment to a zoning map does not significantly affect an existing or planned transportation facility if all of the following requirements are met.

- (a) The proposed zoning is consistent with the existing comprehensive plan map designation and the amendment does not change the comprehensive plan map;
- (b) The local government has an acknowledged TSP and the proposed zoning is consistent with the TSP; and
- (c) The area subject to the zoning map amendment was not exempted from this rule at the time of an urban growth boundary amendment as permitted in OAR 660-024-0020(1)(d), or the area was exempted from this rule but the local government has a subsequently acknowledged TSP amendment that accounted for urbanization of the area.

Applicant's Finding: The applicant acknowledges that the proposed land exchange would not significantly affect the existing transportation network. Therefore, the requirements of this section do not apply.

(10) Notwithstanding sections (1) and (2) of this rule, a local government may amend a functional plan, a comprehensive plan or a land use regulation without applying performance standards related to motor vehicle traffic congestion (e.g. volume to capacity ratio or V/C), delay or travel time if the amendment meets the requirements of subsection (a) of this section. This section does not exempt a proposed amendment from other transportation performance standards or policies that may apply including, but not limited to, safety for all modes, network connectivity for all modes (e.g. sidewalks, bicycle lanes) and accessibility for freight vehicles of a size and frequency required by the development.

(a) A proposed amendment qualifies for this section if it:

- (A) Is a map or text amendment affecting only land entirely within a multimodal mixed-use area (MMA); and
- (B) Is consistent with the definition of an MMA and consistent with the function of the MMA as described in the findings designating the MMA.

(b) For the purpose of this rule, "multimodal mixed-use area" or "MMA" means an area:

- (A) With a boundary adopted by a local government as provided in subsection (d) or (e) of this section and that has been acknowledged;
- (B) Entirely within an urban growth boundary;
- (C) With adopted plans and development regulations that allow the uses listed in paragraphs (8)(b)(A) through (C) of this rule and that require new development to be consistent with the characteristics listed in paragraphs (8)(b)(D) through (H) of this rule;
- (D) With land use regulations that do not require the provision of off-street parking, or regulations that require lower levels of off-street parking than required in

- other areas and allow flexibility to meet the parking requirements (e.g. count on-street parking, allow long-term leases, allow shared parking); and
- (E) Located in one or more of the categories below:
- (i) At least one-quarter mile from any ramp terminal intersection of existing or planned interchanges;
 - (ii) Within the area of an adopted Interchange Area Management Plan (IAMP) and consistent with the IAMP; or
 - (iii) Within one-quarter mile of a ramp terminal intersection of an existing or planned interchange if the mainline facility provider has provided written concurrence with the MMA designation as provided in subsection (c) of this section.
- (c) When a mainline facility provider reviews an MMA designation as provided in subparagraph (b)(E)(iii) of this section, the provider must consider the factors listed in paragraph (A) of this subsection.
- (A) The potential for operational or safety effects to the interchange area and the mainline highway, specifically considering:
- (i) Whether the interchange area has a crash rate that is higher than the statewide crash rate for similar facilities;
 - (ii) Whether the interchange area is in the top ten percent of locations identified by the safety priority index system (SPIS) developed by ODOT; and
 - (iii) Whether existing or potential future traffic queues on the interchange exit ramps extend onto the mainline highway or the portion of the ramp needed to safely accommodate deceleration.
- (B) If there are operational or safety effects as described in paragraph (A) of this subsection, the effects may be addressed by an agreement between the local government and the facility provider regarding traffic management plans favoring traffic movements away from the interchange, particularly those facilitating clearing traffic queues on the interchange exit ramps.
- (d) A local government may designate an MMA by adopting an amendment to the comprehensive plan or land use regulations to delineate the boundary following an existing zone, multiple existing zones, an urban renewal area, other existing boundary, or establishing a new boundary. The designation must be accompanied by findings showing how the area meets the definition of an MMA. Designation of an MMA is not subject to the requirements in sections (1) and (2) of this rule.
- (e) A local government may designate an MMA on an area where comprehensive plan map designations or land use regulations do not meet the definition, if all of the other elements meet the definition, by concurrently adopting comprehensive plan or land use regulation amendments necessary to meet the definition. Such amendments are not subject to performance standards related to motor vehicle traffic congestion, delay or travel time.

Applicant's Finding: The applicant does not propose an exemption to the provision of performance standards related to motor vehicle traffic congestion within this application. Therefore, the requirements of this section do not apply.

(11) A local government may approve an amendment with partial mitigation as provided in section (2) of this rule if the amendment complies with subsection (a) of this section, the amendment meets the balancing test in subsection (b) of this section, and the local government coordinates as provided in subsection (c) of this section.

(a) The amendment must meet paragraphs (A) and (B) of this subsection or meet paragraph (D) of this subsection.

(A) Create direct benefits in terms of industrial or traded-sector jobs created or retained by limiting uses to industrial or traded-sector industries.

(B) Not allow retail uses, except limited retail incidental to industrial or traded sector development, not to exceed five percent of the net developable area.

(C) For the purpose of this section:

(i) "Industrial" means employment activities generating income from the production, handling or distribution of goods including, but not limited to, manufacturing, assembly, fabrication, processing, storage, logistics, warehousing, importation, distribution and transshipment and research and development.

(ii) "Traded-sector" means industries in which member firms sell their goods or services into markets for which national or international competition exists.

(D) Notwithstanding paragraphs (A) and (B) of this subsection, an amendment complies with subsection (a) if all of the following conditions are met:

(i) The amendment is within a city with a population less than 10,000 and outside of a Metropolitan Planning Organization.

(ii) The amendment would provide land for "Other Employment Use" or "Prime Industrial Land" as those terms are defined in OAR 660-009-0005.

(iii) The amendment is located outside of the Willamette Valley as defined in ORS 215.010.

(E) The provisions of paragraph (D) of this subsection are repealed on January 1, 2017.

(b) A local government may accept partial mitigation only if the local government determines that the benefits outweigh the negative effects on local transportation facilities and the local government receives from the provider of any transportation facility that would be significantly affected written concurrence that the benefits outweigh the negative effects on their transportation facilities. If the amendment significantly affects a state highway, then ODOT must coordinate with the Oregon Business Development Department regarding the economic and job creation benefits of the proposed amendment as defined in subsection (a) of this section. The requirement to obtain concurrence from a provider is satisfied if the local

government provides notice as required by subsection (c) of this section and the provider does not respond in writing (either concurring or non-concurring) within forty-five days.

- (c) A local government that proposes to use this section must coordinate with Oregon Business Development Department, Department of Land Conservation and Development, area commission on transportation, metropolitan planning organization, and transportation providers and local governments directly impacted by the proposal to allow opportunities for comments on whether the proposed amendment meets the definition of economic development, how it would affect transportation facilities and the adequacy of proposed mitigation. Informal consultation is encouraged throughout the process starting with pre-application meetings. Coordination has the meaning given in ORS 197.015 and Goal 2 and must include notice at least 45 days before the first evidentiary hearing. Notice must include the following:
 - (A) Proposed amendment.
 - (B) Proposed mitigating actions from section (2) of this rule.
 - (C) Analysis and projections of the extent to which the proposed amendment in combination with proposed mitigating actions would fall short of being consistent with the function, capacity, and performance standards of transportation facilities.
 - (D) Findings showing how the proposed amendment meets the requirements of subsection (a) of this section.
 - (E) Findings showing that the benefits of the proposed amendment outweigh the negative effects on transportation facilities.

Applicant's Finding: The applicant does not propose a partial mitigation of anticipated transportation impacts. Therefore, the requirements of this section do not apply.

Division 18 – Post-Acknowledgement Amendments

660-018-0020

Notice of a Proposed Change to a Comprehensive Plan or Land Use Regulation

- (1) Before a local government adopts a change to an acknowledged comprehensive plan or a land use regulation, unless circumstances described in OAR 660-018-0022 apply, the local government shall submit the proposed change to the department, including the information described in section (2) of this rule. The local government must submit the proposed change to the director at the department's Salem office at least 35 days before holding the first evidentiary hearing on adoption of the proposed change.
- (2) The submittal must include applicable forms provided by the department, be in a format acceptable to the department, and include all of the following materials:
 - (a) The text of the proposed change to the comprehensive plan or land use regulation implementing the plan, as provided in section (3) of this rule;

- (b) If a comprehensive plan map or zoning map is created or altered by the proposed change, a copy of the relevant portion of the map that is created or altered
 - (c) A brief narrative summary of the proposed change and any supplemental information that the local government believes may be useful to inform the director and members of the public of the effect of the proposed change;
 - (d) The date set for the first evidentiary hearing;
 - (e) The notice or a draft of the notice required under ORS 197.763 regarding a quasi-judicial land use hearing, if applicable; and
 - (f) Any staff report on the proposed change or information that describes when the staff report will be available and how a copy may be obtained.
- (3) The proposed text submitted to comply with subsection (2)(a) of this rule must include all of the proposed wording to be added to or deleted from the acknowledged plan or land use regulations. A general description of the proposal or its purpose, by itself, is not sufficient. For map changes, the material submitted to comply with Subsection (2)(b) must include a graphic depiction of the change; a legal description, tax account number, address or similar general description, by itself, is not sufficient. If a goal exception is proposed, the submittal must include the proposed wording of the exception.
- (4) If a local government proposes a change to an acknowledged comprehensive plan or a land use regulation solely for the purpose of conforming the plan and regulations to new requirements in a land use statute, statewide land use planning goal, or a rule implementing the statutes or goals, the local government may adopt such a change without holding a public hearing, notwithstanding contrary provisions of state and local law, provided:
- (a) The local government provides notice to the department of the proposed change identifying it as a change described under this section, and includes the materials described in section (2) of this rule, 35 days before the proposed change is adopted by the local government, and
 - (b) The department confirms in writing prior to the adoption of the change that the only effect of the proposed change is to conform the comprehensive plan or the land use regulations to the new requirements.
- (5) For purposes of computation of time for the 35-day notice under this rule and OAR 660-018-0035(1)(c), the proposed change is considered to have been “submitted” on the day that paper copies or an electronic file of the applicable notice forms and other documents required by section (2) this rule are received or, if mailed, on the date of mailing. The materials must be mailed to or received by the department at its Salem office.

Applicant's Finding: For the Post Acknowledgement Plan Amendment associated with the UGB Adjustment, the City of Newport and Lincoln County shall jointly submit all of the required elements listed above within the specified timeframe.

Joint Submittal of Notices and Changes

- (1) Where two or more local governments are required by plan provisions, coordination agreements, statutes or goals to agree on and mutually adopt a change to a comprehensive plan or land use regulation, the local governments shall jointly submit the notice required in OAR 660-018-0020 and, if the change is adopted, the decision and materials required by OAR 660-018-0040. Notice of such proposed changes must be jointly submitted at least 35 days prior to the first evidentiary hearing. For purposes of notice and appeal, the date of the decision is the date of the last local government's adoption of the change.
- (2) For purposes of this rule, a change to a comprehensive plan or land use regulation that requires two or more local governments to agree on and mutually adopt the change includes, but is not limited to, the establishment or amendment of an urban growth boundary or urban reserve by a city and county in the manner specified in Goal 14.

Applicant's Finding: For the Post Acknowledgement Plan Amendment associated with the UGB Adjustment, the City of Newport and Lincoln County shall jointly submit all of the required elements listed above within the specified timeframe.

Division 24 – Urban Growth Boundaries

660-024-0020

Adoption or Amendment of a UGB

- (1) All statewide goals and related administrative rules are applicable when establishing or amending a UGB, except as follows:
 - (a) The exceptions process in Goal 2 and OAR chapter 660, division 4, is not applicable unless a local government chooses to take an exception to a particular goal requirement, for example, as provided in OAR 660-004-0010(1);
 - (b) Goals 3 and 4 are not applicable;
 - (c) Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB, except as required under OAR 660-023-0070 and 660-023-0250;
 - (d) The transportation planning rule requirements under OAR 660-012-0060 need not be applied to a UGB amendment if the land added to the UGB is zoned as urbanizable land, either by retaining the zoning that was assigned prior to inclusion in the boundary or by assigning interim zoning that does not allow development that would generate more vehicle trips than development allowed by the zoning assigned prior to inclusion in the boundary;
 - (e) Goal 15 is not applicable to land added to the UGB unless the land is within the Willamette River Greenway Boundary;
 - (f) Goals 16 to 18 are not applicable to land added to the UGB unless the land is within a coastal shorelands boundary;
 - (g) Goal 19 is not applicable to a UGB amendment.

- (2) The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.

Applicant's Finding: The applicant acknowledges the applicability of goals and administrative rules as listed above. Attached to this application are proposed revised maps showing the existing and proposed UGB in detail.

660-024-0040

Land Need

- (1) The UGB must be based on the appropriate 20-year population forecast for the urban area as determined under rules in OAR chapter 660, division 32, and must provide for needed housing, employment and other urban uses such as public facilities, streets and roads, schools, parks and open space over the 20-year planning period consistent with the land need requirements of Goal 14 and this rule. The 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision. Local governments in Crook, Deschutes or Jefferson Counties may determine the need for Regional Large-Lot Industrial Land by following the provisions of OAR 660-024-0045 for areas subject to that rule.
- (2) If the UGB analysis or amendment is conducted as part of a periodic review work program, the 20-year planning period must commence on the date initially scheduled for completion of the appropriate work task. If the UGB analysis or amendment is conducted as part of a sequential UGB approval, the 20-year planning period will be established in the work program issued pursuant to OAR 660-025-0185. If the UGB analysis or amendment is conducted as a post-acknowledgement plan amendment under ORS 197.610 to 197.625, the 20-year planning period must commence either:
 - (a) On the date initially scheduled for final adoption of the amendment specified by the local government in the initial notice of the amendment required by OAR 660-018-0020; or
 - (b) If more recent than the date determined in subsection (a), at the beginning of the 20-year period specified in the appropriate coordinated population forecast for the urban area as determined under rules in OAR chapter 660, division 32, unless ORS 197.296 requires a different date for local governments subject to that statute.
- (3) A local government may review and amend the UGB in consideration of one category of land need (for example, housing need) without a simultaneous review and amendment in consideration of other categories of land need (for example, employment need).
- (4) The determination of 20-year residential land needs for an urban area must be consistent with the appropriate 20-year coordinated population forecast for the urban area determined under rules in OAR chapter 660, division 32, and with the requirements

for determining housing needs in Goals 10 and 14, OAR chapter 660, division 7 or 8, and applicable provisions of ORS 197.295 to 197.314 and 197.475 to 197.490.

Applicant's Finding: OAR 660-024-0070(3) allows a local government considering an exchange of land to rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided that the buildable land added to the UGB provides a specific type of residential need substantially equivalent to the amount of buildable land removed and that the land added to the UGB is designated for the same residential uses and housing density as the land removed from the UGB.

As detailed later in this narrative, the inclusion of Site A meets these requirements; therefore, the City may utilize its current 20-year population forecast and housing needs analysis for the purposes of this UGB Adjustment.

- (5) Except for a metropolitan service district described in ORS 197.015(13), the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9 and OAR chapter 660, division 9, and must include a determination of the need for a short-term supply of land for employment uses consistent with OAR 660-009-0025. Employment land need may be based on an estimate of job growth over the planning period; local government must provide a reasonable justification for the job growth estimate but Goal 14 does not require that job growth estimates necessarily be proportional to population growth. Local governments in Crook, Deschutes or Jefferson Counties may determine the need for Regional Large-Lot Industrial Land by following the provisions of OAR 660-024-0045 for areas subject to that rule.**
- (6) Cities and counties may jointly conduct a coordinated regional EOA for more than one city in the county or for a defined region within one or more counties, in conformance with Goal 9, OAR chapter 660, division 9, and applicable provisions of ORS 195.025. A defined region may include incorporated and unincorporated areas of one or more counties.**
- (7) The determination of 20-year land needs for transportation and public facilities for an urban area must comply with applicable requirements of Goals 11 and 12, rules in OAR chapter 660, divisions 11 and 12, and public facilities requirements in ORS 197.712 and 197.768. The determination of school facility needs must also comply with 195.110 and 197.296 for local governments specified in those statutes.**

Applicant's Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

- (8) The following safe harbors may be applied by a local government to determine housing need under this division:**

- (a) A local government may estimate persons per household for the 20-year planning period using the persons per household for the urban area indicated in the most current data for the urban area published by the U.S. Census Bureau.
- (b) If a local government does not regulate government-assisted housing differently than other housing types, it is not required to estimate the need for government-assisted housing as a separate housing type.
- (c) If a local government allows manufactured homes on individual lots as a permitted use in all residential zones that allow 10 or fewer dwelling units per net buildable acre, it is not necessary to provide an estimate of the need for manufactured dwellings on individual lots.
- (d) If a local government allows manufactured dwelling parks required by ORS 197.475 to 197.490 in all areas planned and zoned for a residential density of six to 12 units per acre, a separate estimate of the need for manufactured dwelling parks is not required.
- (e) A local government outside of the Metro boundary may estimate its housing vacancy rate for the 20-year planning period using the vacancy rate in the most current data published by the U.S. Census Bureau for that urban area that includes the local government.
- (f) A local government outside of the Metro boundary may determine housing needs for purposes of a UGB amendment using the combined Housing Density and Housing Mix safe harbors described in this subsection and in Table 1, or in combination with the Alternative Density safe harbor described under subsection (g) of this section and in Table 2. To meet the Housing Density safe harbor in this subsection, the local government may Assume For UGB Analysis that all buildable land in the urban area, including land added to the UGB, will develop at the applicable average overall density specified in column B of Table 1. Buildable land in the UGB, including land added to the UGB, must also be Zoned to Allow at least the average overall maximum density specified as Zone To Allow in column B of Table 1. Finally, the local government must adopt zoning that ensures buildable land in the urban area, including land added to the UGB, cannot develop at an average overall density less than the applicable Required Overall Minimum density specified in column B of Table 1. To meet the Housing Mix safe harbor in this subsection, the local government must Zone to Allow the applicable percentages of low, medium and high density residential specified in column C of Table 1.
- (g) When using the safe harbor in subsection (f), a local government may choose to also use the applicable Alternative Density safe harbors for Small Exception Parcels and High Value Farm Land specified in Table 2. If a local government chooses to use the Alternative Density safe harbors described in Table 2, it must:
 - (A) Apply the applicable Small Exception Parcel density assumption and the High Value Farm Land density assumption measures specified in the table to all buildable land that is within these categories, and

- (B) Apply the Housing Density and Mix safe harbors specified in subsection (f) of this section and specified in Table 1 to all buildable land in the urban area that does not consist of Small Exception Parcels or High Value Farm Land.
- (h) As an alternative to the density safe harbors in subsection (f) and, if applicable, subsection (g), of this section, a local government outside of the Metro boundary may assume that the average overall density of buildable residential land in the urban area for the 20-year planning period will increase by 25 percent over the average overall density of developed residential land in the urban area at the time the local government initiated the evaluation or amendment of the UGB. If a local government uses this Incremental Housing Density safe harbor, it must also meet the applicable Zoned to Allow density and Required Overall Minimum density requirements in Column B of Table 1 and, if applicable, Table 2, and must use the Housing Mix safe harbor in Column C of Table 1.
- (i) As an alternative to the Housing Mix safe harbor required in subsection (f) of this section and in Column C of Table 1, a local government outside the Metro boundary that uses the housing density safe harbor in subsection (f), (g) or (h) of this section may estimate housing mix using the Incremental Housing Mix safe harbor described in paragraphs (A) to (C) of this subsection, as illustrated in Table 3:
- (A) Determine the existing percentages of low density, medium density, and high density housing on developed land (not “buildable land”) in the urban area at the time the local government initiated the evaluation or amendment of the UGB;
 - (B) Increase the percentage of medium density housing estimated in paragraph (A) of this subsection by 10 percent, increase the percentage of high density housing estimated in paragraph (A) of this subsection by five percent, as illustrated in Table 3, and decrease the percentage of low density single family housing by a proportionate amount so that the overall mix total is 100 percent, and
 - (C) Zone to Allow the resultant housing mix determined under subparagraphs (A) and (B) of this subsection.
- (j) Tables 1, 2 and 3 are adopted as part of this rule, and the following definitions apply to terms used in the tables:
- (A) “Assume For UGB Analysis” means the local government may assume that the UGB will develop over the 20-year planning period at the applicable overall density specified in Column B of Tables 1 and 2.
 - (B) “Attached housing” means housing where each unit shares a common wall, ceiling or floor with at least one other unit. “Attached housing” includes, but is not limited to, apartments, condominiums, and common-wall dwellings or row houses where each dwelling unit occupies a separate lot.
 - (C) “Average Overall Density” means the average density of all buildable land in the UGB, including buildable land already inside the UGB and buildable land added

to the UGB, including land zoned for residential use that is presumed to be needed for schools, parks and other institutional uses.

- (D) "Coordinated 20-year Population Forecast" and "20-year Population Forecast" under Column A of the Tables refers to the appropriate population forecast for the urban area determined under rules in OAR chapter 660, division 32.
- (E) "Density" means the number of dwelling units per net buildable acre.
- (F) "High Value Farm Land" has the same meaning as the term defined in ORS 195.300(10).
- (G) "Required Overall Minimum" means a minimum allowed overall average density, or a "density floor," that must be ensured in the applicable residential zones with respect to the overall supply of buildable land for that zone in the urban area for the 20-year planning period.
- (H) "Single Family Detached Housing" means a housing unit that is free standing and separate from other housing units, including mobile homes and manufactured dwellings under ORS 197.475 to 197.492.
- (I) "Small Exception Parcel" means a residentially zoned parcel five acres or less with a house on it, located on land that is outside a UGB prior to a proposed UGB expansion, subject to an acknowledged exception to Goal 3 or 4 or both.
- (J) "Zone To Allow" or "Zoned to Allow" means that the comprehensive plan and implementing zoning shall allow the specified housing types and densities under clear and objective standards and other requirements specified in ORS 197.307(4) and (6).

Applicant's Finding: The applicant acknowledges the permitted safe harbors listed above.

- (9) The following safe harbors may be applied by a local government to determine its employment needs for purposes of a UGB amendment under this rule, Goal 9, OAR chapter 660, division 9, Goal 14 and, if applicable, ORS 197.296.
 - (a) A local government may estimate that the current number of jobs in the urban area will grow during the 20-year planning period at a rate equal to either:
 - (A) The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department; or
 - (B) The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under rules in OAR chapter 660, division 32.
 - (b) A local government with a population of 10,000 or less may assume that retail and service commercial land needs will grow in direct proportion to the forecasted urban area population growth over the 20-year planning period. This safe harbor may not be used to determine employment land needs for sectors other than retail and service commercial.

- (10) As a safe harbor during periodic review or other legislative review of the UGB, a local government may estimate that the 20-year land needs for streets and roads, parks and school facilities will together require an additional amount of land equal to 25 percent of the net buildable acres determined for residential land needs under section (4) of this rule, and in conformance with the definition of "Net Buildable Acre" as defined in OAR 660-024-0010(6).

Applicant's Finding: The proposed UGB Adjustment does not propose a change to the amount of employment land or land for transportation and public facilities. Therefore, the requirements of this section do not apply.

660-024-0050

Land Inventory and Response to Deficiency

- (1) When evaluating or amending a UGB, a local government must inventory land inside the UGB to determine whether there is adequate development capacity to accommodate 20-year needs determined in OAR 660-024-0040. For residential land, the buildable land inventory must include vacant and redevelopable land, and be conducted in accordance with OAR 660-007-0045 or 660-008-0010, whichever is applicable, and ORS 197.296 for local governments subject to that statute. For employment land, the inventory must include suitable vacant and developed land designated for industrial or other employment use, and must be conducted in accordance with OAR 660-009-0015.
- (2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:
 - (a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;
 - (b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.
- (3) As safe harbors when inventorying land to accommodate industrial and other employment needs, a local government may assume that a lot or parcel is vacant if it is:
 - (a) Equal to or larger than one-half acre, if the lot or parcel does not contain a permanent building; or
 - (b) Equal to or larger than five acres, if less than one-half acre of the lot or parcel is occupied by a permanent building.
- (4) If the inventory demonstrates that the development capacity of land inside the UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040, the local government must amend the plan to satisfy the need deficiency, either by increasing the development capacity of land already inside the city or by

expanding the UGB, or both, and in accordance with ORS 197.296 where applicable. Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB. If the local government determines there is a need to expand the UGB, changes to the UGB must be determined by evaluating alternative boundary locations consistent with Goal 14 and applicable rules at OAR 660-024-0060 or 660-024-0065 and 660-024-0067.

- (5) In evaluating an amendment of a UGB submitted under ORS 197.626, the director or the commission may determine that a difference between the estimated 20-year needs determined under OAR 660-024-0040 and the amount of land and development capacity added to the UGB by the submitted amendment is unlikely to significantly affect land supply or resource land protection, and as a result, may determine that the proposed amendment complies with section (4) of this rule.

Applicant's Finding: The proposed UGB Adjustment would result in the inclusion of Site A, a 39.8 acre parcel of vacant timber land zoned Timber Conservation (T-C) and the exclusion of Site B, a 71.4 acre parcel of unincorporated lands within the UGB. Site B is zoned for Rural Residential (RR-10) and designated as High Density Residential in the Newport Comprehensive Plan. As the County has no deficiencies of land identified for Timber Conservation, the conversion of these lands to an urban designation will have no net negative impacts.

- (6) When land is added to the UGB, the local government must assign appropriate urban plan designations to the added land, consistent with the need determination and the requirements of section (7) of this rule, if applicable. The local government must also apply appropriate zoning to the added land consistent with the plan designation or may maintain the land as urbanizable land until the land is rezoned for the planned urban uses, either by retaining the zoning that was assigned prior to inclusion in the boundary or by applying other interim zoning that maintains the land's potential for planned urban development. The requirements of ORS 197.296 regarding planning and zoning also apply when local governments specified in that statute add land to the UGB.
- (7) Lands included within a UGB pursuant to OAR 660-024-0065(3) to provide for a particular industrial use, or a particular public facility, must be planned and zoned for the intended use and must remain planned and zoned for that use unless the city removes the land from the UGB.
- (8) As a safe harbor regarding requirements concerning "efficiency," a local government that chooses to use the density and mix safe harbors in OAR 660-024-0040(8) is deemed to have met the Goal 14 efficiency requirements under:
- (a) Sections (1) and (4) of this rule regarding evaluation of the development capacity of residential land inside the UGB to accommodate the estimated 20-year needs; and

- (b) Goal 14 regarding a demonstration that residential needs cannot be reasonably accommodated on residential land already inside the UGB, but not with respect to:
 - (A) A demonstration that residential needs cannot be reasonably accommodated by rezoning non-residential land, and
 - (B) Compliance with Goal 14 Boundary Location factors.

660-024-0070

UGB Adjustments

- (1) A local government may adjust the UGB at any time to better achieve the purposes of Goal 14 and this division. Such adjustment may occur by adding or removing land from the UGB, or by exchanging land inside the UGB for land outside the UGB. The requirements of section (2) of this rule apply when removing land from the UGB. The requirements of Goal 14 and this division [and ORS 197.298] apply when land is added to the UGB, including land added in exchange for land removed. The requirements of ORS 197.296 may also apply when land is added to a UGB, as specified in that statute. If a local government exchanges land inside the UGB for land outside the UGB, the applicable local government must adopt appropriate rural zoning designations for the land removed from the UGB prior to or at the time of adoption of the UGB amendment and must apply applicable location and priority provisions of OAR 660-024-0060 through 660-020-0067.
- (2) A local government may remove land from a UGB following the procedures and requirements of ORS 197.764. Alternatively, a local government may remove land from the UGB following the procedures and requirements of 197.610 to 197.650, provided it determines:
 - (a) The removal of land would not violate applicable statewide planning goals and rules;
 - (b) The UGB would provide a 20-year supply of land for estimated needs after the land is removed, or would provide roughly the same supply of buildable land as prior to the removal, taking into consideration land added to the UGB at the same time;
 - (c) Public facilities agreements adopted under ORS 195.020 do not intend to provide for urban services on the subject land unless the public facilities provider agrees to removal of the land from the UGB and concurrent modification of the agreement;
 - (d) Removal of the land does not preclude the efficient provision of urban services to any other buildable land that remains inside the UGB; and
 - (e) The land removed from the UGB is planned and zoned for rural use consistent with all applicable laws.

Applicant's Finding: The applicant proposes a UGB adjustment by exchanging land inside the UGB for land outside the UGB. The proposed exchange would result in the inclusion of a 39.8 acre parcel currently zoned Timber Conservation (Site A) and the exclusion of a 71.4

acre parcel currently zoned Rural Residential (Site B). The removal of Site B the procedures and requirements of ORS 197.764 as detailed in this narrative.

Site B is proposed for removal from the UGB. It is currently zoned for rural residential use (RR-10).

The lands proposed for removal from the UGB are located on the southeastern perimeter of the Newport UGB near other undeveloped lands designated for high-density residential use. Due to the parcel's location on the periphery of the UGB and north of a stream and wetland, it is unlikely that the removal of Site B from the UGB will significantly impact the provision of urban services to other buildable lands inside the UGB.

(3) Notwithstanding sections (1) and (2) of this rule, a local government considering an exchange of land may rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided:

(a) The amount of buildable land added to the UGB to meet:

(A) A specific type of residential need is substantially equivalent to the amount of buildable residential land removed, or

(B) The amount of employment land added to the UGB to meet an employment need is substantially equivalent to the amount of employment land removed, and

(b) The local government must apply comprehensive plan designations and, if applicable, urban zoning to the land added to the UGB, such that the land added is designated:

(A) For the same residential uses and at the same housing density as the land removed from the UGB, or

(B) For the same employment uses as allowed on the land removed from the UGB, or

(C) If the land exchange is intended to provide for a particular industrial use that requires specific site characteristics, only land zoned for commercial or industrial use may be removed, and the land added must be zoned for the particular industrial use and meet other applicable requirements of ORS 197A.320(6).

Applicant's Finding:

The proposed site for removal from the UGB (Site B) is approximately 71.4 acres, is currently zoned as RR-10 (Rural Residential), and designated as "High Density Residential" on the Newport Comprehensive Plan Map. The current zoning of Site B is inappropriate for the desired objectives of the Comprehensive Plan Designation.

If incorporated, the designation of Site B as a higher density district (i.e. R-3 or R-4) would be inconsistent with the stated intent of those districts, which contain siting requirements including land that is flat and free of constraints that would inhibit the development of apartments. City staff suggested the land would be zoned R-2

(Medium Density Single-Family Residential) if incorporated into the city, which is more consistent with the stated intent of that district to provide for smaller lot size residential development that serves as a transitional area between low density uses and higher density residential districts.

The applicant anticipates the eventual designation for Site A with a "High Density Residential" Comprehensive Plan designation and R-2 Zoning Designation. Site A is approximately 31.6 acres smaller than Site B, but the current Housing Element of the Newport Comprehensive Plan indicates that the city has a 730-acre surplus of High Density Residential Land. Therefore, while the UGB Adjustment will result in a gross acreage loss of 31.6 acres, this will not significantly impact the overall supply of land. Furthermore, the inclusion of Site A into the UGB will go further towards providing needed housing to Newport residents by providing lands that are more easily served by public facilities, closer to existing residential development, and closer to existing employment centers.

To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent
 - Slopes between ten and twenty five percent are considered "partially constrained" and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-2 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction approximately 200 single family homes, which is substantially equivalent to the estimated buildout of Site B.

LCDC Review Required for UGB Amendments

A metropolitan service district that amends its UGB to include more than 100 acres, or a city with a population of 2,500 or more within its UGB that amends the UGB to include more than 50 acres shall submit the amendment to the Commission in the manner provided for periodic review under ORS 197.628 to 197.650 and OAR 660-025-0175.

Applicant's The proposed UGB adjustment will include an additional 39.8 acres to the UGB.

Finding: Therefore, the requirements for this section do not apply, and the reviewing body will be the Department of Land Conservation and Development (LCDC).

OREGON REVISED STATUTES

197.298 Priority of land to be included within urban growth boundary.

- (1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary of Metro except under the following priorities:
 - (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.
 - (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.
 - (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).
 - (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.
- (2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.
- (3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
 - (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;
 - (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or
 - (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

(4) When a city includes land within the urban growth boundary of the city pursuant to ORS 197.295 to 197.314, the city shall prioritize lands for inclusion as provided in ORS 197A.320.

Applicant's Finding: UGB adjustments must comply with applicable local criteria as outlined in the City of Newport Comprehensive Plan and Development Code.

The process for expanding the UGB has been described under Policy 4 (Urbanization) of the Newport Comprehensive Plan. Newport categorizes UGB Amendments as minor or major. The City and County Planning Director are responsible for assigning a designation to the proposed application. The City and County have categorized the proposed adjustment as a minor UGB Amendment.

The proposed UGB adjustment and comprehensive plan map amendment has been initiated by the property owners of each parcel. Consistent with Statewide Planning Goal 14 and Policy 4.4 of the Newport Comprehensive Plan, both the city and county governing bodies are required to hold public hearings, and both must agree for an amendment to become final.

Chapter 8 of the Newport Comprehensive Plan specifies three types of procedures for map amendments. The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this land use narrative.

The Urbanization Element requires that changes to the Comprehensive Plan map shall be considered by Planning Commission and City Council at public hearings. Notices and other procedural requirements shall be made in accordance with Section 2-6-1 of the Newport Zoning Ordinance. The Urbanization Element also requires findings of fact be developed in support of the decision and outlines the requirements for findings.

197.626 Submission of land use decisions that expand urban growth boundary or designate urban or rural reserves.

- (1) A local government shall submit for review and the Land Conservation and Development Commission shall review the following final land use decisions in the manner provided for review of a work task under ORS 197.633 and subject to subsection (3) of this section:**
- (a) An amendment of an urban growth boundary by a metropolitan service district that adds more than 100 acres to the area within its urban growth boundary;**
 - (b) An amendment of an urban growth boundary by a city with a population of 2,500 or more within its urban growth boundary that adds more than 50 acres to the area within the urban growth boundary;**
 - (c) A designation of an area as an urban reserve under ORS 195.137 to 195.145 by a metropolitan service district or by a city with a population of 2,500 or more within its urban growth boundary;**

- (d) An amendment of the boundary of an urban reserve by a metropolitan service district;
- (e) An amendment of the boundary of an urban reserve to add more than 50 acres to the urban reserve by a city with a population of 2,500 or more within its urban growth boundary; and
- (f) A designation or an amendment to the designation of a rural reserve under ORS 195.137 to 195.145 by a county, in coordination with a metropolitan service district, and the amendment of the designation.

Applicant's Finding: The proposed UGB amendment will not result in an addition to the UGB exceeding 100 acres. Therefore, the requirements of this section do not apply.

197.764 Application to remove property from within urban growth boundary

1) A local government may approve an application to remove a lot or parcel from within an urban growth boundary if:

a) The application is submitted by the owner of the lot or parcel;

Applicant's Finding: The proposed UGB Adjustment application has been initiated by both property owners of Sites A and B. The requirements of this section are met.

b)

A) The lot or parcel is adjacent to the edge of the urban growth boundary; or

B) The lot or parcel is adjacent to another lot or parcel that is removed under this section;

Applicant's Finding: Site B, the parcel proposed for removal from the urban growth boundary, is located at the edge of the existing urban growth boundary. The requirements of this section are met.

c) The lot or parcel is assessed under ORS 308A.050 (Legislative intent) to 308A.128 (Certain district assessments inapplicable to exclusive farm use zone farmland) for its value for farm use;

Applicant's Finding: Neither parcel has been assessed under ORS 308A.050 to 308A.128.

d) The lot or parcel is not within the boundaries of a city; and

Applicant's Finding: The parcel proposed for removal is not located within the Newport City Limits. The requirements of this section are met.

e) The lot or parcel is not included in an area identified for urban services under ORS 197.754 (Land identified for urban services).

Applicant's Finding: The parcel proposed for removal is not included in an area identified for urban services. The requirements of this section are met.

2) A local government, in deciding whether to approve an application under subsection (1) of this section, shall consider:

a) The projected costs and other consequences of extending urban services to the affected lot or parcel;

Applicant's Finding: Site B is located at the southeastern periphery of the Newport UGB in the area identified as the "Wolf Tree Destination Resort". While this parcel and much of the surrounding area was designated for High Density Residential use in the Newport Comprehensive Plan, the area remains largely undeveloped and without public facilities and services.

The site has several features that would make the extension of urban services infeasible. Because the site is on the periphery of the UGB and far from developed urban areas, the costs associated with extending these services from the nearest development to the north would be infeasible. Additionally, the site has several geographic constraints to the installation of public facilities, including varying slope and the presence of wetlands and a creek that would greatly increase the costs to serve the parcel.

b) The potential value in the investment of providing urban services to the affected lot or parcel;

Applicant's Finding: The southern portion of the UGB designated for High Density Residential use remains largely undeveloped today due to the costs associated with providing urban services to the area as well as the area's location far from services, retail, and transportation linkages. This issue is identified in the Housing element of the Newport Comprehensive Plan.

c) Any requirement for expanding the urban growth boundary in other areas to compensate for any loss in buildable lands; and

Applicant's Finding: To confirm that the proposed UGB Adjustment will not result in a substantial change in developable acreage, the applicant conducted an analysis of buildable lands (Attachment E) on Site B. In order to accurately determine the buildable acreage of Site B, the applicant excluded the following lands from the total buildable acreage:

- Wetlands identified on local or national wetland inventories
- Slopes exceeding twenty five percent
 - Slopes between ten and twenty five percent are considered "partially constrained" and are assumed at full buildout in these calculations.
- Areas within fifty feet of an identified stream
- Otherwise developable areas that are surrounded by constrained areas which prevent the adequate provision of public facilities and services

Through this analysis, the applicant determined that approximately 23.2 acres are developable with minimal constraints, 33.0 acres are constrained via the exclusion

criteria listed above, and the remaining 15.2 acres are partially constrained by moderate slopes.

The R-2 zone permits the development of single-family detached dwellings at a net density of 5,000 sq. ft. per unit. Assuming net developable acreage equal to 80% of gross acreage, Site B could accommodate a total of 162 unit on the unconstrained portion of the site. Assuming the full buildout of areas with partial constraints due to slopes between ten and twenty five percent, Site B could accommodate an additional 105 units, for a grand total of 267 units.

As shown on the attached Site Plan for Site A (Attachment E), the applicant proposes the construction of 200 units, which is substantially equivalent to the estimated buildout of Site B.

d) The projected costs and other consequences of providing urban services to other areas brought in under an expanded urban growth boundary.

Applicant's Finding: The costs associated with the development of both properties is likely to be extremely similar. Both properties will require the extension of urban services, new roadways, and franchise utilities to be delivered.

3)

a) Land that is removed from within an urban growth boundary pursuant to an application approved under this section shall be removed from any inventory of buildable lands maintained by the local government.

Applicant's Finding: The inventory of buildable lands maintained by the City of Newport will be revised to reflect the changes associated with the proposed UGB Adjustment. The requirements of this section are met.

b) A local government that approves an application under this section shall either expand the urban growth boundary to compensate for any resulting reduction in available buildable lands or increase the development capacity of the remaining supply of buildable lands. [1999 c.503 §1; 2001 c.104 §70]

Applicant's Finding: The reduction in buildable lands from the removal of Site B from the UGB will be offset by the buildable land brought into the UGB via the inclusion of Site A. While these two lands share different acreages and Comprehensive Plan designations, they would produce a similar type and quantity of residential dwellings.

Site B is currently zoned for rural residential use (RR-10), but designated for High Density Residential Use in the Newport Comprehensive Plan. If incorporated, it is unlikely that the site would be assigned either a Medium Density Multi-Family Residential (R-3) or High Density Multi-Family Residential (R-4) zoning designation due to their siting criteria. Specifically, the stated intent of these zones outline the following:

R-3/"Medium Density Multi-Family Residential." This district is intended for medium density multi-family residential development. It is planned for areas that are able to accommodate the development of apartments. New R-3 zones should be near major streets, on relatively flat land, and near community or neighborhood activity centers.

R-4/"High Density Multi-Family Residential." This district is intended to provide for high density multi-family residential and some limited commercial development. New R-4 zones should be on major streets, on relatively flat land, and near commercial centers.

Multifamily development would face significant challenges on Site B due to the steep slopes and topography of the site. City staff has suggested the land would be zoned Medium Density Single-Family Residential (R-2) with a stated intent to serve as a transitional area between low density and higher density residential districts. Based on the 2011 housing needs assessment ECONorthwest completed for the City in 2011, R-2 would be the appropriate zoning for Site B.

Therefore, the anticipated zone of Site B would be identical to the anticipated zoning for Site A and the anticipated scopes of development would be the similar in yield and impact.

Another potential concern is regarding the imbalance of acreage between the two sites. The applicant has provided an analysis in this narrative comparing the expected net density of each site confirming that each parcel would produce a substantially similar number of dwellings.

NEWPORT COMPREHENSIVE PLAN

URBANIZATION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

Goal: To promote the orderly and efficient expansion of Newport's city limits.

Policy 4: The development of land in the urban area shall conform to the plans, policies, and ordinances of the City of Newport.

Implementation Measure 4b: Amendments to UGB Boundaries or Policies. This subsection delineates the procedure for joint city and county review of amendments to the urban growth boundary or urbanization policies as the need arises.

1) Major Amendments:

a) Any UGB change that has widespread and significant influence beyond the immediate area. Examples include:

- (1) Quantitative changes that allow for substantial changes in the population or development density.**
- (2) Qualitative changes in the land use, such as residential to commercial or industrial.**
- (3) Changes that affect large areas or many different ownerships.**

b) A change in any urbanization policy.

- 2) Minor Boundary Line Adjustments:** The city and county may consider minor adjustments to the UGB using procedures similar to a zone change. Minor adjustments focus on specific, small properties not having significant impact beyond the immediate area.

Applicant's Finding: The proposed amendment is considered a "minor" amendment. Findings related to local policy are similar to those required for Goal 14 and are addressed in this section.

- 3) Determination of Major and Minor Amendments:** The planning directors for the city and county shall determine whether or not a change is a minor or major amendment. If they cannot agree, the planning commissions for the city and county shall rule on the matter. The request shall be considered a major amendment if the planning commissions cannot agree.

Applicant's Finding: The applicant acknowledges the authority of the city and county planning directors and commissions to determine whether a change is a minor or major amendment.

- 4) Initiation, Application, and Procedure:** Individual or groups of property owners, agencies that are affected, the planning commissions, or the city or county governing bodies may initiate amendments. Applicants for changes are responsible for completing the necessary application and preparing and Submitting the applicable findings with the application. The planning commissions for the city and county shall review the request and forward recommendations to the Newport City Council and the Lincoln County Board of Commissioners. The city and county governing bodies shall hold public hearings on the request. Amendments become final only if both bodies approve the request.

Applicant's Finding: The purpose of this application is to provide all necessary information and findings for the approval of the proposed UGB Adjustment. The requirement of this section is met.

- 5) Findings shall address the following:**

- a) Land Need:** Establishment and change of urban growth boundaries shall be based on the following:

- (1) Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and**

Applicant's Finding: As discussed in greater detail under Goal 14 of this narrative, the proposed UGB Adjustment will serve an estimated population over the planning period specified in the City's housing element of the Comprehensive Plan by providing needed housing.

(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks and open space, or any combination of the need categories in this subsection;

Applicant's Finding:

The proposed inclusion of Site A into the UGB, eventual designation as medium density residential (R-2), and subsequent development of housing on this site provides an effective response to the regional issue of limited housing supply and increasing housing costs affecting the City of Newport and Lincoln County. According to the 2013-2017 American Community Survey, median monthly housing costs total \$869 and 37.5% of households pay 30 percent or more of their household income in housing costs. Among households with a mortgage, 33.4% have household costs exceeding 35 percent of their household income. Compounding this issue is the prevalence of housing units that are utilized as second homes or vacation homes. The vacancy rate of households in Newport is 21 percent, suggesting a large proportion of needed housing to serve Newport residents are owned by non-residents. This further constrains supply and exacerbates the affordability crisis Newport faces.

The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents.

b) Boundary Location: The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

(1) Efficient accommodation of identified land needs;

Applicant's Finding:

The inclusion of Site A would provide a large site that has minimal development constraints, is easily serviceable by existing public facilities and services, and is located near existing development and economic opportunities in Newport. Additionally, because the site is not currently parcelized, the associated return on investment for the development of the tract is much greater than alternative locations, making development significantly more likely in the near future than sites with high parcelization. The full development of Site A with housing, while not fully meeting the affordability need of the City, will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

(2) Orderly and economic provision of public facilities and services;

Applicant's Finding:

The proposed UGB Adjustment would provide for a more orderly and economic provision of public facilities and services in comparison to existing conditions. Site A is located at the periphery of the Newport UGB and City Limits. The site is currently

adjacent to a developed collector, NE Harney Street, and it is located to adjacent development.

Transportation

Site A is currently adjacent to a developed collector, NE Harney Street, and it is located adjacent to existing development. According to the attached Transportation Impact Analysis (Attachment D), the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 40-acre site has the potential to create a significant effect on the surrounding transportation network. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2039 with the implementation of improvements identified in the TIA.

Capacity of existing facilities to serve areas already inside the UGB

Operational analyses outlined in the Traffic Impact Analysis (Attachment D) indicate that all of the study intersections currently operate at acceptable mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The attached TIA estimates background traffic volumes for the 2039 planning horizon year using an 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. With the proposed UGB adjustment, assuming that the 40-acre site is zoned under the City of Newport's R-2 Medium Density Single Family Residential zone, the TIA determined the site could support up to 200 single family homes in a reasonable worst case scenario. This has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Impacts to existing facilities that serve nearby areas already inside the UGB

Operations of the study intersections under the 2039 R-2 Medium Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets. The Application proposes to leave the existing zoning in place until the property is annexed to the City. Therefore, pursuant to OAR 660-024-0020(1)(d), the Application does not address OAR 660-012-0060, the TPR. The applicant will demonstrate compliance with the TPR when it proposes urban zoning on the property added to the UGB.

Water

According to a City map of existing water services in Newport, a 12-inch water main runs along NE Harney Street as well as two hydrants located along this main

adjacent to Site A. This would allow for the extension of water service to the parcel once it develops.

Capacity of existing facilities to serve areas already inside the UGB

Sections 5 and 6 of the 2008 Newport Water System Master Plan describe the existing water system and water demand. The City holds water rights allowing for a maximum of 19.24 cfs from six streams, but can only utilize 16.54 cfs from three due to location constraints. The City stores water from these streams in the Big Creek reservoir to draw from during the dry and high-water-demand summer months. The plan estimates that the average monthly water consumption for a typical dwelling ranges between 3,695 gallons in winter months to 6,270 gallons in summer months with an average demand of 4,600 gallons per month. During the summer months, the maximum daily demand (MDD) can reach a total 6.27 cfs, but the average daily demand (ADD) throughout the year is 3.33 cfs. In instances where the City's demand exceeded water available from streams, supply drew from the Big Creek reservoir to meet demand.

The plan projects this demand to increase to a MDD 8.99 cfs and an ADD of 4.72 cfs by 2030. Based on the capacity of the Big Creek reservoir during its driest year on record, it is possible to support the anticipated maximum demand in 2030 by diverting water from the Siletz River to recharge the reservoir, but following that, the City will need to consider alternatives to provide sufficient water supply. The Capital Improvement Plan (Section 9) identifies a \$12 million upgrade to the existing Big Creek Water Treatment Plant that will allow for the sufficient accommodation of water needs as development continues.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Assuming the average monthly water consumption outlined in the Newport Water System Master Plan, the inclusion of Site A into the UGB and development could result in a total increase in water demand of 1,254,000 gallons per month (0.06 cfs) during peak months and 920,000 gallons per month (0.05 cfs) on average. While significant, the capacity to serve Site A currently exists, and the Capital Improvement Plan identifies improvements that will ensure the adequate provision of water well into the future. Therefore, with the provision of appropriate system development charges and water line extension, the existing water system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

Linking to the existing 12-inch water main along NE Harney Street will result in additional water demand on the pipe and local distribution network. Any significant demands upon the City's existing water network can be addressed by the developer at the time of development.

Sanitary Sewer

The City recently updated their Sanitary Sewer Master Plan in order to update wastewater elements of the Comprehensive Plan and develop a priority for capital improvement projects. According to a publicly-available draft dated March 22, 2018, there is a gravity sewer extending to the northwest corner of Site A, which would allow for the extension of sanitary sewer to Site A once it develops. The line was constructed circa 1990 and is composed of Polyvinyl Chloride (PVC). This gravity main connects to a Vance Avery Wastewater Treatment Facility located in South Beach.

Capacity of existing facilities to serve areas already inside the UGB

The City provides sanitary sewer collection system services to approximately 10,000 people spread across an area of approximately 11.2 square miles. The City oversees over 62 miles of gravity pipelines ranging in size from approximately 3 to 36 inches in diameter, 1,400 manholes, 9 major pump stations, 16 minor pump stations, and 12 miles of sanitary force mains. The plan identifies minor deficiencies in the sanitary sewer system, but provides a series of recommended improvements prioritized by assessed risk of overflow to ensure that there will be sufficient capacity to accommodate new development.

Capacity of existing facilities to serve areas proposed for addition to the UGB

The Master Plan models buildout scenarios over a 20-year period to identify possible surcharging and flooding during large storm events (i.e. a 1-in-10 year storm). The plan uses these scenarios to provide recommended improvements to ensure the existing system will be able to accommodate new development as it occurs, prioritizing the most critical facilities for improvement. Therefore, with the provision of appropriate system development charges and sanitary sewer extension, the existing sanitary sewer system will be able to accommodate the full buildout of Site A.

Impacts to existing facilities that serve nearby areas already inside the UGB

(3) Comparative environmental, energy, economic, and social consequences; and

Applicant's Finding:

Economic

As discussed earlier in this analysis, the full development of Site A with housing will provide critical housing supply that will ultimately reduce the average cost of homes in the region and provide more affordable options for Newport residents. Additionally, the provision of housing near existing transportation networks and development provide communities better access to employment and educational opportunities and more efficient provision of transportation facilities and utilities.

While a T-C designation on Site A will result in the preservation of resource land, the R-2 land use provides a greater economic benefit to the community through increased housing options, and the loss of resource land will be offset through the movement of Site B out of the urban growth boundary. The proposed adjustment and future use promote more efficient and coordinated use of land and minimizes urban sprawl.

Social

There are developed neighborhoods to the north and the west of Site A, and the development of housing on what was originally resource land would result in a change of character for existing residents, most notably a loss of rural lifestyle or low-density residential development. Additionally, forest and natural areas can provide people with access to nature and stress relief, though the anticipated loss would be minimal in this case as this land is managed forest with no public access.

There is the potential to dedicate future park space and scenic areas as development occurs. Specifically, in areas that have topographical constraints that make development infeasible, dedicated natural open space and scenic vistas can be provided to serve as an essential resource to Newport communities. Additionally, the provision of trails connecting to the existing Ocean to Bay Trail network to the southwest could mitigate loss of forested area by providing access to nature and other recreational amenities to Newport residents.

Environmental

There are no identified wetlands on Site A. However, just south of the parcel is a City designated wetland that extends from the property line to NE Harney Street. The development of Site A could impact this wetland as the increase in impervious surface increases runoff and flow rates downstream.

The development of Site A will require the clearing of trees, which will have associated erosion, air quality, and greenhouse gas impacts. These impacts can be mitigated through the careful provision of open space in areas that are not suitable for development. These areas could be planted with native vegetation and trees that would provide better environmental services than the current timber plantation. This would offset some of the environmental impact associated with the clearing of trees to accommodate development.

Additionally, the exclusion of Site B will offset the development of Site A by precluding development on Site B and preserving the area for forest land uses. Site B is currently included in the UGB and zoned for rural residential development, which would result in much larger development footprints and disturbance to the surrounding area should they be developed. Therefore, the proposed adjustment provides the opportunity to limit the future clearing of trees and sprawling patterns

of development on Site B and provide more compact residential development with a lower environmental footprint per unit through the development of Site A.

Energy

The inclusion of Site A into the UGB is expected to result in new housing replacing areas currently used as timber resource land except where topography constrains development. There is a power transmission line and transformer to the north of Site A, but it is unlikely to be impacted by residential development. Within the site, redevelopment could support as many as 200 dwelling units, which would have an increased energy impact in the form of construction, dwelling unit energy use, and transportation.

There is a bus stop along Hwy 101 that is approximately a ten minute walk from the western periphery of Site A, and an existing Ocean to Bay Trail network that can provide options for non-automobile travel, reducing some of the energy impacts associated with transportation.

(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Applicant's Finding: The proximity of single-family dwellings to adjacent forest lands creates the potential for conflict between the two uses in the form of noise, pollution from logging equipment, truck and automobile traffic, and hazards associated with forest lands such as falling or windthrown trees and wildfire. Additionally, the proximity of new housing may present challenges to active forest management if those activities are a nuisance to adjacent uses. The key towards mitigating these conflicts is separation and buffering. The power transmission line located north of Site A provides an excellent buffer area in which felling is less likely to occur to avoid damage to the lines. This allows trees to grow in this buffer, providing additional shielding and impacts associated with forest activity to the north of the power line. In addition to this, Chapter 14.18 requires buffering between residential and non-residential uses, providing an opportunity to increase the separation between residential and forest uses and mitigate potential conflicts.

c) Compliance with applicable Statewide Planning Goals, unless an exception is taken to a particular goal requirement.

Applicant's Finding: As detailed earlier in this narrative, the proposed UGB Adjustment demonstrates substantial compliance with applicable Statewide Planning Goals. The requirement of this section is met.

SUMMARY AND CONCLUSION

Based upon the materials submitted herein, the Applicant respectfully requests approval from the City's Planning Department of this application for an Urban Growth Boundary Adjustment.





EXISTING ZONING | COMP PLAN DESIGNATION

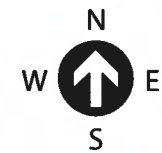
40
ACRES TIMBER CONSERVATION (T-C)

PROPOSED ZONING | COMP PLAN DESIGNATION

40
ACRES MEDIUM DENSITY RESIDENTIAL (R-2)
COMP: LOW DENSITY RESIDENTIAL

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 300'



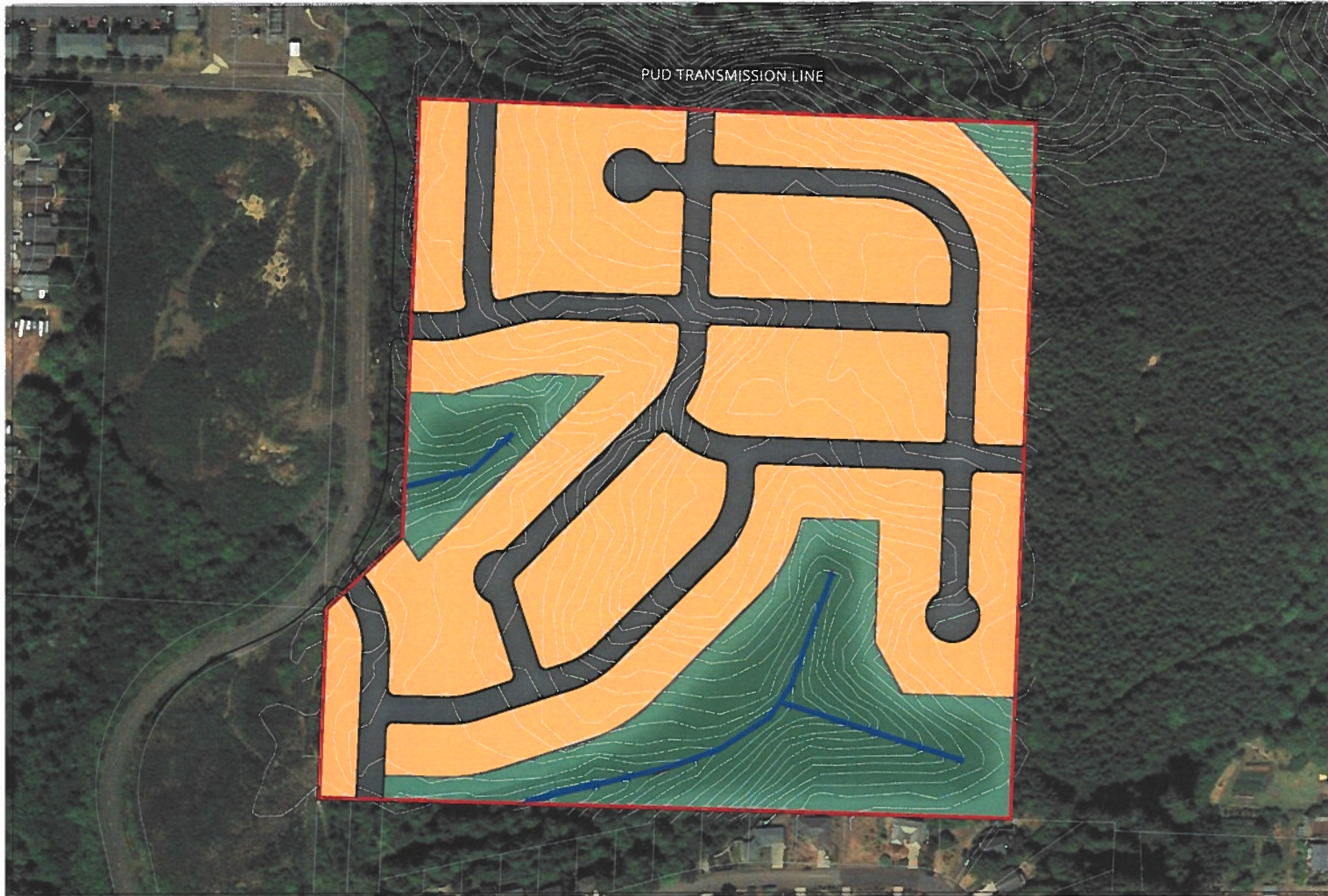
HANCOCK UGB ADJUSTMENT

SITE A ZONE CHANGE EXHIBIT

3J CONSULTING

CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

JANUARY 2020



SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING TAX MAPS AND COUNTY PLIS GIS DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.

LEGEND

- DEVELOPABLE LOT AREA
21.6 ACRES
- STREAM BUFFER/STEEP SLOPES
8.4 ACRES
- POTENTIAL STREAM ALIGNMENT



SCALE: 1" = 200'

NEWPORT UGB SWAP

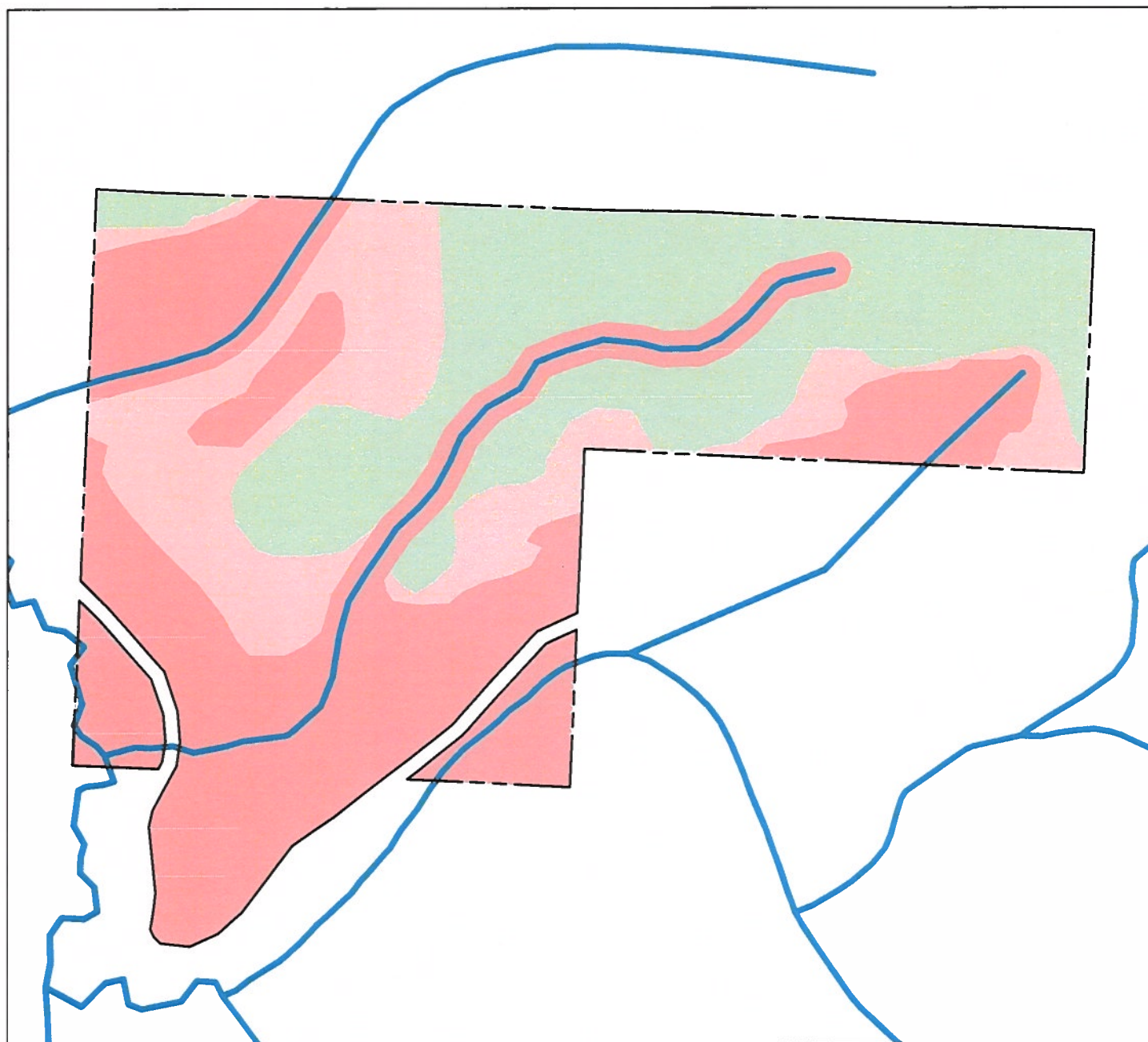
HANCOCK FOREST MANAGEMENT

07/25/19

CONCEPTUAL SITE PLAN

3J CONSULTING

CIVIL ENGINEERING | WATER RESOURCES | LAND USE PLANNING



LEGEND

	EST. ACREAGE
BUILDABLE	23.2
PARTIALLY CONSTRAINED	15.2
CONSTRAINED	33.0
SITE B BOUNDARY	
STREAMS	

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



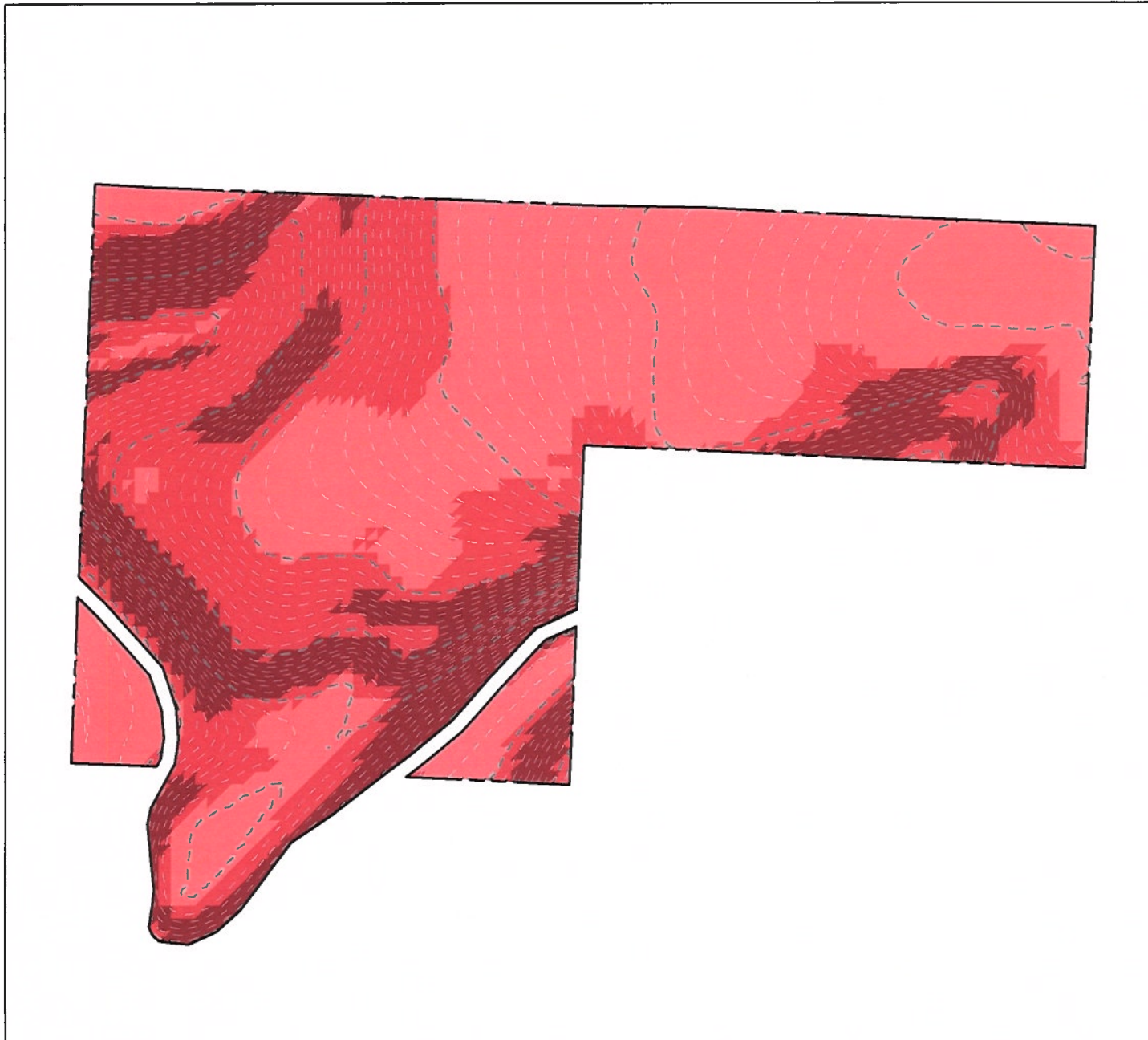
HANCOCK UGB ADJUSTMENT

SITE B BUILDABLE LANDS ANALYSIS

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CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

SEPTEMBER 2019



LEGEND

- 0 - 10% SLOPE
- 10 - 25% SLOPE
- >25% SLOPE
- SITE B BOUNDARY
- 40 FT MAJOR CONTOURS
- 5 FT MINOR CONTOURS

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



HANCOCK UGB ADJUSTMENT




SITE B SLOPE ANALYSIS

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SEPTEMBER 2019

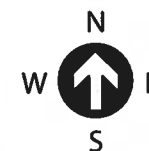


LEGEND

-  LOCAL WETLAND INVENTORY
-  NATIONAL WETLAND INVENTORY
-  SITE B BOUNDARY
-  URBAN GROWTH BOUNDARY (OUT OF DATE)

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING CITY OF NEWBERG WETLAND MAPS. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'



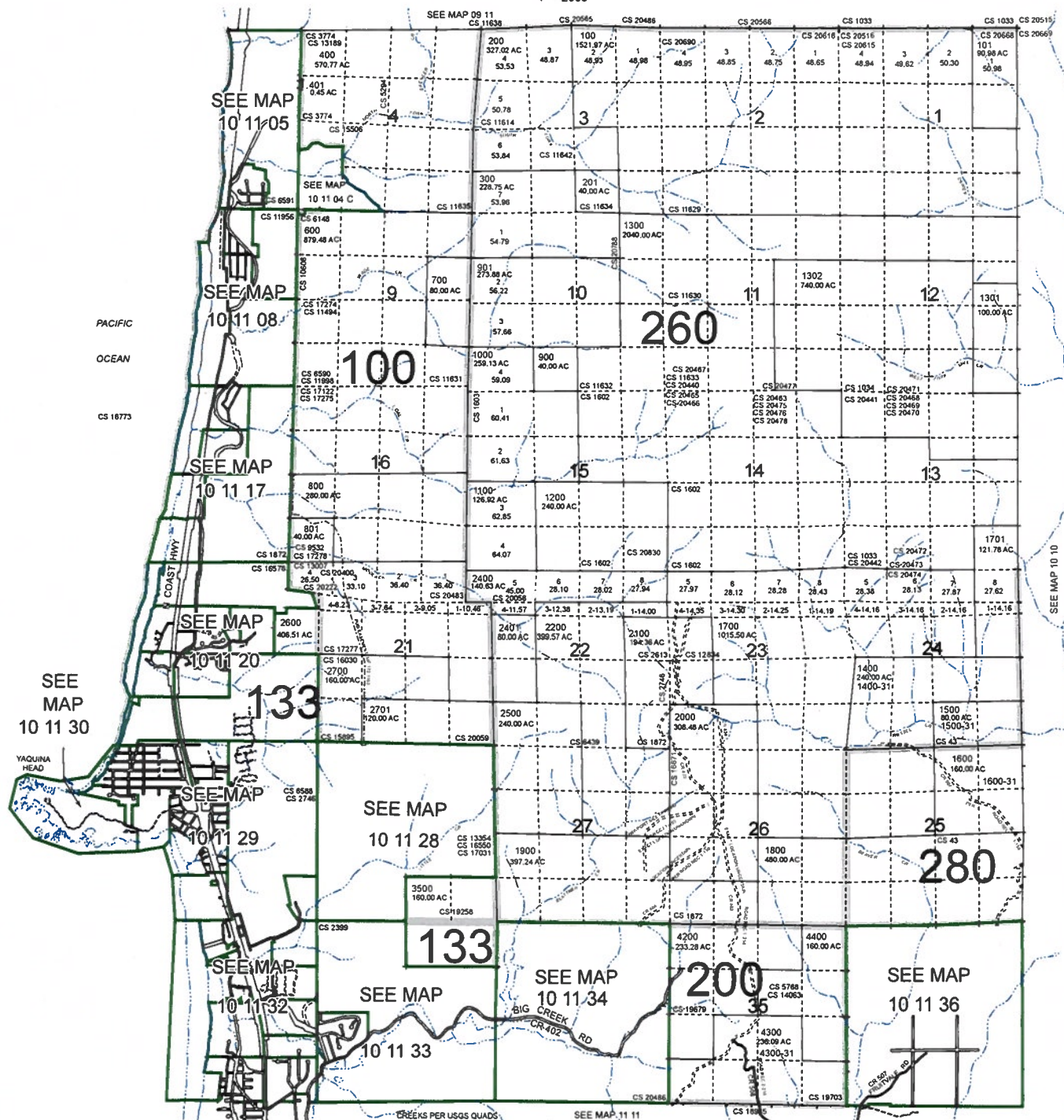
HANCOCK UGB ADJUSTMENT

SITE B WETLAND ANALYSIS

3J CONSULTING
CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

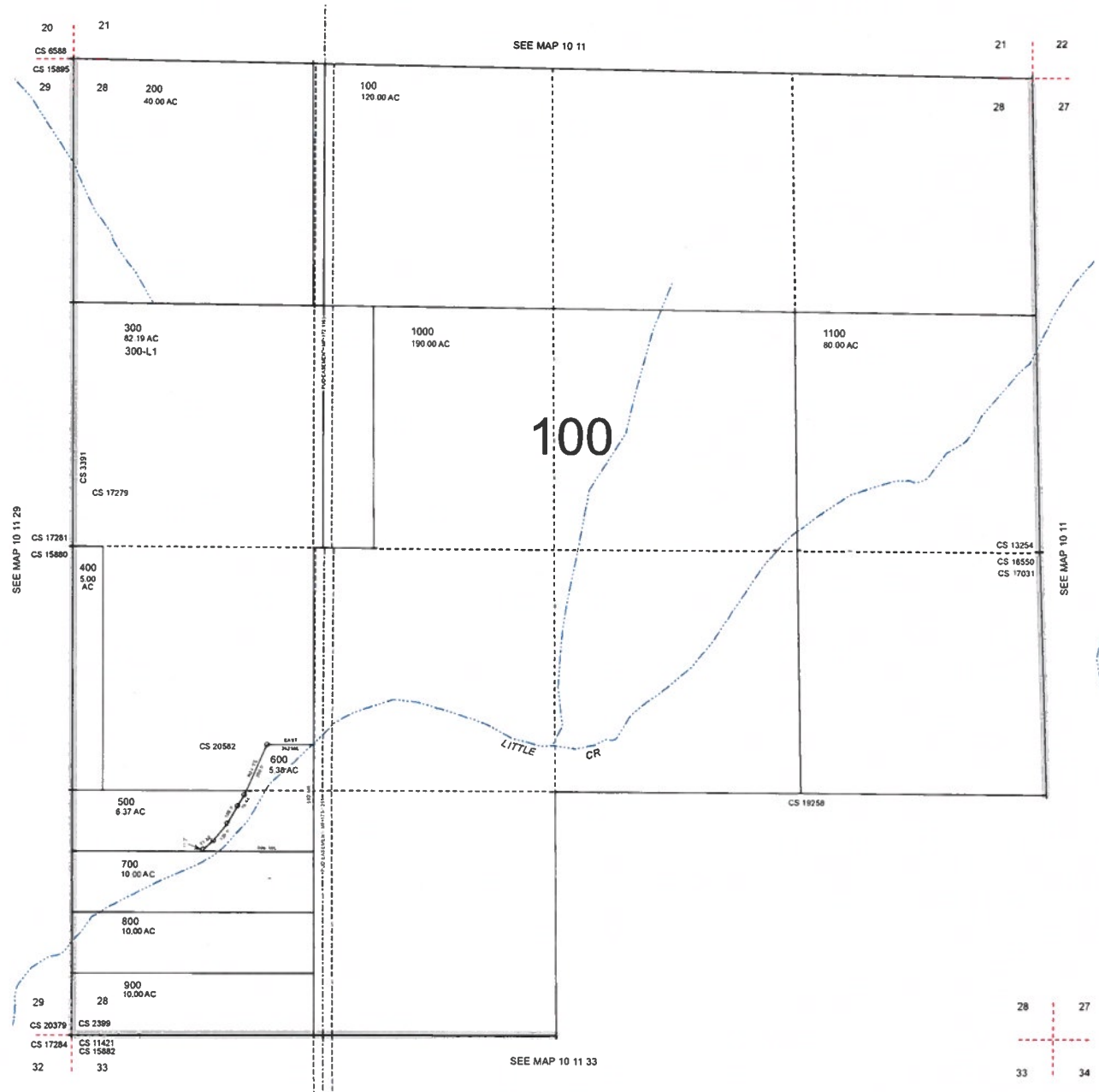
SEPTEMBER 2019

10 11



Cancelled
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Revised: SEB
04/16/2018



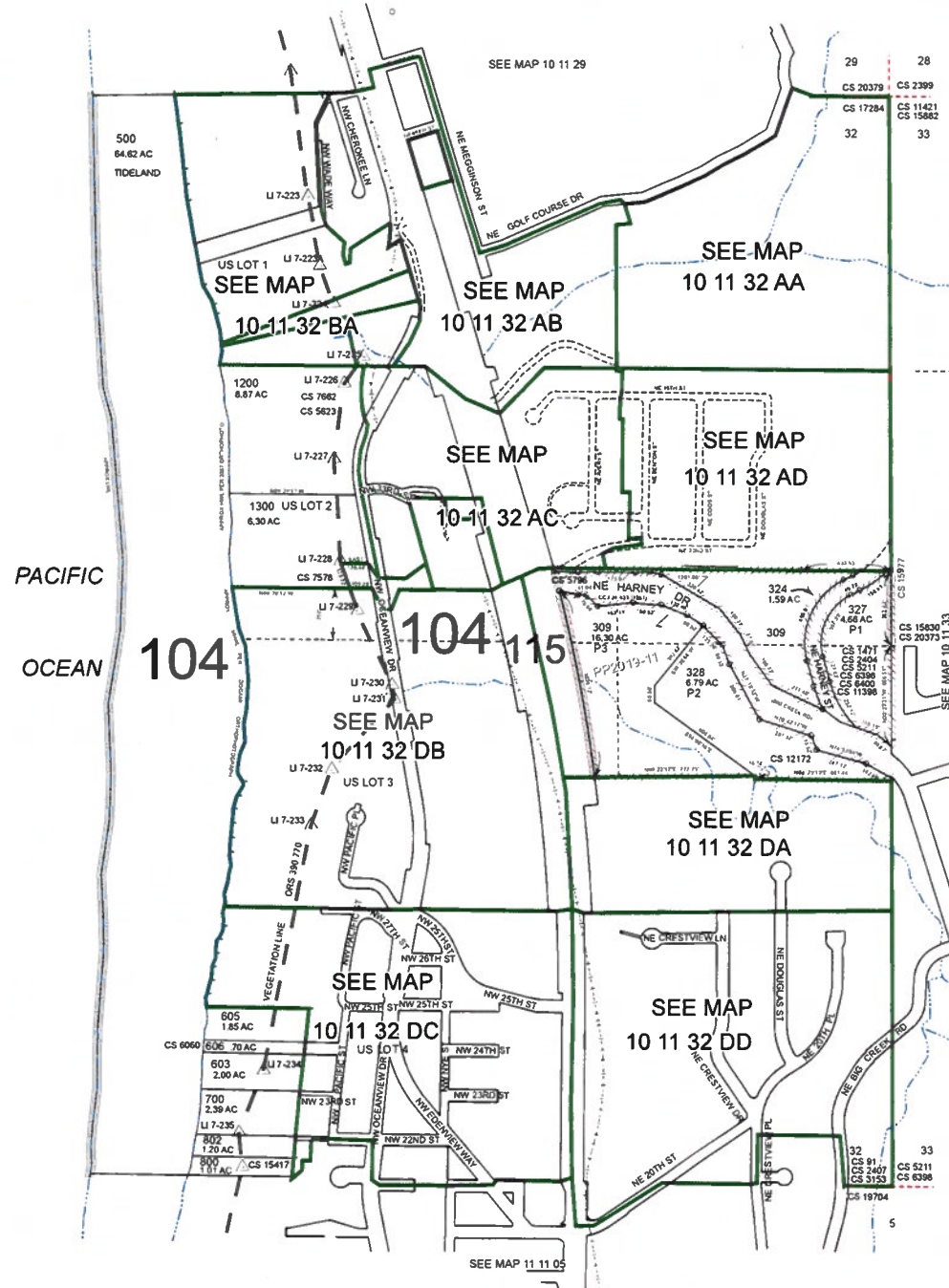
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THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY

0 200 400 600 800 Feet
1" = 400'

SECTION 32 T.10S. R.11W. W.M.
LINCOLN COUNTY
1" = 400'

10 11 32
NEWPORT



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Revised: SAO
11/01/2019

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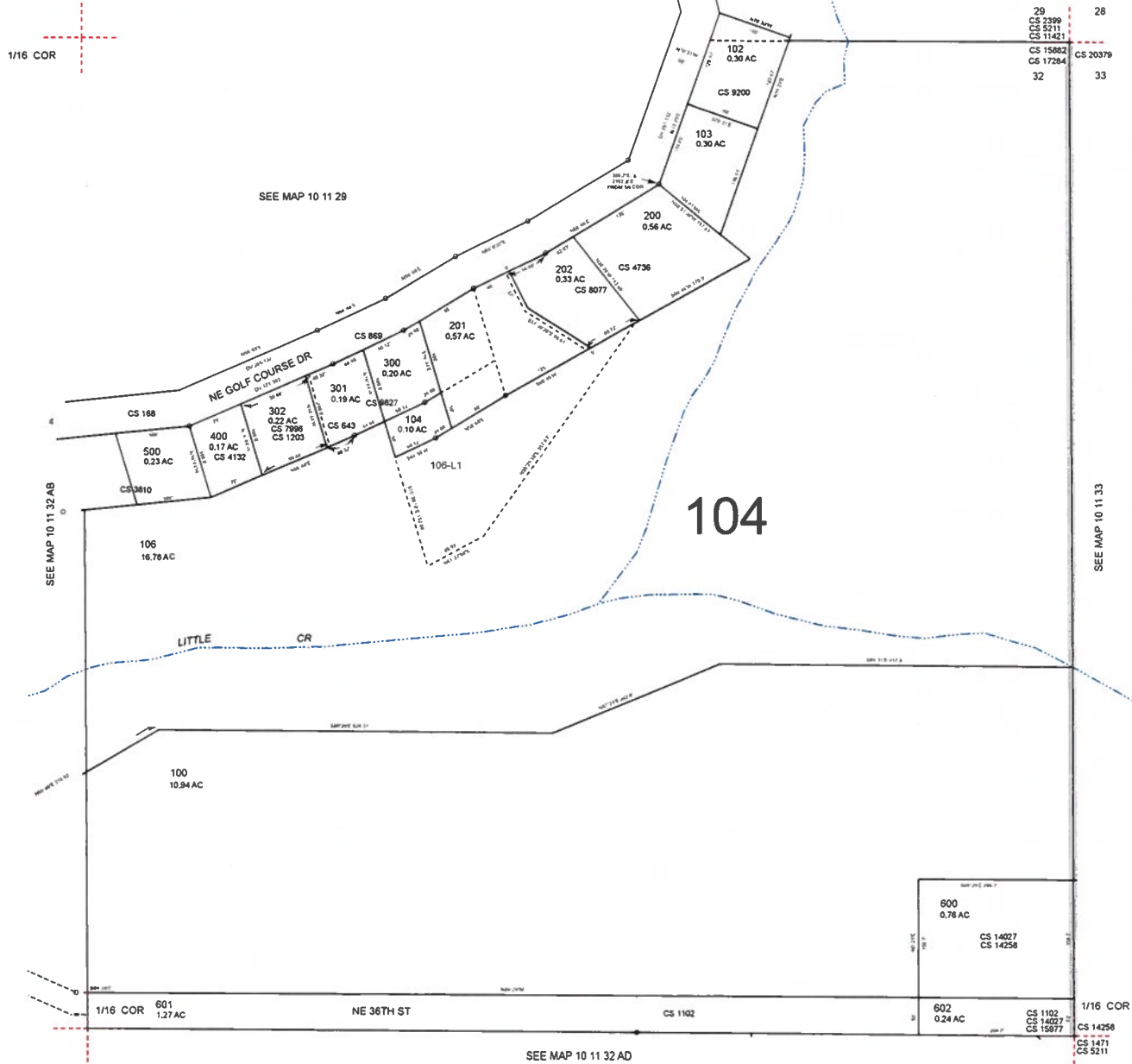
THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY

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N.E. 1/4 N.E. 1/4 SEC. 32 T. 10S. R. 11W. W.M.
LINCOLN COUNTY
1" = 100'

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NEWPORT

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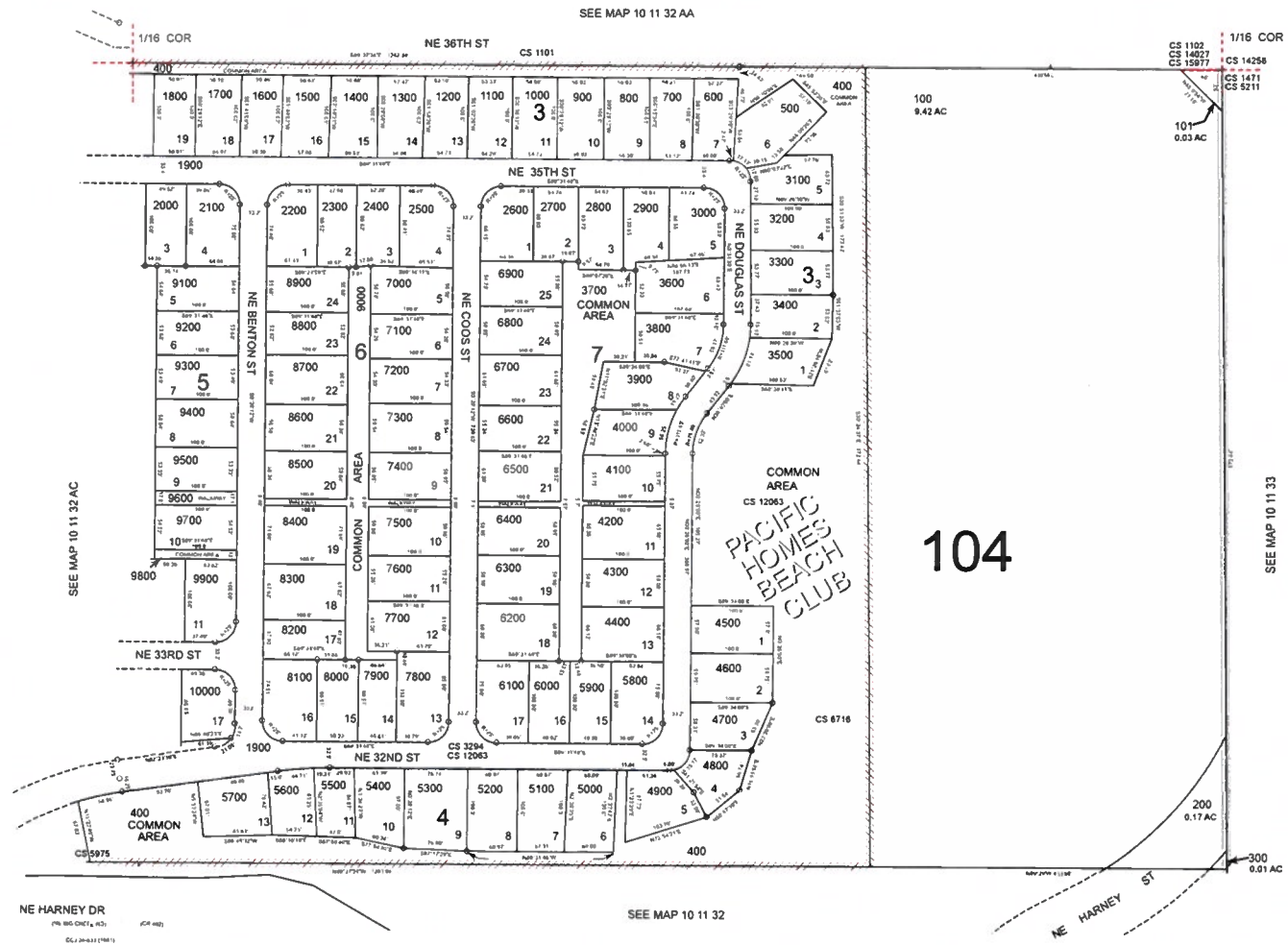
Revised: SEB
09/06/2018

NEWPORT
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A horizontal scale bar with major tick marks at 0, 50, 100, 150, and 200 Feet. There are also minor tick marks between the major ones, representing 10-foot intervals.

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LINCOLN COUNTY
1" = 100'

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NEWPORT



Revised: SEB
09/20/2012

NEWPORT
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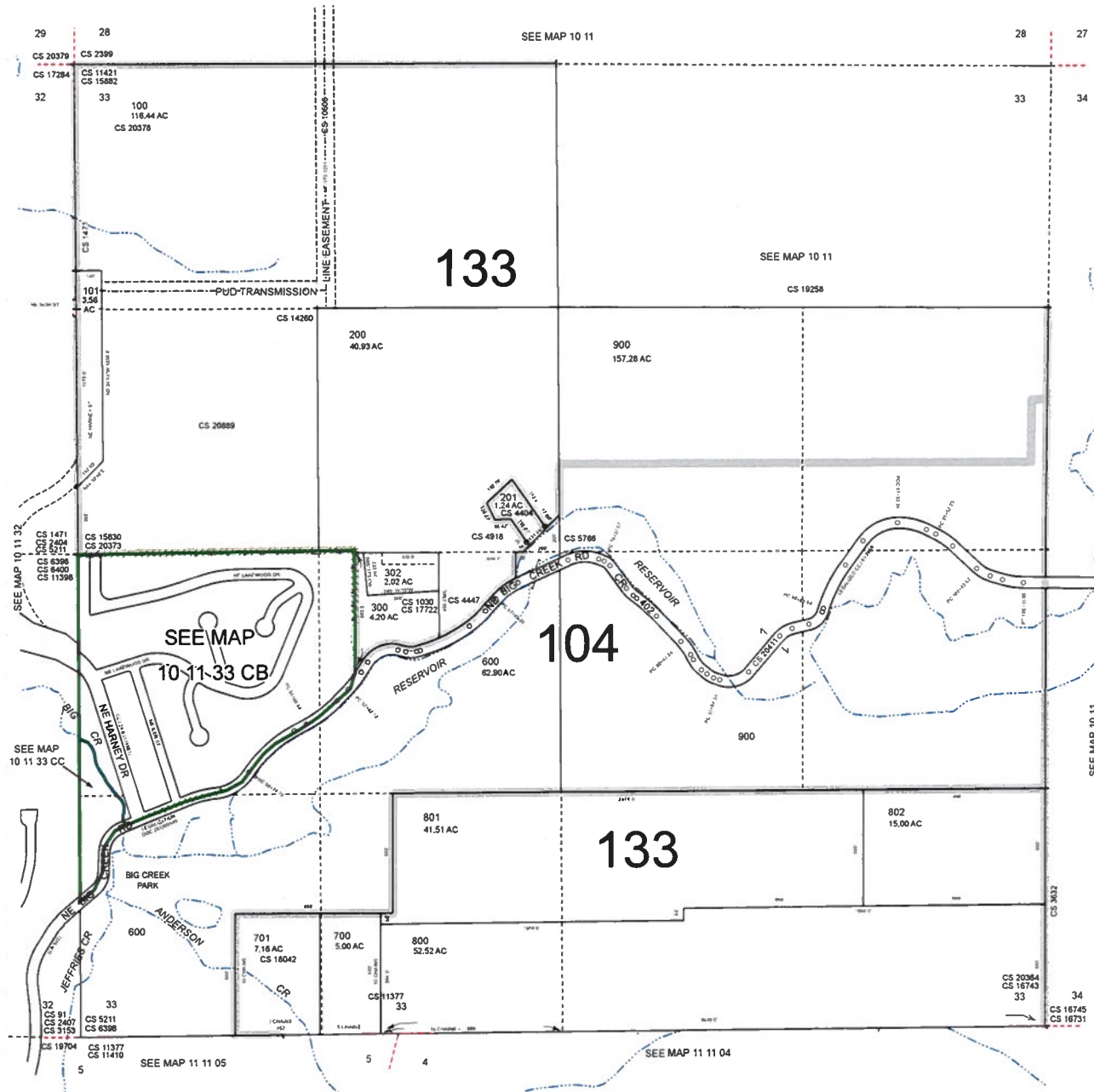
THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY

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SECTION 33 T.10S. R.11W. W.M.
LINCOLN COUNTY
1" = 400'

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NEWPORT

Cancelled
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401
402
403
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Revised: SEB
03/23/2017

NEWPORT
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THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY

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N.W.1/4 S.W.1/4 SEC.33 T.10S. R.11W. W.M.
LINCOLN COUNTY
1" = 100'

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NEWPORT

Cancelled
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Revised SAO
10/14/2015

NEWPORT
10 11 33 CB

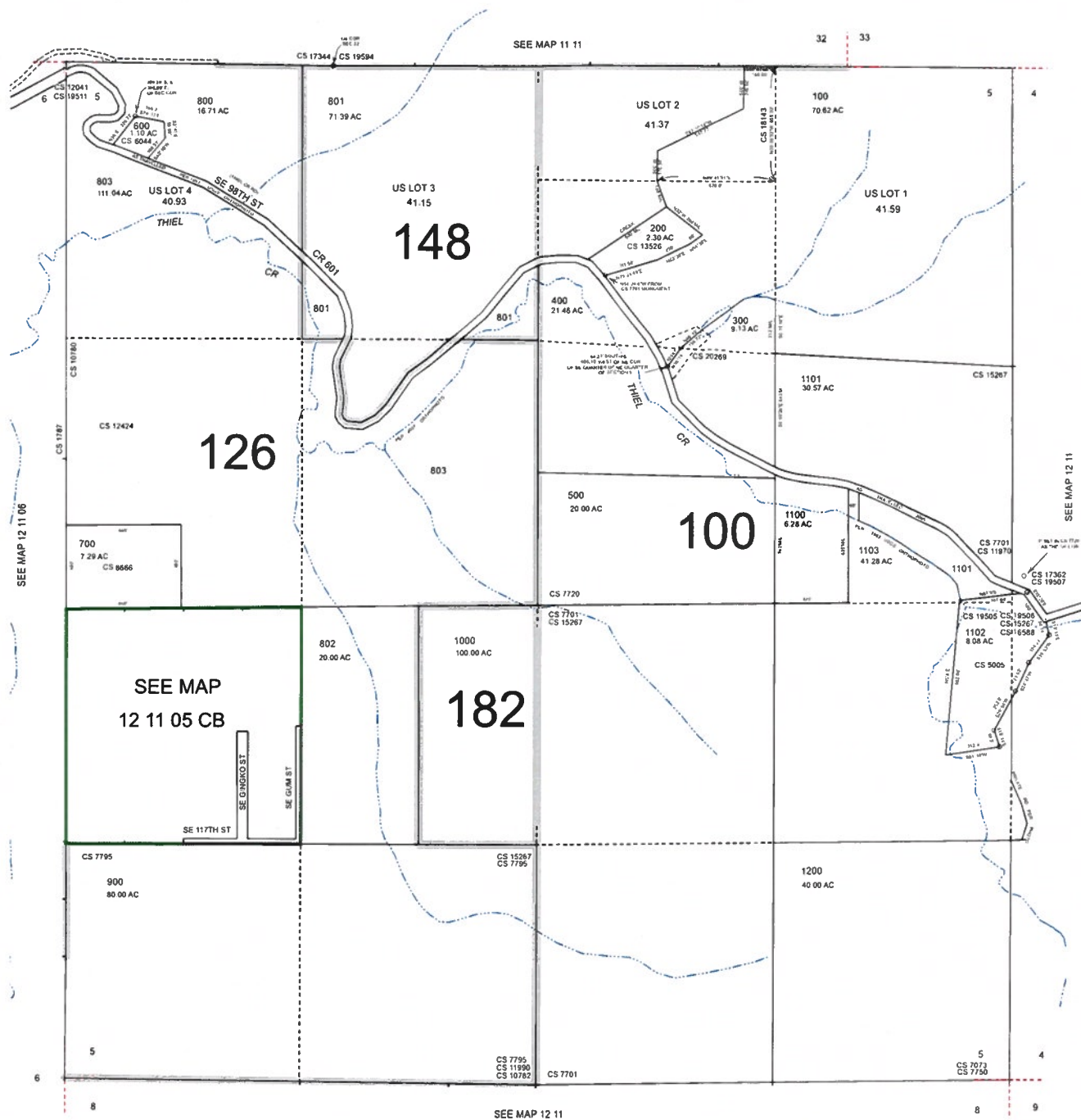
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10-11-28-00-00900-00		NELSON NICKOLAS R	466 WASKOW DR			SAN JOSE, CA 95123
10-11-28-00-01000-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-29-DD-00100-00		DUNSCOMB KATHRYN M TRUSTEE &	MARTIN TERENCE R TRUSTEE	ATTN RAMONA MARTIN	4100 N COAST HWY	NEWPORT, OR 97365
10-11-32-00-00309-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-00-00324-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-00-00327-00	1345 NE LAKEWOOD DR	WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AA-00100-00	405 NE 36TH ST	LC APARTMENTS LLC	12318 STATE ST			SANTA BARBARA, CA 93101
10-11-32-AA-00106-00		CITY OF NEWPORT	ATTN MINOR J CHRISTOPHER	236 W OLIVE ST		NEWPORT, OR 97365
10-11-32-AA-00600-00	575 NE 36TH ST	CENTRAL LINCOLN PUD	ATTN BRIAN BARTH	MGR ACCT & FINANCE	PO BOX 1126	NEWPORT, OR 97365
10-11-32-AA-00601-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AA-00602-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AD-00100-00		WYNDHAVEN RIDGE LLC	PO BOX 247			STAYTON, OR 97383
10-11-32-AD-00101-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AD-00200-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-32-AD-00300-00		SLAYDEN CONSTRUCTION GROUP INC	PO BOX 247			STAYTON, OR 97383
10-11-33-00-00100-00		BOSTON TIMBER OPPORTUN LLC	ATTN HANCOCK FOREST MGMT	17700 SE MILL PLAIN BLVD	STE 180	VANCOUVER, WA 98683
10-11-33-00-00101-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-00-00200-00		BRAXLING ARTHUR &	BRAXBEACH LLC	PO BOX 240		NEWPORT, OR 97365
10-11-33-00-00300-00	3245 NE BIG CREEK RD	ETHERINGTON ROBERT C &	ETHERINGTON LINDA A	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00302-00	3249 NE BIG CREEK RD	ETHERINGTON ROBERT CHRIS &	ETHERINGTON LINDA ANN	3249 NE BIG CREEK RD		NEWPORT, OR 97365
10-11-33-00-00900-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-03600-00	1255 NE LAKEWOOD DR	WOODARD LISA A	1255 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-03700-00	1245 NE LAKEWOOD DR	YUILLE KRISTIN H &	GREEN NATHAN R	1245 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03800-00	1235 NE LAKEWOOD DR	INGALLS DONNE J &	INGALLS KELSEY A	1235 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-03900-00	1225 NE LAKEWOOD DR	WALKER STEPHEN D TSTEE &	WALKER CHRISTIE H TSTEE	1225 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04000-00	1215 NE LAKEWOOD DR	HESLEN AMIE L &	MARSHALL HEATH	1215 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04300-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-04400-00	1185 NE LAKEWOOD DR	STUDLEY DAVID J &	STUDLEY PAULETTE L	1185 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04500-00	1175 NE LAKEWOOD DR	KEPLER RICHARD ALLEN	1175 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04600-00		RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04700-00	1155 NE LAKEWOOD DR	RYAN REATHA L TSTEE	1155 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-04800-00	1145 NE LAKEWOOD DR	WENELL GARY W TSTEE &	WENELL PAULA C TSTEE	1145 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-04900-00	1135 NE LAKEWOOD DR	MERWIN PAMELA D COTTEE &	ROEBBER SUSAN COTTEE &	VANGORP ALISON COTSTEE	1135 NE LAKEWOOD DR	NEWPORT, OR 97365
10-11-33-CB-05000-00	2935 NE LISI PL	BAKER CARL F &	BAKER DIAN G	2935 NE LISI PL		NEWPORT, OR 97365
10-11-33-CB-05200-00	2930 NE KLAMATH PL	ROLL JOHN R &	ROLL NINA R	2930 NE KLAMATH PL		NEWPORT, OR 97365
10-11-33-CB-06400-00	2930 NE LISI PL	BARBER JERRY LEE &	BARBER SANDRA LEE	2930 NE LISI PL		NEWPORT, OR 97365
10-11-33-CB-06600-00	1080 NE LAKEWOOD DR	PETTETT JAMES W &	PETTETT MICHELLE R	1080 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06700-00	1090 NE LAKEWOOD DR	CAUDURO RAYMOND &	CAUDURO PATRICIA A	1090 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-06800-00	1100 NE LAKEWOOD DR	PORCH ROBERT R	1100 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-06900-00	1110 NE LAKEWOOD DR	RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07000-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-07100-00		RANDALL MARGARET J	840 S RANCHO DR	#4-409		LAS VEGAS, NV 89106
10-11-33-CB-07200-00	1130 NE LAKEWOOD DR	LEE DAVID J &	LEE ROSALINE H	PO BOX 2226		NEWPORT, OR 97365
10-11-33-CB-07300-00		TODD EDWARD L &	TODD SYDNEY E	337 NE SAN-BAY-O CIR		NEWPORT, OR 97365
10-11-33-CB-07400-00	1150 NE LAKEWOOD DR	BRUNELLE LAWRENCE W &	BRUNELLE CLAUDIA J	1150 NE LAKEWOOD DR		NEWPORT, OR 97365

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
10-11-33-CB-07500-00	1160 NE LAKEWOOD DR	WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07600-00		WOODLEY MICHAEL H &	WOODLEY WINNIFRED J	PO BOX 664		PRINEVILLE, OR 97754
10-11-33-CB-07700-00		WEATHERS KAREN A	876 CHURCH ST			WOODBURN, OR 97071
10-11-33-CB-07800-00		SAVARA VIKRAM C TSTEE &	SAVARA NALINI V TSTEE	772 SW BROADWAY DR #2		PORTLAND, OR 97201
10-11-33-CB-07900-00	1200 NE LAKEWOOD DR	BURTON LYNSEY	1200 NE LAKEWOOD DR			NEWPORT, OR 97365
10-11-33-CB-08000-00	1210 NE LAKEWOOD DR	SHAMAS RICHARD A &	SHAMAS IRIS T	6821 SYLVIA DR		HUNTINGTON BEACH, CA 92647
10-11-33-CB-08100-00	1220 NE LAKEWOOD DR	ARNSDORF JOSEPH A &	ARNSDORF JESSICA L	1220 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08200-00	1230 NE LAKEWOOD DR	BODENSTAB MARK R &	BODENSTAB DORIS	7836 E BRALTON DR		NAMPA, ID 83686
10-11-33-CB-08300-00	1240 NE LAKEWOOD DR	SMITH ROBERT &	SMITH LEA	1240 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08400-00	1250 NE LAKEWOOD DR	BOYS DAVID A II &	BOYS LEILA M	1250 NE LAKEWOOD DR		NEWPORT, OR 97365
10-11-33-CB-08500-00		CITY OF NEWPORT	CITY MANAGER	169 SW COAST HWY		NEWPORT, OR 97365
10-11-33-CB-08600-00		LAKEWOOD HILLS INC	810 SE 5TH ST			NEWPORT, OR 97365
10-11-33-CB-0ROAD-00						

NEWPORT
11 11 32

SECTION 5 T.12S. R.11W. W.M.
LINCOLN COUNTY
1" = 400'

12 11 05
NEWPORT



Revised: SAO
11/08/2016

NEWPORT
12 11 05

ParcelID	Situs Address	Owner	Address1	Address2	Address3	CityStateZip
11-11-32-00-01601-00		SENN JAMES A &	SENN JONG SOON	8450 SW MARINE VIEW ST		SOUTH BEACH, OR 97366
11-11-32-D0-00600-00		GOODPASTURE KATHERINE E	415 SE 98TH CT			SOUTH BEACH, OR 97366
11-11-32-D0-00601-00		FERRIS WILLARD STUART &	FERRIS PETER K &	FERRIS KATHERINE	415 SE 98TH CT	SOUTH BEACH, OR 97366
11-11-32-D0-01100-00	857 SE 98TH ST	PEDERSON JOEL W	16151 SHELLCRACKER RD			JACKSONVILLE, FL 32226
11-11-32-D0-01200-00		KLAY JONATHAN MARK &	KLAY FREDRIKA	20143 47TH AVE NE		LK FOREST PK, WA 98155
12-11-05-00-00100-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00200-00	1489 SE 98TH ST	SELICH JACK M &	SELICH JUDITH N	PO BOX 358		SOUTH BEACH, OR 97366
12-11-05-00-00400-00	1604 SE 98TH ST	ZEISER STEVEN K &	ZEISER KATHERINE K	3511 E 3RD ST		LONG BEACH, CA 90814
12-11-05-00-00800-00		STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-00801-00		LETTENMAIER TERRANCE M &	WEITKAMP LAURIE A	PO BOX 550		SOUTH BEACH, OR 97366
12-11-05-00-00803-00	760 SE 98TH ST	STEEL STRING INC	2712 SE 20TH AVE			PORTLAND, OR 97202
12-11-05-00-0ROAD-00						

Lincoln County Property Report

Account # & Prop. Info		Account Details		Owner & Address	
Account #:	R206997	Neighborhood:	RMTB	Owner and	BOSTON TIMBER OPPORTUN LLC
Map Taxlot:	10-11-33-00-00100-00	Property Class:	640	Mailing Address:	ATTN HANCOCK FOREST MGMT 17700 SE MILL PLAIN BLVD STE 180 VANCOUVER, WA 98683
Tax Map:	10s11w33			Site Address(es):	
Web Map:	View Map				
Info:	TWNShp 10, RNG 11, ACRES 116.44, POTENTIAL ADDITIONAL TAX LIABILITY, DOC200416962				
Tax Code:	100				
Acres:	116.44				

Improvements					
No Inventory					

Value History					
Year	Imp.	Land	Total Market	Total Assessed	Levied Tax
2019	0	122,260	122,260	59,570	808.64
2018	0	122,260	122,260	57,840	782.97
2017	0	122,260	122,260	56,150	798.52
2016	0	122,260	122,260	54,510	775.23
2015	0	122,260	122,260	52,930	682.53
2014	0	122,260	122,260	51,390	668.24
2013	0	122,260	122,260	49,890	634.56
2012	0	122,260	122,260	48,440	604.84

Sales History					
No Sales Data					

Land				Related Accounts	Disclaimer
Description	Acres	Market Value	Special Use Value		
DESIGNATED FOREST	40	42,000	22,910		For assessment purposes only. Lincoln County makes no warranty as to the accuracy of the information provided. Users should consult with the appropriate City, County or State Department or Agency concerning allowed land uses, required permits or licenses, and development rights on specific properties before making decisions based on this information. Tax data exported 10/2019.
DESIGNATED FOREST	76.44	80,260	36,660		

Today's Date: 07/10/2020

Lincoln County Property Report

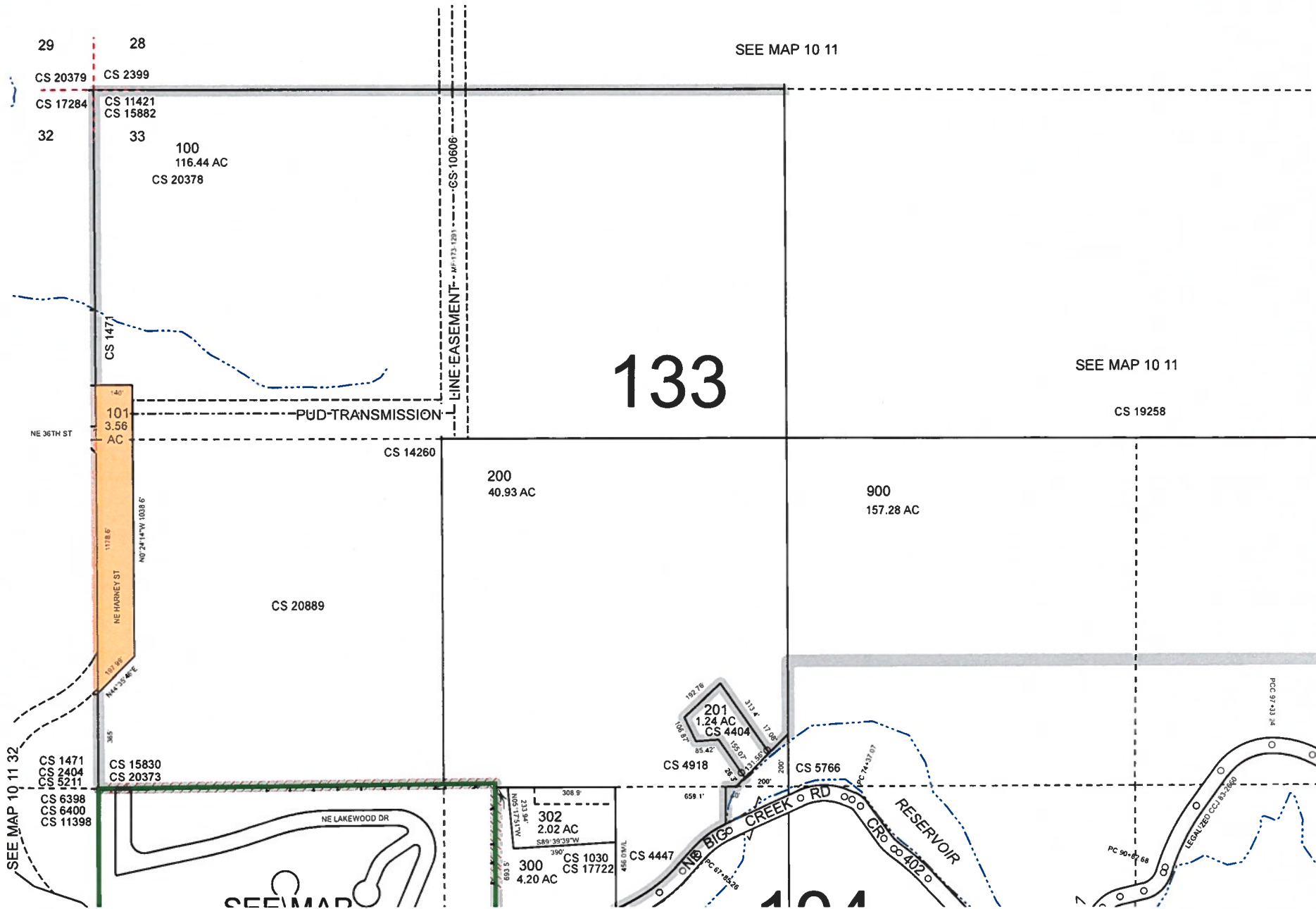
Account # & Prop. Info		Account Details		Owner & Address	
Account #:	R510714	Neighborhood:	RMTB	Owner and	CITY OF NEWPORT
Map Taxlot:	10-11-33-00-00101-00	Property Class:	940	Mailing Address:	CITY MANAGER 169 SW COAST HWY NEWPORT, OR 97365
Tax Map:	10s11w33			Site Address(es):	
Web Map:	View Map				
Info:	TWNSHP 10, RNG 11, ACRES 3.56, MF384-1283				
Document:	MF384-1283				
Tax Code:	133				
Acres:	3.56				

Improvements					
No Inventory					

Value History					
Year	Imp.	Land	Total Market	Total Assessed	Levied Tax
2020	0	3,560	3,560	0	0
2019	0	3,560	3,560	0	0
2018	0	3,560	3,560	0	0
2017	0	3,560	3,560	0	0
2016	0	3,560	3,560	0	0
2015	0	3,560	3,560	0	0
2014	0	3,560	3,560	0	0
2013	0	3,560	3,560	0	0
2012	0	3,560	3,560	0	0

Sales History				
Sale Date	Price	Document	Type	Code
06/17/1999	\$13,500	MF384-1283	27	WD

Land		Related Accounts	Disclaimer
Description	Acres Market Value Special Use Value		
RESIDENTIAL TRACT	3.56 3,560		For assessment purposes only. Lincoln County makes no warranty as to the accuracy of the information provided. Users should consult with the appropriate City, County or State Department or Agency concerning allowed land uses, required permits or licenses, and development rights on specific properties before making decisions based on this information. Tax data exported 11/2020.





851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

May 15, 2020

Project #: 23915

Derrick Tokos, AICP
City of Newport
169 SW Coast Highway
Newport, OR 97365

RE: Newport Urban Growth Boundary Swap Transportation Analysis Letter

Dear Derrick,

Attached to this letter is a copy of the Traffic Impact Analysis report that was initially prepared to support the removal of a 71.36-acre property from the southern Newport UGB, bring in a 40-acre property in the northern UGB, and then rezone the 40-acre property for future annexation and residential development. As noted in the report and subsequently discussed in our phone conversations, the analysis findings suggest it would be beneficial for the City of Newport to consider the adoption of alternative mobility targets for the segment of Highway 101 north of NE 20th Street in order to avoid significant highway widening improvements. Given that the City is currently in the process of updating its Transportation System Plan (TSP), the timing is conducive for the UGB swap application to defer a formal rezone request to a date after the TSP is complete and the alternative mobility targets are potentially adopted. To assist the City in its TSP update (and the potential for adoption of alternative mobility targets), we offer the analysis and findings of the attached report.

Depending on a successful UGB swap and the results of the TSP update, the attached Traffic Impact Analysis will be updated and formally submitted to address Oregon's Transportation Planning Rule requirements for an eventual residential zone change application.

Please contact me if you have any questions.







Sincerely,
KITTELSON & ASSOCIATES, INC.

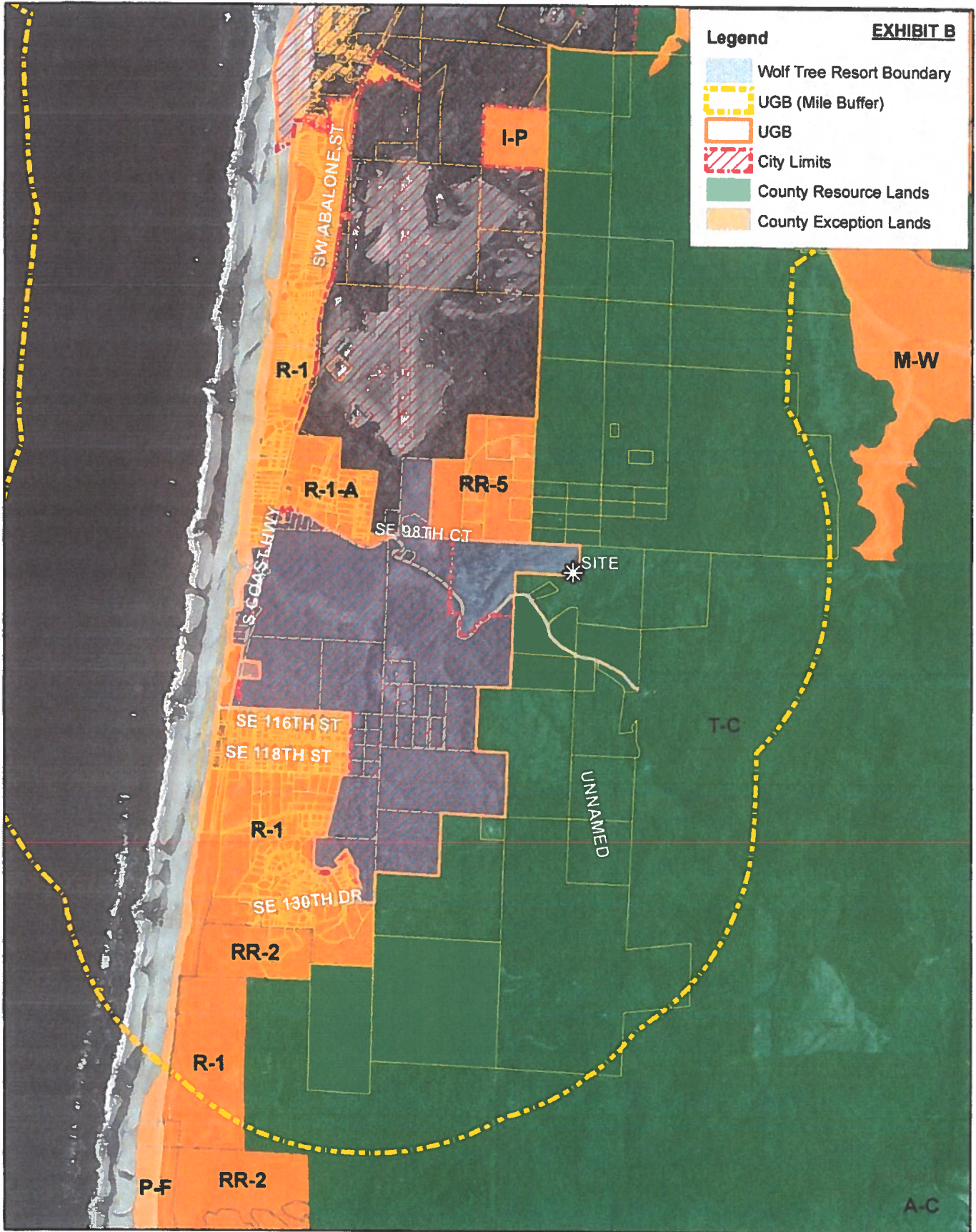
A handwritten signature in blue ink that reads 'Matt Hughart'.

Matt Hughart, AICP
Principal Planner

EXHIBIT B

Legend

-  Wolf Tree Resort Boundary
-  UGB (Mile Buffer)
-  UGB
-  City Limits
-  County Resource Lands
-  County Exception Lands

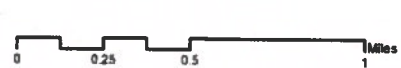


City of Newport
Community Development Department
100 SW Coast Highway
Newport, OR 97365
Phone: 1.503.874.8679
Fax: 1.503.874.0544






Enlarged UGB Study Area with County Zoning Lettenmaier Amendment (File No. 1-UGB-16/1-CP-16)

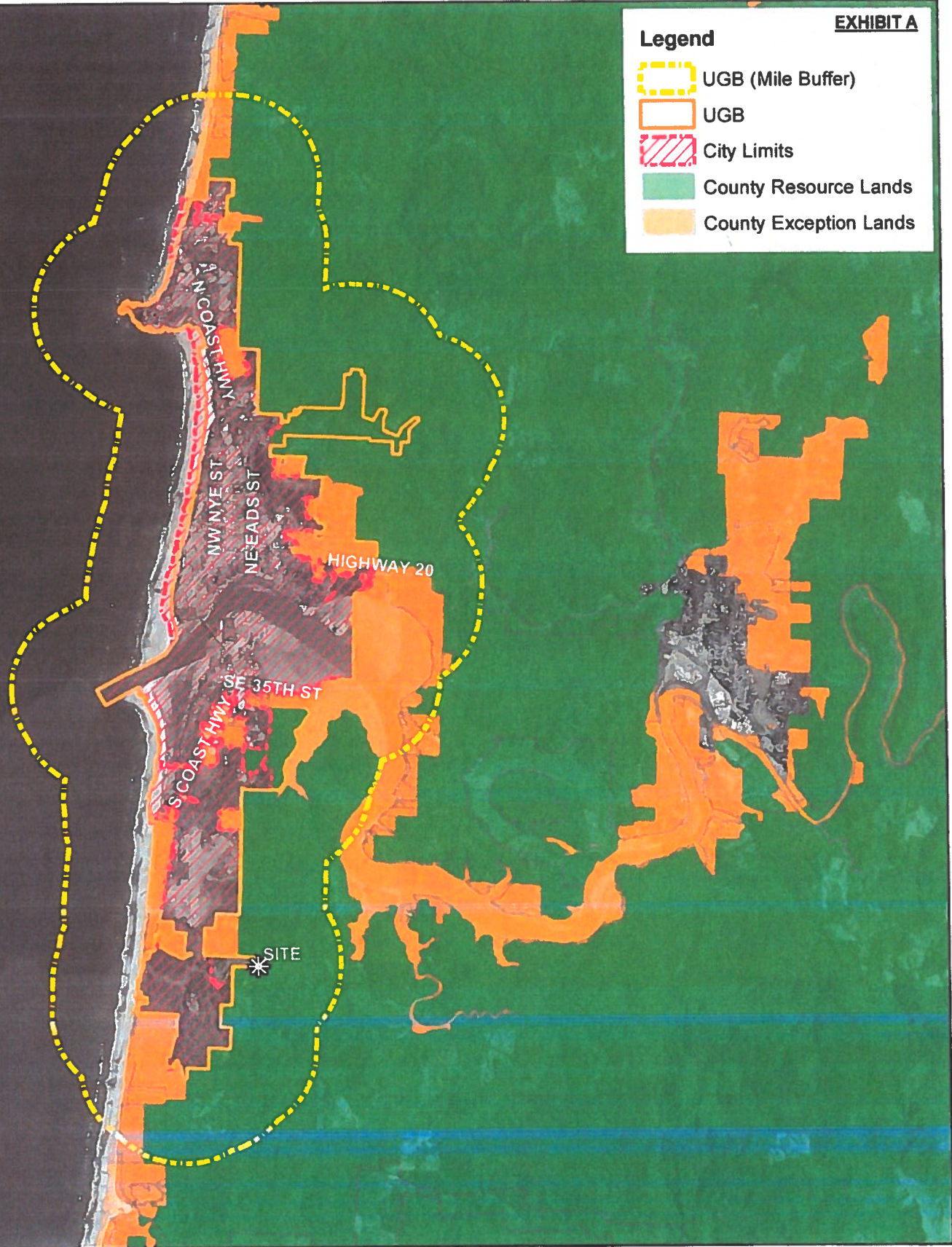
This map is for informational use only and has not been prepared for use in a judicial or engineering or surveying context. It is not intended to be used as a legal document. The City of Newport assumes no responsibility for its use and users of this information are advised to verify all information with the City of Newport Community Development Department.

Image Taken July 2013
Aerial, 4-band Digital Orthophotograph
David Smith & Associates, Inc., Portland, OR



Legend

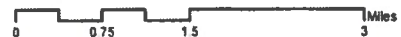
-  UGB (Mile Buffer)
-  UGB
-  City Limits
-  County Resource Lands
-  County Exception Lands



City of Newport
Community Development Department
100 West Coast Highway
Newport, OR 97365
Phone: 1.541.874.8629
Fax: 1.541.874.8644

Urban Growth Boundary Study Area
Lettenmaier Amendment (File No. 1-UGB-16/1-CP-16)

Image Taken July 2013
Aerials, 4-Band Digital Orthophotographs
David Smith & Associates, Inc. Portland, OR




This map is for informational use only and has not been prepared for use as a substitute for legal engineering or planning services. It includes data from multiple sources. The City of Newport assumes no responsibility for its use or for any errors or omissions. Any reproduction or use of this information is at the user's discretion and is not intended to constitute a warranty of any kind.

City of Newport

Community Development Department

Memorandum

To: Newport City Council

From: Derrick Tokos, Community Development Director 

Date: July 13, 2016

Re: Supplemental Analysis for Lettenmaier UGB Amendment

In response to comments provided by Patrick Wingard, North Coast Regional Representative, with the Department of Land Conservation and Development, the following analysis responds to requirements of OAR Chapter 660, Division 24 as they pertain to the subject request.

An application to adjust an Urban Growth Boundary (UGB), including an equal area exchange of land as proposed with this request, may rely on the land needs analysis that provided a basis for its current acknowledged Comprehensive Plan as long as the land being added can satisfy the residential land use need in a manner equivalent to the land being removed, and the City is prepared to apply the same Comprehensive Plan designation to the newly added real property (OAR 660-024-0070(3)). That is the case with this proposal. The residential need at issue is somewhat unique, in that the subject property is part of a large tract of land brought into the Newport UGB in July of 1987 to facilitate the construction of a destination resort. The Comprehensive Plan designation in the vicinity of the applicant's property is high-density residential; however, the resort concept includes some commercially designated property further to the west, adjacent to US 101. A resort has yet to be constructed, and the properties are restricted such that they cannot develop at urban densities in an incremental manner. In fact, the minimum scale of development is 150 separate rentable units, and eating establishments sufficient to accommodate 100 visitors with equivalent meeting space, the aggregate cost for which must be at least \$4 million (1987 dollars). Additionally, recreational facilities costing at least \$2 million (1987 dollars) must be constructed (ref. NMC 14.40.050(B)). The development would be served by a private sewage treatment system, and these minimum standards ensure that the scale of development will be sufficient to support the cost of installing such a system. The housing element of the Newport Comprehensive Plan, last amended in 2014, classifies the 575+/- acres of land in the destination resort separately from other residential lands, given the development limitations listed above. Additionally, given the scale and mix of uses described, the destination resort can be expected to generate a substantial number of jobs for residents of Newport and Lincoln County as a whole and is; therefore, reasonably characterized as an employment use within the context of the administrative rules.

Mr. Wingard points out that the subject proposal, involving an exchange of 6-acres of land, is subject to the location and priority provisions listed in OAR 660-024-0065 and OAR 660-024-0067. The locational provisions require the City to evaluate lands within 1 mile of the Newport UGB to see if the 6-acres the applicant proposes to add to the UGB is best suited for that purpose given the identified residential need and the State of Oregon's priorities which emphasize non-resource (exception) land being added as opposed to resource (i.e. farm and forest) lands. A map enclosed as Exhibit A shows the 1-mile study area. Given the unique nature of this destination resort, all non-contiguous properties north of the Newport Municipal Airport, which adjoins the northern boundary of the destination resort, are unsuitable because the existing development pattern, both structures and infrastructure, are too far removed from the balance of the destination resort for them to be reasonably developed as part of the resort (ref. OAR 660-024-0067(5)(a)(B)). Narrowing the scope of the analysis to properties south of the airport, adjacent

or in close proximity to the destination resort, it is evident that the available exception lands are unsuitable because they consist of parcels 2-acres or less in size or are situated immediately adjacent to the airport and its associated airplane approach zones that discourage residential development. A map enclosed as Exhibit B shows the exception areas with parcel boundaries. The R-1, R-1-A and RR-2 designated lands are highly parcelized and largely developed making them difficult to incorporate into a future destination resort. The administrative rules allow such lands to be considered unsuitable (OAR 660-024-0067(5)(a)(A)). The same goes for lands that cannot be reasonably developed as a result of existing development patterns such as the RR-5 zoned land next to the airport or the above referenced R-1, R-1-A, and RR-5 zoned lands OAR 660-024-0067(5)(a)(B)).

What is left are resource lands, such as the Timber-Conservation (T-C) zoned properties along the east side of the planned destination resort. The original concept drawings for the resort show a block of high-density residential development in the area where the 6-acre land exchange is going to occur (Exhibit C). While this UGB amendment proposal has been made to accommodate a single family dwelling home site outside of the city limits, the property is large enough at over 70 acres to accommodate urban levels of development as part of a future destination resort. As the applicant notes, the reconfigured boundary aligns the UGB more or less with the natural contours of the land. Property being added is situated west of a drainage and orients more to other lands inside the UGB that are also west of this natural feature. This makes it suitable for inclusion in the UGB.

It is relevant to note that this property is eligible for a home site because it was withdrawn from the city limits and is subject to county zoning regulations (ref: Ordinance No 2057, dated 8/19/13). The City utilizes an overlay zone to implement standards referenced earlier in this memo that prohibit residential development that does not meet the minimum investment threshold. That overlay is put in place at the time a property is annexed.

Attachments

- Exhibit A – UGB Study Area
- Exhibit B – Enlarged Map of Study Area
- Exhibit C – Wolf Tree Boundaries and Preliminary Site Plan

Derrick Tokos

From: Wingard, Patrick <patrick.wingard@state.or.us>
Sent: Thursday, June 02, 2016 5:31 PM
To: Derrick Tokos
Cc: Onno Husing
Subject: RE: Notice of Proposed Amendment

Hi Derrick,

I would like to talk to you about this proposal. OAR 660-024-0070 states that any swap such as this "must apply applicable location and priority provisions of OAR 660-024-0060 through 660-024-0067." No such analysis has been provided with this submittal. Essentially, this means that the city and county must adopt findings that the six acres to be brought into the UGB is better than any other six acres available under the criteria set forth in the rule. Newport would be the first city to do this analysis under the new rules that went into effect January 1, 2016 and we would like to work with you to craft appropriate findings. The one thing that could complicate matters: Does Newport have any rural residential "exception" lands adjacent to the city, or is it all forest land?

My apologies on the lateness of these comments. I looked at the application when it came in a few weeks ago, made some notes, and then got side-tracked. I meant to talk to you about this two weeks ago. I certainly don't want to delay, or complicate, things but we should touch base soon on how to address the concern I raise above.

Thanks,

Patrick

Patrick Wingard, AICP | North Coast Regional Representative
Ocean/Coastal Services Division
Oregon Dept. of Land Conservation and Development
North Coast Regional Solutions Center
4301 Third Street, Room 206 | Tillamook, OR 97141
Cell: (503) 812-5448
patrick.wingard@state.or.us | www.oregon.gov/LCD

From: Derrick Tokos [mailto:D.Tokos@NewportOregon.gov]
Sent: Tuesday, May 10, 2016 8:44 AM
To: DLCD Plan Amendments <planamendments@dlcd.state.or.us>
Cc: Wingard, Patrick <pwingard@dlcd.state.or.us>; Onno Husing <ohusing@co.lincoln.or.us>
Subject: Notice of Proposed Amendment

Enclosed is a notice of proposed amendment to the Newport Urban Growth Boundary. It is a minor amendment, involving the exchange of 6 acres so that the UGB aligns with a property line adjustment that the property owners are pursuing.

Let me know if you have any questions.

Derrick I. Tokos, AICP
Community Development Director
City of Newport
169 SW Coast Highway

Newport, OR 97365
ph: 541.574.0626 fax: 541.574.0644
d.tokos@newportoregon.gov




EXISTING ZONING | COMP PLAN DESIGNATION

71 RURAL RESIDENTIAL (RR-10) |
ACRES HIGH DENSITY RESIDENTIAL (HDR)

SITE NOTE

SITE MAP HAS BEEN PREPARED USING DATA FROM EXISTING COUNTY SURVEYOR DATA AND USGS ELEVATION DATA. THIS MAP HAS BEEN PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. ALL BOUNDARY AND DIMENSIONAL INFORMATION SHOULD BE VERIFIED BY A PROFESSIONAL LAND SURVEYOR.



SCALE: 1" = 400'


HANCOCK UGB ADJUSTMENT

UGB AMENDMENT EXHIBIT

3J CONSULTING

CIVIL ENGINEERING · WATER RESOURCES · LAND USE PLANNING

MARCH 2020

April 1, 2020

Project #: 23915

Keith Blair
ODOT Region 2
455 Airport Road SE, Bldg. A
Salem, OR 97301

Derrick Tokos
City of Newport
169 SW Coast Highway
Newport, OR 97365

RE: Newport UGB Lane Exchange

Dear Keith and Derrick,

This letter presents a Traffic Impact Analysis supporting the proposed land exchange that would remove 71.39 acres of undeveloped residential zoned land in the southern portion of Newport's urban growth boundary (UGB) and bring in approximately 40 acres of rural land located adjacent to the northeast quadrant of the City's UGB.

Based on the results of the transportation analysis outlined in this report, the proposed amendment to the City's UGB and affiliated comprehensive plan/zone designation for the 40-acre site has the potential to create a significant effect on the surrounding transportation network if no mitigations are proposed. However, acceptable operational levels can be achieved at the study intersections in the planning horizon year 2040 with potential mitigation measures in place as described in the report.

FINDINGS**Existing Transportation Conditions**

- Traffic counts were collected in June 2019 at all of the study intersections during the critical weekday AM and PM peak travel periods. ODOT procedures were used to identify the 30th Highest Hour Volumes along the US 101 corridor which resulted in a 17% increase to the existing weekday AM and PM peak hour traffic volumes.
- Operational analyses indicate that all of the study intersections currently operate acceptably based on the existing mobility targets with the exception of the US 101/NE 20th Avenue intersection. During the weekday PM peak hour, this intersection operates at a volume-to-capacity ratio of 0.84 which is above the 0.80 mobility target.

Future Year 2040 Traffic Conditions

- The proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres is proposed to be removed from the UGB, it would have no significant future development potential outside of its current Lincoln County RR-10 zone designation. Accordingly, the focus of this analysis is on the proposed urbanization of the 40-acre site.
- Background traffic volumes for the 2040 planning horizon year were estimated using a 1% annual growth rate to reflect anticipated regional traffic growth along the US 101 corridor. Trips associated with anticipated developments near the 40-acre site were applied to the study intersections to account for local traffic growth on the system.
- The existing 40-acre site is currently zoned Timber Conservation by Lincoln County. As a resource land designation, it essentially has no measurable trip generation potential. Therefore, the 2040 Background Conditions represent the future traffic conditions that can be expected under the existing Timber Conservation zone scenario.
- Operations of the study intersections under 2040 Background conditions (assumed regional and local traffic growth but no land use action on the 40-acre site) found that all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street and US 101/NE 20th Street intersections. During the weekday PM Peak hour, both of these intersections are forecast to operate with a volume-to-capacity ratio of 0.92 which exceeds their respective 0.80 and 0.90 mobility targets.
- With a potential UGB amendment, it was conservatively assumed that the 40-acre site could be zoned under the City of Newport's R-2 Medium Density Single Family Residential zone which allows a mix of duplexes and single-family homes. Based on a preliminary site assessment taking into consideration topography, non-buildable lands, and wetlands, it was determined that the site could conservatively support up to 200 single family homes.
- Comparing the existing Timber Conservation zoning to a potential R-2 Medium Density Single Family Residential zone, the later has the potential to generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.
- Operations of the study intersections under the 2040 R-2 Medium Density Single Family Residential zoning scenario found that all of the US 101 study intersections are forecast to exceed their respective mobility targets. Specifically:
 - The eastbound approach to the unsignalized US 101/NE 36th Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. This represents a significant impact to the operations of the intersection. To address TPR requirements, mitigation and potential revised mobility targets would

be needed to restore capacity to the intersection and show it can meet operating standards.

- The eastbound approach to the unsignalized US 101/NE 31st Street intersection is forecast to operate over capacity during both the weekday AM and PM peak hours. To address TPR requirements, mitigation and potential revised mobility targets would be needed to restore capacity to the intersection and show it can meet operating standards.
- The signalized US 101/NE 25th Street intersection is forecast to operate at a volume-to-capacity ratio of 0.94 during the weekday PM peak hour. Compared to forecast volume-to-capacity ratio of 0.92 under 2040 Background conditions, this represents a further degradation to the intersection. To address TPR requirements, mitigation would need to be proposed that would restore the intersection operations back to a volume-to-capacity ratio of 0.92 or better.
- The signalized US 101/NE 20th Street intersection is forecast to operate at a volume-to-capacity ratio of 0.95 during the weekday PM peak hour. Compared to forecast volume-to-capacity ratio of 0.92 under 2040 Background conditions, this represents a further degradation to the intersection. To address TPR requirements, mitigation and potential revised mobility targets would be needed to show it can meet operating standards.

Conclusions

The following intersection mitigation measures would ensure the proposed land exchange and urbanization (R-2 Medium Density Single Family Residential zoning scenario) of the 40-acre parcel complies with the Oregon TPR:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects:
 - Widen the westbound NE 36th Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions:
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

PROJECT BACKGROUND

The proposed land exchange involves two separate land parcels. The first parcel is 71.36 acres of privately-owned property in southern Newport that is accessed from SE 98th Street. This land is located within the City of Newport's UGB, but it has not been annexed into the city limits. Currently zoned Rural Residential (RR-10) by Lincoln County, the property is steeply sloped, not currently served by established infrastructure, and not a currently desirable location for future urban development given its somewhat isolated location. The second parcel is a 40-acre site that is currently outside the City of Newport's UGB as shown in Figure 1. The land is currently zoned Timber-Conservation (T-C) by Lincoln County. The proposed land use action would remove the 71.36-acre property from the Newport UGB and bring in the 40-acre property where it would then be eligible for potential future annexation and residential development.

Per Oregon Administrative Rule 660-012-0060, also known as the Transportation Planning Rule (TPR), land use actions such as these need to determine if there will be a significant effect on an existing or planned transportation facility. Under these types of land use actions, a significant effect to a transportation facility typically is anything that could involve the degradation of the performance of an existing or planned transportation facility such that it would not meet adopted local performance standards. The following report addresses the TPR requirements.

Figure 1 – Site Vicinity Map



STUDY SCOPE & ANALYSIS METHODOLOGY

The proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres would be removed from the UGB, it would have no significant future development potential outside of its current Lincoln County RR-10 zone designation. Accordingly, the focus of this analysis is on the proposed 40-acre site and its applicable study area.

Study Scope

This analysis identifies the transportation-related impacts associated with the proposed land exchange. The study was prepared in accordance with the ODOT *Analysis Procedures Manual* (APM, Reference 1), the City of Newport's traffic impact study requirements, and supplemental direction provided by ODOT development review staff. The study scope and overall study area for this project were selected based on an analysis of current and future traffic volumes at study intersections and discussions with both City and ODOT staff. As required by the City of Newport's Municipal Code Chapter 14.45 and the TPR requirements, the analysis was prepared to address the following transportation issues:

- Existing land use and transportation system conditions within the site vicinity;
- Review of regional traffic growth and seasonal traffic patterns, in-process developments, planned transportation improvements, and related transportation impact studies for other developments in the study area;
- Site trip generation and distribution estimates for reasonable worst-case development scenarios for current Timber Conservation and proposed residential zoning;
- Planning horizon year 2040 traffic operations and vehicle queuing conditions under existing Timber Conservation and proposed residential zoning development scenarios;
- Identification of traffic system deficiencies and potential mitigation measures;
- Assessment of zone change compliance with the TPR (OAR Section 660-12-060); and,
- Conclusions and recommendations.

Study Intersections

The study intersections were identified in collaboration with City and ODOT staff. Figure 1 illustrates the location of the study intersections that are listed below. For ease of review, each intersection is referenced within this report using a numerical ID.

1. US 101 / NE 36th Street
2. US 101 / NE 31st Street
3. US 101 / NE 25th Street
4. US 101 / NE 20th Street

5. NE Harney Street / NE 31st Street

Traffic Analysis Time Periods

Study intersection operations were analyzed during the weekday morning (intersection peak hour between 7:00-9:00 AM) and evening peak hour (intersection peak hour between 4:00-6:00 PM).

Analysis Methodology

The unsignalized and signalized intersection operational analyses presented in this report were prepared following Highway Capacity Manual 6th edition (Reference 2) analysis procedures using VISTRO software.

Performance Measures & Operating Standards

Intersection performance measures reported in this study include volume-to-capacity ratio (V/C), and delay. Intersection operating standards adopted by the City and ODOT are summarized in this section.

ODOT Operating Standards (Mobility Targets)

ODOT uses volume-to-capacity (V/C) ratios to assess intersection operations. Table 6 of the *Oregon Highway Plan* (OHP) provides maximum volume-to-capacity ratio targets for all signalized and unsignalized intersections located outside the Portland metropolitan area. The ODOT controlled intersections within the study area are located along US 101. Table 1 summarizes the v/c ratios that will be used to identify the existing and potential future operational issues at the ODOT study intersections.

Table 1 – ODOT Mobility Targets

Intersection	OHP Mobility Target
US 101 / NE 36 th Street (unsignalized)	0.80 major approach / 0.90 minor approach
US 101 / NE 31 st Street (unsignalized)	0.80 major approach / 0.90 minor approach
US 101 / NE 25 th Street (signalized)	0.80
US 101 / NE 20 th Street (signalized)	0.90

Note: US 101 is a Statewide Highway (not a Freight Route). The posted speed along US 101 is 35 mph through the US 101/NE 20th Street intersection and transitions to a 45 mph facility from the NE 25th Street intersection through the NE 36th Street intersection.

City of Newport Operating Standards

The City of Newport has not adopted intersection operating standards and, per City staff, generally relies on consideration of queuing as well as ODOT standards. For the NE Harney Street / NE 31st Street intersection, a 0.80 major street approach/0.90 minor street approach volume-to-capacity standard will be utilized.

EXISTING CONDITIONS TRAFFIC ANALYSIS

The existing conditions analysis identifies field conditions and the current operational, traffic control, and geometric characteristics of the roadways and other transportation facilities within the vicinity of the 40-acre study area. These conditions will be compared with future year conditions later in this report. Kittelson staff visited the study area and inventoried the existing transportation system to identify lane configurations, traffic control devices, bicycle and pedestrian facilities, transit stops, geometric features, and sight distances at the study intersections during the summer of 2019.

Site Conditions and Adjacent Land Uses

The proposed 40-acre land exchange site is currently undeveloped and heavily forested. It is generally bordered by SW Harney Street to the west, existing single-family development to the south, and undeveloped forest land to the north and east.

Transportation Facilities

This section provides a multi-modal overview of transportation facilities in the site vicinity.

Roadway Facilities

Figure 2 summarizes the existing lane configurations and traffic control devices at the study intersections. Table 2 summarizes roadways in the site vicinity that are assessed as part of the traffic impact study.

Table 2 – Existing Transportation Facilities

Roadway	Jurisdictional Authority	Functional Classification ¹	Number of Auto Lanes	Posted Speed (MPH)	Sidewalks Present	Bicycle Lanes Present	On-Street Parking Allowed?
US 101	ODOT	Statewide Highway – ODOT Oregon Highway Plan Principal Arterial - Newport	3-5	45 ²	Yes ³	Yes ⁴	No
NE 36 th Street	City of Newport	Collector	2	25	No	Yes	No
NE 31 st Street	City of Newport	Minor Arterial	2	Not Posted	No	No	No
NW 25 th Street	City of Newport	Local	2	Not Posted	Yes	No	No
NW 20 th Street	City of Newport	Collector	2	Not Posted	No	No	No
NW Harney St	City of Newport	Collector	2	Not Posted	No	No	No

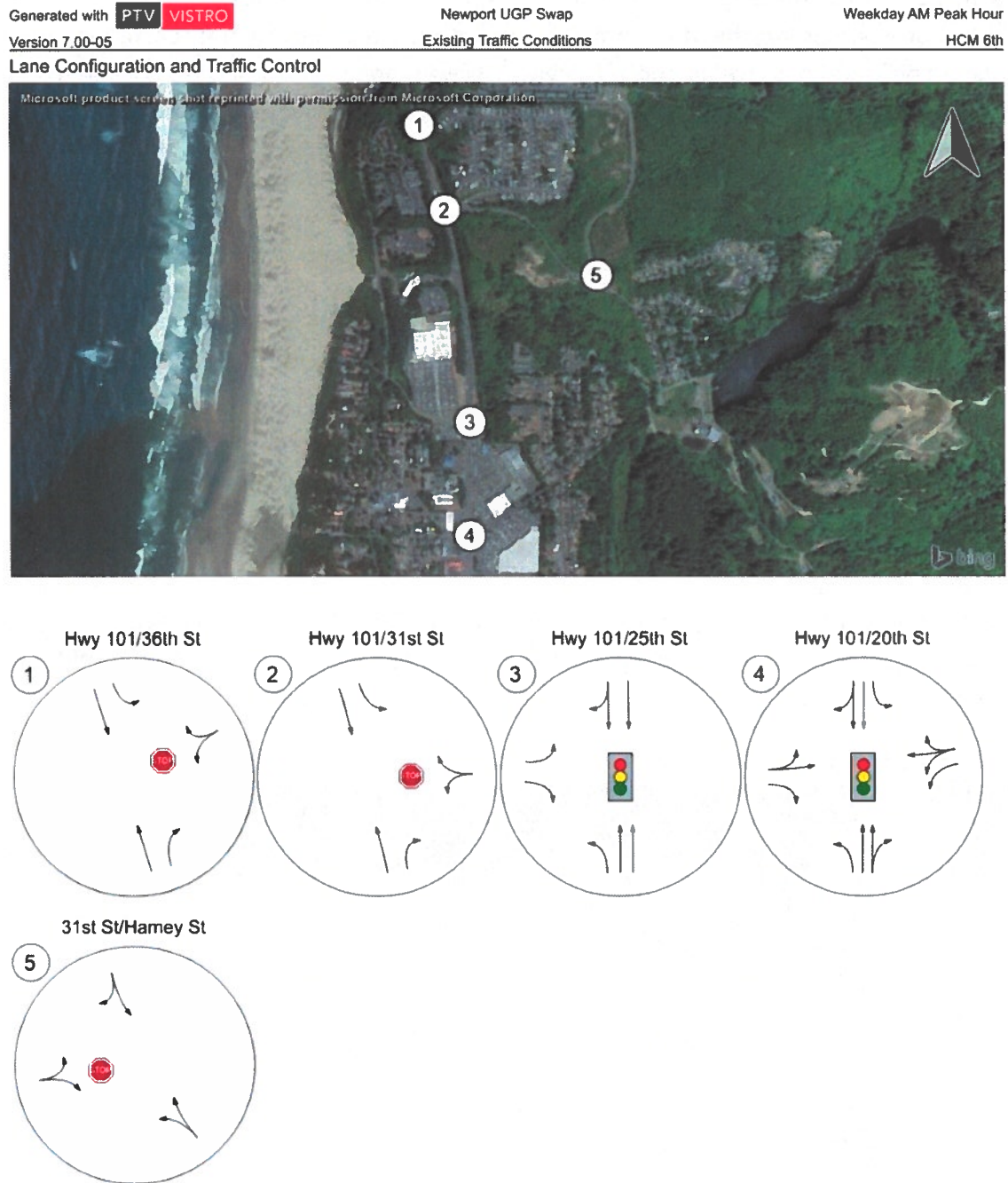
¹ Source: City of Newport Transportation System Plan

² The posted speed of US 101 lowers to 35 mph in the vicinity of NW 20th Street

³ There are no sidewalks on US 101 in the vicinity of NW 31st Street and NW 36th Street

⁴ US 101 has a striped bicycle lane or wide shoulder north of NW 25th Street

Figure 2 - Existing Study Intersection Lane Configurations and Traffic Control Devices



Transit Facilities

Lincoln County operates the Newport City Loop Bus within the City. The bus operates between 7:23 AM and 5:11 PM seven days a week except on Thanksgiving and Christmas. The bus route loops between Newport Business Center on the south side of the community and the NW 73rd & Avery intersection on the north side of the community with study area stops at Fred Meyer, Walmart, and the Little Creek Apartments. Intercity bus connections are also provided between Newport and Siletz, Lincoln City/Rose Lodge, and Yachats. The intercity service schedules vary by destination but generally operate Monday through Saturday with service to Newport occurring at a stop at City Hall.

Existing Traffic Volumes

Turning movement counts were conducted at the study intersections on a typical mid-weekday in early June 2019 while local schools were still in session. Peak traffic volumes were observed at the intersections between 7:20 - 8:20 AM and 4:05 – 5:05 PM. The traffic counts were seasonally adjusted to 30th highest hour design volumes before use in the operational analysis in accordance with procedures presented in ODOT's APM. *Appendix "A" provides the detailed methodology and calculations for the 30th highest hour adjustment.* Figures 3 and 4 show the resulting turning movement counts at the study intersections during the weekday AM and PM peak hours. *Appendix "B" contains the intersection turning movement count sheets.*

Existing Intersection Operations

Operations of the study intersections were assessed using the previously described methodology and were compared to the respective mobility targets. Table 3 summarizes the operational analyses for the weekday AM and PM peak hour reflective of the seasonal adjustment factor. As shown, all of the study intersections currently operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street intersection. During the weekday PM Peak hour, the intersection currently operates with a volume-to-capacity ratio of 0.84 which exceeds the 0.80 mobility target. *Appendix "C" includes the existing conditions intersection operations analysis worksheets.*

Table 3 – Existing Traffic Conditions

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.01 (SBLT) 0.37 (WB)	8.57 (SBLT) 34.1 (WB)	0.01 (SBLT) 0.15 (WB)	10.2 (SBLT) 33.5 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.43 (WB)	8.69 (SBLT) 46.1 (WB)	0.03 (SBLT) 0.37 (WB)	10.8 (SBLT) 58.6 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.54	12.8	0.84	41.8
US 101 / NE 20 th Street	0.90 for intersection	0.48	16.6	0.74	35.9
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	8.7 (EB)	0.07 (EB)	8.6 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio exceeds the respective mobility target

Figure 3 – Existing Traffic Volumes, Weekday AM Peak Hour

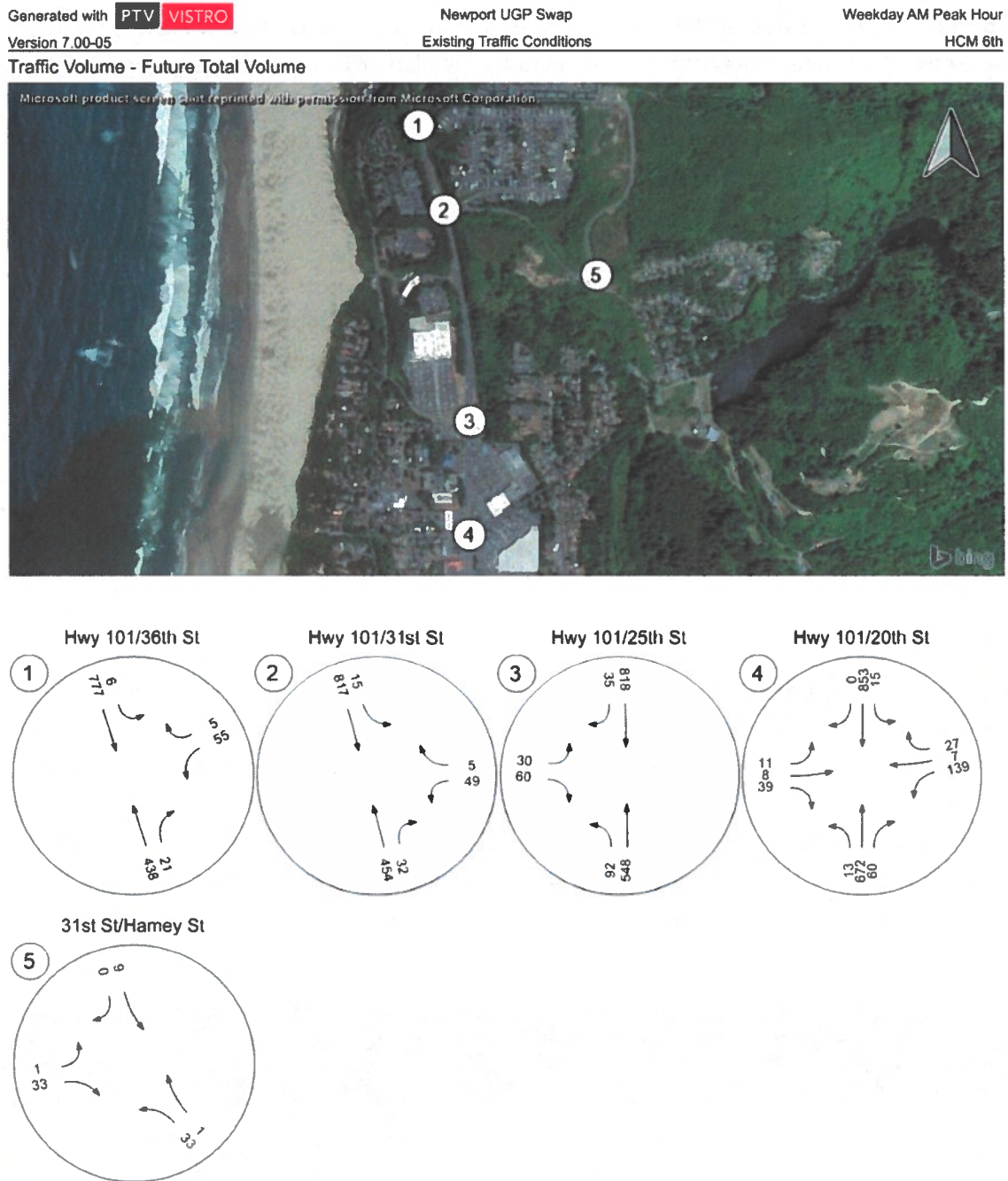
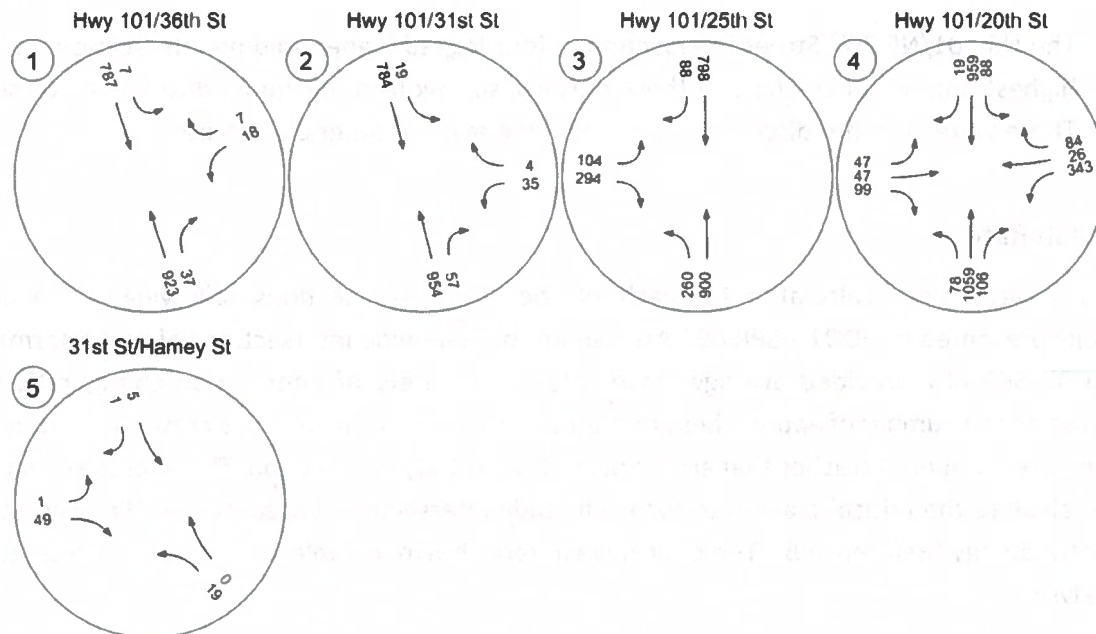


Figure 4 – Existing Traffic Volumes, Weekday PM Peak Hour

Generated with **PTV VISTRO** Newport UGP Swap Weekday PM Peak Hour
Version 7.00-05 Existing Traffic Conditions HCM 6th
Traffic Volume - Future Total Volume



Intersection Crash History

The crash histories at the individual study intersections were obtained and reviewed in an effort to identify potential safety issues. ODOT provided crash records for the study intersections for the five-year period from January 1, 2013 through December 31, 2017. Table 4 summarizes the ODOT crash data.

Table 4 – Study Intersection Crash Summary (January 2013 to December 2017)

Study Intersections	Collision Type					Severity			
	Rear-End	Turning	Angle	Fixed Object	Other	PDO	Injury	Fatal	Total
US 101 / NE 36 th Street	1	6	0	0	0	1	5	1	7
US 101 / NE 31 st Street	2	3	0	0	0	4	1	0	5
US 101 / NE 25 th Street	5	2	0	1	0	6	2	0	8
US 101 / NE 20 th Street	9	5	3	0	2	7	12	0	19
NE Harney Street / NE 31 st Street	0	0	0	0	0	0	0	0	0

A review of Table 4 revealed the following:

- One fatality occurred at the US 101/NE 36th Street intersection that involved a westbound vehicle making a left-turn onto US 101 and colliding with a northbound US 101 vehicle. Six of the 7 recorded collisions also involved this same set of movements.
- The US 101/NE 20th Street intersection, a four legged higher volume intersection had the highest number of crashes. Of these crashes, six involved northbound rear-end collisions. There were no other discernable patterns amongst the other crash types.

Critical Crash Rate

Critical crash rates were calculated for each of the study intersections following the analysis methodology presented in ODOT's SPR 667 Assessment of Statewide Intersection Safety Performance (Reference 5). SPR 667 provided average crash rates at a variety of intersection configurations in Oregon based on the number of approaches and traffic control types. The average crash rate represents the approximate number of crashes that are "expected" at a study intersection. This average crash rate is used to calculate the critical crash rate for each study intersection, based on the Highway Safety Manual methodology (Reference 6). The critical crash rate shown in Table 5 serves as a threshold for further analysis.

Table 5 – Intersection Critical Crash Rate Assessment

Intersection	Total Crashes	Critical Crash Rate by Intersection	Critical Crash Rate by Volume	Observed Crash Rate at Intersection	Observed Crash Rate > Critical Crash Rate?
US 101 / NE 36 th Street	7	0.47	0.48	0.29	No
US 101 / NE 31 st Street	5	0.47	0.63	0.20	No
US 101 / NE 25 th Street	8	0.71	0.46	0.28	No
US 101 / NE 20 th Street	19	0.25	0.35	0.56	Yes
NE Harney Street / NE 31 st Street	0	1.01	1.04	0.00	No

As shown in Table 5, the observed crash rate at the US 101/NE 20th Street intersection exceeds the critical crash rate by intersection type and volume. Further, this intersection is on ODOT's 2017 Safety Priority Index List (SPIS). *Appendix "D" contains the crash data summary sheets.*

YEAR 2040 TRAFFIC CONDITIONS

This section of the report contains a detailed assessment of the long-term traffic impacts associated with the proposed land exchange. More specifically, it evaluates the impacts of urbanizing the 40-acre parcel on the north side of the Newport UGB¹. The analysis of long-term traffic conditions is mandated by the State's Transportation Planning Rule (TPR, OAR Section 660-12-0060), given that the proposed UGB amendment for the 40-acre parcel would require an amendment to an acknowledged land use regulation and may have the potential to significantly affect a transportation facility.

To test for significant effect, an analysis of traffic conditions was conducted under reasonable worst-case site development scenarios for the subject site under the current Lincoln County Timber Conservation zone and a proposed scenario where the UGB is amended and the land is zoned and annexed for future residential development.

Based on the required analysis, the impacts of traffic generated by the potential urbanization of the 40-acres site were examined in the following manner:

- Anticipated background traffic growth patterns and in-process development trips were identified for the weekday AM and PM peak hour of the 2040 planning horizon year.
- Planned transportation improvements in the site vicinity were identified and reviewed.
- Reasonable worst-case land development scenarios were developed under the current Timber Conservation zone and for a potential future residential zoning designation, including basic assumptions on site accessibility.
- Estimates of average daily, weekday AM, and weekday PM peak hour site trips were prepared for the current Timber Conservation zone and for a potential future residential zoning designation.
- A site trip distribution pattern was derived through a review of existing traffic volumes, surrounding transportation facilities, and conversations with ODOT and City of Newport staff.
- Weekday AM and PM peak hour site-generated trips were assigned to the surrounding street network for both zoning scenarios.

¹ As previously stated, the proposed land use action is a unique case that would involve the exchange of 71.36 acres of undeveloped UGB land in southern Newport for 40 acres on the northern border of the Newport UGB. Since the existing 71.36 acres would be removed from the UGB, it would have no significant future development potential outside of what is currently allowed under the Lincoln County RR-10 zone. Accordingly, the focus of this analysis is on the potential urbanization of 40-acre site and its surrounding study area.

- Planning horizon year 2040 traffic volumes, operations, and vehicle queuing conditions were analyzed for the weekday AM and PM peak hour under the existing Timber Conservation zone and for a potential future residential zoning designation.
- Operational deficiencies were identified and appropriate mitigation measures were evaluated.

Year 2040 Background Traffic Forecast

To achieve a reasonable estimate of background traffic levels during the 2040 planning horizon year, current weekday AM and PM peak hour volumes shown in Figure 3 were increased by a 1% linear annual growth rate to account for regional traffic growth in the area over the 20-year forecast window. This growth factor was determined through consultation with City of Newport staff.

Additional trips were added to the background traffic growth adjustments to account for development that is not specifically approved but highly anticipated to be built within the 2040 analysis period. Through discussions with city staff, three development projects are anticipated in the immediate vicinity of the 40-acre site. These developments² are defined below:

- A 66-unit multi-family apartment complex is anticipated on the undeveloped parcel of land east of the NE Harney Street/NE 31st Street intersection. This project would likely include an extension of NE Lakewood Drive to NE Harney Street.
- A 96-unit multi-family apartment complex is anticipated on the undeveloped parcel of land located south of NE 36th Street, west of NE Harney Street and east of the Pacific Homes Beach Club.
- An 84-unit multi-family apartment complex is anticipated on the undeveloped parcel of land located south of NE 31st Street and west of NE Harney Street.

Year 2040 background traffic volumes forecast for the weekday AM and PM peak hour are illustrated in Figures 5 and 6 for all study intersections. These figures reflect background traffic levels without any development on the subject site.

² Through conversations with City staff, none of these developments are formally approved. However, City staff feels they are all reasonably likely to be approved and built within the 20-year planning period of this study. For these reasons, representative stand in projects have been assumed to more conservatively account for this long-term traffic growth potential and its operational impacts at the NE 36th Street and NE 31st Street intersections.

Figure 5 – 2040 Background Traffic Volumes, Weekday AM Peak Hour

Generated with **PTV VISTRO** Newport UGP Swap Weekday AM Peak Hour
Version 7.00-05 Year 2039 Background Traffic Conditions HCM 6th
Traffic Volume - Future Total Volume

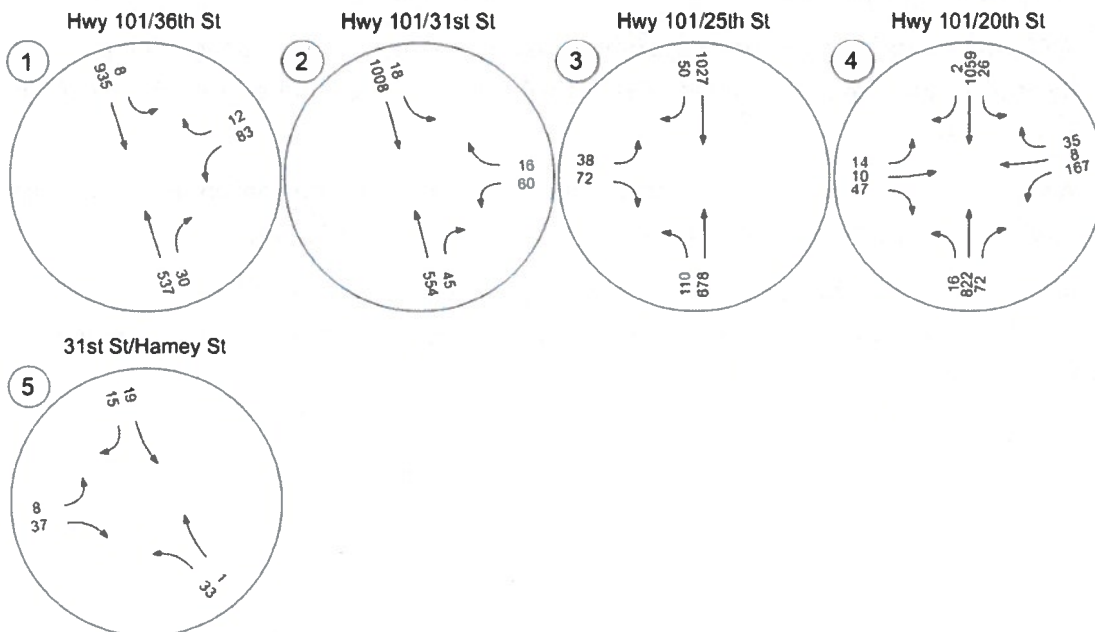
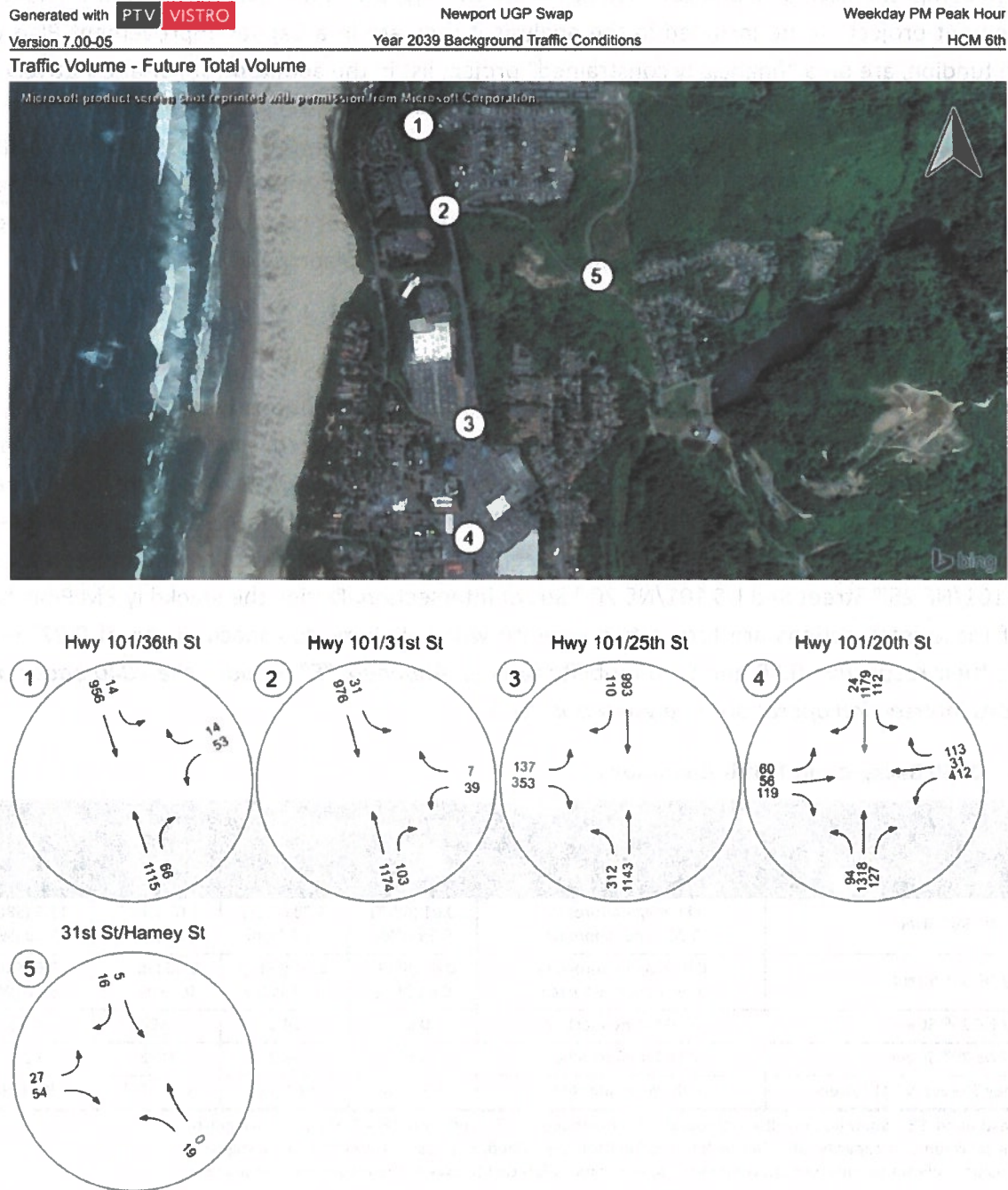


Figure 6 – 2040 Background Traffic Volumes, Weekday PM Peak Hour



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Year 2040 Planned Transportation Improvements

The Transportation Planning Rule provides specific language and direction on how planned transportation improvements can be included in the long-range transportation impact analyses for proposed comprehensive plan and zone changes. Specifically, the TPR allows roadway or intersection improvement projects to be included in the analysis if they are in a Capital Improvement Plan with secured funding, are on a “financially constrained” project list in the adopted TSP, or alternatively, are deemed by the local agency to be “reasonably likely to occur” within the planning horizon. Within the study area, the Newport TSP has identified the need for signalization of the US 101/NE 36th Street intersection. However, the TSP identifies this infrastructure improvement as a development-based project that would be constructed when warranted. As such, it is not currently funded or included on the City’s CIP as has therefore not been assumed within the 2040 planning period.

Year 2040 Background Intersection Operations

Operations of the study intersections under 2040 Background conditions were assessed using the previously described methodology and were compared to the respective mobility targets. Table 6 summarizes the operational analyses for the weekday AM and PM peak hour reflective of anticipated regional and local traffic volume growth. As shown, all of the study intersections are forecast to continue to operate acceptably during both the weekday AM and PM peak hours with the exception of the US 101/NE 25th Street and US 101/NE 20th Street intersection. During the weekday PM Peak hour, both of these intersections are forecast to operate with a volume-to-capacity ratio of 0.92³ which exceeds their respective 0.80 and 0.90 mobility targets. *Appendix “E” includes the 2040 background conditions intersection operations analysis worksheets.*

Table 6 – 2040 Background Traffic Conditions

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.01 (SBLT) 0.59 (WB)	8.78 (SBLT) 54.5 (WB)	0.03 (SBLT) 0.72 (WB)	11.5 (SBLT) 123.0 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.61 (WB)	8.94 (SBLT) 72.3 (WB)	0.06 (SBLT) 0.79 (WB)	12.6 (SBLT) 182.2 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.62	14.2	0.92	48.5
US 101 / NE 20 th Street	0.90 for intersection	0.55	18.3	0.92	63.2
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	8.62 (EB)	0.07 (EB)	9.0 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio is forecast to exceed the respective mobility target

³ The 20-year operations are reflective of signal timing optimization while maintaining the existing overall cycle length.

Site Zoning and Development Scenarios

For the purposes of this analysis, two reasonable worst-case development scenarios were identified for the 40-acre site to compare the traffic impacts between development under the existing Timber Conservation zone and for a potential future residential zoning designation.

Existing Timber Conservation Zoning vs. Potential Residential Zoning

The existing Timber Conservation zone is essentially a resource land zone designation. As such, it has conservatively been assumed that it has no significant or measurable trip generation potential. Under a potential residential zoning designation, it was conservatively assumed that the 40-acres site could be zoned under the City of Newport's R-2 Medium Density Single Family Residential zone which allows a mix of duplexes and single-family homes. Based on a preliminary site assessment taking into consideration topography, non-buildable lands, and wetlands, it was determined that the site could conservatively support up to 200 single family homes. This land use was assumed to represent a reasonable worst-case development scenario for the subject property.

Table 6 shows the estimated trip generation comparison between the two land use scenarios as summarized in the *ITE Trip Generation Manual, 10th Edition*. As shown, the proposed urbanization of the 40-acre site under R-2 development scenario would generate approximately 1,968 net new daily trips, 147 net new AM peak hour trips, and 198 net new PM peak hour trips.

Table 7 – Estimated Trip Generation (Current Timber Conservation Zone vs. Proposed Residential Zone)

Land Use	ITE Code	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Existing Lincoln County Timber Conservation Zone									
Rural Resource Land	-	40 acres	-	-	-	-	-	-	-
Assumed City of Newport R-2 Medium Density Single Family Zoning									
Single-Family Detached Housing	210	200 homes	1,968	147	37	110	198	125	73
Net New Trips			+1,968	+147	+37	+110	+198	+125	+73

Site Trip Distribution and Assignment

Under the existing Timber Conservation Zone, there is no measurable trip profile that can be forecast from this land use. Under the assumed R-2 Medium Density Single Family Residential development scenario, vehicular access to the 40-acre site was assumed to occur via multiple driveways along the property's NE Harney Street frontage. From these points of access, the distribution of site-generated trips onto the study area roadway system was estimated based on an examination of major transportation facilities within the site vicinity and travel characteristics observed from the existing weekday AM and PM traffic counts.

The assumed trip distribution pattern for the R-2 Medium Density Single Family Residential development scenario are illustrated in Figures 7 and 8 along with the total weekday AM and PM peak hour site trip assignments.

Year 2040 Total Traffic Intersection Operations Analysis (40-Acres Converted to Residential Zoning)

The 2040 traffic conditions analysis forecasts how the study area's transportation system will operate by the planning horizon year if the subject site were to remain under the current Timber Conservation zone or reasonably developed under the R-2 Medium Density Single Family Residential zone. As noted, there is no measurable development potential under the Timber Conservation zone. Accordingly, the previously summarized 2040 Background traffic conditions effectively represent the operations under this scenario. To produce the analysis under the R-2 Medium Density Single Family Residential development scenario, the weekday AM and PM peak hour site generated traffic volumes shown in Figures 7 and 8 were added to the background traffic volumes shown in Figures 5 and 6 to arrive at year 2040 traffic volumes shown in Figures 9 and 10.

Year 2040 Total Traffic Operations Results (40-Acres Converted to Residential Zoning)

Operations of the study intersections under 2040 Total conditions (with the 40 acres converted to residential zoning) were assessed using the previously described methodology and were compared to the respective mobility targets. Table 8 summarizes the operational analyses for the weekday AM and PM peak hour reflective of anticipated regional/local traffic volume growth and the traffic generated by the R-2 Medium Density Single Family Residential zone. As shown, all of the study intersections are forecast to experience operational issues. Specifically, the US 101/NE 25th Street and US 101/NE 20th Street intersections are forecast to continue to operate above their respective mobility targets while the critical westbound approaches at the US 101/NE 36th Street and US 101/NE 20th Street intersections are forecast to operate over capacity. *Appendix "F" includes the 2040 total traffic conditions intersection operations analysis worksheets.*

Table 8 - 2040 Total Traffic Conditions (40 Acres Converted to Residential Zoning)

Study Intersections	V/C Mobility Target	Weekday AM Peak Hour		Weekday PM Peak Hour	
		V/C	Delay (sec)	V/C	Delay (sec)
US 101 / NE 36 th Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 0.91 (WB)	8.87 (SBLT) 113.9 (WB)	0.07 (SBLT) 1.75 (WB)	12.2 (SBLT) 584.9 (WB)
US 101 / NE 31 st Street	0.80 major approach / 0.90 minor approach	0.02 (SBLT) 1.11 (WB)	9.06 (SBLT) 205.6 (WB)	0.07 (SBLT) 1.69 (WB)	13.4 (SBLT) 526.6 (WB)
US 101 / NE 25 th Street	0.80 for intersection	0.59	13.0	0.94	48.8
US 101 / NE 20 th Street	0.90 for intersection	0.58	18.8	0.95	73.3
NE Harney Street / NE 31 st Street	0.90 minor approach	0.04 (EB)	9.17 (EB)	0.17 (EB)	11.1 (EB)

WB= Westbound, SB = Southbound, EB = Eastbound, NB = Northbound, LT = Left-turn, TH = Through, RT = Right-turn
V/C= Critical volume-to-capacity ratio, Delay= Intersection delay (signalized) / Critical movement delay (unsignalized)
Shaded values indicate the intersection volume-to-capacity ratio is forecast to exceed the respective mobility target

Figure 7 – Site Trip Distribution and Site Generated Trips (Proposed Residential Zoning), Weekday AM Peak Hour

Generated with **PTV VISTRO** Newport UGP Swap Weekday AM Peak Hour
Version 7.00-05 Year 2039 Total Traffic Conditions HCM 6th
Traffic Volume - Net New Site Trips

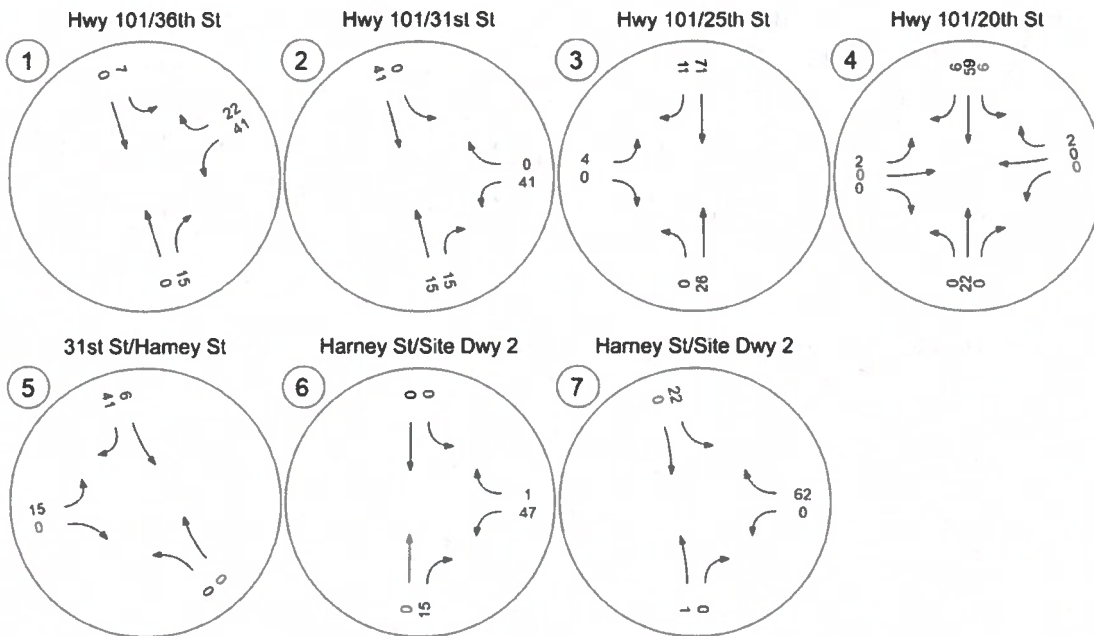
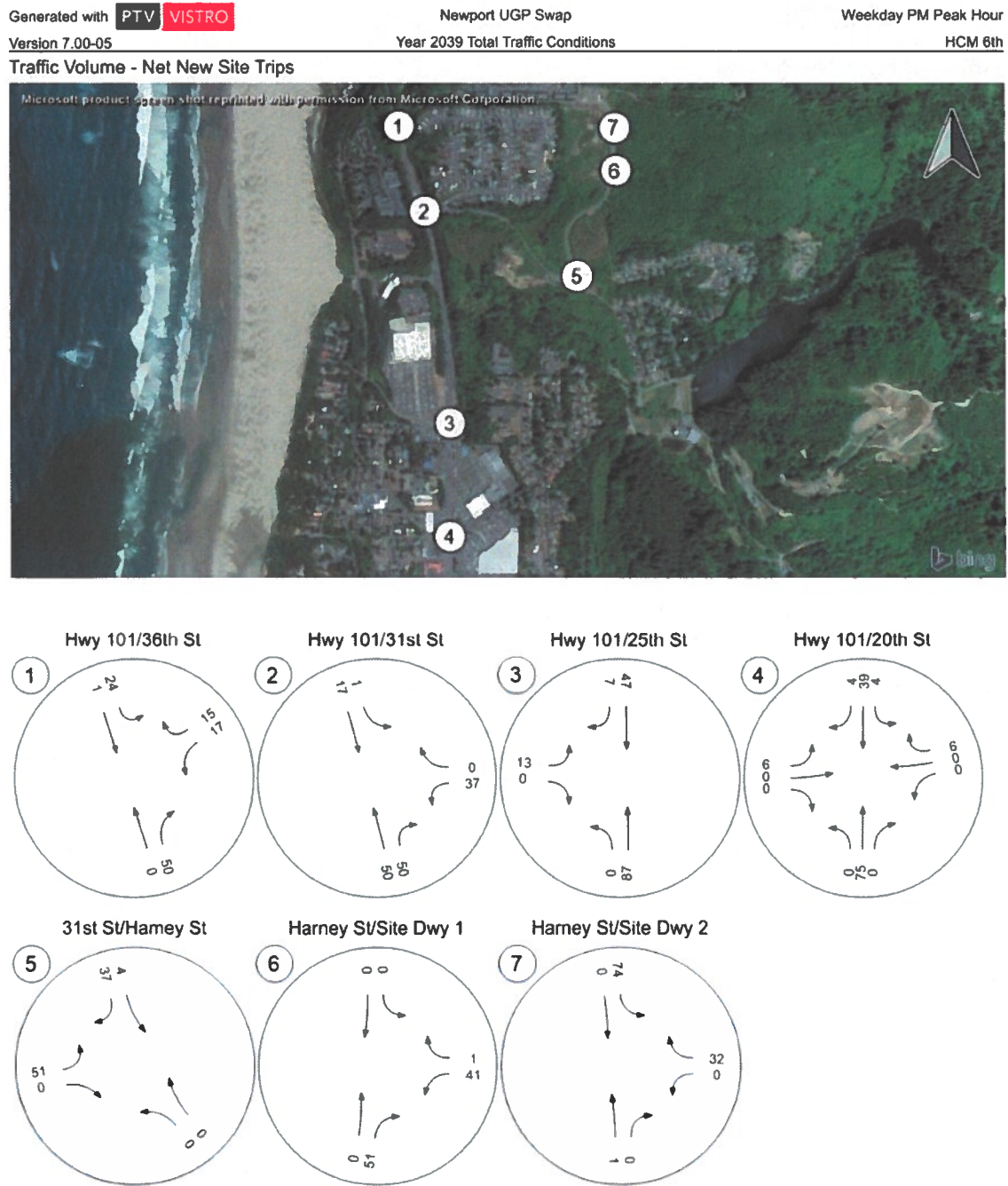


Figure 8 – Site Trip Distribution and Site Generated Trips (Proposed Residential Zoning), Weekday PM Peak Hour

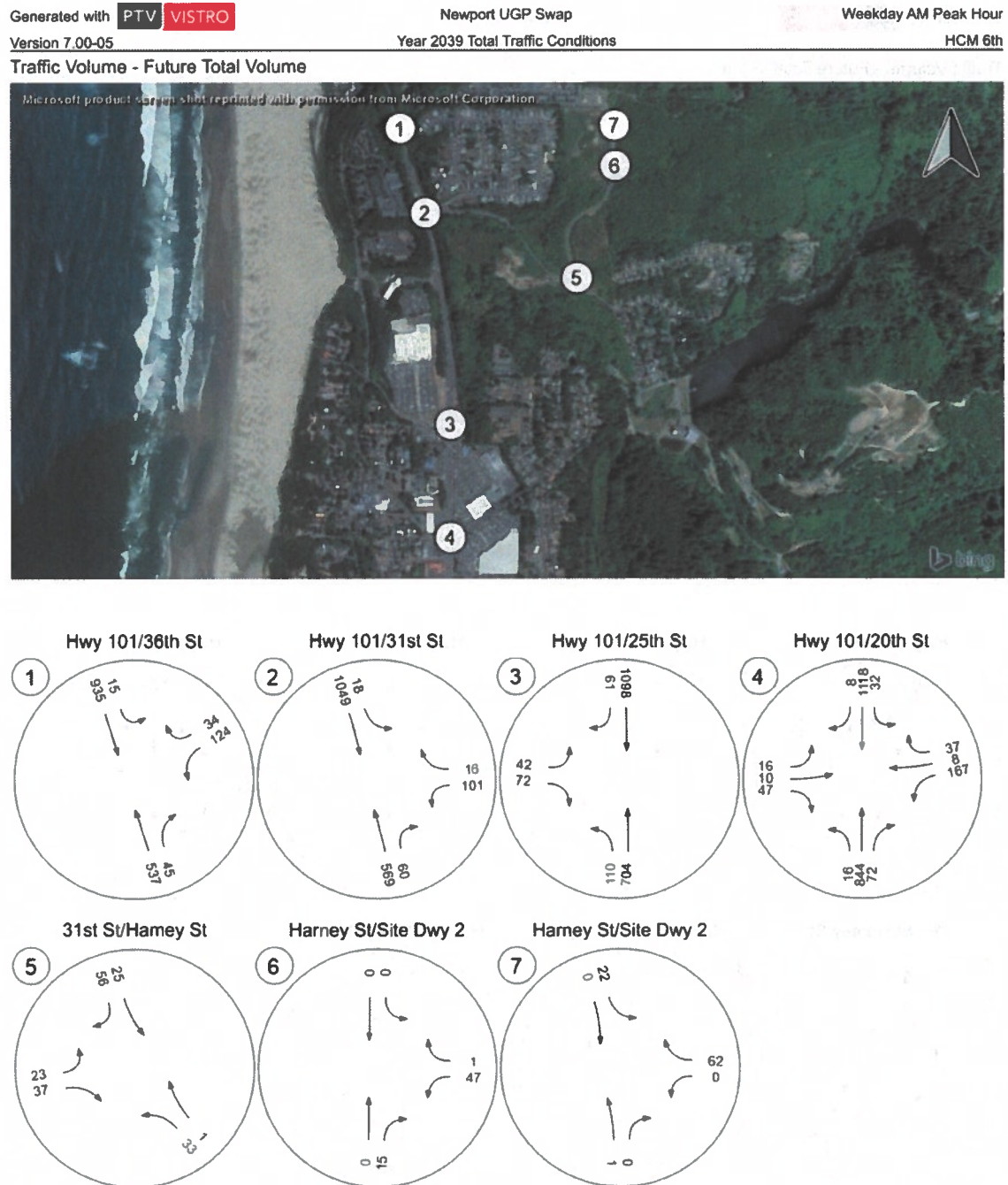


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Figure 9 – 2040 Traffic Volumes (w/ Proposed Residential Zoning), Weekday AM Peak Hour

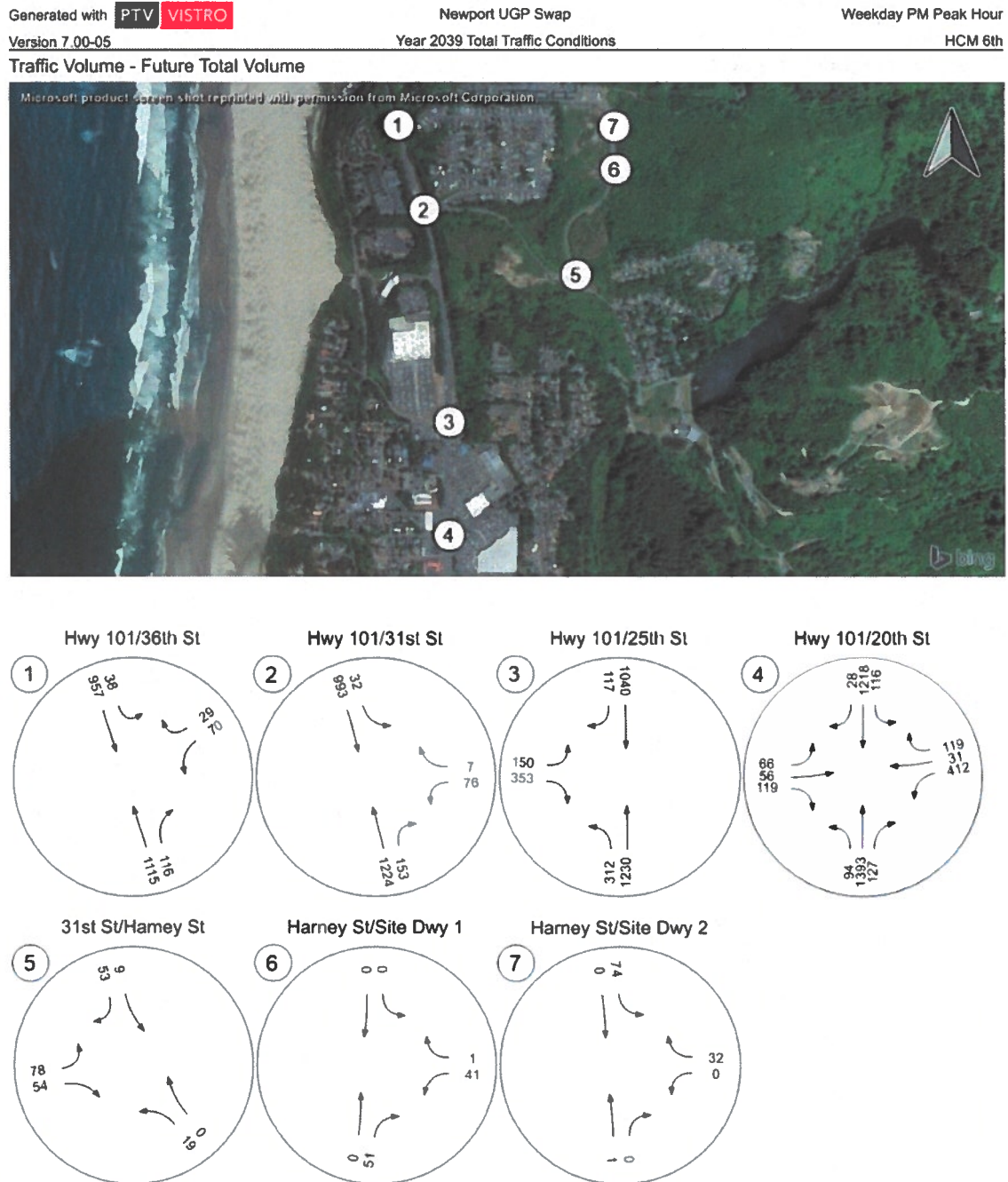


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Figure 10 – 2040 Traffic Volumes (w/ Proposed Residential Zoning), Weekday PM Peak Hour



Year 2040 Intersection Operation Deficiencies and Mitigation Measures

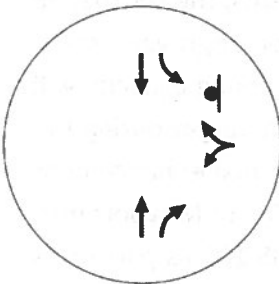
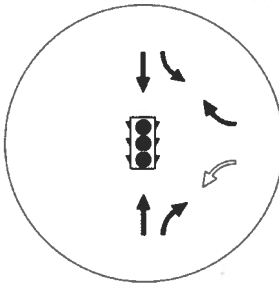
As noted in Table 8, the inclusion of R-2 Medium Density Single Family Residential zoning on the 40 acres is forecast to result in a measurable degradation of the four US 101 study intersections when compared to the 2040 Background Conditions analysis. Therefore, per the TPR, the proposed land exchange has the potential to create a significant effect on the supporting transportation infrastructure. The following sections identify potential mitigation measures that could be considered to address forecast operations.

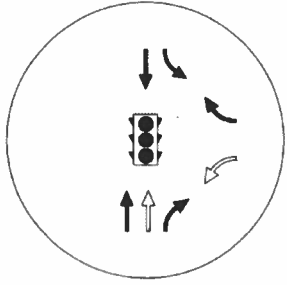
US 101/NE 36th Street Intersection

The westbound approach at the unsignalized US 101/NE 36th Street intersection is projected to exceed the mobility target during the weekday AM peak hour and operate well over capacity during the weekday PM peak hour. In recognition of these findings, the following investigation was performed:

- A signal warrant analysis found that the intersection is forecast to meet the volume-based planning warrants for a traffic signal.
- Given that signalization of the intersection is already identified in the Newport TSP, mitigation scenarios were limited to signalization and potential roadway widening options as summarized in Table 9 below.

Table 9 – US 101/NE 36th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 36 th Street Intersection	Weekday AM Peak Hour	Weekday PM Peak Hour						
Under Existing Unsignalized Intersection Configurations								
	Critical Westbound Approach V/C = 0.91	Critical Westbound Approach V/C = 1.75						
Mitigation Option #1 – Signalization w/separate left- and right-turn lanes on NE 36 th Street								
	V/C = 0.73	Approach	Lane	95 th Queue	V/C = 0.88	Approach	Lane	95 th Queue
WB		LT	75	WB		LT	50	
		RT	25			RT	25	
SB		TH	200	SB		TH	100	
		LT	25			LT	25	
NB		TH	100	NB		TH	900	
	RT	25	RT		25			

US 101/NE 36 th Street Intersection		Weekday AM Peak Hour			Weekday PM Peak Hour			
Mitigation Option #2 – Signalization w/separate left- and right-turn lanes on NE 36 th Street and a second northbound lane on US 101								
	V/C = 0.73	Approach	Lane	95 th Queue	V/C = 0.78	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	25
			RT	25			RT	25
		SB	TH	250		SB	TH	75
			LT	25			LT	25
		NB	TH	50		NB	TH	100
			RT	50			RT	100

Note: Hollow arrows represent assumed lane configurations

As shown in Table 9, Mitigation Scenario #1 involves the signalization of the intersection along with widening for separate left- and right-turn lanes on the NE 36th Street approach. While this scenario would restore working capacity to the intersection (0.88), it would still operate above the 0.80 mobility target during the weekday PM peak hour. As such, Mitigation Scenario #2 assessed a widening of the critical northbound US 101 approach to include a second northbound through lane. This additional US 101 widening coupled with all the improvements under Mitigation Scenario #1 would provide sufficient capacity (0.78) to meet the 0.80 mobility target. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

Summary of US 101/NE 36th Street Intersection Mitigation and Potential Alternative Mobility Targets

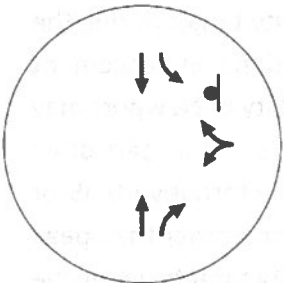
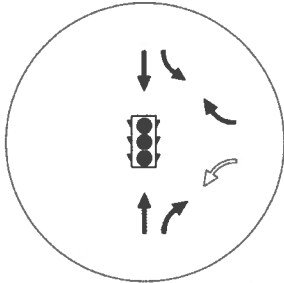
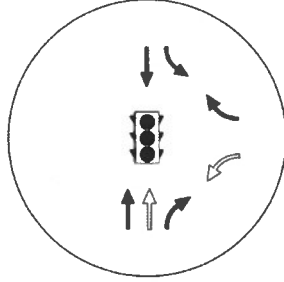
The analysis in Table 9 shows that without traffic control and widening improvements, the US 101/NE 36th Street intersection will operate over capacity. With the first level of intersection improvements in place (i.e. signalization w/separate left- and right-turn lanes on NE 36th Street), working capacity will be restored to the intersection, but it would still operate above the ODOT mobility target during the weekday PM peak hour. Given that the intersection will require a significant additional enhancement (a second northbound lane on US 101) to fully meet the 0.80 mobility target, the City of Newport may want to consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.90 or higher mobility target during 30th highest hour conditions or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets under the more realistic and achievable Mitigation Scenario #1.

US 101/NE 31st Street Intersection

The westbound approach at the unsignalized US 101/NE 31st Street intersection is projected to operate over capacity during the weekday AM and PM peak hours. In recognition of these findings, the following investigation was performed:

- A signal warrant analysis found that the intersection is forecast to meet the volume-based planning warrants for a traffic signal.
- Given the context and constraints of the study area, mitigation scenarios were limited to signalization and potential roadway widening options as summarized in Table 10 below.

Table 10 – US 101/NE 31st Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 31 st Street Intersection		Weekday AM Peak Hour		Weekday PM Peak Hour				
Under Existing Unsignalized Intersection Configurations								
			Critical Westbound Approach V/C = 1.11		Critical Westbound Approach V/C = 1.69			
Mitigation Option #1 – Signalization w/separate left- and right-turn lanes on NE 31 st Street								
	V/C = 0.79	Approach	Lane	95 th Queue	V/C = 0.95	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	50
			RT	25			RT	25
		SB	TH	400		SB	TH	125
			LT	25			LT	25
		NB	TH	100		NB	TH	1,300
			RT	25			RT	25
		Mitigation Option #2 – Signalization w/separate left- and right-turn lanes on NE 31 st Street and a second northbound lane on US 101						
	V/C = 0.79	Approach	Lane	95 th Queue	V/C = 0.79	Approach	Lane	95 th Queue
		WB	LT	75		WB	LT	50
			RT	25			RT	25
		SB	TH	400		SB	TH	100
			LT	25			LT	25
		NB	TH	50		NB	TH	125
			RT	50			RT	25

Note: Hollow arrows represent assumed lane configurations

As shown in Table 10, Mitigation Scenario #1 involves the signalization of the intersection along with widening for separate left- and right-turn lanes on the NE 31st Street approach. While this scenario would restore some capacity to the intersection (0.95), it would still operate well above the 0.80 mobility target during the weekday PM peak hour. As such, Mitigation Scenario #2 assessed a widening of the critical northbound US 101 approach to include a second northbound through lane. This additional widening coupled with all the improvements under Mitigation Scenario #1 would provide sufficient capacity (0.79) to meet the 0.80 mobility target. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

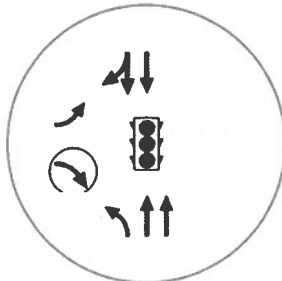
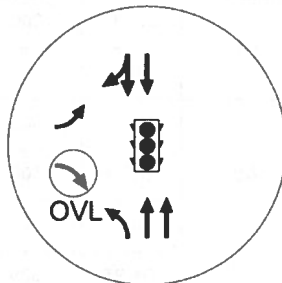
Summary of US 101/NE 31st Street Intersection Mitigation and Potential Alternative Mobility Targets

The analysis in Table 10 shows that without traffic control and physical improvements, the US 101/NE 31st Street intersection will operate over capacity. With the first level of intersection improvements in place (i.e. signalization w/separate left- and right-turn lanes on NE 31st Street), some capacity will be restored to the intersection, but it would still operate well above the ODOT mobility target during the weekday PM peak hour. Given that the intersection will require a significant additional enhancement (a second northbound lane on US 101) to fully meet the 0.80 mobility target, the City of Newport may want to consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.95 or higher mobility target during 30th highest hour conditions, or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets under the more realistic and achievable Mitigation Scenario #1.

US 101/NE 25th Street Intersection

The US 101/NE 25th Street intersection is forecast to operate at volume-to-capacity ratio of 0.94 during the weekday PM peak hour which exceeds the critical 0.92 volume-to-capacity ratio under background conditions. In recognition of this finding, a mitigation scenario was evaluated that involves the addition of right-turn overlap phasing to the eastbound right-turn lane. As summarized in Table 11, this relatively simple and inexpensive signal modification will significantly improve the intersection to an acceptable 0.76 volume-to-capacity ratio. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

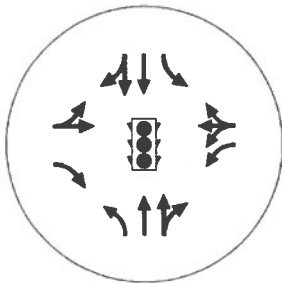
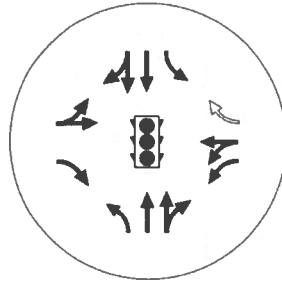
Table 11 - US 101/NE 25th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 25 th Street Intersection		Weekday AM Peak Hour		Weekday PM Peak Hour				
Under Existing Intersection Configurations								
	V/C = 0.59		V/C = 0.94					
Mitigation – Add overlap phasing to the eastbound right-turn movement								
	V/C = 0.56	Approach	Lane	95 th Queue	V/C = 0.76	Approach	Lane	95 th Queue
		EB	LT	75		EB	LT	200
			RT	50			RT	350
		SB	TH	275		SB	TH	675
		NB	TH	175		NB	TH	350
			LT	50			LT	475

US 101/NE 20th Street Intersection

The US 101/NE 20th Street intersection is forecast to operate at volume-to-capacity ratio of 0.95 during the weekday PM peak hour which exceeds the critical 0.92 volume-to-capacity ratio under background conditions. In recognition of this finding, a mitigation scenario was evaluated that involves the addition of right-turn overlap phasing to the eastbound right-turn lane and the addition of a separate westbound right-turn lane. As summarized in Table 12, this signal and signal timing modification will improve the intersection to an acceptable 0.89 volume-to-capacity ratio. *Appendix "G" includes the 2040 total traffic mitigation operations analysis worksheets.*

Table 12 - US 101/NE 20th Street Intersection Mitigation Summary, 2040 Total Traffic Conditions

US 101/NE 31 st Street Intersection		Weekday AM Peak Hour	Weekday PM Peak Hour					
Under Existing Intersection Configurations								
	V/C = 0.58	V/C = 0.95						
Mitigation Option #1 – Add overlap phasing to the eastbound right-turn movement and add a separate westbound right-turn lane								
	V/C = 0.58	Approach	Lane	95 th Queue	V/C = 0.89	Approach	Lane	95 th Queue
		EB	LT/TH	50		EB	LT/TH	200
			RT	25			RT	150
		WB	LT	125		WB	LT	300
			LT/TH	150			LT/TH	300
			RT	50			RT	175
		SB	TH/RT	350		SB	TH/RT	625
			LT	75			LT	250
		NB	LT	50		NB	LT	175
			TH/RT	275			TH/RT	950

Note: Hollow arrows represent assumed lane configurations

Summary of US 101/NE 20th Street Intersection Mitigation and Potential Alternative Mobility Targets

The analysis in Table 12 shows that without traffic control and physical improvements, the US 101/NE 20th Street intersection will operate over the 0.92 background volume-to-capacity ratio and over the 0.90 mobility target. With the identified intersection improvements in place (i.e. eastbound right-turn

overlap phasing and a separate westbound right-turn lane on NE 20th Street), some capacity will be restored to the intersection. However, given that the westbound right-turn lane will likely involve right-of-way impacts to the adjacent parcel, the City of Newport may consider adoption of alternative mobility targets along this segment of US 101 as part of its ongoing Transportation System Plan (TSP) update. For example, adoption of an alternative 0.95 or higher mobility target during 30th highest hour conditions, or using an analysis period other than peak season for this segment of US 101 would result in the intersection meeting mobility targets without the costly and impactful right-turn lane improvement.

Alternative Trip Routing Scenario Using Big Creek Road

At the request of the City of Newport, an alternative operations scenario was performed that assumes significant upgrades to Big Creek Road (widened to bi-directional travel and modernized to accommodate multi-modal use) and an associated higher percentage of local trips using this facility as an alternative to US 101. To address this request, a reasonable portion of the localized background growth and the new trips generated by urbanization of the 40 acres was reassigned to Big Creek Road. In summary, each of the study intersections that was previously identified as either operating over capacity or over their respective mobility targets would continue to operate over capacity or over their respective mobility targets. While Big Creek Road would provide some parallel benefit (particularly for trips to/from the local public schools), that benefit has its limitations given the roadways circuitous alignment through established residential neighborhoods and its lack of connections to major retail centers along the US 101 corridor.

TRANSPORTATION PLANNING RULE COMPLIANCE

This section addresses the Oregon Administrative Rule Section 660-12-0060 of the Oregon Transportation Planning Rule (TPR) requirements for the proposed zone change.

TRANSPORTATION PLAN RULE

OAR Section 660-12-0060 Plan and Land Use Regulation Amendments of the TPR sets forth the criteria for evaluating plan and land use regulation amendments. The criteria establish the determination of significant effect on a transportation system resulting from a land use action; where a significant effect is identified, the criteria establish the means for achieving compliance. The relevant portion of this section of the TPR is reproduced below in italics followed by the response for this project in standard text.

660-12-0060 Plan and Land Use Regulation Amendments

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

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

Response: The proposed land exchange and residential zoning of the 40-acre site will not require or result in any changes to the functional classification of any transportation facility in the vicinity of the site.

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

Response: The proposed land exchange and residential zoning of the 40-acre site will not outright require changes to the standards that implement the functional classification system. However, if desired by the City of Newport and ODOT, alternative mobility targets could potentially be adopted to address the operational impacts of the proposed land exchange. See subsequent responses to the (c) below.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to,

transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Response: The proposed land exchange and residential zoning of the 40-acre site would result in future traffic volumes that are consistent with the functional classifications of the roadways in the study area.

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

Response: The proposed land exchange and residential zoning of the 40-acre site would degrade operations of the US 101/NE 36th Street and US 101/NE 31st Street intersections below their respective mobility targets. Signalization and the addition of travel lanes on US 101, NE 36th Street, and NE 31st Street would improve forecast intersection operations back to acceptable levels. Alternatively, signalization, widening to the NE 36th Street and NE 31st Street approaches, and potential adoption of alternative mobility targets would allow operations to be measured at acceptable levels without the significant and costly widening of US 101.

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Response: Without any mitigation measures in place, the proposed land exchange and residential zoning of the 40-acre site would result in further degradation of failing operations at the US 101/NE 25th Street and US 101/NE 20th Street intersections. Modification of current signal phasing would restore the US 101/NE 25th Street intersection to a v/c ratio that is better than the respective mobility target. Modification of current signal phasing and the installation of a separate westbound right-turn lane would restore the US 101/NE 20th Street intersection to a v/c ratio that is better than the respective mobility target. Alternatively, potential adoption of alternative mobility targets would allow operations to be measured at acceptable levels without the significant and costly widening of the westbound NE 20th Street approach.

CONCLUSIONS

Based on the long-term traffic impact analyses detailed in this report, the proposed land exchange and residential zoning of the 40-acre site has the potential to significantly affect the surrounding transportation system. As mitigation for this potential significant effect and to comply with the TPR (OAR Section 660-12-0060), the following intersection improvements can be considered:

The US 101/NE 36th Street Intersection Improvements:

- Capacity Enhancing Projects:
 - Widen the westbound NE 36th Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.90 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 31st Street Intersection

- Capacity Enhancing Projects:
 - Widen the westbound NE 31st Street approach to include a separate left- and right-turn lane.
 - Install a traffic signal
- Additional Projects to Meet the Currently Adopted 0.80 Mobility Target:
 - Widen US 101 to include a second northbound through lane
- Alternative to Meeting the 0.80 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.

US 101/NE 25th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions:
 - Install right-turn overlap phasing on the eastbound approach

US 101/NE 20th Street Intersection

- Projects to Restore the Intersection to Background Traffic Conditions/Mobility Target:
 - Install right-turn overlap phasing on the eastbound approach.
 - Construct a separate westbound right-turn lane on the NE 20th Street approach.
- Alternative to Meeting the 0.90 Mobility Target:
 - City of Newport and ODOT consider the adoption of an alternative mobility target (0.95 or higher) under 30th highest hour conditions or maintain the existing target under other than peak season conditions.


Sincerely,
KITTELSON & ASSOCIATES, INC.



Matt Hughart, AICP
Principal Planner



Susan Wright, P.E.
Principal Engineer



Ali Razmpa
Transportation Analyst

Appendix A Season Adjustment Calculations

SEASONAL ADJUSTMENT CALCULATIONS

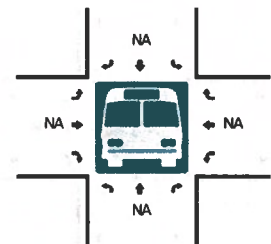
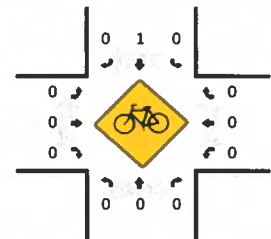
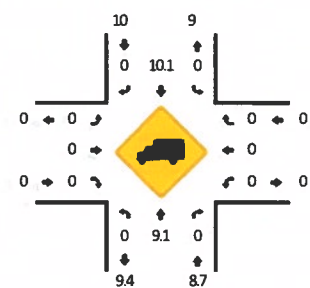
Version 2 of the APM identifies three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATR) located in select locations throughout the State Highway System that collect traffic data 24-hours a day/365 days a year. Within the study area, ATR #21-009 is located on US 101 at NW 25th Street. Given this location is within the study area, the On-Site ATR Method was used to adjust the intersection turning movement counts to 30th highest hour conditions. Since the traffic counts were taken in early June, an average of May and June data was used. The proposed seasonal adjustment factor calculations for ATR #21-009 is summarized in the Table below.

	2013	2014	2015	2016	2017	Avg
Peak Month (August)	127%	129%	122%	124%	123%	125%
Count Month (June)	108%	110%	113%	113%	113%	112%
Count Month (May)	101	100	100	104	104	102%

- The average peak month (August) is: $(127\% + 124\% + 123\%) / 3 = 125\%$
- The average count month (June) is: $(110\% + 113\% + 113\%) / 3 = 112\%$
- The average count month (May) is: $(101\% + 100\% + 104\%) / 3 = 102\%$
- The average of June and May is: $(112\% + 102\%) / 2 = 107\%$
- The season adjustment factor is $125\% / 107\% = 1.17$

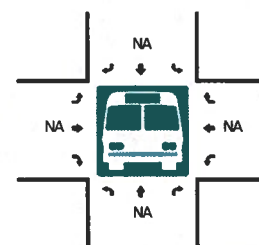
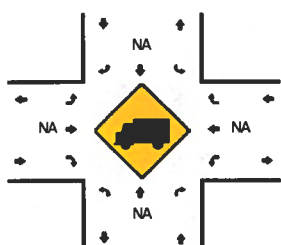
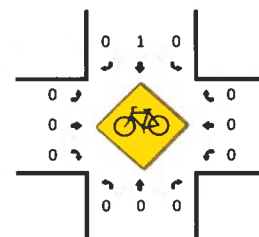
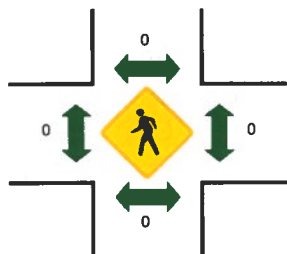
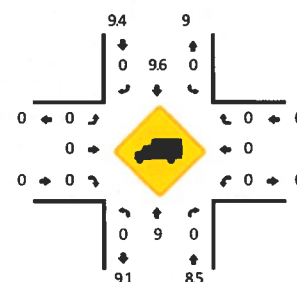
Appendix B Traffic Counts

QC JOB #: 15004601
DATE: Wed, Jun 5 2019



Comments:

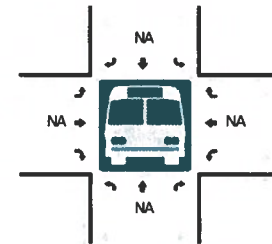
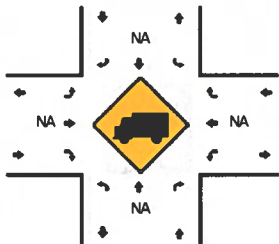
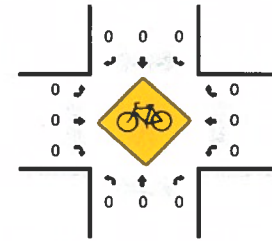
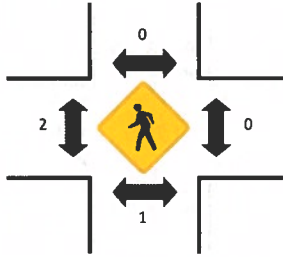
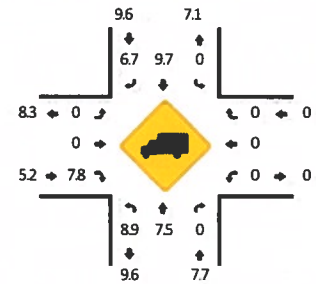
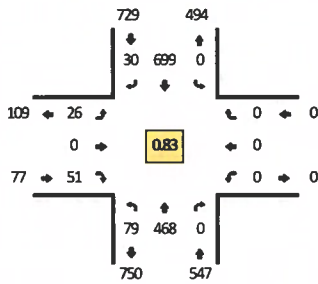
QC JOB #: 15004603
DATE: Wed, Jun 5 2019

Comments:

LOCATION: Hwy 101 -- NW 25th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004605
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



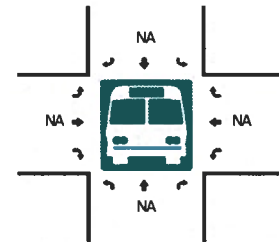
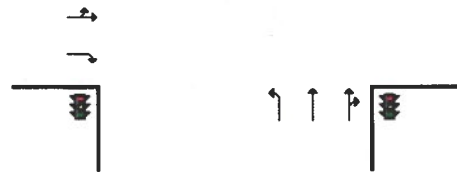
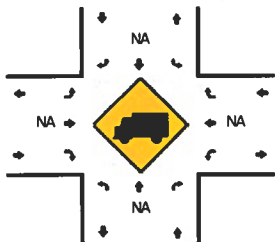
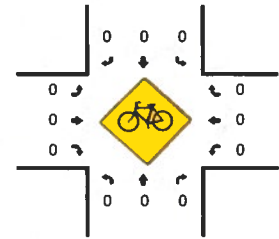
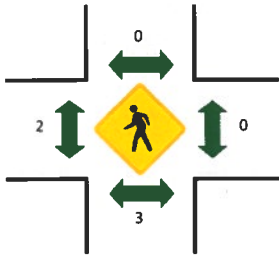
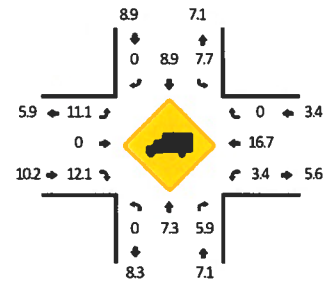
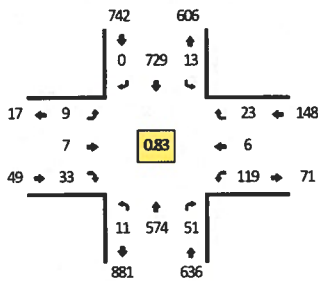
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NW 25th St (Eastbound)				NW 25th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	29	0	0	0	34	3	0	1	0	3	0	0	0	0	0	72	
7:05 AM	4	23	0	0	0	25	0	0	3	0	0	0	0	0	0	0	55	
7:10 AM	2	20	0	0	0	24	1	0	0	0	7	0	0	0	0	0	54	
7:15 AM	1	35	0	0	0	45	3	0	1	0	4	0	0	0	0	0	89	
7:20 AM	4	37	0	0	0	59	1	0	4	0	2	0	0	0	0	0	107	
7:25 AM	5	22	0	0	0	47	2	0	2	0	8	0	0	0	0	0	86	
7:30 AM	5	31	0	0	0	67	4	0	0	0	3	0	0	0	0	0	110	
7:35 AM	6	29	0	0	0	54	2	0	4	0	6	0	0	0	0	0	101	
7:40 AM	6	41	0	0	0	78	4	0	0	0	6	0	0	0	0	0	135	
7:45 AM	7	42	0	0	0	85	2	0	2	0	7	0	0	0	0	0	145	
7:50 AM	7	33	0	0	0	72	2	0	2	0	1	0	0	0	0	0	117	
7:55 AM	6	51	0	0	0	74	2	0	7	0	4	0	0	0	0	0	144	1215
8:00 AM	5	38	0	0	0	37	2	0	2	0	5	0	0	0	0	0	89	1232
8:05 AM	9	57	0	0	0	46	5	0	1	0	3	0	0	0	0	0	121	1298
8:10 AM	3	41	0	0	0	47	2	0	1	0	2	0	0	0	0	0	96	1340
8:15 AM	16	46	0	0	0	33	2	0	1	0	4	0	0	0	0	0	102	1353
8:20 AM	2	33	0	0	0	28	2	0	2	0	3	0	0	0	0	0	70	1316
8:25 AM	7	39	0	0	0	32	3	0	2	0	4	0	0	0	0	0	87	1317
8:30 AM	3	40	0	0	0	54	2	0	3	0	7	0	0	0	0	0	109	1316
8:35 AM	12	33	0	0	0	53	6	0	3	0	9	0	0	0	0	0	116	1331
8:40 AM	8	26	0	0	0	50	8	0	2	0	7	0	0	0	0	0	101	1297
8:45 AM	8	40	0	0	0	41	3	0	2	0	12	0	0	0	0	0	106	1258
8:50 AM	12	34	0	0	0	44	3	0	2	0	5	0	0	0	0	0	100	1241
8:55 AM	6	40	0	0	0	34	3	0	0	0	10	0	0	0	0	0	93	1190
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	80	504	0	0	0	924	24	0	44	0	48	0	0	0	0	0	1624	
Heavy Trucks	4	20	0	0	0	64	0	0	0	0	4	0	0	0	0	0	92	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 20th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004607
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM – 8:20 AM
Peak 15-Min: 7:45 AM – 8:00 AM



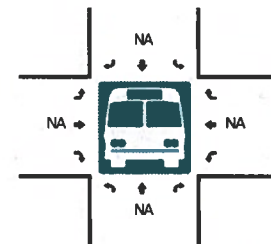
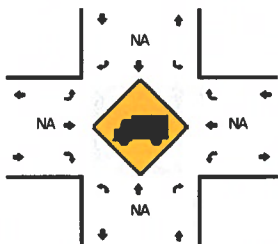
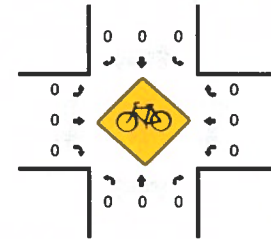
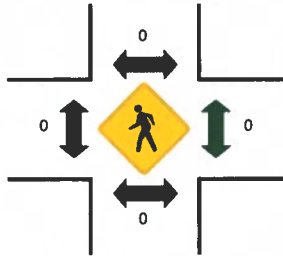
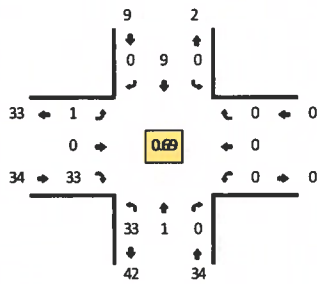
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 20th St (Eastbound)				NE 20th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	31	4	0	2	35	0	0	1	0	2	0	3	0	0	0	78	
7:05 AM	2	28	2	0	0	28	0	0	1	2	0	0	4	0	1	0	68	
7:10 AM	1	22	0	0	2	30	1	0	0	0	3	0	6	0	1	0	66	
7:15 AM	2	37	2	0	0	46	0	0	0	0	1	0	8	1	0	0	97	
7:20 AM	1	44	4	0	0	46	0	0	0	1	4	0	13	0	2	0	115	
7:25 AM	1	22	3	0	1	63	0	0	1	0	1	0	15	1	1	0	109	
7:30 AM	1	42	5	0	3	65	0	0	1	0	2	0	9	0	2	0	130	
7:35 AM	0	32	2	0	2	61	0	0	1	0	2	0	11	1	1	0	113	
7:40 AM	1	50	3	0	0	70	0	0	1	1	1	0	9	0	1	0	137	
7:45 AM	0	55	2	0	1	88	0	0	0	0	3	0	11	0	3	0	163	
7:50 AM	0	47	5	0	0	77	0	0	2	2	4	0	11	1	0	0	149	
7:55 AM	3	55	3	0	0	80	0	0	1	1	5	0	8	0	6	0	162	1387
8:00 AM	1	47	5	0	2	42	0	0	1	2	1	0	11	1	4	0	117	1426
8:05 AM	0	74	5	0	2	45	0	0	0	0	5	0	2	0	0	0	133	1491
8:10 AM	2	42	2	0	1	54	0	0	0	0	4	0	7	1	2	0	115	1540
8:15 AM	1	64	12	0	1	38	0	0	1	0	1	0	12	1	1	0	132	1575
8:20 AM	2	33	2	0	1	30	1	0	1	1	1	0	15	0	4	0	91	1551
8:25 AM	3	40	6	0	2	21	0	0	2	1	1	0	11	0	1	0	88	1530
8:30 AM	0	40	1	0	3	58	1	0	2	0	2	0	5	1	2	0	115	1515
8:35 AM	2	47	7	0	0	60	1	0	1	1	6	0	13	0	1	0	139	1541
8:40 AM	4	35	2	0	4	42	0	0	0	4	8	0	9	1	4	0	113	1517
8:45 AM	3	50	2	0	3	55	2	0	2	1	4	0	5	2	0	0	129	1483
8:50 AM	2	50	7	0	3	48	0	1	0	1	6	0	6	0	1	0	125	1459
8:55 AM	4	47	7	0	3	46	0	0	2	1	4	0	6	1	1	0	122	1419
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	628	40	0	4	980	0	0	12	12	48	0	120	4	36	0	1896	
Heavy Trucks	0	28	4	0	0	68	0	0	0	0	0	0	12	0	0	0	112	
Pedestrians	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	8	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: NE Harney St -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004609
DATE: Wed, Jun 5 2019

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



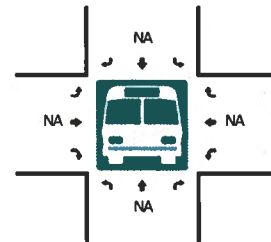
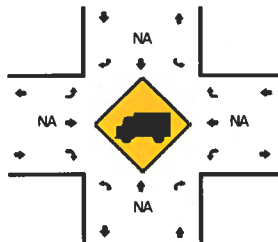
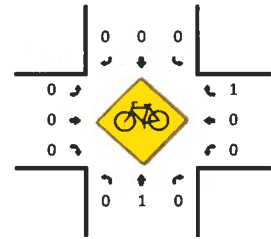
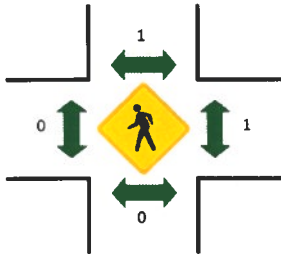
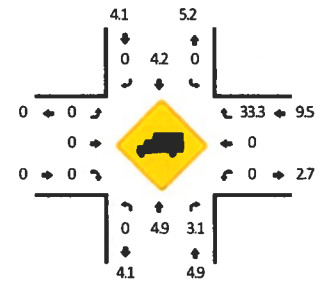
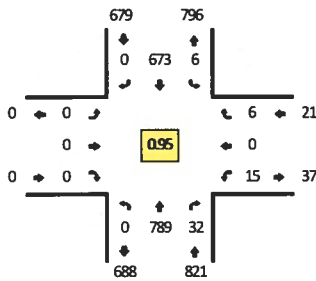
5-Min Count Period Beginning At	NE Harney St (Northbound)				NE Harney St (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
7:05 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	
7:10 AM	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	
7:15 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	
7:20 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:25 AM	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	6	
7:30 AM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6	
7:35 AM	4	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	9	
7:40 AM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	
7:45 AM	6	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	8	
7:50 AM	1	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	7	
7:55 AM	3	1	0	0	0	1	0	0	0	0	8	0	0	0	0	0	13	68
8:00 AM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	71
8:05 AM	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	7	75
8:10 AM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	73
8:15 AM	2	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	7	77
8:20 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	78
8:25 AM	2	1	0	0	0	2	0	0	0	0	3	0	0	0	0	0	8	80
8:30 AM	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	77
8:35 AM	1	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	6	74
8:40 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	71
8:45 AM	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6	69
8:50 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	64
8:55 AM	1	0	0	0	0	1	0	0	0	1	0	3	0	0	0	0	6	57
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	40	4	0	0	0	16	0	0	0	0	52	0	0	0	0	0	112	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Hwy 101 -- NE 36th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004602
DATE: Wed, Jun 5 2019

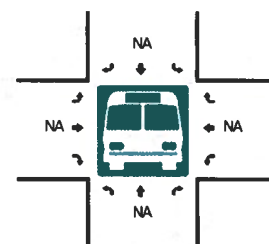
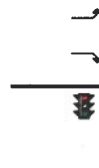
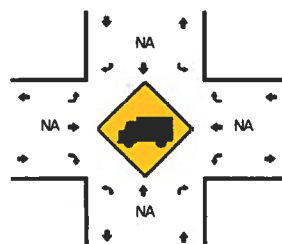
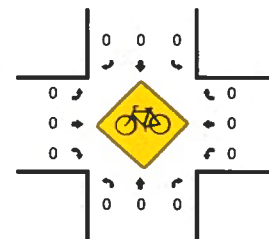
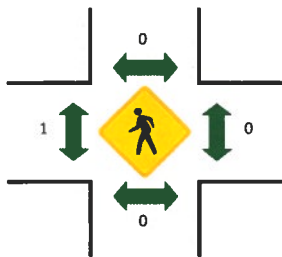
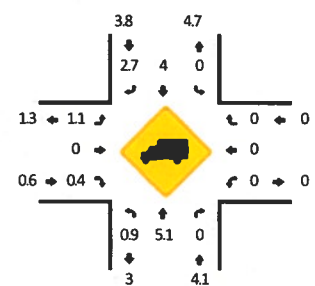
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:50 PM -- 5:05 PM



5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 36th St (Eastbound)				NE 36th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	59	2	0	0	64	0	0	0	0	0	0	3	0	1	0	129	
4:05 PM	0	72	3	0	0	56	0	0	0	0	0	0	2	0	1	0	134	
4:10 PM	0	64	3	0	0	60	0	0	0	0	0	0	0	0	0	0	127	
4:15 PM	0	57	1	0	0	58	0	0	0	0	0	0	0	0	0	0	116	
4:20 PM	0	63	3	0	0	57	0	0	0	0	0	0	0	0	1	0	124	
4:25 PM	0	63	5	0	2	56	0	0	0	0	0	0	1	0	1	0	128	
4:30 PM	0	66	2	0	0	47	0	0	0	0	0	0	0	0	1	0	116	
4:35 PM	0	72	4	0	0	44	0	0	0	0	0	0	4	0	0	0	124	
4:40 PM	0	57	2	0	0	67	0	0	0	0	0	0	1	0	2	0	129	
4:45 PM	0	67	3	0	0	48	0	0	0	0	0	0	3	0	0	0	121	
4:50 PM	0	71	3	0	1	71	0	0	0	0	0	0	1	0	0	0	147	
4:55 PM	0	60	1	0	2	41	0	1	0	0	0	0	2	0	0	0	107	1502
5:00 PM	0	77	2	0	0	68	0	0	0	0	0	0	1	0	0	0	148	1521
5:05 PM	0	65	2	0	0	52	0	0	0	0	0	0	4	0	0	0	123	1510
5:10 PM	0	64	4	0	0	45	0	0	0	0	0	0	0	0	0	0	113	1496
5:15 PM	0	49	3	0	1	47	0	0	0	0	0	0	0	0	0	0	100	1480
5:20 PM	0	55	5	0	2	43	0	0	0	0	0	0	2	0	0	0	107	1463
5:25 PM	0	63	3	0	0	60	0	0	0	0	0	0	2	0	2	0	130	1465
5:30 PM	0	60	5	0	0	43	0	0	0	0	0	0	2	0	1	0	111	1460
5:35 PM	0	66	7	0	2	57	0	0	0	0	0	0	0	0	0	0	132	1468
5:40 PM	0	53	6	0	1	61	0	0	0	0	0	0	2	0	0	0	123	1462
5:45 PM	0	40	3	0	0	45	0	0	0	0	0	0	0	0	1	0	89	1430
5:50 PM	0	53	1	0	0	45	0	0	0	0	0	0	2	0	2	0	103	1386
5:55 PM	0	49	1	0	1	21	0	0	0	0	0	0	2	0	1	0	75	1354
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	832	24	0	12	720	0	4	0	0	0	0	16	0	0	0	1608	
Heavy Trucks	0	48	0	0	0	32	0	0	0	0	0	0	0	0	0	0	80	
Pedestrians	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Railroad																		
Stopped Buses																		

Comments:

QC JOB #: 15004606
DATE: Wed, Jun 5 2019

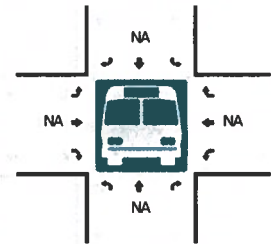
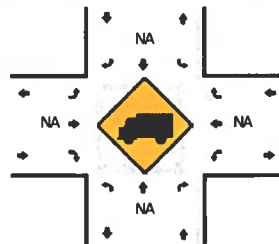
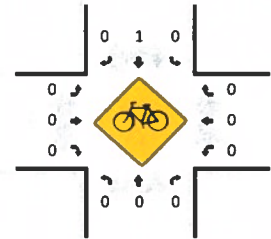
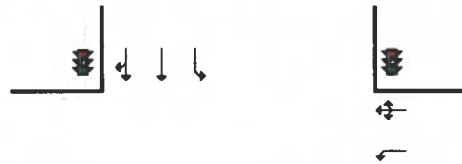
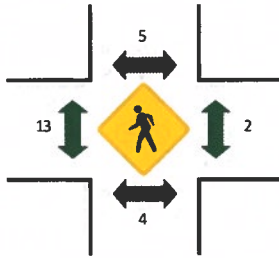
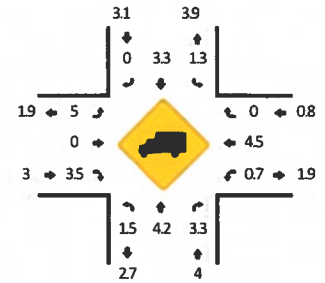
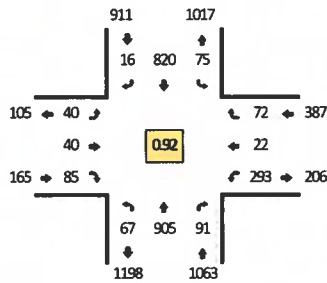


Comments:

LOCATION: Hwy 101 -- NE 20th St
CITY/STATE: Lincoln, OR

QC JOB #: 15004608
DATE: Wed, Jun 5 2019

Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:40 PM -- 4:55 PM



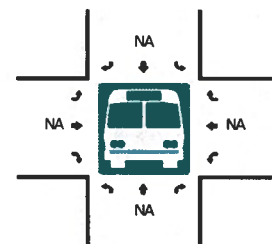
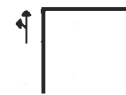
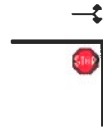
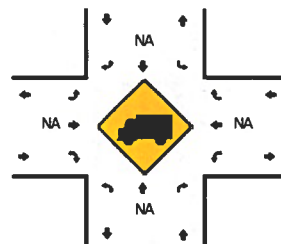
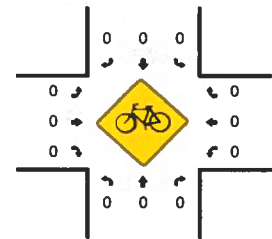
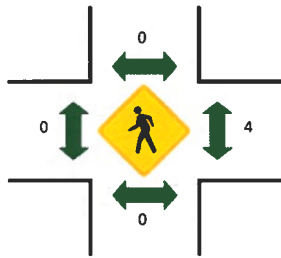
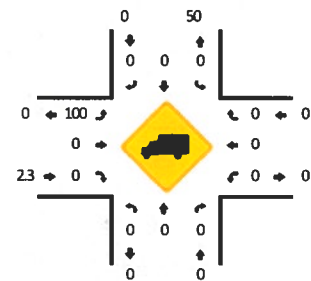
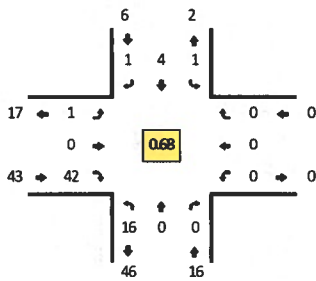
5-Min Count Period Beginning At	Hwy 101 (Northbound)				Hwy 101 (Southbound)				NE 20th St (Eastbound)				NE 20th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	96	12	0	7	71	1	0	2	1	10	0	14	1	5	0	226	
4:05 PM	5	55	3	0	3	51	0	0	5	6	6	0	35	4	4	0	177	
4:10 PM	4	84	13	0	8	69	1	0	3	3	5	0	20	1	6	0	217	
4:15 PM	9	51	7	0	9	48	0	0	3	3	10	0	24	2	9	0	175	
4:20 PM	2	87	13	0	10	77	1	0	5	3	3	0	22	3	1	0	227	
4:25 PM	7	71	2	0	6	57	4	0	0	4	5	0	33	0	5	0	194	
4:30 PM	8	96	9	0	4	70	2	0	4	3	11	0	14	1	4	0	226	
4:35 PM	8	72	5	0	5	58	1	0	1	6	6	0	41	6	3	0	212	
4:40 PM	5	85	9	0	4	81	1	0	2	4	10	0	16	1	5	0	223	
4:45 PM	7	71	7	0	7	76	3	0	5	1	12	0	35	2	13	0	239	
4:50 PM	1	95	5	0	6	86	1	0	3	3	5	0	14	0	5	0	224	
4:55 PM	10	39	5	0	10	65	0	0	6	3	7	0	21	2	10	0	178	2518
5:00 PM	1	99	13	0	3	82	2	0	3	1	5	0	18	0	7	0	234	2526
5:05 PM	6	54	8	0	6	61	1	0	5	1	9	0	28	2	8	0	189	2538
5:10 PM	3	97	6	0	8	80	2	0	5	1	4	0	21	4	8	0	239	2560
5:15 PM	3	57	7	0	5	52	2	0	2	9	4	0	26	2	3	0	172	2557
5:20 PM	4	90	6	0	3	60	1	0	1	0	4	0	18	6	2	0	195	2525
5:25 PM	2	68	7	0	4	60	0	0	4	0	9	0	30	3	5	0	192	2523
5:30 PM	5	90	9	0	3	60	2	0	1	1	7	0	22	0	2	0	202	2499
5:35 PM	3	76	8	0	5	50	1	0	4	3	7	0	30	2	4	0	193	2480
5:40 PM	4	62	7	0	10	74	2	0	2	2	6	0	20	2	5	0	196	2453
5:45 PM	4	48	7	0	6	47	0	0	4	5	8	0	14	1	6	0	150	2364
5:50 PM	1	65	6	0	3	62	0	0	3	1	5	0	12	1	3	0	162	2302
5:55 PM	7	43	8	0	2	47	0	0	0	3	2	0	27	1	4	0	144	2268
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	52	1004	84	0	68	972	20	0	40	32	108	0	260	12	92	0	2744	
Heavy Trucks	0	24	0	0	0	32	0	0	8	0	4	0	4	4	0	0	76	
Pedestrians	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	36	
Bicycles	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
Railroad Stopped Buses																		

Comments:

LOCATION: NE Harney St -- NE 31st St
CITY/STATE: Lincoln, OR

QC JOB #: 15004610
DATE: Wed, Jun 5 2019

Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:10 PM -- 4:25 PM



5-Min Count Period Beginning At	NE Harney St (Northbound)				NE Harney St (Southbound)				NE 31st St (Eastbound)				NE 31st St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	6	
4:05 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	
4:10 PM	4	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	11	
4:15 PM	2	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	7	
4:20 PM	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	0	6	
4:25 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	
4:30 PM	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	
4:35 PM	1	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	4	
4:40 PM	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:50 PM	1	0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	6	
4:55 PM	1	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	7	64
5:00 PM	2	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	7	65
5:05 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	64
5:10 PM	2	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	9	62
5:15 PM	1	0	0	0	0	1	0	0	0	0	10	0	0	0	0	0	12	67
5:20 PM	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	6	67
5:25 PM	0	2	0	0	0	1	0	0	0	0	10	0	0	0	0	0	13	76
5:30 PM	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	5	76
5:35 PM	2	0	0	0	0	1	0	0	1	0	5	0	0	0	0	0	9	81
5:40 PM	2	0	0	0	0	2	1	0	0	0	7	0	0	0	0	0	12	88
5:45 PM	2	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	8	96
5:50 PM	0	1	0	0	0	1	0	0	0	0	5	0	0	0	0	0	7	97
5:55 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	93
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	24	0	0	0	0	8	0	0	0	0	64	0	0	0	0	0	96	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Appendix C Existing Intersection Operations

Newport UGP Swap

Vistro File: H:\...\Vistro.vistro
Report File: H:\...\Exist AM.pdf

Scenario 1 Exist AM
10/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hwy 101/36th St	Two-way stop	HCM 6th Edition	WB Left	0.367	35.2	E
2	Hwy 101/31st St	Two-way stop	HCM 6th Edition	WB Left	0.426	47.8	E
3	Hwy 101/25th St	Signalized	HCM 6th Edition	NB Left	0.541	12.8	B
4	Hwy 101/20th St	Signalized	HCM 6th Edition	SB Left	0.483	16.5	B
5	31st St/Hamey St	Two-way stop	HCM 6th Edition	EB Left	0.001	9.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hwy 101/36th St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 35.2
 Level Of Service: E
 Volume to Capacity (v/c): 0.367

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	r		l		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	438	21	6	777	55	5
Peak Hour Factor	0.8100	0.8100	0.8100	0.8100	0.8100	0.8100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	135	6	2	240	17	2
Total Analysis Volume [veh/h]	541	26	7	959	68	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.37	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.57	0.00	35.18	21.96
Movement LOS	A	A	A	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.00	1.64	1.64
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.52	0.00	41.08	41.08
d_A, Approach Delay [s/veh]	0.00		0.06		34.11	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	1.61					
Intersection LOS	E					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 47.8
 Level Of Service: E
 Volume to Capacity (v/c): 0.426

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	454	32	15	817	49	5
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	138	10	5	249	15	2
Total Analysis Volume [veh/h]	554	39	18	996	60	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.43	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.69	0.00	47.83	28.80
Movement LOS	A	A	A	A	E	D
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	1.96	1.96
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.38	0.00	49.08	49.08
d_A, Approach Delay [s/veh]	0.00		0.15		46.10	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	1.91					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 3: Hwy 101/25th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 12.8
Level Of Service: B
Volume to Capacity (v/c): 0.541

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	548	818	35	30	60
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	165	246	11	9	18
Total Analysis Volume [veh/h]	111	660	986	42	36	72
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	91	76	76	8	8
g / C, Green / Cycle	0.09	0.83	0.69	0.69	0.08	0.08
(v / s)_j Volume / Saturation Flow Rate	0.08	0.23	0.35	0.36	0.02	0.06
s, saturation flow rate [veh/h]	1395	2835	1451	1430	1500	1249
c, Capacity [veh/h]	132	2349	1006	991	114	95
d1, Uniform Delay [s]	49.00	2.11	8.02	8.08	48.11	49.81
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.29	0.30	1.86	1.94	1.16	8.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.28	0.51	0.52	0.32	0.76
d, Delay for Lane Group [s/veh]	59.29	2.41	9.87	10.02	49.27	58.64
Lane Group LOS	E	A	A	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	1.11	5.68	5.74	0.97	2.17
50th-Percentile Queue Length [ft/ln]	84.14	27.72	141.99	143.41	24.30	54.23
95th-Percentile Queue Length [veh/ln]	6.06	2.00	9.59	9.66	1.75	3.90
95th-Percentile Queue Length [ft/ln]	151.45	49.90	239.70	241.61	43.74	97.62

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.29	2.41	9.94	10.02	49.27	58.64
Movement LOS	E	A	A	B	D	E
d_A, Approach Delay [s/veh]	10.60		9.95		55.52	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	12.79					
Intersection LOS	B					
Intersection V/C	0.541					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10604.79	0.00	4788.15
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.665	2.560	2.035
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.768	4.981	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 16.5
Level Of Service: B
Volume to Capacity (v/c): 0.483

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	202	18	5	257	0	3	2	12	42	2	8
Total Analysis Volume [veh/h]	16	810	72	18	1028	0	13	10	47	167	8	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	74	74	2	74	74	6	6	10	10
g / C, Green / Cycle	0.01	0.67	0.67	0.02	0.67	0.67	0.06	0.06	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.01	0.27	0.27	0.01	0.32	0.32	0.01	0.04	0.07	0.07
s, saturation flow rate [veh/h]	1667	1653	1606	1561	1626	1626	1702	1325	1627	1391
c, Capacity [veh/h]	24	1107	1075	25	1090	1090	97	76	145	124
d1, Uniform Delay [s]	53.95	8.24	8.24	53.91	8.72	8.72	49.58	50.68	48.99	49.04
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.10	1.13	25.28	1.46	1.46	0.91	6.00	6.18	7.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.40	0.40	0.72	0.47	0.47	0.24	0.62	0.77	0.78
d, Delay for Lane Group [s/veh]	74.06	9.34	9.37	79.19	10.19	10.19	50.50	56.68	55.18	56.53
Lane Group LOS	E	A	A	E	B	B	D	E	E	E
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.58	4.75	4.63	0.67	5.82	5.82	0.63	1.39	3.24	2.85
50th-Percentile Queue Length [ft/ln]	14.40	118.81	115.71	16.75	145.60	145.60	15.74	34.74	80.95	71.13
95th-Percentile Queue Length [veh/ln]	1.04	8.33	8.16	1.21	9.78	9.78	1.13	2.50	5.83	5.12
95th-Percentile Queue Length [ft/ln]	25.92	208.20	203.91	30.15	244.55	244.55	28.33	62.53	145.71	128.03

Version 7.00-05

Movement, Approach, & Intersection Results

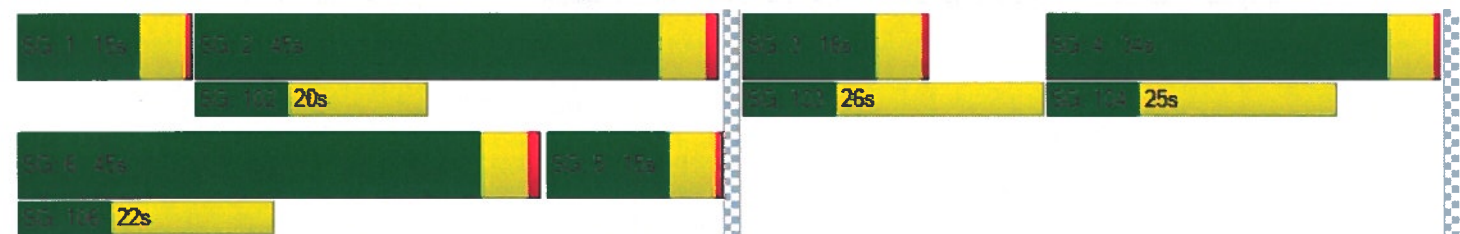
d_M, Delay for Movement [s/veh]	74.06	9.36	9.37	79.19	10.19	10.19	50.50	50.50	56.68	55.64	56.53	56.53
Movement LOS	E	A	A	E	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	10.51			11.37			54.65			55.80		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	16.55											
Intersection LOS	B											
Intersection V/C	0.483											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	3730.20			0.00			5789.53			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	2.726			2.679			1.979			2.049		
Crosswalk LOS	B			B			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	727			727			209			536		
d_b, Bicycle Delay [s]	22.27			22.27			44.10			29.46		
I_b,int, Bicycle LOS Score for Intersection	2.300			2.423			1.675			1.903		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 9.4
Level Of Service: A
Volume to Capacity (v/c): 0.001

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		→		↔	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	9	0	1	33
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	3	0	0	12
Total Analysis Volume [veh/h]	48	1	13	0	1	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	0.00	9.38	8.52
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.14	0.14
95th-Percentile Queue Length [ft/ln]	2.33	2.33	0.00	0.00	3.61	3.61
d_A, Approach Delay [s/veh]	7.18		0.00		8.54	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.94					
Intersection LOS	A					

Newport UGP Swap

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Report File: H:\...\Exist AM.pdf

Scenario 1 Exist AM
10/15/2019

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
1	Hwy 101/36th St	438	21	6	777	55	5	1302

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	Hwy 101/31st St	454	32	15	817	49	5	1372

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
3	Hwy 101/25th St	92	548	818	35	30	60	1583

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Hwy 101/20th St	13	672	60	15	853	0	11	8	39	139	7	27	1844

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	31st St/Hamey St	33	1	9	0	1	33	77

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Report File: H:\...\Exist PM.pdf

Scenario 2 Exist PM
10/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hwy 101/36th St	Two-way stop	HCM 6th Edition	WB Left	0.147	37.7	E
2	Hwy 101/31st St	Two-way stop	HCM 6th Edition	WB Left	0.366	61.1	F
3	Hwy 101/25th St	Signalized	HCM 6th Edition	EB Right	0.835	41.8	D
4	Hwy 101/20th St	Signalized	HCM 6th Edition	NB Left	0.743	35.9	D
5	31st St/Hamey St	Two-way stop	HCM 6th Edition	EB Left	0.001	10.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hwy 101/36th St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 37.7
Level Of Service: E
Volume to Capacity (v/c): 0.147

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration	IR		RI		TT	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	923	37	7	787	18	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	243	10	2	207	5	2
Total Analysis Volume [veh/h]	972	39	7	828	19	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.15	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	10.24	0.00	37.73	21.85
Movement LOS	A	A	B	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	0.60	0.60
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.76	0.00	14.88	14.88
d_A, Approach Delay [s/veh]	0.00		0.09		33.45	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	0.50					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 61.1
Level Of Service: F
Volume to Capacity (v/c): 0.366

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	954	57	19	784	35	4
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	248	15	5	204	9	1
Total Analysis Volume [veh/h]	994	59	20	817	36	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.37	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	10.75	0.00	61.13	36.21
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.10	0.00	1.54	1.54
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.39	0.00	38.56	38.56
d_A, Approach Delay [s/veh]	0.00		0.26		58.64	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.33					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Hwy 101/25th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 41.8
Level Of Service: D
Volume to Capacity (v/c): 0.835

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	900	798	88	104	294
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	250	222	24	29	82
Total Analysis Volume [veh/h]	289	1000	887	98	116	327
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	25	84	55	55	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.19	0.35	0.32	0.33	0.08	0.24
s, saturation flow rate [veh/h]	1488	2881	1525	1473	1488	1339
c, Capacity [veh/h]	309	2017	693	670	316	285
d1, Uniform Delay [s]	46.73	8.28	26.35	26.80	40.33	47.23
k, delay calibration	0.26	0.50	0.50	0.50	0.08	0.42
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.08	0.87	6.08	7.05	0.53	95.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.50	0.71	0.74	0.37	1.15
d, Delay for Lane Group [s/veh]	70.81	9.15	32.43	33.85	40.86	142.75
Lane Group LOS	E	A	C	C	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	10.50	5.69	12.29	12.63	2.99	16.00
50th-Percentile Queue Length [ft/ln]	262.58	142.37	307.36	315.65	74.63	399.95
95th-Percentile Queue Length [veh/ln]	15.82	9.61	18.04	18.45	5.37	24.23
95th-Percentile Queue Length [ft/ln]	395.45	240.21	451.12	461.34	134.33	605.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.81	9.15	33.06	33.85	40.86	142.75
Movement LOS	E	A	C	C	D	F
d_A, Approach Delay [s/veh]	22.98		33.14		116.07	
Approach LOS	C		C		F	
d_I, Intersection Delay [s/veh]	41.84					
Intersection LOS	D					
Intersection V/C	0.835					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	7520.16
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.801	2.656	2.224
Crosswalk LOS	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.196	4.945	4.132
Bicycle LOS	F	E	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 35.9
Level Of Service: D
Volume to Capacity (v/c): 0.743

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	288	29	24	261	5	13	13	27	93	7	23
Total Analysis Volume [veh/h]	85	1151	115	96	1042	21	51	51	108	373	28	91
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v _{do} , Outbound Pedestrian Volume crossing	2			3			2			2		
v _{di} , Inbound Pedestrian Volume crossing	2			2			2			3		
v _{co} , Outbound Pedestrian Volume crossing	1			6			7			1		
v _{ci} , Inbound Pedestrian Volume crossing	1			7			6			1		
v _{ab} , Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	60	60	9	61	61	12	12	21	21
g / C, Green / Cycle	0.06	0.50	0.50	0.07	0.51	0.51	0.10	0.10	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.05	0.38	0.38	0.06	0.31	0.31	0.06	0.08	0.15	0.15
s, saturation flow rate [veh/h]	1654	1695	1641	1654	1709	1694	1707	1423	1654	1538
c, Capacity [veh/h]	107	847	820	120	867	859	167	139	291	271
d1, Uniform Delay [s]	55.36	24.19	24.26	54.88	21.21	21.23	52.03	52.89	48.19	48.19
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.24	6.28	6.60	8.88	3.26	3.31	2.69	6.82	6.22	6.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.76	0.76	0.80	0.62	0.62	0.61	0.78	0.87	0.87
d, Delay for Lane Group [s/veh]	64.60	30.46	30.86	63.76	24.47	24.53	54.72	59.70	54.41	54.83
Lane Group LOS	E	C	C	E	C	C	D	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.81	15.74	15.42	3.16	11.30	11.24	3.07	3.44	7.91	7.39
50th-Percentile Queue Length [ft/ln]	70.35	393.40	385.59	78.92	282.50	281.05	76.86	85.93	197.79	184.81
95th-Percentile Queue Length [veh/ln]	5.07	22.24	21.86	5.68	16.81	16.74	5.53	6.19	12.52	11.85
95th-Percentile Queue Length [ft/ln]	126.63	556.04	546.61	142.06	420.32	418.52	138.34	154.68	313.11	296.29

Movement, Approach, & Intersection Results

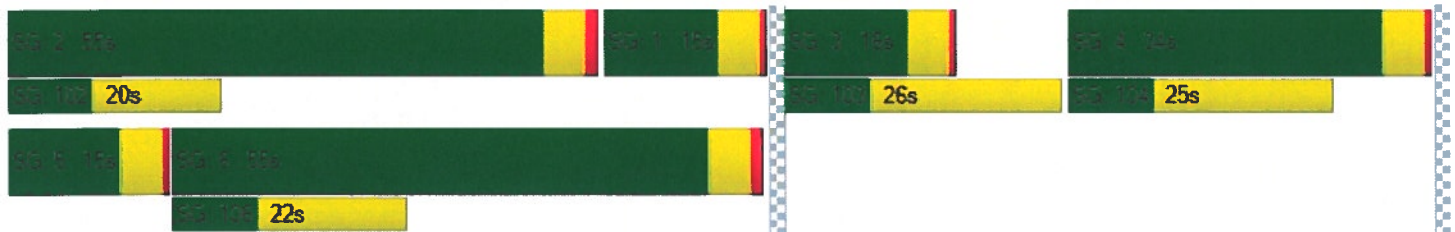
d_M, Delay for Movement [s/veh]	64.60	30.64	30.86	63.76	24.50	24.53	54.72	54.72	59.70	54.55	54.83	54.83
Movement LOS	E	C	C	E	C	C	D	D	E	D	D	D
d_A, Approach Delay [s/veh]	32.79			27.75			57.29			54.61		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	35.92											
Intersection LOS	D											
Intersection V/C	0.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2300.69			1895.36			782.97			4315.98		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	2.873			2.791			2.065			2.198		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	833			833			192			492		
d_b, Bicycle Delay [s]	20.42			20.43			49.05			34.13		
I_b,int, Bicycle LOS Score for Intersection	2.674			2.516			1.906			2.371		
Bicycle LOS	B			B			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.001

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↰		↱		↔	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	5	1	1	49
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	2	0	0	18
Total Analysis Volume [veh/h]	28	0	7	1	1	72
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	7.27	0.00	0.00	0.00	10.19	8.58
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.22	0.22
95th-Percentile Queue Length [ft/ln]	1.33	1.33	0.00	0.00	5.47	5.47
d_A, Approach Delay [s/veh]	7.27		0.00		8.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.63					
Intersection LOS	B					

Newport UGP Swap

Vistro File: H:\...\Vistro.vistro
Report File: H:\...\Exist PM.pdfScenario 2 Exist PM
10/15/2019

Turning Movement Volume: Summary

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
1	Hwy 101/36th St	923	37	7	787	18	7	1779

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	Hwy 101/31st St	954	57	19	784	35	4	1853

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
3	Hwy 101/25th St	260	900	798	88	104	294	2444

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Hwy 101/20th St	78	1059	106	88	959	19	47	47	99	343	26	84	2955

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	31st St/Hamey St	19	0	5	1	1	49	75

Appendix D Crash Data Summary Sheets

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

[illegible]

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

[illegible][illegible][illegible]

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

[illegible]

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

COUNTY CITY URBAN AREA	RD# CMPT/MLG MILEPNT LRS	FC FIRST SECOND STREET INTERSECTION	CONN #	SEQ#	RD CHAR DIRECT LOCNTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT SURF DRVMY LIGHT SVRTY	WTHR COLL TYP	CRASH TYP	SPLC USE TRLR QTY OWNER V# VEH TYPE	MOVE FROM TO	P# TYPE SVRTY	PRTC INJ E X RES	A S G E LICNS LOC ERROR	ACTN
2016 LINCOLN 12P NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 03	3-LEG N 0	TRF SIGNAL N N	N CLR S-OTHER TURN	N DRY TURN	01 NONE 9 TURN-L E S	02 NONE 9 STRGHT N/A N S	PSNGR CAR	01 DRVR NONE	00 U UNK	000 000	000
2014 LINCOLN 9A NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 04	CROSS N 0	TRF SIGNAL N N	N RAIN ANGL-OTH TURN	N WET TURN	01 NONE 0 TURN-R PRVTE S E	02 NONE 9 TURN-L N/A E S	PSNGR CAR	01 DRVR NONE	00 U UNK	000 000	000
2014 LINCOLN 11A NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 04	CROSS N 0	TRF SIGNAL N N	N CLR ANGL-OTH ANGL	N WET ANGL	01 NONE 0 STRGHT PRVTE S N	02 NONE 0 STRGHT PRVTE W E	PSNGR CAR	01 DRVR INJC	44 M OR-Y	000 000	000
2015 LINCOLN 10A NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 04	CROSS N 0	TRF SIGNAL N N	N CLR S-OTHER TURN	N DRY TURN	01 NONE 0 TURN-L PRVTE S W	02 NONE 0 STRGHT PRVTE E W	PSNGR CAR	01 DRVR NONE	70 M OTH-Y	020 N-RES	000
2015 LINCOLN 10A NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 04	CROSS N 0	TRF SIGNAL N N	N CLR S-OTHER TURN	N DRY TURN	01 NONE 0 TURN-L PRVTE S W	02 NONE 0 STRGHT PRVTE E W	PSNGR CAR	01 DRVR NONE	57 M OR-Y	026 OR>25	000
2015 LINCOLN 10A NEWPORT 124 3 10.79	1 MN 139.32 000900100S00	14 0 20TH ST		1	INTER CN 04	CROSS N 0	TRF SIGNAL N N	N CLR S-OTHER TURN	N DRY TURN	01 NONE 0 TURN-L PRVTE S W	02 NONE 0 STRGHT PRVTE E W	PSNGR CAR	01 DRVR NONE	64 M OR-Y	000 OR<25	000

DLN COUNTY

US 101 Oregon Coast Highway (009) & NE 20th St
January 1, 2013 through December 31, 2017

E /TIME /LONG	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RNDBT DRVMY	WTHR SURF LIGHT	CRASH_TYP COLL_TYP SVRTY	SPL USE TRLR QTY V# OWNER	MOVE FROM TO	PRTC TYPE	INJ SVRTY	A G E X RES	PED LOC ERROR	ACTN
10/2016 12P 24 3 10.79	17 0	OREGON COAST HY 20TH ST 1	INTER E 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR INJ	01 PRVTE PSNGR CAR	0 E W					000 000
									02 PRVTE PSNGR CAR	0 E W				026 OR<25	011 000
15/2016 7P 24 3 10.79	17 0	OREGON COAST HY 20TH ST 1	INTER E 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR PDO	01 N/A PSNGR CAR	9 E W					000 000
									02 N/A PSNGR CAR	9 E W					011 000

TRANSLATION LIST

LONG DESCRIPTION

NO ACTION OR NON-WARRANTED
 SKIDDED
 GETTING ON OR OFF STOPPED OR PARKED VEHICLE
 OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
 SLOWED DOWN
 AVOIDING MANEUVER
 PARALLEL PARKING
 ANGLE PARKING
 PASSENGER INTERFERING WITH DRIVER
 STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
 STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
 STOPPED WHILE EXECUTING A TURN
 EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
 PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
 TURNED ON RED AFTER STOPPING
 LOST CONTROL OF VEHICLE
 ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
 ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
 BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
 CAR RAN AWAY - NO DRIVER
 STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
 VEHICLE STALLED OR DISABLED
 DEAD BY UNASSOCIATED CAUSE
 FATIGUED, SLEEPY, ASLEEP
 DRIVER BLINDED BY SUN
 DRIVER BLINDED BY HEADLIGHTS
 PHYSICALLY ILL
 VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
 PURSUING OR ATTEMPTING TO STOP A VEHICLE
 PASSING SITUATION
 VEHICLE PARKED BEYOND CURB OR SHOULDER
 VEHICLE CROSSED EARTH OR GRASS MEDIAN
 CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 DRIVER'S ATTENTION DISTRACTED
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
 STANDING OR LYING IN ROADWAY
 ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
 MERGING

: TRANSLATION LIST

LONG DESCRIPTION

BLINDED BY WATER SPRAY

OTHER ACTION

UNKNOWN ACTION

: TRANSLATION LIST

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-ITURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-ISTOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

LONG DESCRIPTION

NO CAUSE ASSOCIATED AT THIS LEVEL
 TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
 DID NOT YIELD RIGHT-OF-WAY
 PASSED STOP SIGN OR RED FLASHER
 DISREGARDED TRAFFIC SIGNAL
 DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
 IMPROPER OVERTAKING
 FOLLOWED TOO CLOSELY
 MADE IMPROPER TURN
 ALCOHOL OR DRUG INVOLVED
 OTHER IMPROPER DRIVING
 MECHANICAL DEFECT
 OTHER (NOT IMPROPER DRIVING)
 IMPROPER CHANGE OF TRAFFIC LANES
 DISREGARDED OTHER TRAFFIC CONTROL DEVICE
 WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO.
 DRIVER DROWSY/FATIGUED/SLEEPY
 PHYSICAL ILLNESS
 NON-MOTORIST ILLEGALLY IN ROADWAY
 NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
 VEHICLE IMPROPERLY PARKED
 DEFECTIVE STEERING MECHANISM
 INADEQUATE OR NO BRAKES
 VEHICLE LOST LOAD OR LOAD SHIFTED
 TIRE FAILURE
 PHANTOM / NON-CONTACT VEHICLE
 INATTENTION
 NON-MOTORIST INATTENTION
 FAILED TO AVOID VEHICLE AHEAD
 DRIVING IN EXCESS OF POSTED SPEED
 SPEED RACING (PER PAR)
 CARELESS DRIVING (PER PAR)
 RECKLESS DRIVING (PER PAR)
 AGGRESSIVE DRIVING (PER PAR)
 ROAD RAGE (PER PAR)
 VIEW OBSCURED
 IMPROPER USE OF MEDIAN OR SHOULDER
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD

CODE TRANSLATION LIST

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

NG DESCRIPTION

T LICENSED (HAD NEVER BEEN LICENSED)
 LID OREGON LICENSE
 LID LICENSE, OTHER STATE OR COUNTRY
 SPENDED/REVOKED
 PIRE
 HER NON-VALID LICENSE
 KNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

E TRANSLATION LIST

FULL DESCRIPTION

NO ERROR
 WIDE TURN
 CUT CORNER ON TURN
 FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
 LEFT TURN IN FRONT OF ONCOMING TRAFFIC
 LEFT TURN WHERE PROHIBITED
 TURNED FROM WRONG LANE
 TURNED INTO WRONG LANE
 U-TURNED ILLEGALLY
 IMPROPERLY STOPPED IN TRAFFIC LANE
 IMPROPER SIGNAL OR FAILURE TO SIGNAL
 BACKING IMPROPERLY (NOT PARKING)
 IMPROPERLY PARKED
 IMPROPER START LEAVING PARKED POSITION
 IMPROPER START FROM STOPPED POSITION
 IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
 INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
 DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
 ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
 DISREGARDED OTHER DRIVER'S SIGNAL
 DISREGARDED TRAFFIC SIGNAL
 DISREGARDED STOP SIGN OR FLASHING RED
 DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
 DISREGARDED POLICE OFFICER OR FLAGMAN
 DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
 DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
 FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
 DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
 DID NOT HAVE RIGHT-OF-WAY
 FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
 PASSING ON A CURVE
 PASSING ON THE WRONG SIDE
 PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
 PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
 PASSING AT INTERSECTION
 PASSING ON CREST OF HILL
 PASSING IN "NO PASSING" ZONE
 PASSING IN FRONT OF ONCOMING TRAFFIC
 CUTTING IN (TWO LANES - TWO WAY ONLY)
 DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

E TRANSLATION LIST

FULL DESCRIPTION

DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
 FAILED TO STOP FOR SCHOOL BUS
 FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
 FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
 STRADDLING OR DRIVING ON WRONG LANES
 IMPROPER CHANGE OF TRAFFIC LANES
 WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
 DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
 OPENED DOOR INTO ADJACENT TRAFFIC LANE
 IMPEDING TRAFFIC
 DRIVING IN EXCESS OF POSTED SPEED
 RECKLESS DRIVING (PER PAR)
 CARELESS DRIVING (PER PAR)
 SPEED RACING (PER PAR)
 CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 STANDING OR LYING IN ROADWAY
 IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
 ELUDING / ATTEMPT TO ELUDE
 FAILED TO NEGOTIATE A CURVE
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD
 DRIVER MISJUDGED CLEARANCE
 OVER-CORRECTING
 CODE NOT IN USE
 OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
 UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

MODE TRANSLATION LIST

LONG DESCRIPTION

OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
 PASSENGER INTERFERED WITH DRIVER
 ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
 PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
 "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
 PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
 HITCHHIKER (SOLICITING A RIDE)
 PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
 GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
 OVERTURNED AFTER FIRST HARMFUL EVENT
 VEHICLE BEING PUSHED
 VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
 VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
 VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
 AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
 AT OR ON LIGHT-RAIL RIGHT-OF-WAY
 TRAIN STRUCK VEHICLE
 VEHICLE STRUCK TRAIN
 VEHICLE STRUCK RAILROAD CAR ON ROADWAY
 JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
 TRAILER OR TOWED VEHICLE OVERTURNED
 TRAILER CONNECTION BROKE
 DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
 VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
 WHEEL CAME OFF
 HOOD FLEW UP
 LOST LOAD, LOAD MOVED OR SHIFTED
 TIRE FAILURE
 PET: CAT, DOG AND SIMILAR
 STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
 HORSE, MULE, OR DONKEY
 HORSE AND RIDER
 WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
 DEER OR ELK, WAPITI
 ANIMAL-DRAWN VEHICLE
 CULVERT, OPEN LOW OR HIGH MANHOLE
 IMPACT ATTENUATOR
 PARKING METER
 CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
 JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
 LEADING EDGE OF GUARDRAIL
 GUARD RAIL (NOT METAL MEDIAN BARRIER)
 MEDIAN BARRIER (RAISED OR METAL)
 RETAINING WALL OR TUNNEL WALL
 BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
 BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
 BRIDGE PILLAR OR COLUMN
 BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
 TRAFFIC RAISED ISLAND
 GORE
 POLE - TYPE UNKNOWN
 POLE - POWER OR TELEPHONE
 POLE - STREET LIGHT ONLY
 POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
 POLE - SIGN BRIDGE
 STOP OR YIELD SIGN

CODE TRANSLATION LIST

LONG DESCRIPTION

OTHER SIGN, INCLUDING STREET SIGNS
 HYDRANT
 DELINEATOR OR MARKER (REFLECTOR POSTS)
 MAILBOX
 TREE, STUMP OR SHRUBS
 TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
 WIRE OR CABLE ACROSS OR OVER THE ROAD
 TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
 PERMANENT SIGN OR BARRICADE IN/OFF ROAD
 SLIDES, FALLEN OR FALLING ROCKS
 FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
 EQUIPMENT WORKING IN/OFF ROAD
 OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
 WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
 ROCK, BRICK OR OTHER SOLID WALL
 OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
 OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
 BRIDGE OR ROAD CAVE IN
 HIGH WATER
 SNOW BANK
 LOW OR HIGH SHOULDER AT PAVEMENT EDGE
 CUT SLOPE OR DITCH EMBANKMENT
 STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
 STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
 VEHICLE OBSCURED VIEW
 VEGETATION OBSCURED VIEW
 VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
 WIND GUST
 VEHICLE IMMERSED IN BODY OF WATER
 FIRE OR EXPLOSION
 FENCE OR BUILDING, ETC.
 CRASH RELATED TO ANOTHER SEPARATE CRASH
 TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
 BUILDING OR OTHER STRUCTURE
 OTHER (PHANTOM) NON-CONTACT VEHICLE
 CELL PHONE (ON PAR OR DRIVER IN USE)
 TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
 GUY WIRE
 BERM (EARTHEN OR GRAVEL MOUND)
 GRAVEL IN ROADWAY
 ABRUPT EDGE
 CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
 FIXED OBJECT, UNKNOWN TYPE.
 NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
 TEXTING
 WORK ZONE WORKER
 PASSENGER RIDING ON VEHICLE EXTERIOR
 PASSENGER RIDING ON PEDALCYCLE
 PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
 PEDESTRIAN IN MOTORIZED WHEELCHAIR
 LAW ENFORCEMENT / POLICE OFFICER
 "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
 NON-MOTORIST STRUCK VEHICLE
 STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
 VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
 AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

CODE TRANSLATION LIST

LONG DESCRIPTION

VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
 DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
 DISTRACTED BY OTHER ELECTRONIC DEVICE
 RAIL CROSSING DROP-ARM GATE
 EXPANSION JOINT
 JERSEY BARRIER
 WIRE OR CABLE MEDIAN BARRIER
 FENCE
 LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
 SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
 SHOULDER GAVE WAY
 ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
 ROCK SLIDE OR LAND SLIDE
 CURVE PRESENT AT CRASH LOCATION
 VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
 VIEW OBSCURED BY CURVE
 VIEW OBSCURED BY VERTICAL GRADE / HILL
 VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
 VIEW OBSCURED BY WATER SPRAY
 TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

SIFICATION TRANSLATION LIST

CODE	DESCRIPTION
PAL	ARTERIAL - INTERSTATE
PAL	ARTERIAL - OTHER
ARTERIAL	
COLLECTOR	
COLLECTOR	
PAL	ARTERIAL - INTERSTATE
PAL	ARTERIAL - OTHER FREEWAYS AND EXP
PAL	ARTERIAL - OTHER
ARTERIAL	
COLLECTOR	
COLLECTOR	
L	SYSTEM
L	NON-SYSTEM
N	SYSTEM
N	NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

CODE TRANSLATION LIST

DESCRIPTION
L INJURY (K)
ECTED SERIOUS INJURY (A)
ECTED MINOR INJURY (B)
IBLE INJURY (C)
PRIOR TO CRASH
NJURY - 0 TO 4 YEARS OF AGE
PPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

SHORT		LONG DESCRIPTION	
CODE	DESC		
0	UNK	UNKNOWN	
1	DAY	DAYLIGHT	
2	DLIT	DARKNESS - WITH STREET LIGHTS	
3	DARK	DARKNESS - NO STREET LIGHTS	
4	DAWN	DAWN (TWILIGHT)	
5	DUSK	DUSK (TWILIGHT)	

ODE TRANSLATION LIST

G DESCRIPTION
MEDIAN
ID MEDIAN BARRIER
TH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

CODE TRANSLATION LIST

LONG DESCRIPTION
UNKNOWN
TRAIGHT AHEAD
TURNING RIGHT
TURNING LEFT
MAKING A U-TURN
BACKING
TAPPED IN TRAFFIC
PAKED - PROPERLY
PAKED - IMPROPERLY
PAKING MANEUVER

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

LONG DESCRIPTION
ON - NOT IN ROADWAY
ON - INSIDE CROSSWALK
ON - IN ROADWAY, OUTSIDE CROSSWALK
ON - IN ROADWAY, XWALK AVAIL UNKNOWN
SECTION - IN ROADWAY
SECTION - ON SHOULDER
SECTION - ON MEDIAN
SECTION - WITHIN TRAFFIC RIGHT-OF-WAY
SECTION - IN BIKE PATH OR PARKING LANE
SECTION - ON SIDEWALK
SECTION - ON BIKE LANE
SECTION - IN BIKE LANE
SECTION - INSIDE MID-BLOCK CROSSWALK
SECTION - IN PARKING LANE
SECTION - IN ROADWAY
SECTION - IN ROADWAY

CODE TRANSLATION LIST

LONG DESCRIPTION
UNKNOWN
INTERSECTION
DRIVEWAY OR ALLEY
TRAIGHT ROADWAY
TRANSITION
CURVE (HORIZONTAL CURVE)
OPEN ACCESS OR TURNOUT
GRADE (VERTICAL CURVE)
RIDGE STRUCTURE
TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

ODE TRANSLATION LIST

ONG DESCRIPTION

OT COLLECTED FOR PDO CRASHES
 ASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
 RUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
 ARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
 RUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
 RUCK WITH NON-DETACHABLE BED, PANEL, ETC.
 OPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
 CHOOOL BUS (INCLUDES VAN)
 THER BUS
 OTORCYCLE, DIRT BIKE
 THER: FORKLIFT, BACKHOE, ETC.
 OTORHOME
 OTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
 TV
 OTORIZED SCOOTER (STANDING)
 NOWMOBILE
 NKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE SHORT DESC LONG DESCRIPTION

0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

US 101 Oregon Coast Highway (009) & NE 25th St
January 1, 2013 through December 31, 2017

ME NG	COUNTY CITY URBAN AREA	RD# CMPT/MLG MILEPNT LRS	FC FIRST STREET SECOND STREET INTERSECTION	CONN # STREET STREET SEQ#	RD CHAR DIRECT LOC	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	SPL USE TRLR QTY OWNER V#	MOVE FROM TO	PRTC INJ P#	TYPE SVRTY E	A S E LICNS X RES	LOC ERROR	ACTN
2013 5P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER UN	CROSS	N	TRF SIGNAL	N	UNK	S-1STOP	01	NONE	0	STRGHT	UN UN	
		139.11	NW 25TH ST		06	0		N	DUSK	PDO	PSNGR CAR	01	DRVR	NONE	38 F	OR-Y	026
24	3 10.80	000900100S00		1				02	NONE	0	STOP	UN UN					011
								PSNGR	CAR		01	DRVR	NONE	00 U	UNK	000	000
2014 1P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER N	3-LEG	N	TRF SIGNAL	N	CLR	S-1STOP	01	NONE	0	STRGHT	N S	
		139.11	NW 25TH ST		06	0		N	DAY	PDO	PSNGR CAR	01	DRVR	NONE	00 M	UNK	045,047
24	3 10.80	000900100S00		1				02	NONE	0	STOP	N S					011
								PSNGR	CAR		01	DRVR	NONE	55 F	OR-Y	000	000
2013 9P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER S	3-LEG	N	L-GRN-SIG	N	CLR	S-1STOP	01	NONE	0	STRGHT	S N	
		139.11	NW 25TH ST		06	0		N	DAY	PDO	PSNGR CAR	01	DRVR	NONE	60 F	OR-Y	043
24	3 10.80	000900100S00		1				02	NONE	0	STOP	S N					012
								PSNGR	CAR		01	DRVR	NONE	46 F	OR-Y	000	000
2013 12P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER W	3-LEG	N	TRF SIGNAL	Y	RAIN	FIX OBJ	01	NONE	1	TURN-R	N W	
		139.11	NW 25TH ST		05	0		N	DAY	PDO	SEMI TOW	01	DRVR	NONE	63 M	OR-Y	002,080
24	3 10.80	000900100S00		1													000
2014 1P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER CN	3-LEG	N	TRF SIGNAL	N	CLR	S-1STOP	01	NONE	0	STRGHT	N S	
		139.11	NW 25TH ST		01	0		N	DAY	INJ	PSNGR CAR	01	DRVR	NONE	64 M	OR-Y	026
24	3 10.79	000900100S00		1				02	NONE	0	STOP	N S					011
								PSNGR	CAR		01	DRVR	NONE	65 M	OR-Y	000	000
											02	PSNG	INJC	68 F		000	000

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
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January 1, 2013 through December 31, 2017

ME NG	COUNTY CITY URBAN AREA	RD# CMT/MLG MILEPNT LRS	FC CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVMY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	MOVE FROM TO	SPCL USE TRLR QTY OWNER VEH TYPE	P# TYPE	INJ SVRTY	A S E X RES	LICNS PED LOC ERROR	ACT'N	
2014 11P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	1	INTER CN	3-LEG N	N RAIN N WET	S-1STOP REAR	01 NONE 0 TURN-R N W	PSNGR CAR	01 DRVR	NONE	34 M	OR-Y OR<25	000 043,016	000 038
124	3 10.80	139.11 000900100S00		NW 25TH ST		01	0	N DLIT	PDO	PSNGR CAR	02 PSNG NO<5	02 F	000	01 M	000	000	000
											03 PSNG NO<5	01 M	000	04 M	000	000	000
											04 PSNG NO<5	04 M	000				
											02 NONE 0 STOP PRVTE	N W					013
											PSNGR CAR	01 DRVR	NONE	56 F	OR-Y OR<25	000	000
2014 5P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	1	INTER CN	3-LEG N	N RAIN N WET	O-OTHER TURN	01 NONE 0 TURN-R N W	PSNGR CAR	01 DRVR	NONE	78 M	OR-Y OR<25	000	006 000
124	3 10.80	139.11 000900100S00		NW 25TH ST		01	0	N DLIT	INJ	PSNGR CAR	02 NONE 0 TURN-L PRVTE	S W					000
											PSNGR CAR	01 DRVR	INJC	34 F	OR-Y OR>25	028	000
2017 10A	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	1	INTER CN	3-LEG N	N CLR N DRY	ANGL-OTH TURN	01 NONE 9 TURN-R N/A W S	PSNGR CAR	01 DRVR	NONE	00 U	UNK UNK	000	000
124	3 10.80	139.11 000900100S00		NW 25TH ST		03	0	N DAY	PDO	PSNGR CAR	02 NONE 9 STRGHT N/A N S						000
											PSNGR CAR	01 DRVR	NONE	00 U	UNK UNK	000	000
											PSNGR CAR	01 DRVR	NONE	00 U	UNK UNK	000	000

TRANSLATION LIST

LONG DESCRIPTION

NO ACTION OR NON-WARRANTED
 SKIDDED
 GETTING ON OR OFF STOPPED OR PARKED VEHICLE
 OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
 SLOWED DOWN
 AVOIDING MANEUVER
 PARALLEL PARKING
 ANGLE PARKING
 PASSENGER INTERFERING WITH DRIVER
 STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
 STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
 STOPPED WHILE EXECUTING A TURN
 EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
 PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
 TURNED ON RED AFTER STOPPING
 LOST CONTROL OF VEHICLE
 ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
 ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
 BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
 CAR RAN AWAY - NO DRIVER
 STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
 VEHICLE STALLED OR DISABLED
 DEAD BY UNASSOCIATED CAUSE
 FATIGUED, SLEEPY, ASLEEP
 DRIVER BLINDED BY SUN
 DRIVER BLINDED BY HEADLIGHTS
 PHYSICALLY ILL
 VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
 PURSUING OR ATTEMPTING TO STOP A VEHICLE
 PASSING SITUATION
 VEHICLE PARKED BEYOND CURB OR SHOULDER
 VEHICLE CROSSED EARTH OR GRASS MEDIAN
 CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 DRIVER'S ATTENTION DISTRACTED
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
 STANDING OR LYING IN ROADWAY
 ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
 MERGING

TRANSLATION LIST

LONG DESCRIPTION

BLINDED BY WATER SPRAY

OTHER ACTION

UNKNOWN ACTION

: TRANSLATION LIST

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

LONG DESCRIPTION

NO CAUSE ASSOCIATED AT THIS LEVEL
 TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
 DID NOT YIELD RIGHT-OF-WAY
 PASSED STOP SIGN OR RED FLASHER
 DISREGARDED TRAFFIC SIGNAL
 DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
 IMPROPER OVERTAKING
 FOLLOWED TOO CLOSELY
 MADE IMPROPER TURN
 ALCOHOL OR DRUG INVOLVED
 OTHER IMPROPER DRIVING
 MECHANICAL DEFECT
 OTHER (NOT IMPROPER DRIVING)
 IMPROPER CHANGE OF TRAFFIC LANES
 DISREGARDED OTHER TRAFFIC CONTROL DEVICE
 WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO.
 DRIVER DROWSY/FATIGUED/SLEEPY
 PHYSICAL ILLNESS
 NON-MOTORIST ILLEGALLY IN ROADWAY
 NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHING
 VEHICLE IMPROPERLY PARKED
 DEFECTIVE STEERING MECHANISM
 INADEQUATE OR NO BRAKES
 VEHICLE LOST LOAD OR LOAD SHIFTED
 TIRE FAILURE
 PHANTOM / NON-CONTACT VEHICLE
 INATTENTION
 NON-MOTORIST INATTENTION
 FAILED TO AVOID VEHICLE AHEAD
 DRIVING IN EXCESS OF POSTED SPEED
 SPEED RACING (PER PAR)
 CARELESS DRIVING (PER PAR)
 RECKLESS DRIVING (PER PAR)
 AGGRESSIVE DRIVING (PER PAR)
 ROAD RAGE (PER PAR)
 VIEW OBSCURED
 IMPROPER USE OF MEDIAN OR SHOULDER
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

CODE TRANSLATION LIST

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

NG DESCRIPTION

T LICENSED (HAD NEVER BEEN LICENSED)
 LID OREGON LICENSE
 LID LICENSE, OTHER STATE OR COUNTRY
 SPENDED/REVOKED
 PIRE
 HER NON-VALID LICENSE
 KNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

E TRANSLATION LIST

FULL DESCRIPTION

NO ERROR
 WIDE TURN
 CUT CORNER ON TURN
 FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
 LEFT TURN IN FRONT OF ONCOMING TRAFFIC
 LEFT TURN WHERE PROHIBITED
 TURNED FROM WRONG LANE
 TURNED INTO WRONG LANE
 U-TURNED ILLEGALLY
 IMPROPERLY STOPPED IN TRAFFIC LANE
 IMPROPER SIGNAL OR FAILURE TO SIGNAL
 BACKING IMPROPERLY (NOT PARKING)
 IMPROPERLY PARKED
 IMPROPER START LEAVING PARKED POSITION
 IMPROPER START FROM STOPPED POSITION
 IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
 INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
 DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
 ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
 DISREGARDED OTHER DRIVER'S SIGNAL
 DISREGARDED TRAFFIC SIGNAL
 DISREGARDED STOP SIGN OR FLASHING RED
 DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
 DISREGARDED POLICE OFFICER OR FLAGMAN
 DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
 DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
 FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
 DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
 DID NOT HAVE RIGHT-OF-WAY
 FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
 PASSING ON A CURVE
 PASSING ON THE WRONG SIDE
 PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
 PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
 PASSING AT INTERSECTION
 PASSING ON CREST OF HILL
 PASSING IN "NO PASSING" ZONE
 PASSING IN FRONT OF ONCOMING TRAFFIC
 CUTTING IN (TWO LANES - TWO WAY ONLY)
 DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

E TRANSLATION LIST

FULL DESCRIPTION

DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
 FAILED TO STOP FOR SCHOOL BUS
 FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
 FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
 STRADDLING OR DRIVING ON WRONG LANES
 IMPROPER CHANGE OF TRAFFIC LANES
 WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
 DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
 OPENED DOOR INTO ADJACENT TRAFFIC LANE
 IMPEDING TRAFFIC
 DRIVING IN EXCESS OF POSTED SPEED
 RECKLESS DRIVING (PER PAR)
 CARELESS DRIVING (PER PAR)
 SPEED RACING (PER PAR)
 CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 STANDING OR LYING IN ROADWAY
 IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
 ELUDING / ATTEMPT TO ELUDE
 FAILED TO NEGOTIATE A CURVE
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD
 DRIVER MISJUDGED CLEARANCE
 OVER-CORRECTING
 CODE NOT IN USE
 OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
 UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

ODE TRANSLATION LIST

LONG DESCRIPTION

OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
 PASSENGER INTERFERED WITH DRIVER
 ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
 PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
 "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
 PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
 HITCHHIKER (SOLICITING A RIDE)
 PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
 GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE BEING PUSHED)
 VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
 VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
 VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
 AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
 AT OR ON LIGHT-RAIL RIGHT-OF-WAY
 TRAIN STRUCK VEHICLE
 VEHICLE STRUCK TRAIN
 VEHICLE STRUCK RAILROAD CAR ON ROADWAY
 JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
 TRAILER OR TOWED VEHICLE OVERTURNED
 TRAILER CONNECTION BROKE
 DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
 VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
 WHEEL CAME OFF
 HOOD FLEW UP
 LOST LOAD, LOAD MOVED OR SHIFTED
 TIRE FAILURE
 PET: CAT, DOG AND SIMILAR
 STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
 HORSE, MULE, OR DONKEY
 HORSE AND RIDER
 WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
 DEER OR ELK, WAPITI
 ANIMAL-DRAWN VEHICLE
 CULVERT, OPEN LOW OR HIGH MANHOLE
 IMPACT ATTENUATOR
 PARKING METER
 CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
 JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
 LEADING EDGE OF GUARDRAIL
 GUARD RAIL (NOT METAL MEDIAN BARRIER)
 MEDIAN BARRIER (RAISED OR METAL)
 RETAINING WALL OR TUNNEL WALL
 BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
 BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
 BRIDGE PILLAR OR COLUMN
 BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
 TRAFFIC RAISED ISLAND
 GORE
 POLE - TYPE UNKNOWN
 POLE - POWER OR TELEPHONE
 POLE - STREET LIGHT ONLY
 POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
 POLE - SIGN BRIDGE
 STOP OR YIELD SIGN

CODE TRANSLATION LIST

LONG DESCRIPTION

OTHER SIGN, INCLUDING STREET SIGNS
 HYDRANT
 DELINEATOR OR MARKER (REFLECTOR POSTS)
 MAILBOX
 TREE, STUMP OR SHRUBS
 TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
 WIRE OR CABLE ACROSS OR OVER THE ROAD
 TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
 PERMANENT SIGN OR BARRICADE IN/OFF ROAD
 SLIDES, FALLEN OR FALLING ROCKS
 FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
 EQUIPMENT WORKING IN/OFF ROAD
 OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
 WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
 ROCK, BRICK OR OTHER SOLID WALL
 OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
 OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
 BRIDGE OR ROAD CAVE IN
 HIGH WATER
 SNOW BANK
 LOW OR HIGH SHOULDER AT PAVEMENT EDGE
 CUT SLOPE OR DITCH EMBANKMENT
 STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
 STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
 VEHICLE OBSCURED VIEW
 VEGETATION OBSCURED VIEW
 VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
 WIND GUST
 VEHICLE IMMERSED IN BODY OF WATER
 FIRE OR EXPLOSION
 FENCE OR BUILDING, ETC.
 CRASH RELATED TO ANOTHER SEPARATE CRASH
 TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
 BUILDING OR OTHER STRUCTURE
 OTHER (PHANTOM) NON-CONTACT VEHICLE
 CELL PHONE (ON PAR OR DRIVER IN USE)
 TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
 GUY WIRE
 BERM (EARTHEN OR GRAVEL MOUND)
 GRAVEL IN ROADWAY
 ABRUPT EDGE
 CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
 FIXED OBJECT, UNKNOWN TYPE.
 NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
 TEXTING
 WORK ZONE WORKER
 PASSENGER RIDING ON VEHICLE EXTERIOR
 PASSENGER RIDING ON PEDALCYCLE
 PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
 PEDESTRIAN IN MOTORIZED WHEELCHAIR
 LAW ENFORCEMENT / POLICE OFFICER
 "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
 NON-MOTORIST STRUCK VEHICLE
 STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
 VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
 AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

ODE TRANSLATION LIST

LONG DESCRIPTION

VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
 DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
 DISTRACTED BY OTHER ELECTRONIC DEVICE
 RAIL CROSSING DROP-ARM GATE
 EXPANSION JOINT
 JERSEY BARRIER
 WIRE OR CABLE MEDIAN BARRIER
 FENCE
 LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
 SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
 SHOULDER GAVE WAY
 ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
 ROCK SLIDE OR LAND SLIDE
 CURVE PRESENT AT CRASH LOCATION
 VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
 VIEW OBSCURED BY CURVE
 VIEW OBSCURED BY VERTICAL GRADE / HILL
 VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
 VIEW OBSCURED BY WATER SPRAY
 TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

SIFICATION TRANSLATION LIST

CODE	DESCRIPTION
PAL ARTERIAL - INTERSTATE	
PAL ARTERIAL - OTHER	
ARTERIAL	
COLLECTOR	
COLLECTOR	
PAL ARTERIAL - INTERSTATE	
PAL ARTERIAL - OTHER FREEWAYS AND EXP	
PAL ARTERIAL - OTHER	
ARTERIAL	
COLLECTOR	
COLLECTOR	
L SYSTEM	
L NON-SYSTEM	
N SYSTEM	
N NON-SYSTEM	

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUplet
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

CODE TRANSLATION LIST

DESCRIPTION
L INJURY (K)
ECTED SERIOUS INJURY (A)
ECTED MINOR INJURY (B)
IBLE INJURY (C)
PRIOR TO CRASH
NJURY - 0 TO 4 YEARS OF AGE
PPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

SHORT		LONG DESCRIPTION	
CODE	DESC		
0	UNK	UNKNOWN	
1	DAY	DAYLIGHT	
2	DLIT	DARKNESS - WITH STREET LIGHTS	
3	DARK	DARKNESS - NO STREET LIGHTS	
4	DAWN	DAWN (TWILIGHT)	
5	DUSK	DUSK (TWILIGHT)	

ODE TRANSLATION LIST

G DESCRIPTION
MEDIAN
ID MEDIAN BARRIER
TH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYA
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN '
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL

RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE

020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WM W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

ODE TRANSLATION LIST

ONG DESCRIPTION
OT COLLECTED FOR PDO CRASHES
ASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
RUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
ARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
RUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
RUCK WITH NON-DETACHABLE BED, PANEL, ETC.
OPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
CHOO BUS (INCLUDES VAN)
THER BUS
OTORCYCLE, DIRT BIKE
THER: FORKLIFT, BACKHOE, ETC.
OTORHOME
OTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
TV
OTORIZED SCOOTER (STANDING)
NOWMOBILE
NKNOWN VEHICLE TYPE

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

US 101 Oregon Coast Highway (009) & NE 31st St
January 1, 2013 through December 31, 2017

ME NG	COUNTY CITY	RD#	FC	CONN #	CMPT/MLG FIRST STREET	SECOND STREET	INTERSECTION SEQ#	RD CHAR DIRECT	INT-TYP (MIDIAN)	INT-REL	OFFRD WTHR	CRASH TYP	TRLR QTY	MOVE FROM	OWNER	V#	VEH TYPE	P#	PRTC INJ	SVRTY	E X	RES	LOC	ERROR	ACTN	
2013	LINCOLN	1	14					INTER	3-LEG N	STOP SIGN	N RAIN	S-1STOP	01	NONE	0	STRGHT										
	3P NEWPORT	MN	0	NE 31ST ST				CN			N WET	REAR		PRVTE	N S										000	
	24 3 14.35	NEWPORT UA	138.73	OREGON COAST HY			1	01	0		N DAY	PDO		PSNGR CAR				01	DRVR	NONE	20	M	OR-Y	026	000	
																							OR<25			
														02	NONE	0	STOP								011	
														PRVTE	N S										000	
														PSNGR CAR				01	DRVR	NONE	44	F	OR-Y	000	000	
																						OR>25				
2015	LINCOLN	1	14					INTER	CROSS N	STOP SIGN	N CLR	S-1STOP	01	NONE	0	STRGHT										
	5P NEWPORT	MN	0	NE 31ST ST				CN			N DRY	REAR		PRVTE	W E										000	
	24 3 14.35	NEWPORT UA	138.73	OREGON COAST HY			1	01	0		N DAY	PDO		PSNGR CAR				01	DRVR	NONE	00	M	UNK	026	000	
																							OR<25			
														02	NONE	0	STOP								012	
														PRVTE	W E										000	
														PSNGR CAR				01	DRVR	NONE	78	F	OR-Y	000	000	
																							OR<25			
2015	LINCOLN	1	14					INTER	3-LEG N	STOP SIGN	N CLR	ANGL-OTH	01	NONE	0	STRGHT										
	8A NEWPORT	MN	0	NE 31ST ST				CN			N DRY	TURN		PRVTE	S N										000	
	24 3 14.35	NEWPORT UA	138.73	OREGON COAST HY			1	02	0		N DAWN	PDO		PSNGR CAR				01	DRVR	NONE	70	M	OR-Y	000	000	
																							OR<25			
														02	NONE	0	TURN-L								015	
														PRVTE	E S										000	
														PSNGR CAR				01	DRVR	NONE	17	M	OR-Y	028	000	
																							OR<25			
2016	LINCOLN	1	14					INTER	3-LEG N	STOP SIGN	N CLR	ANGL-OTH	01	NONE	0	TURN-L										
	9A NEWPORT	MN	0	NE 31ST ST				CN			N DRY	TURN		PRVTE	E S										015	
	24 3 14.35	NEWPORT UA	138.73	OREGON COAST HY			1	02	0		N DAY	INJ		PSNGR CAR				01	DRVR	NONE	91	F	OR-Y	028	000	
																							OR<25			
														02	NONE	0	STRGHT								000	
														PRVTE	S N										000	
														PSNGR CAR				01	DRVR	INJC	69	M	OR-Y	000	000	
																							OR<25			
2015	LINCOLN	1	14					INTER	3-LEG N	STOP SIGN	N RAIN	ANGL-OTH	01	NONE	0	TURN-L										
	7P NEWPORT	MN	0	NE 31ST ST				CN			N WET	TURN		PRVTE	E S										015	
	24 3 14.35	NEWPORT UA	138.73	OREGON COAST HY			1	04	0		N DARK	PDO		PSNGR CAR				01	DRVR	NONE	46	M	OR-Y	028	000	
																							OR<25			

US 101 Oregon Coast Highway (009) & NE 31st St
January 1, 2013 through December 31, 2017

[illegible]

: TRANSLATION LIST

LONG DESCRIPTION

NO ACTION OR NON-WARRANTED
 SKIDDED
 GETTING ON OR OFF STOPPED OR PARKED VEHICLE
 OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
 SLOWED DOWN
 AVOIDING MANEUVER
 PARALLEL PARKING
 ANGLE PARKING
 PASSENGER INTERFERING WITH DRIVER
 STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
 STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
 STOPPED WHILE EXECUTING A TURN
 EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
 PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
 TURNED ON RED AFTER STOPPING
 LOST CONTROL OF VEHICLE
 ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
 ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
 BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
 CAR RAN AWAY - NO DRIVER
 STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
 VEHICLE STALLED OR DISABLED
 DEAD BY UNASSOCIATED CAUSE
 FATIGUED, SLEEPY, ASLEEP
 DRIVER BLINDED BY SUN
 DRIVER BLINDED BY HEADLIGHTS
 PHYSICALLY ILL
 VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
 PURSUING OR ATTEMPTING TO STOP A VEHICLE
 PASSING SITUATION
 VEHICLE PARKED BEYOND CURB OR SHOULDER
 VEHICLE CROSSED EARTH OR GRASS MEDIAN
 CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 DRIVER'S ATTENTION DISTRACTED
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
 STANDING OR LYING IN ROADWAY
 ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
 MERGING

TRANSLATION LIST

LONG DESCRIPTION

BLINDED BY WATER SPRAY
OTHER ACTION
UNKNOWN ACTION

TRANSLATION LIST

LONG DESCRIPTION

NO CAUSE ASSOCIATED AT THIS LEVEL
 TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
 DID NOT YIELD RIGHT-OF-WAY
 PASSED STOP SIGN OR RED FLASHER
 DISREGARDED TRAFFIC SIGNAL
 DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
 IMPROPER OVERTAKING
 FOLLOWED TOO CLOSELY
 MADE IMPROPER TURN
 ALCOHOL OR DRUG INVOLVED
 OTHER IMPROPER DRIVING
 MECHANICAL DEFECT
 OTHER (NOT IMPROPER DRIVING)
 IMPROPER CHANGE OF TRAFFIC LANES
 DISREGARDED OTHER TRAFFIC CONTROL DEVICE
 WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO.
 DRIVER DROWSY/FATIGUED/SLEEPY
 PHYSICAL ILLNESS
 NON-MOTORIST ILLEGALLY IN ROADWAY
 NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
 VEHICLE IMPROPERLY PARKED
 DEFECTIVE STEERING MECHANISM
 INADEQUATE OR NO BRAKES
 VEHICLE LOST LOAD OR LOAD SHIFTED
 TIRE FAILURE
 PHANTOM / NON-CONTACT VEHICLE
 INATTENTION
 NON-MOTORIST INATTENTION
 FAILED TO AVOID VEHICLE AHEAD
 DRIVING IN EXCESS OF POSTED SPEED
 SPEED RACING (PER PAR)
 CARELESS DRIVING (PER PAR)
 RECKLESS DRIVING (PER PAR)
 AGGRESSIVE DRIVING (PER PAR)
 ROAD RAGE (PER PAR)
 VIEW OBSCURED
 IMPROPER USE OF MEDIAN OR SHOULDER
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

CODE TRANSLATION LIST

DRIVER RESIDENCE CODE TRANSLATION LIST

NG DESCRIPTION

1. T LICENSED (HAD NEVER BEEN LICENSED)
 2. LID OREGON LICENSE
 3. LID LICENSE, OTHER STATE OR COUNTRY
 4. SPENDED/REVOKED
 9. PIRE
 10. HER NON-VALID LICENSE
 11. KNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

RES CODE SHORT DESC LONG DESCRIPTION
 1 OR<25 OREGON RESIDENT WITHIN 25 MILE OF HOME
 2 OR>25 OREGON RESIDENT 25 OR MORE MILES FROM HOME
 3 OR-? OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
 4 N-RES NON-RESIDENT
 9 UNK UNKNOWN IF OREGON RESIDENT

E TRANSLATION LIST

FULL DESCRIPTION

NO ERROR
 WIDE TURN
 CUT CORNER ON TURN
 FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
 LEFT TURN IN FRONT OF ONCOMING TRAFFIC
 LEFT TURN WHERE PROHIBITED
 TURNED FROM WRONG LANE
 TURNED INTO WRONG LANE
 U-TURNED ILLEGALLY
 IMPROPERLY STOPPED IN TRAFFIC LANE
 IMPROPER SIGNAL OR FAILURE TO SIGNAL
 BACKING IMPROPERLY (NOT PARKING)
 IMPROPERLY PARKED
 IMPROPER START LEAVING PARKED POSITION
 IMPROPER START FROM STOPPED POSITION
 IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
 INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
 DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
 ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
 DISREGARDED OTHER DRIVER'S SIGNAL
 DISREGARDED TRAFFIC SIGNAL
 DISREGARDED STOP SIGN OR FLASHING RED
 DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
 DISREGARDED POLICE OFFICER OR FLAGMAN
 DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
 DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
 FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
 DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
 DID NOT HAVE RIGHT-OF-WAY
 FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
 PASSING ON A CURVE
 PASSING ON THE WRONG SIDE
 PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
 PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
 PASSING AT INTERSECTION
 PASSING ON CREST OF HILL
 PASSING IN "NO PASSING" ZONE
 PASSING IN FRONT OF ONCOMING TRAFFIC
 CUTTING IN (TWO LANES - TWO WAY ONLY)
 DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

E TRANSLATION LIST

FULL DESCRIPTION

DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
FAILED TO STOP FOR SCHOOL BUS
FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
STRADDLING OR DRIVING ON WRONG LANES
IMPROPER CHANGE OF TRAFFIC LANES
WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
OPENED DOOR INTO ADJACENT TRAFFIC LANE
IMPEDING TRAFFIC
DRIVING IN EXCESS OF POSTED SPEED
RECKLESS DRIVING (PER PAR)
CARELESS DRIVING (PER PAR)
SPEED RACING (PER PAR)
CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
CROSSING AT INTERSECTION - DIAGONALLY
CROSSING BETWEEN INTERSECTIONS
WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
PLAYING IN STREET OR ROAD
PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
WORKING IN ROADWAY OR ALONG SHOULDER
STANDING OR LYING IN ROADWAY
IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
ELUDING / ATTEMPT TO ELUDE
FAILED TO NEGOTIATE A CURVE
FAILED TO MAINTAIN LANE
RAN OFF ROAD
DRIVER MISJUDGED CLEARANCE
OVER-CORRECTING
CODE NOT IN USE
OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

CODE TRANSLATION LIST

LONG DESCRIPTION

OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
 PASSENGER INTERFERED WITH DRIVER
 ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
 PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
 "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
 PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
 HITCHHIKER (SOLICITING A RIDE)
 PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
 GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
 OVERTURNED AFTER FIRST HARMFUL EVENT
 VEHICLE BEING PUSHED
 VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
 VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
 VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
 AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
 AT OR ON LIGHT-RAIL RIGHT-OF-WAY
 TRAIN STRUCK VEHICLE
 VEHICLE STRUCK TRAIN
 VEHICLE STRUCK RAILROAD CAR ON ROADWAY
 JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
 TRAILER OR TOWED VEHICLE OVERTURNED
 TRAILER CONNECTION BROKE
 DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
 VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
 WHEEL CAME OFF
 HOOD FLEW UP
 LOST LOAD, LOAD MOVED OR SHIFTED
 TIRE FAILURE
 PET: CAT, DOG AND SIMILAR
 STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
 HORSE, MULE, OR DONKEY
 HORSE AND RIDER
 WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
 DEER OR ELK, WAPITI
 ANIMAL-DRAWN VEHICLE
 CULVERT, OPEN LOW OR HIGH MANHOLE
 IMPACT ATTENUATOR
 PARKING METER
 CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
 JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
 LEADING EDGE OF GUARDRAIL
 GUARD RAIL (NOT METAL MEDIAN BARRIER)
 MEDIAN BARRIER (RAISED OR METAL)
 RETAINING WALL OR TUNNEL WALL
 BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
 BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
 BRIDGE PILLAR OR COLUMN
 BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
 TRAFFIC RAISED ISLAND
 GORE
 POLE - TYPE UNKNOWN
 POLE - POWER OR TELEPHONE
 POLE - STREET LIGHT ONLY
 POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
 POLE - SIGN BRIDGE
 STOP OR YIELD SIGN

CODE TRANSLATION LIST

LONG DESCRIPTION

OTHER SIGN, INCLUDING STREET SIGNS
 HYDRANT
 DELINEATOR OR MARKER (REFLECTOR POSTS)
 MAILBOX
 TREE, STUMP OR SHRUBS
 TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
 WIRE OR CABLE ACROSS OR OVER THE ROAD
 TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
 PERMANENT SIGN OR BARRICADE IN/OFF ROAD
 SLIDES, FALLEN OR FALLING ROCKS
 FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
 EQUIPMENT WORKING IN/OFF ROAD
 OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
 WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
 ROCK, BRICK OR OTHER SOLID WALL
 OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
 OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
 BRIDGE OR ROAD CAVE IN
 HIGH WATER
 SNOW BANK
 LOW OR HIGH SHOULDER AT PAVEMENT EDGE
 CUT SLOPE OR DITCH EMBANKMENT
 STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
 STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
 VEHICLE OBSCURED VIEW
 VEGETATION OBSCURED VIEW
 VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
 WIND GUST
 VEHICLE IMMERSSED IN BODY OF WATER
 FIRE OR EXPLOSION
 FENCE OR BUILDING, ETC.
 CRASH RELATED TO ANOTHER SEPARATE CRASH
 TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
 BUILDING OR OTHER STRUCTURE
 OTHER (PHANTOM) NON-CONTACT VEHICLE
 CELL PHONE (ON PAR OR DRIVER IN USE)
 TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
 GUY WIRE
 BERM (EARTHEN OR GRAVEL MOUND)
 GRAVEL IN ROADWAY
 ABRUPT EDGE
 CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
 FIXED OBJECT, UNKNOWN TYPE.
 NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
 TEXTING
 WORK ZONE WORKER
 PASSENGER RIDING ON VEHICLE EXTERIOR
 PASSENGER RIDING ON PEDALCYCLE
 PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
 PEDESTRIAN IN MOTORIZED WHEELCHAIR
 LAW ENFORCEMENT / POLICE OFFICER
 "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
 NON-MOTORIST STRUCK VEHICLE
 STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
 VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
 AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

CODE TRANSLATION LIST

LONG DESCRIPTION

VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
 DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
 DISTRACTED BY OTHER ELECTRONIC DEVICE
 RAIL CROSSING DROP-ARM GATE
 EXPANSION JOINT
 JERSEY BARRIER
 WIRE OR CABLE MEDIAN BARRIER
 FENCE
 LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
 SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
 SHOULDER GAVE WAY
 ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
 ROCK SLIDE OR LAND SLIDE
 CURVE PRESENT AT CRASH LOCATION
 VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
 VIEW OBSCURED BY CURVE
 VIEW OBSCURED BY VERTICAL GRADE / HILL
 VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
 VIEW OBSCURED BY WATER SPRAY
 TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

SIFICATION TRANSLATION LIST

CODE	DESCRIPTION
PAL	ARTERIAL - INTERSTATE
PAL	ARTERIAL - OTHER
ARTERIAL	
COLLECTOR	
COLLECTOR	
PAL	ARTERIAL - INTERSTATE
PAL	ARTERIAL - OTHER FREEWAYS AND EXP
PAL	ARTERIAL - OTHER
ARTERIAL	
COLLECTOR	
COLLECTOR	
L	SYSTEM
L	NON-SYSTEM
N	SYSTEM
N	NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLER
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

CODE TRANSLATION LIST

DESCRIPTION
L INJURY (K)
ECTED SERIOUS INJURY (A)
ECTED MINOR INJURY (B)
IBLE INJURY (C)
PRIOR TO CRASH
NUJURY - 0 TO 4 YEARS OF AGE
PPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

SHORT		LONG DESCRIPTION	
CODE	DESC		
0	UNK	UNKNOWN	
1	DAY	DAYLIGHT	
2	DLIT	DARKNESS - WITH STREET LIGHTS	
3	DARK	DARKNESS - NO STREET LIGHTS	
4	DAWN	DAWN (TWILIGHT)	
5	DUSK	DUSK (TWILIGHT)	

CODE TRANSLATION LIST

CODE	DESCRIPTION
MEDIAN	
ID	MEDIAN BARRIER
TH,	GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

CODE TRANSLATION LIST

ONG DESCRIPTION
NKNOWN
TRAIGHT AHEAD
URNING RIGHT
URNING LEFT
AKING A U-TURN
ACKING
TOPPED IN TRAFFIC
ARKED - PROPERLY
ARKED - IMPROPERLY
ARKING MANEUVER

TION CODE TRANSLATION LIST

ION - NOT IN ROADWAY
ION - INSIDE CROSSWALK
ION - IN ROADWAY, OUTSIDE CROSSWALK
ION - IN ROADWAY, XWALK AVAIL UNKNWN
SECTION - IN ROADWAY
SECTION - ON SHOULDER
SECTION - ON MEDIAN
SECTION - WITHIN TRAFFIC RIGHT-OF-WAY
SECTION - IN BIKE PATH OR PARKING LANE
SECTION - ON SIDEWALK
ICWAY BOUNDARIES
ION - IN BIKE LANE
SECTION - IN BIKE LANE
SECTION - INSIDE MID-BLOCK CROSSWALK
SECTION - IN PARKING LANE
I ROADWAY
ION

CODE TRANSLATION LIST

ONG DESCRIPTION
NKNOWN
INTERSECTION
DRIVEWAY OR ALLEY
TRAIGHT ROADWAY
RANSITION
URVE (HORIZONTAL CURVE)
PEN ACCESS OR TURNOUT
RADE (VERTICAL CURVE)
RIDGE STRUCTURE
UNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYA
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

MODE TRANSLATION LIST

ONG DESCRIPTION
OT COLLECTED FOR PDO CRASHES
ASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
RUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
ARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
RUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
RUCK WITH NON-DETACHABLE BED, PANEL, ETC.
OPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
CHOO L BUS (INCLUDES VAN)
TER BUS
OTORCYCLE, DIRT BIKE
TER: FORKLIFT, BACKHOE, ETC.
OTORHOME
OTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
TV
OTORIZED SCOOTER (STANDING)
NOWMOBILE
NKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

US 101 Oregon Coast Highway (009) & NE 36th St
January 1, 2013 through December 31, 2017

[illegible]

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING
US 101 Oregon Coast Highway (009) & NE 36th St
January 1, 2013 through December 31, 2017

ME NG	COUNTY CITY URBAN AREA	RD# CMPT/MLG MILEPNT LRS	FC FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOC TN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAFF- (#LANES)	OFFRD WTHR RND BT SURF DRVMY LIGHT SVR TY	CRASH TYP COLL TYP SVR TY	SPCL USE TRLR QTY OWNER V# VEH TYPE	MOVE FROM TO	PRTC INJ P# TYPE SVR TY	A S G E LICNS E X RES	PED LOC ERROR	ACTN
									02 NONE 0 STRGHT PRVTE S N					000
									PSNGR CAR		01 DRVR NONE	59 M OTH-Y N-RES	000	000
											02 PSNG INJC	57 F	000	000
2016 9A	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER CN	3-LEG N NONE	N CLR S-1STOP N DRY REAR	01 NONE 9 STRGHT N/A N S						000
		138.55 000900100S00	36TH ST	03	0		N DAY PDO	PSNGR CAR			01 DRVR NONE	00 U UNK UNK	000	000
124	3 17.59				1			02 NONE 9 STOP N/A N S						011
								PSNGR CAR			01 DRVR NONE	00 U UNK UNK	000	000
2014 12P	LINCOLN NEWPORT	1 MN	14 0	OREGON COAST HY	INTER CN	3-LEG N STOP SIGN	N CLR S-OTHER N DRY TURN	01 NONE 0 STRGHT PRVTE S N						000
		138.55 000900100S00	36TH ST	04	0		N DAY PDO	PSNGR CAR			01 DRVR NONE	64 F OR-Y OR<25	000	000
124	3 17.59				1			02 NONE 0 U-TURN PRVTE S S						088
								PSNGR CAR			01 DRVR NONE	92 F OR-Y OR<25	008,028	000

: TRANSLATION LIST

LONG DESCRIPTION

NO ACTION OR NON-WARRANTED
 SKIDDED
 GETTING ON OR OFF STOPPED OR PARKED VEHICLE
 OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
 SLOWED DOWN
 AVOIDING MANEUVER
 PARALLEL PARKING
 ANGLE PARKING
 PASSENGER INTERFERING WITH DRIVER
 STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
 STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
 STOPPED WHILE EXECUTING A TURN
 EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
 PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
 TURNED ON RED AFTER STOPPING
 LOST CONTROL OF VEHICLE
 ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
 ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
 BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
 CAR RAN AWAY - NO DRIVER
 STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
 VEHICLE STALLED OR DISABLED
 DEAD BY UNASSOCIATED CAUSE
 FATIGUED, SLEEPY, ASLEEP
 DRIVER BLINDED BY SUN
 DRIVER BLINDED BY HEADLIGHTS
 PHYSICALLY ILL
 VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
 PURSUING OR ATTEMPTING TO STOP A VEHICLE
 PASSING SITUATION
 VEHICLE PARKED BEYOND CURB OR SHOULDER
 VEHICLE CROSSED EARTH OR GRASS MEDIAN
 CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 DRIVER'S ATTENTION DISTRACTED
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
 NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
 STANDING OR LYING IN ROADWAY
 ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
 MERGING

: TRANSLATION LIST

LONG DESCRIPTION

BLINDED BY WATER SPRAY

OTHER ACTION

UNKNOWN ACTION

: TRANSLATION LIST

LONG DESCRIPTION

NO CAUSE ASSOCIATED AT THIS LEVEL
 TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
 DID NOT YIELD RIGHT-OF-WAY
 PASSED STOP SIGN OR RED FLASHER
 DISREGARDED TRAFFIC SIGNAL
 DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
 IMPROPER OVERTAKING
 FOLLOWED TOO CLOSELY
 MADE IMPROPER TURN
 ALCOHOL OR DRUG INVOLVED
 OTHER IMPROPER DRIVING
 MECHANICAL DEFECT
 OTHER (NOT IMPROPER DRIVING)
 IMPROPER CHANGE OF TRAFFIC LANES
 DISREGARDED OTHER TRAFFIC CONTROL DEVICE
 WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO.
 DRIVER DROWSY/FATIGUED/SLEEPY
 PHYSICAL ILLNESS
 NON-MOTORIST ILLEGALLY IN ROADWAY
 NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHING
 VEHICLE IMPROPERLY PARKED
 DEFECTIVE STEERING MECHANISM
 INADEQUATE OR NO BRAKES
 VEHICLE LOST LOAD OR LOAD SHIFTED
 TIRE FAILURE
 PHANTOM / NON-CONTACT VEHICLE
 INATTENTION
 NON-MOTORIST INATTENTION
 FAILED TO AVOID VEHICLE AHEAD
 DRIVING IN EXCESS OF POSTED SPEED
 SPEED RACING (PER PAR)
 CARELESS DRIVING (PER PAR)
 RECKLESS DRIVING (PER PAR)
 AGGRESSIVE DRIVING (PER PAR)
 ROAD RAGE (PER PAR)
 VIEW OBSCURED
 IMPROPER USE OF MEDIAN OR SHOULDER
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

CODE TRANSLATION LIST

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

LONG DESCRIPTION

NOT LICENSED (HAD NEVER BEEN LICENSED)
 ILID OREGON LICENSE
 ILID LICENSE, OTHER STATE OR COUNTRY
 SPENDED/REVOKED
 PIRED
 HER NON-VALID LICENSE
 KNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

E TRANSLATION LIST

FULL DESCRIPTION

NO ERROR
 WIDE TURN
 CUT CORNER ON TURN
 FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
 LEFT TURN IN FRONT OF ONCOMING TRAFFIC
 LEFT TURN WHERE PROHIBITED
 TURNED FROM WRONG LANE
 TURNED INTO WRONG LANE
 U-TURNED ILLEGALLY
 IMPROPERLY STOPPED IN TRAFFIC LANE
 IMPROPER SIGNAL OR FAILURE TO SIGNAL
 BACKING IMPROPERLY (NOT PARKING)
 IMPROPERLY PARKED
 IMPROPER START LEAVING PARKED POSITION
 IMPROPER START FROM STOPPED POSITION
 IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
 INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
 DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
 ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
 DISREGARDED OTHER DRIVER'S SIGNAL
 DISREGARDED TRAFFIC SIGNAL
 DISREGARDED STOP SIGN OR FLASHING RED
 DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
 DISREGARDED POLICE OFFICER OR FLAGMAN
 DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
 DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
 FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
 DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
 DID NOT HAVE RIGHT-OF-WAY
 FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
 PASSING ON A CURVE
 PASSING ON THE WRONG SIDE
 PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
 PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
 PASSING AT INTERSECTION
 PASSING ON CREST OF HILL
 PASSING IN "NO PASSING" ZONE
 PASSING IN FRONT OF ONCOMING TRAFFIC
 CUTTING IN (TWO LANES - TWO WAY ONLY)
 DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

E TRANSLATION LIST

FULL DESCRIPTION

DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
 FAILED TO STOP FOR SCHOOL BUS
 FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
 FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
 STRADDLING OR DRIVING ON WRONG LANES
 IMPROPER CHANGE OF TRAFFIC LANES
 WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
 DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
 OPENED DOOR INTO ADJACENT TRAFFIC LANE
 IMPEDING TRAFFIC
 DRIVING IN EXCESS OF POSTED SPEED
 RECKLESS DRIVING (PER PAR)
 CARELESS DRIVING (PER PAR)
 SPEED RACING (PER PAR)
 CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
 CROSSING AT INTERSECTION - DIAGONALLY
 CROSSING BETWEEN INTERSECTIONS
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
 WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
 PLAYING IN STREET OR ROAD
 PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
 WORKING IN ROADWAY OR ALONG SHOULDER
 STANDING OR LYING IN ROADWAY
 IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
 ELUDING / ATTEMPT TO ELUDE
 FAILED TO NEGOTIATE A CURVE
 FAILED TO MAINTAIN LANE
 RAN OFF ROAD
 DRIVER MISJUDGED CLEARANCE
 OVER-CORRECTING
 CODE NOT IN USE
 OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
 UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

CODE TRANSLATION LIST

LONG DESCRIPTION

OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
 PASSENGER INTERFERED WITH DRIVER
 ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
 PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
 "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
 PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
 HITCHHIKER (SOLICITING A RIDE)
 PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
 GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHICLE)
 OVERTURNED AFTER FIRST HARMFUL EVENT
 VEHICLE BEING PUSHED
 VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
 VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
 VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
 AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
 AT OR ON LIGHT-RAIL RIGHT-OF-WAY
 TRAIN STRUCK VEHICLE
 VEHICLE STRUCK TRAIN
 VEHICLE STRUCK RAILROAD CAR ON ROADWAY
 JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
 TRAILER OR TOWED VEHICLE OVERTURNED
 TRAILER CONNECTION BROKE
 DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
 VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
 WHEEL CAME OFF
 HOOD FLEW UP
 LOST LOAD, LOAD MOVED OR SHIFTED
 TIRE FAILURE
 PET: CAT, DOG AND SIMILAR
 STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
 HORSE, MULE, OR DONKEY
 HORSE AND RIDER
 WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
 DEER OR ELK, WAPITI
 ANIMAL-DRAWN VEHICLE
 CULVERT, OPEN LOW OR HIGH MANHOLE
 IMPACT ATTENUATOR
 PARKING METER
 CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
 JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
 LEADING EDGE OF GUARDRAIL
 GUARD RAIL (NOT METAL MEDIAN BARRIER)
 MEDIAN BARRIER (RAISED OR METAL)
 RETAINING WALL OR TUNNEL WALL
 BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
 BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
 BRIDGE PILLAR OR COLUMN
 BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
 TRAFFIC RAISED ISLAND
 GORE
 POLE - TYPE UNKNOWN
 POLE - POWER OR TELEPHONE
 POLE - STREET LIGHT ONLY
 POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
 POLE - SIGN BRIDGE
 STOP OR YIELD SIGN

CODE TRANSLATION LIST

LONG DESCRIPTION

OTHER SIGN, INCLUDING STREET SIGNS
 HYDRANT
 DELINEATOR OR MARKER (REFLECTOR POSTS)
 MAILBOX
 TREE, STUMP OR SHRUBS
 WIRE OR CABLE ACROSS OR OVER THE ROAD
 TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
 PERMANENT SIGN OR BARRICADE IN/OFF ROAD
 SLIDES, FALLEN OR FALLING ROCKS
 FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
 EQUIPMENT WORKING IN/OFF ROAD
 OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
 WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
 ROCK, BRICK OR OTHER SOLID WALL
 OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
 OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
 BRIDGE OR ROAD CAVE IN
 HIGH WATER
 SNOW BANK
 LOW OR HIGH SHOULDER AT PAVEMENT EDGE
 CUT SLOPE OR DITCH EMBANKMENT
 STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
 STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
 VEHICLE OBSCURED VIEW
 VEGETATION OBSCURED VIEW
 VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
 WIND GUST
 VEHICLE IMMERSED IN BODY OF WATER
 FIRE OR EXPLOSION
 FENCE OR BUILDING, ETC.
 CRASH RELATED TO ANOTHER SEPARATE CRASH
 TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
 BUILDING OR OTHER STRUCTURE
 OTHER (PHANTOM) NON-CONTACT VEHICLE
 CELL PHONE (ON PAR OR DRIVER IN USE)
 TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
 GUY WIRE
 BERM (EARTHEN OR GRAVEL MOUND)
 GRAVEL IN ROADWAY
 ABRUPT EDGE
 CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
 FIXED OBJECT, UNKNOWN TYPE.
 NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
 TEXTING
 WORK ZONE WORKER
 PASSENGER RIDING ON VEHICLE EXTERIOR
 PASSENGER RIDING ON PEDALCYCLE
 PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
 PEDESTRIAN IN MOTORIZED WHEELCHAIR
 LAW ENFORCEMENT / POLICE OFFICER
 "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
 NON-MOTORIST STRUCK VEHICLE
 STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
 VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
 AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

CODE TRANSLATION LIST

LONG DESCRIPTION

VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
 DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
 DISTRACTED BY OTHER ELECTRONIC DEVICE
 RAIL CROSSING DROP-ARM GATE
 EXPANSION JOINT
 JERSEY BARRIER
 WIRE OR CABLE MEDIAN BARRIER
 FENCE
 LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
 SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
 SHOULDER GAVE WAY
 ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
 ROCK SLIDE OR LAND SLIDE
 CURVE PRESENT AT CRASH LOCATION
 VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
 VIEW OBSCURED BY CURVE
 VIEW OBSCURED BY VERTICAL GRADE / HILL
 VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
 VIEW OBSCURED BY WATER SPRAY
 TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

SIFICATION TRANSLATION LIST

CODE	DESCRIPTION
0	PAL ARTERIAL - INTERSTATE
1	PAL ARTERIAL - OTHER
3	ARTERIAL
6	COLLECTOR
8	COLLECTOR
	PAL ARTERIAL - INTERSTATE
	PAL ARTERIAL - OTHER FREEWAYS AND EXP
	PAL ARTERIAL - OTHER
	ARTERIAL
	COLLECTOR
	COLLECTOR
	L SYSTEM
	L NON-SYSTEM
	N SYSTEM
	N NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

CODE TRANSLATION LIST

DESCRIPTION
L INJURY (K)
ECTED SERIOUS INJURY (A)
ECTED MINOR INJURY (B)
IBLE INJURY (C)
PRIOR TO CRASH
NJURY - 0 TO 4 YEARS OF AGE
PPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

SHORT		
CODE	DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

CODE TRANSLATION LIST

IG DESCRIPTION
MEDIAN
ID MEDIAN BARRIER
TH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

CODE TRANSLATION LIST

LONG DESCRIPTION
UNKNOWN
STRAIGHT AHEAD
TURNING RIGHT
TURNING LEFT
MAKING A U-TURN
BACKING
TOPPED IN TRAFFIC
PAKED - PROPERLY
PAKED - IMPROPERLY
PAKING MANEUVER

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILLUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

CODE TRANSLATION LIST

LONG DESCRIPTION
UNKNOWN
INTERSECTION
DRIVEWAY OR ALLEY
STRAIGHT ROADWAY
TRANSITION
CURVE (HORIZONTAL CURVE)
OPEN ACCESS OR TURNOUT
GRADE (VERTICAL CURVE)
RIDGE STRUCTURE
TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESCRIPTION	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFGR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILLUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

MODE TRANSLATION LIST

ONG DESCRIPTION
OT COLLECTED FOR PDO CRASHES
ASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
RUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
ARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
RUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
RUCK WITH NON-DETACHABLE BED, PANEL, ETC.
OPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
CHOO BUS (INCLUDES VAN)
THER BUS
OTORCYCLE, DIRT BIKE
THER: FORKLIFT, BACKHOE, ETC.
OTORHOME
OTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
TV
OTORIZED SCOOTER (STANDING)
NOWMOBILE
NKNOWN VEHICLE TYPE




Appendix E 2040 Background Operations

Intersection Level Of Service Report
Intersection 1: Hwy 101/36th St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 56.5
 Level Of Service: F
 Volume to Capacity (v/c): 0.588

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	537	30	8	935	83	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	8	2	260	23	3
Total Analysis Volume [veh/h]	597	33	9	1039	92	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.59	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	8.78	0.00	56.54	40.16
Movement LOS	A	A	A	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	3.37	3.37
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.71	0.00	84.29	84.29
d_A, Approach Delay [s/veh]	0.00		0.08		54.51	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.25					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 77.9
 Level Of Service: F
 Volume to Capacity (v/c): 0.612

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	554	45	18	1008	60	16
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	154	13	5	280	17	4
Total Analysis Volume [veh/h]	616	50	20	1120	67	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.61	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	8.94	0.00	77.94	52.11
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	3.45	3.45
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.64	0.00	86.17	86.17
d_A, Approach Delay [s/veh]	0.00		0.16		72.47	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.35					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 14.2
 Level Of Service: B
 Volume to Capacity (v/c): 0.622

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	678	1027	50	38	72
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	188	285	14	11	20
Total Analysis Volume [veh/h]	122	753	1141	56	42	80
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	11	90	75	75	9	9
g / C, Green / Cycle	0.10	0.82	0.68	0.68	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.27	0.41	0.42	0.03	0.06
s, saturation flow rate [veh/h]	1395	2835	1451	1427	1500	1250
c, Capacity [veh/h]	144	2328	982	966	125	104
d1, Uniform Delay [s]	48.48	2.39	9.75	9.87	47.54	49.36
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.85	0.37	2.81	2.98	1.16	8.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.32	0.61	0.62	0.34	0.77
d, Delay for Lane Group [s/veh]	58.34	2.76	12.56	12.85	48.71	57.87
Lane Group LOS	E	A	B	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.67	1.44	7.86	7.98	1.13	2.39
50th-Percentile Queue Length [ft/ln]	91.80	35.94	196.60	199.52	28.16	59.84
95th-Percentile Queue Length [veh/ln]	6.61	2.59	12.46	12.61	2.03	4.31
95th-Percentile Queue Length [ft/ln]	165.25	64.69	311.58	315.34	50.68	107.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.34	2.76	12.70	12.85	48.71	57.87
Movement LOS	E	A	B	B	D	E
d_A, Approach Delay [s/veh]	10.51		12.70		54.71	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	14.17					
Intersection LOS	B					
Intersection V/C	0.622					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10466.90	0.00	4640.17
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.717	2.625	2.047
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.854	5.120	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 18.3
Level Of Service: B
Volume to Capacity (v/c): 0.551

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	822	72	26	1059	2	14	10	47	167	8	35
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	228	20	7	294	1	4	3	13	46	2	10
Total Analysis Volume [veh/h]	18	913	80	29	1177	2	16	11	52	186	9	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead			Lag								
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	72	72	2	72	72	7	7	11	11
g / C, Green / Cycle	0.02	0.65	0.65	0.02	0.66	0.66	0.06	0.06	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.01	0.30	0.30	0.02	0.36	0.36	0.02	0.04	0.08	0.08
s, saturation flow rate [veh/h]	1667	1653	1607	1561	1626	1625	1700	1326	1627	1388
c, Capacity [veh/h]	27	1077	1046	35	1069	1068	102	80	160	136
d1, Uniform Delay [s]	53.87	9.62	9.62	53.61	10.13	10.13	49.38	50.55	48.49	48.53
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.46	1.50	30.53	2.05	2.05	1.01	6.47	6.23	7.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.47	0.47	0.84	0.55	0.55	0.26	0.65	0.79	0.79
d, Delay for Lane Group [s/veh]	73.98	11.08	11.13	84.14	12.18	12.18	50.39	57.02	54.72	56.07
Lane Group LOS	E	B	B	F	B	B	D	E	D	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	6.05	5.89	1.09	7.61	7.61	0.74	1.54	3.64	3.18
50th-Percentile Queue Length [ft/ln]	16.08	151.30	147.37	27.28	190.22	190.13	18.44	38.54	90.97	79.62
95th-Percentile Queue Length [veh/ln]	1.16	10.09	9.88	1.96	12.13	12.13	1.33	2.77	6.55	5.73
95th-Percentile Queue Length [ft/ln]	28.95	252.16	246.92	49.11	303.32	303.20	33.20	69.37	163.75	143.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.98	11.10	11.13	84.14	12.18	12.18	50.39	50.39	57.02	55.17	56.07	56.07
Movement LOS	E	B	B	F	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	12.22			13.91			54.76			55.34		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	18.34											
Intersection LOS	B											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	3703.14			0.00			5769.88			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	2.782			2.733			1.984			2.064		
Crosswalk LOS	C			B			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	727			727			209			536		
d_b, Bicycle Delay [s]	22.27			22.27			44.10			29.46		
I_b,int, Bicycle LOS Score for Intersection	2.394			2.556			1.690			1.946		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.3
 Level Of Service: A
 Volume to Capacity (v/c): 0.010

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↰		↱		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	19	15	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	5	4	2	10
Total Analysis Volume [veh/h]	37	1	21	17	9	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.01	0.04
d_M, Delay for Movement [s/veh]	7.43	0.00	0.00	0.00	9.34	8.62
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.16	0.16
95th-Percentile Queue Length [ft/ln]	1.87	1.87	0.00	0.00	3.90	3.90
d_A, Approach Delay [s/veh]	7.23		0.00		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.65					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 1: Hwy 101/36th St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 129.5
 Level Of Service: F
 Volume to Capacity (v/c): 0.715

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1115	66	14	956	53	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	17	4	252	14	4
Total Analysis Volume [veh/h]	1174	69	15	1006	56	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.72	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	11.52	0.00	129.46	99.09
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.00	4.06	4.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.04	0.00	101.53	101.53
d_A, Approach Delay [s/veh]	0.00		0.17		123.04	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.82					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 190.0
 Level Of Service: F
 Volume to Capacity (v/c): 0.790

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	lr		rl		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1174	103	31	976	39	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	306	27	8	254	10	2
Total Analysis Volume [veh/h]	1223	107	32	1017	41	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.06	0.01	0.79	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	12.59	0.00	189.97	136.39
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.20	0.00	3.64	3.64
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.05	0.00	90.91	90.91
d_A, Approach Delay [s/veh]	0.00		0.38		182.15	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.77					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 48.5
 Level Of Service: D
 Volume to Capacity (v/c): 0.916

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1143	993	110	137	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	318	276	31	38	98
Total Analysis Volume [veh/h]	347	1270	1103	122	152	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag				Lead	
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	26	84	54	54	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.21	0.40	0.36	0.37	0.09	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1637	1654	1488
c, Capacity [veh/h]	352	2241	762	736	352	316
d1, Uniform Delay [s]	47.07	8.96	28.44	29.02	40.95	47.23
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	34.82	1.05	8.79	10.62	0.62	130.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.57	0.80	0.83	0.43	1.24
d, Delay for Lane Group [s/veh]	81.89	10.00	37.23	39.65	41.58	178.11
Lane Group LOS	F	B	D	D	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.66	7.82	16.68	17.30	3.97	20.88
50th-Percentile Queue Length [ft/ln]	341.49	195.40	417.02	432.38	99.28	522.05
95th-Percentile Queue Length [veh/ln]	19.72	12.40	23.38	24.12	7.15	31.60
95th-Percentile Queue Length [ft/ln]	493.02	310.02	584.48	602.89	178.70	789.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	81.89	10.00	38.30	39.65	41.58	178.11
Movement LOS	F	B	D	D	D	F
d_A, Approach Delay [s/veh]	25.43		38.44		139.96	
Approach LOS	C		D		F	
d_I, Intersection Delay [s/veh]	48.54					
Intersection LOS	D					
Intersection V/C	0.916					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	7012.83
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.920	2.789	2.283
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.466	5.143	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report Intersection 4: Hwy 101/20th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 63.2
Level Of Service: E
Volume to Capacity (v/c): 0.921

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1318	127	112	1179	24	60	56	119	412	31	113
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	358	35	30	320	7	16	15	32	112	8	31
Total Analysis Volume [veh/h]	102	1433	138	122	1282	26	65	61	129	448	34	123
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag			Lead								
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	53	53	11	54	54	13	13	25	25
g / C, Green / Cycle	0.08	0.44	0.44	0.09	0.45	0.45	0.11	0.11	0.21	0.21
(v / s)_j Volume / Saturation Flow Rate	0.06	0.47	0.47	0.07	0.38	0.39	0.07	0.09	0.19	0.19
s, saturation flow rate [veh/h]	1654	1695	1643	1654	1709	1694	1706	1424	1654	1531
c, Capacity [veh/h]	124	748	725	145	775	769	182	152	348	322
d1, Uniform Delay [s]	54.70	33.53	33.53	53.93	29.06	29.12	51.70	52.59	46.20	46.23
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.50	49.41	55.63	9.37	11.00	11.27	3.47	9.33	8.98	9.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	1.06	1.08	0.84	0.85	0.85	0.69	0.85	0.90	0.90
d, Delay for Lane Group [s/veh]	64.21	82.94	89.15	63.30	40.06	40.39	55.16	61.92	55.18	56.06
Lane Group LOS	E	F	F	E	D	D	E	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	31.37	31.65	4.00	18.71	18.69	3.83	4.20	9.94	9.31
50th-Percentile Queue Length [ft/ln]	84.16	784.14	791.33	100.09	467.66	467.16	95.77	105.03	248.56	232.78
95th-Percentile Queue Length [veh/ln]	6.06	42.33	43.17	7.21	25.80	25.78	6.90	7.56	15.11	14.32
95th-Percentile Queue Length [ft/ln]	151.48	1058.21	1079.24	180.16	644.99	644.40	172.39	189.06	377.84	357.89

Movement, Approach, & Intersection Results

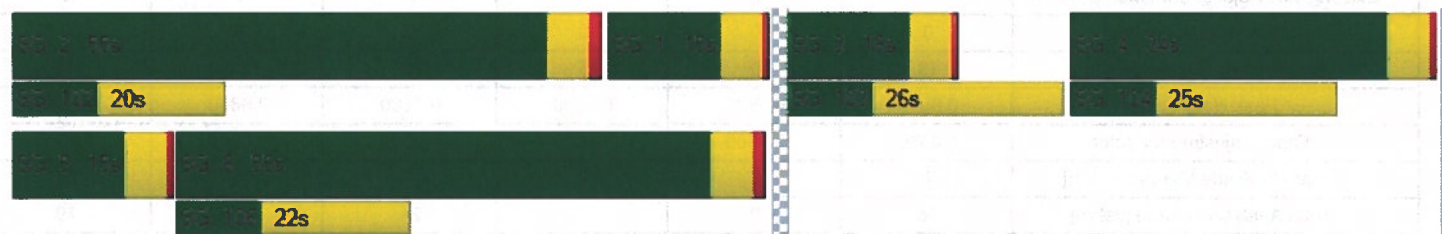
d_M, Delay for Movement [s/veh]	64.21	85.72	89.15	63.30	40.22	40.39	55.16	55.16	61.92	55.45	56.06	56.06
Movement LOS	E	F	F	E	D	D	E	E	E	E	E	E
d_A, Approach Delay [s/veh]	84.69			42.19			58.58			55.60		
Approach LOS	F			D			E			E		
d_I, Intersection Delay [s/veh]	63.24											
Intersection LOS	E											
Intersection V/C	0.921											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	12.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48	1791.51	775.42	4104.77
d_p, Pedestrian Delay [s]	48.60	48.60	48.60	48.60
I_p,int, Pedestrian LOS Score for Intersection	3.002	2.908	2.089	2.254
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	833	833	192	492
d_b, Bicycle Delay [s]	20.42	20.43	49.05	34.13
I_b,int, Bicycle LOS Score for Intersection	2.940	2.739	1.980	2.558
Bicycle LOS	C	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.6
 Level Of Service: B
 Volume to Capacity (v/c): 0.056

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↰		↱		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	5	16	27	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	2	6	10	20
Total Analysis Volume [veh/h]	28	0	7	24	40	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.06	0.07
d_M, Delay for Movement [s/veh]	7.38	0.00	0.00	0.00	10.63	8.97
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.45	0.45
95th-Percentile Queue Length [ft/ln]	1.39	1.39	0.00	0.00	11.18	11.18
d_A, Approach Delay [s/veh]	7.38		0.00		9.53	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.53					
Intersection LOS	B					

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Appendix F 2040 Total Traffic Operations

Intersection Level Of Service Report

Intersection 1: Hwy 101/36th St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 117.6
 Level Of Service: F
 Volume to Capacity (v/c): 0.907

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration	↑↓		↑↓		↔	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	537	45	15	935	124	34
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	9
Total Analysis Volume [veh/h]	597	50	17	1039	138	38
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.91	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.87	0.00	117.58	100.56
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.00	7.88	7.88
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.37	0.00	196.92	196.92
d_A, Approach Delay [s/veh]	0.00		0.14		113.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	10.75					
Intersection LOS	F					

Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 205.6
 Level Of Service: F
 Volume to Capacity (v/c): 1.110

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration	lr		rl		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	569	60	18	1049	101	16
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	4
Total Analysis Volume [veh/h]	632	67	20	1166	112	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	1.11	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	9.06	0.00	205.62	177.12
Movement LOS	A	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	8.09	8.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.69	0.00	202.34	202.34
d_A, Approach Delay [s/veh]	0.00		0.15		201.67	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	13.10					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.0
 Level Of Service: B
 Volume to Capacity (v/c): 0.592

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	704	1098	61	42	72
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	20
Total Analysis Volume [veh/h]	122	782	1220	68	47	80
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-		-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	28	82	54	0	35	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	91	76	76	9	9
g / C, Green / Cycle	0.09	0.83	0.69	0.69	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.06
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1388
c, Capacity [veh/h]	147	2605	1115	1094	129	107
d1, Uniform Delay [s]	48.94	2.19	8.71	8.82	48.17	49.66
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.77	0.30	2.18	2.32	1.28	7.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.30	0.58	0.59	0.36	0.74
d, Delay for Lane Group [s/veh]	57.71	2.48	10.89	11.14	49.44	57.01
Lane Group LOS	E	A	B	B	D	E
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.64	1.35	7.68	7.80	1.27	2.37
50th-Percentile Queue Length [ft/ln]	90.97	33.82	192.06	195.03	31.74	59.18
95th-Percentile Queue Length [veh/ln]	6.55	2.43	12.23	12.38	2.29	4.26
95th-Percentile Queue Length [ft/ln]	163.75	60.87	305.69	309.55	57.14	106.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.71	2.48	11.01	11.14	49.44	57.01
Movement LOS	E	A	B	B	D	E
d_A, Approach Delay [s/veh]	9.94		11.02		54.21	
Approach LOS	A		B		D	
d_I, Intersection Delay [s/veh]	12.96					
Intersection LOS	B					
Intersection V/C	0.592					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	10466.90	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.738	2.656	2.053
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	47	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	13	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	52	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	33.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead		-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	45	0	15	45	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	71	71	3	72	72	7	7	11	11
g / C, Green / Cycle	0.02	0.64	0.64	0.03	0.66	0.66	0.06	0.06	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.04	0.08	0.08
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1326	1627	1386
c, Capacity [veh/h]	27	1065	1036	44	1067	1064	103	80	161	137
d1, Uniform Delay [s]	53.87	10.12	10.12	53.21	10.57	10.57	49.41	50.52	48.45	48.49
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.11	1.58	1.62	23.57	2.37	2.37	1.10	6.36	6.22	7.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.48	0.48	0.82	0.59	0.59	0.28	0.65	0.79	0.80
d, Delay for Lane Group [s/veh]	73.98	11.70	11.74	76.78	12.93	12.94	50.52	56.88	54.67	56.04
Lane Group LOS	E	B	B	E	B	B	D	E	D	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	6.44	6.28	1.28	8.44	8.42	0.79	1.54	3.67	3.21
50th-Percentile Queue Length [ft/ln]	16.08	161.09	157.03	31.88	210.99	210.59	19.84	38.48	91.78	80.22
95th-Percentile Queue Length [veh/ln]	1.16	10.61	10.39	2.30	13.20	13.18	1.43	2.77	6.61	5.78
95th-Percentile Queue Length [ft/ln]	28.95	265.16	259.78	57.39	330.09	329.59	35.72	69.27	165.20	144.40

Movement, Approach, & Intersection Results

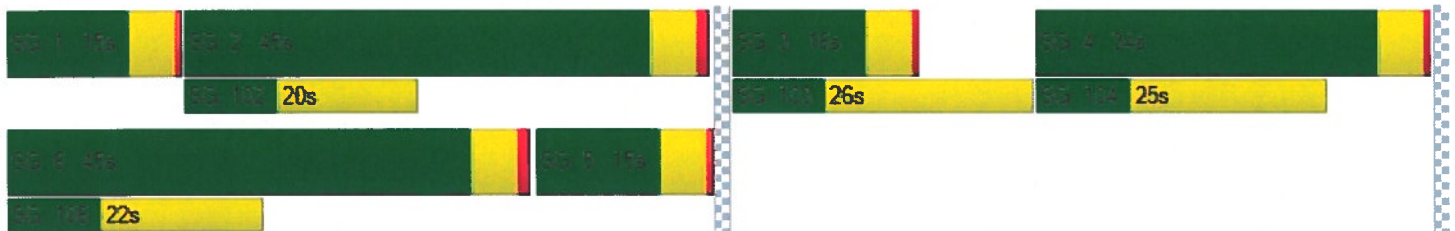
d_M, Delay for Movement [s/veh]	73.98	11.72	11.74	76.78	12.94	12.94	50.52	50.52	56.88	55.12	56.04	56.04
Movement LOS	E	B	B	E	B	B	D	D	E	E	E	E
d_A, Approach Delay [s/veh]	12.80			14.72			54.60			55.30		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	18.82											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk, mi, Effective Walk Time [s]	12.0	12.0	12.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	3703.14	0.00	5701.08	0.00
d_p, Pedestrian Delay [s]	43.65	43.65	43.65	43.65
I_p,int, Pedestrian LOS Score for Intersection	2.799	2.754	1.987	2.067
Crosswalk LOS	C	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	727	727	209	536
d_b, Bicycle Delay [s]	22.27	22.27	44.10	29.46
I_b,int, Bicycle LOS Score for Intersection	2.414	2.621	1.693	1.949
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 5: 31st St/Hamey St**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.6
 Level Of Service: A
 Volume to Capacity (v/c): 0.031

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	←		→		↔	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	T		T		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					




Intersection Level Of Service Report

Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.5
 Level Of Service: A
 Volume to Capacity (v/c): 0.064

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 1: Hwy 101/36th St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 604.8
 Level Of Service: F
 Volume to Capacity (v/c): 1.749

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration	r		l		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1115	116	38	957	70	29
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	8
Total Analysis Volume [veh/h]	1174	122	40	1007	74	31
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.07	0.01	1.75	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	12.18	0.00	604.77	537.49
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.24	0.00	10.12	10.12
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.96	0.00	252.95	252.95
d_A, Approach Delay [s/veh]	0.00		0.47		584.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	25.29					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 531.5
 Level Of Service: F
 Volume to Capacity (v/c): 1.690

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.07	0.01	1.69	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	13.40	0.00	531.52	471.39
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.23	0.00	8.36	8.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.75	0.00	209.12	209.12
d_A, Approach Delay [s/veh]	0.00		0.41		526.62	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	17.68					
Intersection LOS	F					




Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 48.8
 Level Of Service: D
 Volume to Capacity (v/c): 0.937

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	30	90	60	0	30	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	26	84	54	54	26	26
g / C, Green / Cycle	0.21	0.70	0.45	0.45	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	352	2241	762	736	352	316
d1, Uniform Delay [s]	47.07	9.43	29.27	29.92	41.37	47.23
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	34.82	1.25	11.02	13.67	0.74	130.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.61	0.84	0.87	0.48	1.24
d, Delay for Lane Group [s/veh]	81.89	10.68	40.28	43.59	42.11	178.11
Lane Group LOS	F	B	D	D	D	F
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.66	8.88	18.34	19.16	4.41	20.88
50th-Percentile Queue Length [ft/ln]	341.49	221.94	458.54	479.06	110.29	522.05
95th-Percentile Queue Length [veh/ln]	19.72	13.76	25.37	26.34	7.86	31.60
95th-Percentile Queue Length [ft/ln]	493.02	344.10	634.13	658.54	196.41	789.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	81.89	10.68	41.75	43.59	42.11	178.11
Movement LOS	F	B	D	D	D	F
d_A, Approach Delay [s/veh]	25.10		41.94		137.48	
Approach LOS	C		D		F	
d_I, Intersection Delay [s/veh]	48.83					
Intersection LOS	D					
Intersection V/C	0.937					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 73.3
 Level Of Service: E
 Volume to Capacity (v/c): 0.954

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	7.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag		-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	4	10	0	4	10	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0
Split [s]	15	55	0	15	55	0	0	16	0	0	34	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	0	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	53	53	11	54	54	13	13	25	25
g / C, Green / Cycle	0.08	0.44	0.44	0.09	0.45	0.45	0.11	0.11	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.19	0.19
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1424	1654	1528
c, Capacity [veh/h]	124	744	723	145	772	764	182	152	351	324
d1, Uniform Delay [s]	54.70	33.65	33.65	54.07	29.94	30.02	51.93	52.59	46.07	46.10
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.12	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.50	69.50	78.07	11.15	13.64	14.06	4.17	9.33	9.28	10.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	1.12	1.14	0.87	0.88	0.88	0.73	0.85	0.90	0.91
d, Delay for Lane Group [s/veh]	64.21	103.15	111.72	65.22	43.58	44.09	56.10	61.92	55.35	56.32
Lane Group LOS	E	F	F	E	D	D	E	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.37	35.39	36.07	4.20	20.30	20.31	4.09	4.20	10.07	9.43
50th-Percentile Queue Length [ft/ln]	84.16	884.64	901.80	105.10	507.41	507.65	102.17	105.03	251.82	235.64
95th-Percentile Queue Length [veh/ln]	6.06	48.90	50.38	7.57	27.68	27.70	7.36	7.56	15.28	14.46
95th-Percentile Queue Length [ft/ln]	151.48	1222.52	1259.43	189.16	692.12	692.40	183.91	189.06	381.95	361.52

Movement, Approach, & Intersection Results

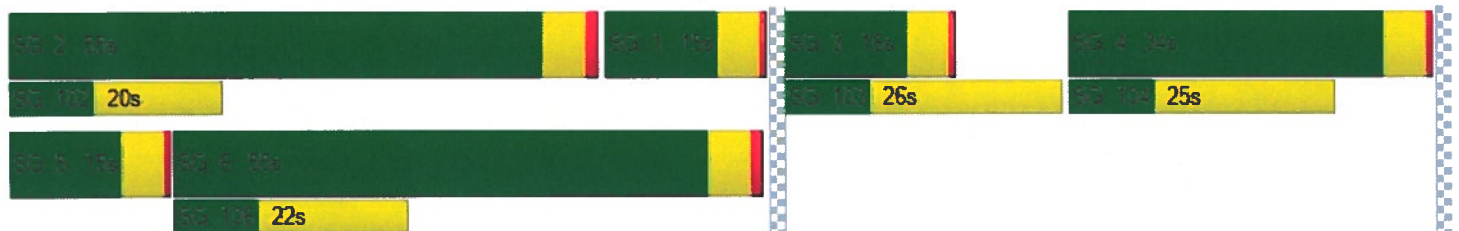
d_M, Delay for Movement [s/veh]	64.21	107.02	111.72	65.22	43.83	44.09	56.10	56.10	61.92	55.64	56.32	56.32
Movement LOS	E	F	F	E	D	D	E	E	E	E	E	E
d_A, Approach Delay [s/veh]	104.90			45.65			58.97			55.82		
Approach LOS	F			D			E			E		
d_I, Intersection Delay [s/veh]	73.32											
Intersection LOS	E											
Intersection V/C	0.954											

Other Modes

g_Walk, mi, Effective Walk Time [s]	12.0	12.0	12.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48	1772.03	769.39	4104.77
d_p, Pedestrian Delay [s]	48.60	48.60	48.60	48.60
I_p,int, Pedestrian LOS Score for Intersection	3.026	2.936	2.092	2.257
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	833	833	192	492
d_b, Bicycle Delay [s]	20.42	20.43	49.05	34.13
I_b,int, Bicycle LOS Score for Intersection	3.007	2.781	1.992	2.568
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.170

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	←		→		↔	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					




Intersection Level Of Service Report

Intersection 6: Harney St/Site Dwy 1

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					




Intersection Level Of Service Report

Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.030

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Appendix G 2040 Total Traffic Mitigation




Intersection Level Of Service Report

Intersection 1: Hwy 101/36th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 14.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.727

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	1	0
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	22
Total Hourly Volume [veh/h]	537	45	15	935	124	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	3
Total Analysis Volume [veh/h]	597	50	17	1039	138	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag			Lead		Lead	
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	86	0	9	95	15	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	1	27	4	4
g / C, Green / Cycle	0.56	0.56	0.02	0.68	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.37	0.03	0.01	0.64	0.08	0.01
s, saturation flow rate [veh/h]	1626	1488	1667	1612	1666	1487
c, Capacity [veh/h]	906	829	36	1099	189	169
d1, Uniform Delay [s]	6.05	3.96	18.88	5.57	16.73	15.48
k, delay calibration	0.11	0.11	0.11	0.33	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.82	0.03	9.02	12.55	5.32	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.06	0.47	0.95	0.73	0.08
d, Delay for Lane Group [s/veh]	6.87	3.99	27.89	18.12	22.05	15.67
Lane Group LOS	A	A	C	B	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.01	0.11	0.22	5.48	1.29	0.10
50th-Percentile Queue Length [ft/ln]	50.22	2.64	5.59	136.88	32.23	2.43
95th-Percentile Queue Length [veh/ln]	3.62	0.19	0.40	9.31	2.32	0.17
95th-Percentile Queue Length [ft/ln]	90.40	4.76	10.05	232.82	58.02	4.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.87	3.99	27.89	18.12	22.05	15.67
Movement LOS	A	A	C	B	C	B
d_A, Approach Delay [s/veh]	6.65		18.28		21.50	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	14.48					
Intersection LOS	B					
Intersection V/C	0.727					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.061
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	5.200	5.875	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 23.4
 Level Of Service: C
 Volume to Capacity (v/c): 0.791

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	1	0
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	11
Total Hourly Volume [veh/h]	569	60	18	1049	101	5
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	1
Total Analysis Volume [veh/h]	632	67	20	1166	112	6
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	87.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag			Lead		Lead	
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	89	0	9	98	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	1	30	4	4
g / C, Green / Cycle	0.60	0.60	0.03	0.72	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.39	0.05	0.01	0.72	0.07	0.00
s, saturation flow rate [veh/h]	1626	1488	1667	1612	1666	1487
c, Capacity [veh/h]	967	885	45	1156	154	137
d1, Uniform Delay [s]	5.63	3.60	20.11	5.93	18.53	17.36
k, delay calibration	0.12	0.11	0.11	0.46	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.81	0.04	6.87	27.54	6.48	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.08	0.45	1.01	0.73	0.04
d, Delay for Lane Group [s/veh]	6.44	3.64	26.98	33.47	25.01	17.49
Lane Group LOS	A	A	C	F	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.08	0.14	0.26	10.45	1.20	0.05
50th-Percentile Queue Length [ft/ln]	52.09	3.39	6.40	261.28	29.97	1.28
95th-Percentile Queue Length [veh/ln]	3.75	0.24	0.46	15.86	2.16	0.09
95th-Percentile Queue Length [ft/ln]	93.77	6.10	11.52	396.58	53.95	2.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.44	3.64	26.98	33.47	25.01	17.49
Movement LOS	A	A	C	F	C	B
d_A, Approach Delay [s/veh]	6.17		33.36		24.63	
Approach LOS	A		C		C	
d_I, Intersection Delay [s/veh]	23.36					
Intersection LOS	C					
Intersection V/C	0.791					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.037
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	5.286	6.089	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.560

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	48
Total Hourly Volume [veh/h]	110	704	1098	61	42	24
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	7
Total Analysis Volume [veh/h]	122	782	1220	68	47	27
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	60.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag				Lead	
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	14	78	64	0	32	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	95	81	81	5	5
g / C, Green / Cycle	0.09	0.86	0.73	0.73	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.02
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1384
c, Capacity [veh/h]	134	2706	1179	1157	76	63
d1, Uniform Delay [s]	49.79	1.45	6.60	6.69	51.57	51.11
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.42	0.27	1.82	1.93	6.06	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.29	0.55	0.56	0.62	0.43
d, Delay for Lane Group [s/veh]	65.21	1.72	8.42	8.62	57.63	54.53
Lane Group LOS	E	A	A	A	E	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.89	0.84	6.29	6.39	1.40	0.78
50th-Percentile Queue Length [ft/ln]	97.25	20.91	157.22	159.65	34.97	19.59
95th-Percentile Queue Length [veh/ln]	7.00	1.51	10.40	10.53	2.52	1.41
95th-Percentile Queue Length [ft/ln]	175.04	37.64	260.04	263.25	62.94	35.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.21	1.72	8.51	8.62	57.63	54.53
Movement LOS	E	A	A	A	E	D
d_A, Approach Delay [s/veh]	10.29		8.52		56.50	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	10.79					
Intersection LOS	B					
Intersection V/C	0.560					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	11380.41	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.737	2.656	2.119
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	31	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	16	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	4	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	18	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v _{do} , Outbound Pedestrian Volume crossing	2			0			1			0		
v _{di} , Inbound Pedestrian Volume crossing	1			0			2			0		
v _{co} , Outbound Pedestrian Volume crossing	0			1			1			0		
v _{ci} , Inbound Pedestrian Volume crossing	0			1			1			0		
v _{ab} , Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	97.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lead			Lag								
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	17	27	0	22	32	0	0	31	31	0	30	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
I2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	69	69	3	71	71	6	30	14	14	14
g / C, Green / Cycle	0.02	0.63	0.63	0.03	0.64	0.64	0.05	0.27	0.12	0.12	0.12
(v / s)_j Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.01	0.06	0.10	0.03
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1343	1406	1084	1488
c, Capacity [veh/h]	26	1039	1011	43	1042	1039	86	366	213	198	185
d1, Uniform Delay [s]	53.89	11.02	11.02	53.22	11.54	11.54	50.44	29.49	46.96	48.00	43.36
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.33	1.69	1.74	24.36	2.57	2.57	1.69	0.04	0.92	1.78	0.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.50	0.50	0.83	0.60	0.60	0.34	0.05	0.40	0.55	0.22
d, Delay for Lane Group [s/veh]	75.22	12.72	12.77	77.58	14.10	14.11	52.13	29.53	47.88	49.79	43.80
Lane Group LOS	E	B	B	E	B	B	D	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.65	6.83	6.66	1.28	8.98	8.96	0.81	0.36	2.29	3.01	1.03
50th-Percentile Queue Length [ft/ln]	16.24	170.81	166.50	32.07	224.40	223.99	20.28	8.93	57.30	75.35	25.73
95th-Percentile Queue Length [veh/ln]	1.17	11.12	10.89	2.31	13.89	13.87	1.46	0.64	4.13	5.42	1.85
95th-Percentile Queue Length [ft/ln]	29.23	277.98	272.31	57.72	347.24	346.71	36.51	16.07	103.15	135.62	46.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	75.22	12.74	12.77	77.58	14.11	14.11	52.13	52.13	29.53	48.90	49.79	43.80
Movement LOS	E	B	B	E	B	B	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	13.83			15.88			43.47			48.05		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.48											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk, mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2817.70			0.00			5701.08			0.00		
d_p, Pedestrian Delay [s]	43.65			43.65			43.65			43.65		
I_p,int, Pedestrian LOS Score for Intersection	3.080			2.754			2.030			2.228		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			491			482			464		
d_b, Bicycle Delay [s]	35.20			31.31			31.69			32.46		
I_b,int, Bicycle LOS Score for Intersection	2.414			2.621			1.688			1.949		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 9.6
Level Of Service: A
Volume to Capacity (v/c): 0.031

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	←↑		↑→		←→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 8.5
Level Of Service: A
Volume to Capacity (v/c): 0.064

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: Hwy 101/36th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 40.0
Level Of Service: D
Volume to Capacity (v/c): 0.877

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	1
Pocket Length [ft]	100.00	130.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	17
Total Hourly Volume [veh/h]	1115	116	38	957	70	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	3
Total Analysis Volume [veh/h]	1174	122	40	1007	74	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag		-	Lead		Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	10	108	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	Yes		No	Yes	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	2	36	4	4
g / C, Green / Cycle	0.63	0.63	0.04	0.76	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.70	0.08	0.02	0.59	0.04	0.01
s, saturation flow rate [veh/h]	1681	1452	1667	1695	1667	1100
c, Capacity [veh/h]	1054	911	78	1284	125	83
d1, Uniform Delay [s]	8.91	3.63	22.27	3.47	21.40	20.69
k, delay calibration	0.50	0.11	0.11	0.41	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	64.35	0.07	5.21	4.04	4.36	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.11	0.13	0.52	0.78	0.59	0.16
d, Delay for Lane Group [s/veh]	73.27	3.69	27.48	7.51	25.76	21.57
Lane Group LOS	F	A	C	A	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	24.56	0.29	0.51	2.22	0.88	0.14
50th-Percentile Queue Length [ft/ln]	614.07	7.15	12.80	55.48	21.95	3.59
95th-Percentile Queue Length [veh/ln]	35.58	0.51	0.92	3.99	1.58	0.26
95th-Percentile Queue Length [ft/ln]	889.57	12.86	23.05	99.86	39.51	6.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.27	3.69	27.48	7.51	25.76	21.57
Movement LOS	F	A	C	A	C	C
d_A, Approach Delay [s/veh]	66.72		8.27		25.13	
Approach LOS	E		A		C	
d_I, Intersection Delay [s/veh]	40.04					
Intersection LOS	D					
Intersection V/C	0.877					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.066
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	6.271	5.860	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 58.2
 Level Of Service: E
 Volume to Capacity (v/c): 0.947

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration	r		l		l r	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	1
Pocket Length [ft]	100.00	35.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	101.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag			Lead		Lead	
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	9	107	13	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	2	36	3	3
g / C, Green / Cycle	0.63	0.63	0.04	0.76	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.76	0.11	0.02	0.61	0.05	0.00
s, saturation flow rate [veh/h]	1681	1440	1588	1695	1666	1406
c, Capacity [veh/h]	1062	910	64	1282	125	106
d1, Uniform Delay [s]	8.75	3.62	22.32	3.61	21.32	20.42
k, delay calibration	0.50	0.11	0.11	0.43	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	99.61	0.09	6.16	4.73	5.15	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.20	0.17	0.51	0.81	0.63	0.07
d, Delay for Lane Group [s/veh]	108.36	3.71	28.49	8.35	26.48	20.68
Lane Group LOS	F	A	C	A	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	34.94	0.37	0.44	2.49	0.95	0.07
50th-Percentile Queue Length [ft/ln]	873.38	9.19	10.97	62.34	23.75	1.83
95th-Percentile Queue Length [veh/ln]	51.35	0.66	0.79	4.49	1.71	0.13
95th-Percentile Queue Length [ft/ln]	1283.70	16.54	19.75	112.20	42.75	3.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	108.36	3.71	28.49	8.35	26.48	20.68
Movement LOS	F	A	C	A	C	C
d_A, Approach Delay [s/veh]	96.75		8.97		26.00	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	58.20					
Intersection LOS	E					
Intersection V/C	0.947					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.046
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	6.499	5.893	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report**Intersection 3: Hwy 101/25th St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 31.7
 Level Of Service: C
 Volume to Capacity (v/c): 0.761

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	5	2	6	0	4	4
Auxiliary Signal Groups						4,5
Lead / Lag	Lag				Lead	
Minimum Green [s]	4	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	4.0	5.0	5.0	0.0	4.0	4.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.5
Split [s]	32	88	56	0	32	32
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	2.5
Walk [s]	0	7	7	0	8	8
Pedestrian Clearance [s]	0	17	14	0	19	19
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	2.5
Minimum Recall	No	Yes	Yes		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	0.00
g_i, Effective Green Time [s]	27	84	53	53	25	56
g / C, Green / Cycle	0.22	0.70	0.44	0.44	0.21	0.47
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	370	2251	749	723	346	700
d1, Uniform Delay [s]	45.71	9.22	30.12	30.80	41.71	22.81
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.21	1.23	12.27	15.36	0.78	3.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.61	0.86	0.89	0.48	0.56
d, Delay for Lane Group [s/veh]	69.92	10.45	42.39	46.16	42.49	25.88
Lane Group LOS	E	B	D	D	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	12.58	8.74	18.85	19.74	4.43	8.45
50th-Percentile Queue Length [ft/ln]	314.49	218.56	471.15	493.60	110.84	211.17
95th-Percentile Queue Length [veh/ln]	18.40	13.59	25.97	27.03	7.89	13.21
95th-Percentile Queue Length [ft/ln]	459.90	339.78	649.14	675.78	197.17	330.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.92	10.45	44.06	46.16	42.49	25.88
Movement LOS	E	B	D	D	D	C
d_A, Approach Delay [s/veh]	22.49		44.28		30.84	
Approach LOS	C		D		C	
d_I, Intersection Delay [s/veh]	31.67					
Intersection LOS	C					
Intersection V/C	0.761					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 51.1
 Level Of Service: D
 Volume to Capacity (v/c): 0.890

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	81.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lag			Lead								
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	31	31	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	13	44	0	13	44	0	0	31	31	0	32	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	60	60	9	60	60	13	26	21	21	21
g / C, Green / Cycle	0.07	0.50	0.50	0.07	0.50	0.50	0.11	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.15	0.15	0.09
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1436	1654	1612	1475
c, Capacity [veh/h]	119	842	817	119	848	840	180	309	284	277	253
d1, Uniform Delay [s]	55.12	29.85	30.24	55.74	25.26	25.33	52.15	40.66	48.34	48.34	45.12
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.05	27.94	32.86	48.86	7.82	8.02	4.41	0.67	5.69	5.81	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.99	1.01	1.06	0.80	0.80	0.74	0.42	0.86	0.86	0.51
d, Delay for Lane Group [s/veh]	67.17	57.79	63.10	104.60	33.08	33.35	56.56	41.33	54.03	54.14	46.29
Lane Group LOS	E	E	F	F	C	C	E	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.45	29.13	29.99	5.23	17.48	17.47	4.11	3.36	7.53	7.35	3.58
50th-Percentile Queue Length [ft/ln]	86.31	728.37	749.87	130.74	437.09	436.64	102.74	84.06	188.34	183.74	89.42
95th-Percentile Queue Length [veh/ln]	6.21	37.99	39.16	9.14	24.34	24.32	7.40	6.05	12.04	11.80	6.44
95th-Percentile Queue Length [ft/ln]	155.35	949.68	978.91	228.44	608.53	607.98	184.93	151.30	300.88	294.89	160.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.17	60.19	63.10	104.60	33.21	33.35	56.56	56.56	41.33	54.08	54.14	46.29
Movement LOS	E	E	E	F	C	C	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	60.82			39.29			49.06			52.44		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	51.07											
Intersection LOS	D											
Intersection V/C	0.890											

Other Modes

g_Walk, mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	2215.48			1772.03			769.39			4104.77		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	3.026			2.936			2.092			2.372		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	650			650			442			458		
d_b, Bicycle Delay [s]	27.34			27.35			36.43			35.65		
I_b,int, Bicycle LOS Score for Intersection	3.007			2.781			1.992			2.568		
Bicycle LOS	C			C			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 11.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.170

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Harney St/Site Dwy 1

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.030

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	T		T		T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 1: Hwy 101/36th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.9
 Level Of Service: B
 Volume to Capacity (v/c): 0.727

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-4.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	438	21	6	777	55	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	11	9	2	3	28	7
Site-Generated Trips [veh/h]	0	15	7	0	41	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	22
Total Hourly Volume [veh/h]	537	45	15	935	124	12
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	13	4	260	34	3
Total Analysis Volume [veh/h]	597	50	17	1039	138	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag			Lead		Lead	
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	86	0	9	95	15	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	1	27	4	4
g / C, Green / Cycle	0.56	0.56	0.02	0.68	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.20	0.20	0.01	0.64	0.08	0.01
s, saturation flow rate [veh/h]	1626	1582	1667	1612	1666	1487
c, Capacity [veh/h]	906	882	36	1099	189	169
d1, Uniform Delay [s]	4.78	4.81	18.87	5.57	16.73	15.48
k, delay calibration	0.11	0.11	0.11	0.33	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.24	0.26	9.03	12.55	5.33	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.37	0.47	0.95	0.73	0.08
d, Delay for Lane Group [s/veh]	5.01	5.06	27.90	18.12	22.06	15.67
Lane Group LOS	A	A	C	B	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.83	0.84	0.22	5.47	1.29	0.10
50th-Percentile Queue Length [ft/ln]	20.77	20.96	5.59	136.81	32.23	2.42
95th-Percentile Queue Length [veh/ln]	1.50	1.51	0.40	9.31	2.32	0.17
95th-Percentile Queue Length [ft/ln]	37.38	37.73	10.06	232.72	58.02	4.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.04	5.06	27.90	18.12	22.06	15.67
Movement LOS	A	A	C	B	C	B
d_A, Approach Delay [s/veh]	5.04		18.28		21.51	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	13.92					
Intersection LOS	B					
Intersection V/C	0.727					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.061
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.666	5.875	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 2: Hwy 101/31st St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 22.8
 Level Of Service: C
 Volume to Capacity (v/c): 0.791

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	1T		1T		1T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	454	32	15	817	49	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	0.00	0.00	10.00	0.00	0.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	9	13	3	28	11	11
Site-Generated Trips [veh/h]	15	15	0	41	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	11
Total Hourly Volume [veh/h]	569	60	18	1049	101	5
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	158	17	5	291	28	1
Total Analysis Volume [veh/h]	632	67	20	1166	112	6
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	87.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag			Lead		Lead	
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	89	0	9	98	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	1	30	4	4
g / C, Green / Cycle	0.60	0.60	0.03	0.72	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.22	0.22	0.01	0.72	0.07	0.00
s, saturation flow rate [veh/h]	1626	1572	1667	1612	1666	1487
c, Capacity [veh/h]	967	936	45	1156	153	137
d1, Uniform Delay [s]	4.38	4.42	20.10	5.93	18.53	17.35
k, delay calibration	0.11	0.11	0.11	0.46	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.25	6.92	27.50	6.54	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.37	0.45	1.01	0.73	0.04
d, Delay for Lane Group [s/veh]	4.61	4.67	27.01	33.42	25.07	17.48
Lane Group LOS	A	A	C	F	C	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.86	0.87	0.26	10.43	1.20	0.05
50th-Percentile Queue Length [ft/ln]	21.60	21.87	6.41	260.79	30.02	1.28
95th-Percentile Queue Length [veh/ln]	1.55	1.57	0.46	15.84	2.16	0.09
95th-Percentile Queue Length [ft/ln]	38.87	39.36	11.53	395.93	54.03	2.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.63	4.67	27.01	33.42	25.07	17.48
Movement LOS	A	A	C	F	C	B
d_A, Approach Delay [s/veh]	4.64		33.31		24.69	
Approach LOS	A		C		C	
d_I, Intersection Delay [s/veh]	22.80					
Intersection LOS	C					
Intersection V/C	0.791					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	46.37
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.037
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.709	6.089	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 3: Hwy 101/25th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 10.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.560

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	92	548	818	35	30	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	7.00	10.00	7.00	0.00	8.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	20	45	8	2	0
Site-Generated Trips [veh/h]	0	26	71	11	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	48
Total Hourly Volume [veh/h]	110	704	1098	61	42	24
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	196	305	17	12	7
Total Analysis Volume [veh/h]	122	782	1220	68	47	27
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	1		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		1	
v_co, Outbound Pedestrian Volume crossing	0		1		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		1	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	60.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lag				Lead	
Minimum Green [s]	4	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	4.0	5.0	5.0	0.0	4.0	0.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.0
Split [s]	14	78	64	0	32	0
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	0.0
Walk [s]	0	7	7	0	8	0
Pedestrian Clearance [s]	0	17	14	0	19	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	0.0
Minimum Recall	No	Yes	Yes		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	2.50
g_i, Effective Green Time [s]	10	95	81	81	5	5
g / C, Green / Cycle	0.09	0.86	0.73	0.73	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.40	0.41	0.03	0.02
s, saturation flow rate [veh/h]	1549	3150	1612	1582	1667	1384
c, Capacity [veh/h]	134	2706	1179	1157	76	63
d1, Uniform Delay [s]	49.79	1.45	6.60	6.69	51.57	51.11
k, delay calibration	0.08	0.50	0.50	0.50	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.42	0.27	1.82	1.93	6.06	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.29	0.55	0.56	0.62	0.43
d, Delay for Lane Group [s/veh]	65.21	1.72	8.42	8.62	57.63	54.53
Lane Group LOS	E	A	A	A	E	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.89	0.84	6.29	6.39	1.40	0.78
50th-Percentile Queue Length [ft/ln]	97.25	20.91	157.22	159.65	34.97	19.59
95th-Percentile Queue Length [veh/ln]	7.00	1.51	10.40	10.53	2.52	1.41
95th-Percentile Queue Length [ft/ln]	175.04	37.64	260.04	263.25	62.94	35.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.21	1.72	8.51	8.62	57.63	54.53
Movement LOS	E	A	A	A	E	D
d_A, Approach Delay [s/veh]	10.29		8.52		56.50	
Approach LOS	B		A		E	
d_I, Intersection Delay [s/veh]	10.79					
Intersection LOS	B					
Intersection V/C	0.560					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	11380.41	0.00	4513.33
d_p, Pedestrian Delay [s]	43.65	43.65	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.737	2.656	2.119
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.878	5.195	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report

Intersection 4: Hwy 101/20th St

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 18.5
 Level Of Service: B
 Volume to Capacity (v/c): 0.577

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	13	672	60	15	853	0	11	8	39	139	7	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	7.00	6.00	8.00	9.00	0.00	11.00	0.00	12.00	3.00	17.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	16	0	8	35	2	1	0	0	0	0	3
Site-Generated Trips [veh/h]	0	22	0	6	59	6	2	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	31	0	0	0
Total Hourly Volume [veh/h]	16	844	72	32	1118	8	16	10	16	167	8	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	20	9	311	2	4	3	4	46	2	10
Total Analysis Volume [veh/h]	18	938	80	36	1242	9	18	11	18	186	9	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			0			1			0		
v_di, Inbound Pedestrian Volume crossing	1			0			2			0		
v_co, Outbound Pedestrian Volume crossing	0			1			1			0		
v_ci, Inbound Pedestrian Volume crossing	0			1			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	97.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lead			Lag								
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	17	27	0	22	32	0	0	31	31	0	30	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	2	69	69	3	71	71	6	30	14	14	14
g / C, Green / Cycle	0.02	0.63	0.63	0.03	0.64	0.64	0.05	0.27	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.31	0.31	0.02	0.39	0.39	0.02	0.01	0.06	0.10	0.03
s, saturation flow rate [veh/h]	1667	1653	1608	1561	1626	1621	1697	1343	1406	1084	1488
c, Capacity [veh/h]	26	1039	1011	43	1042	1039	86	366	213	198	185
d1, Uniform Delay [s]	53.89	11.02	11.02	53.22	11.54	11.54	50.44	29.49	46.96	48.00	43.36
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.33	1.69	1.74	24.36	2.57	2.57	1.69	0.04	0.92	1.78	0.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.50	0.50	0.83	0.60	0.60	0.34	0.05	0.40	0.55	0.22
d, Delay for Lane Group [s/veh]	75.22	12.72	12.77	77.58	14.10	14.11	52.13	29.53	47.88	49.79	43.80
Lane Group LOS	E	B	B	E	B	B	D	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.65	6.83	6.66	1.28	8.98	8.96	0.81	0.36	2.29	3.01	1.03
50th-Percentile Queue Length [ft/ln]	16.24	170.81	166.50	32.07	224.40	223.99	20.28	8.93	57.30	75.35	25.73
95th-Percentile Queue Length [veh/ln]	1.17	11.12	10.89	2.31	13.89	13.87	1.46	0.64	4.13	5.42	1.85
95th-Percentile Queue Length [ft/ln]	29.23	277.98	272.31	57.72	347.24	346.71	36.51	16.07	103.15	135.62	46.31

Version 7.00-05

Movement, Approach, & Intersection Results

Version 7.00-05

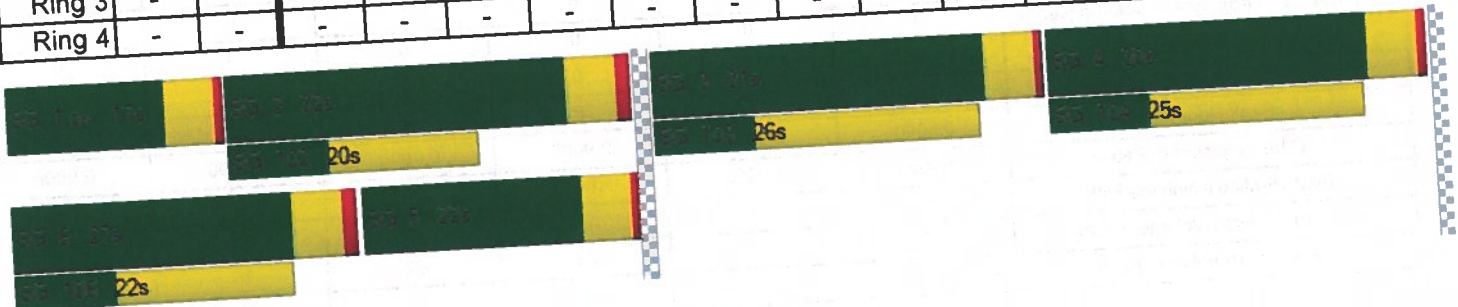
Movement, Approach, & Intersection Results												
d_M, Delay for Movement [s/veh]	75.22	12.74	12.77	77.58	14.11	14.11	52.13	52.13	29.53	48.90	49.79	43.80
Movement LOS	E	B	B	E	B	B	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	13.83			15.88			43.47			48.05		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.48											
Intersection LOS	B											
Intersection V/C	0.577											
										12.0		

Other Modes

g_Walk, mi, Effective Walk Time [s]	12.0	12.0	12.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	2817.70	0.00	5701.08	0.00
d_p, Pedestrian Delay [s]	43.65	43.65	43.65	43.65
I_p,int, Pedestrian LOS Score for Intersection	3.080	2.754	2.030	2.228
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	491	482	464
d_b, Bicycle Delay [s]	35.20	31.31	31.69	32.46
I_b,int, Bicycle LOS Score for Intersection	2.414	2.621	1.688	1.949
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Control Type:
Analysis Method:
Analysis Period:

Two-way stop
HCM 6th Edition
15 minutes

Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Delay (sec / veh): 9.6
Level Of Service: A
Volume to Capacity (v/c): 0.031

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	←		→		↖	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		0.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	33	1	9	0	1	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	10	15	7	4
Site-Generated Trips [veh/h]	0	0	6	41	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	1	25	56	23	37
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	16	6	10
Total Analysis Volume [veh/h]	37	1	28	62	26	41
Pedestrian Volume [ped/h]	0	0	0	0	0	0

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.03	0.04
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	0.00	9.64	8.87
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	2.08	2.08	0.00	0.00	5.81	5.81
d_A, Approach Delay [s/veh]	7.49		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.61					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.051

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	0	47	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	15	0	0	47	1
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	13	0
Total Analysis Volume [veh/h]	0	17	0	0	52	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.75	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.13	4.13
d_A, Approach Delay [s/veh]	0.00		3.62		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.62					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 8.5
Level Of Service: A
Volume to Capacity (v/c): 0.064

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	62
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	22	0	0	62
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	17
Total Analysis Volume [veh/h]	1	0	24	0	0	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.13	1.13	5.09	5.09
d_A, Approach Delay [s/veh]	0.00		7.25		8.55	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	8.13					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: Hwy 101/36th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 9.0
Level Of Service: A
Volume to Capacity (v/c): 0.782

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	923	37	7	787	18	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	3.00	0.00	4.00	0.00	33.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	7	29	7	12	35	7
Site-Generated Trips [veh/h]	0	50	24	1	17	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	17
Total Hourly Volume [veh/h]	1115	116	38	957	70	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	31	10	252	18	3
Total Analysis Volume [veh/h]	1174	122	40	1007	74	13
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	10	108	12	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	Yes		No	Yes	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	2	22	3	3
g / C, Green / Cycle	0.50	0.50	0.05	0.67	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.39	0.40	0.02	0.59	0.04	0.01
s, saturation flow rate [veh/h]	1681	1627	1667	1695	1667	1100
c, Capacity [veh/h]	843	816	79	1137	141	93
d1, Uniform Delay [s]	6.62	6.76	15.22	4.37	14.36	13.88
k, delay calibration	0.11	0.11	0.11	0.19	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.51	1.80	4.93	4.35	3.00	0.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.79	0.51	0.89	0.52	0.14
d, Delay for Lane Group [s/veh]	8.13	8.57	20.16	8.71	17.36	14.56
Lane Group LOS	A	A	C	A	B	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.08	2.18	0.34	1.63	0.54	0.09
50th-Percentile Queue Length [ft/ln]	52.12	54.41	8.61	40.72	13.43	2.22
95th-Percentile Queue Length [veh/ln]	3.75	3.92	0.62	2.93	0.97	0.16
95th-Percentile Queue Length [ft/ln]	93.81	97.95	15.49	73.29	24.18	4.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.33	8.57	20.16	8.71	17.36	14.56
Movement LOS	A	A	C	A	B	B
d_A, Approach Delay [s/veh]	8.35		9.15		16.94	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.00					
Intersection LOS	A					
Intersection V/C	0.782					

Other Modes

g_Walk, mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.066
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.202	5.860	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Hwy 101/31st St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.4
 Level Of Service: A
 Volume to Capacity (v/c): 0.793

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	I I		T T		T T	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		-2.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	954	57	19	784	35	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	4.00	6.00	4.00	0.00	7.00
Growth Factor	1.2000	1.0000	1.0000	1.2000	1.0000	1.0000
In-Process Volume [veh/h]	29	46	12	35	4	3
Site-Generated Trips [veh/h]	50	50	1	17	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1224	153	32	993	76	7
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	319	40	8	259	20	2
Total Analysis Volume [veh/h]	1275	159	33	1034	79	7
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing m	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	101.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	4	0
Auxiliary Signal Groups						
Lead / Lag		-	Lead		Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	98	0	9	107	13	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	1	24	3	3
g / C, Green / Cycle	0.54	0.54	0.04	0.69	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.43	0.44	0.02	0.61	0.05	0.00
s, saturation flow rate [veh/h]	1681	1618	1588	1695	1666	1406
c, Capacity [veh/h]	905	871	63	1172	136	115
d1, Uniform Delay [s]	6.56	6.75	16.62	4.30	15.62	14.96
k, delay calibration	0.11	0.11	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.61	2.03	6.50	5.11	3.87	0.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.82	0.52	0.88	0.58	0.06
d, Delay for Lane Group [s/veh]	8.17	8.78	23.11	9.41	19.49	15.18
Lane Group LOS	A	A	C	A	B	B
Critical Lane Group	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.45	2.59	0.33	2.02	0.65	0.05
50th-Percentile Queue Length [ft/ln]	61.16	64.83	8.34	50.49	16.29	1.25
95th-Percentile Queue Length [veh/ln]	4.40	4.67	0.60	3.64	1.17	0.09
95th-Percentile Queue Length [ft/ln]	110.09	116.69	15.00	90.89	29.33	2.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.43	8.78	23.11	9.41	19.49	15.18
Movement LOS	A	A	C	A	B	B
d_A, Approach Delay [s/veh]	8.47		9.84		19.14	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.39					
Intersection LOS	A					
Intersection V/C	0.793					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.046
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.315	5.893	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report
Intersection 3: Hwy 101/25th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 31.7
Level Of Service: C
Volume to Capacity (v/c): 0.761

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1
Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	-2.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	260	900	798	88	104	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	5.00	4.00	3.00	1.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	63	35	4	12	0
Site-Generated Trips [veh/h]	0	87	47	7	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	312	1230	1040	117	150	353
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	342	289	33	42	98
Total Analysis Volume [veh/h]	347	1367	1156	130	167	392
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		1	
v_ci, Inbound Pedestrian Volume crossing mi	0		1		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.5
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	5	2	6	0	4	4
Auxiliary Signal Groups						4,5
Lead / Lag	Lag				Lead	
Minimum Green [s]	4	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	4.0	5.0	5.0	0.0	4.0	4.0
All red [s]	0.5	1.0	1.0	0.0	0.5	0.5
Split [s]	32	88	56	0	32	32
Vehicle Extension [s]	2.5	4.8	4.8	0.0	2.5	2.5
Walk [s]	0	7	7	0	8	8
Pedestrian Clearance [s]	0	17	14	0	19	19
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	4.0	4.0	0.0	2.5	2.5
Minimum Recall	No	Yes	Yes		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	6.00	6.00	6.00	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	4.00	4.00	4.00	2.50	0.00
g_i, Effective Green Time [s]	27	84	53	53	25	56
g / C, Green / Cycle	0.22	0.70	0.44	0.44	0.21	0.47
(v / s)_i Volume / Saturation Flow Rate	0.21	0.43	0.38	0.39	0.10	0.26
s, saturation flow rate [veh/h]	1653	3202	1695	1636	1654	1488
c, Capacity [veh/h]	370	2251	749	723	346	700
d1, Uniform Delay [s]	45.71	9.22	30.12	30.80	41.71	22.81
k, delay calibration	0.31	0.50	0.50	0.50	0.08	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	24.21	1.23	12.27	15.36	0.78	3.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.61	0.86	0.89	0.48	0.56
d, Delay for Lane Group [s/veh]	69.92	10.45	42.39	46.16	42.49	25.88
Lane Group LOS	E	B	D	D	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	12.58	8.74	18.85	19.74	4.43	8.45
50th-Percentile Queue Length [ft/ln]	314.49	218.56	471.15	493.60	110.84	211.17
95th-Percentile Queue Length [veh/ln]	18.40	13.59	25.97	27.03	7.89	13.21
95th-Percentile Queue Length [ft/ln]	459.90	339.78	649.14	675.78	197.17	330.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.92	10.45	44.06	46.16	42.49	25.88
Movement LOS	E	B	D	D	D	C
d_A, Approach Delay [s/veh]	22.49		44.28		30.84	
Approach LOS	C		D		C	
d_I, Intersection Delay [s/veh]	31.67					
Intersection LOS	C					
Intersection V/C	0.761					

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	6843.72
d_p, Pedestrian Delay [s]	48.60	48.60	49.50
I_p,int, Pedestrian LOS Score for Intersection	2.949	2.832	2.291
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	5.546	5.193	4.132
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Hwy 101/20th St

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 51.1
Level Of Service: D
Volume to Capacity (v/c): 0.890

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	75.00	90.00	100.00	90.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	78	1059	106	88	959	19	47	47	99	343	26	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	4.00	3.00	1.00	3.00	0.00	5.00	0.00	4.00	1.00	5.00	0.00
Growth Factor	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
In-Process Volume [veh/h]	0	47	0	6	28	1	4	0	0	0	0	12
Site-Generated Trips [veh/h]	0	75	0	4	39	4	6	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1393	127	116	1218	28	66	56	119	412	31	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	379	35	32	331	8	18	15	32	112	8	32
Total Analysis Volume [veh/h]	102	1514	138	126	1324	30	72	61	129	448	34	129
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	2			3			2			2		
v_di, Inbound Pedestrian Volume crossing m	2			2			2			3		
v_co, Outbound Pedestrian Volume crossing	1			6			7			1		
v_ci, Inbound Pedestrian Volume crossing mi	1			7			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	81.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Overlap	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	3	3	0	4	0
Auxiliary Signal Groups									1,3			
Lead / Lag	Lag			Lead								
Minimum Green [s]	4	10	0	4	10	0	0	6	6	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	31	31	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	4.0	0.0
All red [s]	0.5	1.0	0.0	0.5	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0
Split [s]	13	44	0	13	44	0	0	31	31	0	32	0
Vehicle Extension [s]	2.5	5.1	0.0	2.5	5.1	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Walk [s]	0	8	0	0	8	0	0	8	8	0	8	0
Pedestrian Clearance [s]	0	14	0	0	12	0	0	18	18	0	17	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.0	0.0	2.5	3.0	0.0	0.0	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	Yes		No	Yes			No	No		No	
Maximum Recall	No	No		No	No			No	No		No	
Pedestrian Recall	No	No		No	No			No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.50	5.00	5.00	4.50	5.00	5.00	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	3.00	3.00	2.50	3.00	3.00	2.50	0.00	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	60	60	9	60	60	13	26	21	21	21
g / C, Green / Cycle	0.07	0.50	0.50	0.07	0.50	0.50	0.11	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.06	0.49	0.50	0.08	0.40	0.40	0.08	0.09	0.15	0.15	0.09
s, saturation flow rate [veh/h]	1654	1695	1645	1654	1709	1692	1704	1436	1654	1612	1475
c, Capacity [veh/h]	119	842	817	119	848	840	180	309	284	277	253
d1, Uniform Delay [s]	55.12	29.85	30.24	55.74	25.26	25.33	52.15	40.66	48.34	48.34	45.12
k, delay calibration	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.08	0.08	0.08	0.08
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.05	27.94	32.86	48.86	7.82	8.02	4.41	0.67	5.69	5.81	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.99	1.01	1.06	0.80	0.80	0.74	0.42	0.86	0.86	0.51
d, Delay for Lane Group [s/veh]	67.17	57.79	63.10	104.60	33.08	33.35	56.56	41.33	54.03	54.14	46.29
Lane Group LOS	E	E	F	F	C	C	E	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.45	29.13	29.99	5.23	17.48	17.47	4.11	3.36	7.53	7.35	3.58
50th-Percentile Queue Length [ft/ln]	86.31	728.37	749.87	130.74	437.09	436.64	102.74	84.06	188.34	183.74	89.42
95th-Percentile Queue Length [veh/ln]	6.21	37.99	39.16	9.14	24.34	24.32	7.40	6.05	12.04	11.80	6.44
95th-Percentile Queue Length [ft/ln]	155.35	949.68	978.91	228.44	608.53	607.98	184.93	151.30	300.88	294.89	160.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.17	60.19	63.10	104.60	33.21	33.35	56.56	56.56	41.33	54.08	54.14	46.29
Movement LOS	E	E	E	F	C	C	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	60.82			39.29			49.06			52.44		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	51.07											
Intersection LOS	D											
Intersection V/C	0.890											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0			12.0			12.0			12.0		
M_corner, Corner Circulation Area [ft²/ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft²/ped]	2215.48			1772.03			769.39			4104.77		
d_p, Pedestrian Delay [s]	48.60			48.60			48.60			48.60		
I_p,int, Pedestrian LOS Score for Intersection	3.026			2.936			2.092			2.372		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	650			650			442			458		
d_b, Bicycle Delay [s]	27.34			27.35			36.43			35.65		
I_b,int, Bicycle LOS Score for Intersection	3.007			2.781			1.992			2.568		
Bicycle LOS	C			C			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: 31st St/Hamey St

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 11.8
Level Of Service: B
Volume to Capacity (v/c): 0.170

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	←		↑		→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	4.00		-4.00		2.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	19	0	5	1	1	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	100.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	15	26	5
Site-Generated Trips [veh/h]	0	0	4	37	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	9	53	78	54
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	3	19	29	20
Total Analysis Volume [veh/h]	28	0	13	78	115	79
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.17	0.08
d_M, Delay for Movement [s/veh]	7.68	0.00	0.00	0.00	11.82	10.04
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	1.56	1.56	0.00	0.00	24.34	24.34
d_A, Approach Delay [s/veh]	7.68		0.00		11.09	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.56					
Intersection LOS	B					

Intersection Level Of Service Report**Intersection 6: Harney St/Site Dwy 1**

Control Type: Two-way stop
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 8.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.041

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	41	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	0	0	41	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	0	0	10	0
Total Analysis Volume [veh/h]	0	51	0	0	41	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.31	0.00	8.80	8.59
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.31	3.31
d_A, Approach Delay [s/veh]	0.00		3.66		8.79	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Harney St/Site Dwy 2

Control Type: Two-way stop
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 8.4
Level Of Service: A
Volume to Capacity (v/c): 0.030

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	74	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	74	0	0	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	19	0	0	8
Total Analysis Volume [veh/h]	1	0	74	0	0	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.33	0.00	9.58	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.14	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.58	3.58	2.28	2.28
d_A, Approach Delay [s/veh]	0.00		7.33		8.42	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Statutory/Other Authority: ORS 197.040, 197A.305, 197A.320 & 197.235 & Statewide Planning Goal 14

Statutes/Other Implemented: ORS 195.036, 197.015, 197.295 – 197.314, 197.610 – 197.650, 197.764 & 197A.300 – 197A.325

History:

LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16

660-024-0070

UGB Adjustments

(1) A local government may adjust the UGB at any time to better achieve the purposes of Goal 14 and this division. Such adjustment may occur by adding or removing land from the UGB, or by exchanging land inside the UGB for land outside the UGB. The requirements of section (2) of this rule apply when removing land from the UGB. The requirements of Goal 14 and this division[and ORS 197.298] apply when land is added to the UGB, including land added in exchange for land removed. The requirements of ORS 197.296 may also apply when land is added to a UGB, as specified in that statute. If a local government exchanges land inside the UGB for land outside the UGB, the applicable local government must adopt appropriate rural zoning designations for the land removed from the UGB prior to or at the time of adoption of the UGB amendment and must apply applicable location and priority provisions of OAR 660-024-0060 through 660-020-0067.

(2) A local government may remove land from a UGB following the procedures and requirements of ORS 197.764. Alternatively, a local government may remove land from the UGB following the procedures and requirements of 197.610 to 197.650, provided it determines:

(a) The removal of land would not violate applicable statewide planning goals and rules;

(b) The UGB would provide a 20-year supply of land for estimated needs after the land is removed, or would provide roughly the same supply of buildable land as prior to the removal, taking into consideration land added to the UGB at the same time;

(c) Public facilities agreements adopted under ORS 195.020 do not intend to provide for urban services on the subject land unless the public facilities provider agrees to removal of the land from the UGB and concurrent modification of the agreement;

(d) Removal of the land does not preclude the efficient provision of urban services to any other buildable land that remains inside the UGB; and

(e) The land removed from the UGB is planned and zoned for rural use consistent with all applicable laws.

(3) Notwithstanding sections (1) and (2) of this rule, a local government considering an exchange of land may rely on the land needs analysis that provided a basis for its current acknowledged plan, rather than adopting a new need analysis, provided:

(a) The amount of buildable land added to the UGB to meet:

(A) A specific type of residential need is substantially equivalent to the amount of buildable residential land removed, or

(B) The amount of employment land added to the UGB to meet an employment need is substantially equivalent to the amount of employment land removed, and

(b) The local government must apply comprehensive plan designations and, if applicable, urban zoning to the land added to the UGB, such that the land added is designated:

(A) For the same residential uses and at the same housing density as the land removed from the UGB, or

(B) For the same employment uses as allowed on the land removed from the UGB, or

(C) If the land exchange is intended to provide for a particular industrial use that requires specific site characteristics, only land zoned for commercial or industrial use may be removed, and the land added must be zoned for the particular industrial use and meet other applicable requirements of ORS 197A.320(6).

Statutory/Other Authority: ORS 197.040, 197A.305, 197A.320 & 197.235 & Statewide Planning Goal 14

Statutes/Other Implemented: ORS 195.036, 197.015, 197.295 – 197.314, 197.610 – 197.650, 197.764 & 197A.300 – 197A.325

History:

LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16

LCDD 2-2009, f. 4-8-09, cert. ef. 4-16-09

LCDD 8-2006, f. 10-19-06, cert. ef. 4-5-07

660-024-0075

Airport Economic Development Pilot Program

City of Newport
169 SW Coast Hwy
Newport OR 97365

(541) 574-0610

Receipt No: 8.011621

Jun 10, 2020

ne harney ugb oarcel 10-11-33-00100-00

Gen Fund - Planning - Land Use Fees	1,516.00
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Total:	1,516.00
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853 se 98th parcel 12-11-05-00801-00

Gen Fund - Planning - Land Use Fees	1,262.00
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Total:	1,262.00
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Check	Check No: 9974	1,262.00
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Check	Check No: 9138	1,516.00
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Total Paid:	2,778.00
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Total Applied:	2,778.00
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Change Tendered:	.00
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06/10/2020 12:03 PM

CITY OF NEWPORT

169 SW COAST HWY

NEWPORT, OREGON 97365

COAST GUARD CITY, USA
Home Port of NOAA MOC-P



phone: 541.574.0629

fax: 541.574.0644

NewportOregon.gov

Mombetsu, Japan, sister city

Community Development Department

June 1, 2020

INVOICE

**Boston Timber Opportunities, LLC
Attn: Hancock Forest Mgmt
17700 SE Mill Plain Blvd, Suite 180
Vancouver, WA 98683**

<u>Description</u>	<u>Amount</u>
<u>Urban Growth Boundary Amendment Land Use Application:</u>	
NE Harney Street UGB Amendment (Parcel 10-11-33-00100-00) (Account Code: 101-1900-46003) 1206	\$ 1,516.00
<u>Comp Plan Amendment Land Use Application:</u>	
853 SE 98th Street Comp Plan Amendment (Parcel 12-11-05-00801-00) (Account Code: 101-1900-46003) 1206	\$ 1,262.00
TOTAL BAL. DUE	\$ 2,778.00

If you have any questions, please call Sherri Marineau, Executive Assistant, Community Development Dept. at 541-574-0629 or e-mail s.marineau@NewportOregon.gov

**Please remit to: CITY OF NEWPORT, COMMUNITY DEVELOPMENT DEPT.,
169 SW Coast Hwy., Newport, OR 97365**

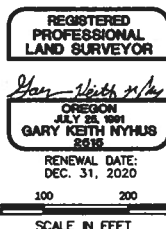
SURVEY PREPARED FOR
HANCOCK TIMBER RESOURCE GROUP
LOCATED IN THE NW 1/4
SECTION 33, T10S, R11W, W.M.
LINCOLN COUNTY, OREGON

APRIL 17, 2019
(10-11-33 TAX LOT 100)
"RESERVOIR SURVEY"

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO LOCATE AND MARK THE CORNERS OF A PORTION OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33, TOWNSHIP 10 SOUTH, RANGE 11 WEST, WILLAMETTE MERIDIAN, EXCEPTING THE TRACT DESCRIBED AS "PARCEL 1" LINCOLN COUNTY MICROFILM VOLUME 384, PAGE 1283, AS SHOWN ON THE ACCOMPANYING PLAT. MONUMENTS FROM LINCOLN COUNTY SURVEYS 6398, 11747, 14260, 15830, AND 15977, AS WELL AS MONUMENTS FROM "LAKEWOOD HILLS PHASE 2" AND A REPLAT OF A PORTION OF "LAKEWOOD HILLS PHASE 2" (PLAT BOOK 15, PAGE 19) WERE FOUND AND HELD TO CONTROL THIS SURVEY. TWO ADDITIONAL MONUMENTS WERE FOUND AND ARE BELIEVED TO BE PART OF A SURVEY IN PROGRESS FOR A NEIGHBORING TRACT AS THEY APPEAR TO BE VERY RECENTLY SET. THE BOUNDARIES OF "PARCEL 1" IN MF 384, PAGE 1283 THAT ARE WITHIN THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33 WERE THEN CALCULATED AND SET BY HOLDING DEED RECORD ANGLES AND DISTANCES OFF OF THE WEST LINE OF SECTION 33. THE EASTERLY BOUNDARY OF THIS PARCEL WAS THEN INTERSECTED WITH THE NORTH LINE OF SAID SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND MONUMENTED AS SHOWN. THE NORTHERN PORTION OF "LAKEWOOD HILLS PHASE 2" OVERLAPS WITH THE SOUTHERLY BOUNDARY OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33 AS SHOWN ON C.S. 14,260. BESIDES THIS OVERLAP, THERE ARE NUMEROUS ENCROACHMENTS UP TO 50 FEET NORTHERLY ACROSS THE LINES OF LOTS 12, 13, 14, AND 15 OF "LAKEWOOD HILLS, PHASE 2". THESE ENCROACHMENTS INCLUDE WOVEN WIRE FENCES, CHAIN LINK FENCES, OUTBUILDINGS, DECKS, ETC.. BEARINGS, AS SHOWN, ARE BASED ON C.S. 15,977 RECORD BETWEEN MONUMENTS (B) AND (F). THIS SURVEY WAS PERFORMED USING A LEICA TS11 TOTAL STATION (3" ANGULAR PRECISION, 1 MM ± 1.5 PPM DISTANCE PRECISION) AS WELL AS A LEICA GS14 GNSS RECEIVER.

FIELD CREW
GARY NYHUS
ERIC NYHUS
STEVEN NYHUS
DANIEL ALVARADO



0 100 200 300
SCALE IN FEET

NYHUS SURVEYING INC.	
GARY NYHUS / STEVEN NYHUS / ERIC NYHUS	
PROFESSIONAL LAND SURVEYORS	
P.O. BOX 206	
740 E. THISSELL RD. TIDEWATER, ORE 97390	
(541) 528-3234	
CHECKED BY: GKN	DRAWN BY: GAM
DATE: 4-17-2019	SCALE: 1" = 100'
PROJECT: 19075	
DRAWN BY: GM MAPPING -GREG MURRY- (541) 528-7062 / 20AASRV	

C.S. # 20889
FILED 3 May 2019
LINCOLN COUNTY SURVEYOR

MONUMENT DESCRIPTIONS

- (A) FOUND: A 5/8" IRON ROD, 0.7' ABOVE GRADE (C.S. ~~8462~~ 15977)
- (B) NORTH 1/16 CORNER TO SECTIONS 32 & 33
FOUND: A 5/8" IRON ROD, 0.1' ABOVE GRADE (C.S. 15,977)
- (C) NORTHWEST 1/16 CORNER SECTION 33
FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "IE ENG", 0.1' ABOVE GRADE (C.S. 14260)
FROM WHICH:
A 38" HEMLOCK WITH A HEALED BLAZE BEARS S 70° W, 23.7' (C.S. 14,260)
A ROTTED 8" ALDER STUB, 1.5' HIGH, BEARS S 74° E, 34.9' (C.S. 14,260)
NEW:
A 16" ALDER, BARKSCRIBED "NW 1/16 S33 BT", BEARS S 70° E, 31.7'
- (D) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "FERGUSON PLS 2279", FLUSH (SURVEY IN PROGRESS)
- (E) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "FERGUSON PLS 2279", FLUSH (SURVEY IN PROGRESS)
- (F) 1/4 CORNER TO SECTIONS 32 & 33
FOUND: A 2" IRON PIPE WITH A 2" BRASS CAP, MARKED AS SHOWN, 0.2' ABOVE GRADE (C.S. 6398)
FROM WHICH:
A 12" HEMLOCK SNAG, 8" HIGH, WITH A ROTTED FACE BEARS N 79° E, 62.1' (C.S. 1471)
A 2" ALUMINUM CAP MARKED "LINCOLN COUNTY RM, S45W, 53.6', S33, 1999", FLUSH, BEARS N 46° 13' E, 53.57' (C.S. 15,830)
A BENT 5/8" IRON ROD, FLUSH, BEARS S 45° 35' W, 21.41' (C.S. 15,830)
AN 18" POWER POLE "C3320038", WHICH IS THE WESTERLY POLE OF A DOUBLE POLE STRUCTURE, BEARS N 5° W, 107.1'
- (G) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "DENISON SURV NEWPORT OR", 0.1' ABOVE GRADE ("REPLAT OF/LAKEWOOD HILLS PHASE 2" PLAT BOOK 15, PAGE 19)
- (H) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "DENISON SURV NEWPORT OR", 0.2' ABOVE GRADE ("REPLAT OF/LAKEWOOD HILLS PHASE 2" PLAT BOOK 15, PAGE 19)
- (I) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 1.0' ABOVE GRADE ("LAKEWOOD HILLS PHASE 2")
- (J) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 0.7' ABOVE GRADE ("LAKEWOOD HILLS PHASE 2")
- (K) FOUND: A 5/8" IRON ROD, 0.6' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (L) FOUND: A BENT RUSTED 1/2" IRON ROD WITH YELLOW PLASTIC CAP MARKED "HOWELL LS 1994", 1.0' ABOVE GRADE (C.S. 11,747)
- (M) FOUND: A 5/8" IRON ROD, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (N) FOUND: A 5/8" IRON ROD WITH ILLEGIBLE YELLOW PLASTIC CAP, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (O) FOUND: A BENT 5/8" IRON ROD, 0.1' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")
- (P) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "IE ENG", 0.3' BELOW GRADE (C.S. 14,260)
- (Q) FOUND: A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "ORE RLS 1816", 0.4' BELOW GRADE ("LAKEWOOD HILLS PHASE 2")

**SURVEY PREPARED FOR
HANCOCK TIMBER RESOURCE GROUP
LOCATED IN THE NW 1/4
SECTION 33, T10S, R11W, W.M.
LINCOLN COUNTY, OREGON**

APRIL 17, 2019
(10-11-33 TAX LOT 100)
"RESERVOIR SURVEY"

C.S. # 20889
FILED 3 May 2019
LINCOLN COUNTY SURVEYOR

LINE TABLE

LINE	BEARING	DISTANCE
L1	S89°28'06"W	27.17'
L2	S89°05'30"W	110.07'
L3	S89°01'55"W	89.81'
L4	S89°09'34"W	90.13'
L5	S89°11'00"W	90.30'
L6	S89°04'10"W	89.83'
L7	S89°08'12"W	59.95'
L8	S89°07'34"W	60.00'
L9	N89°45'03"W	20.56'
L10	N00°18'05"W	49.97'
L11	N84°28'40"E	2.65'

(C.S. 15,977)

(L10)	N00°24'14"W	50.00'
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LEGEND

- MONUMENT SET: 5/8" X 30" RE-BAR WITH YELLOW PLASTIC CAP MARKED "NYHUS SURVEYING"
- ▲ MONUMENT FOUND: HELD FOR CONTROL, AS NOTED

() RECORD INFORMATION, AS NOTED

[] RECORD: BOOK 13, PAGE 19
"LAKEWOOD HILLS PHASE 2 / REPLAT"

FIELD CREW
GARY NYHUS
ERIC NYHUS
STEVEN NYHUS
DANIEL ALVARADO

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Gary Keith Nyhus
OREGON
JULY 25, 1991
GARY KEITH NYHUS
2595

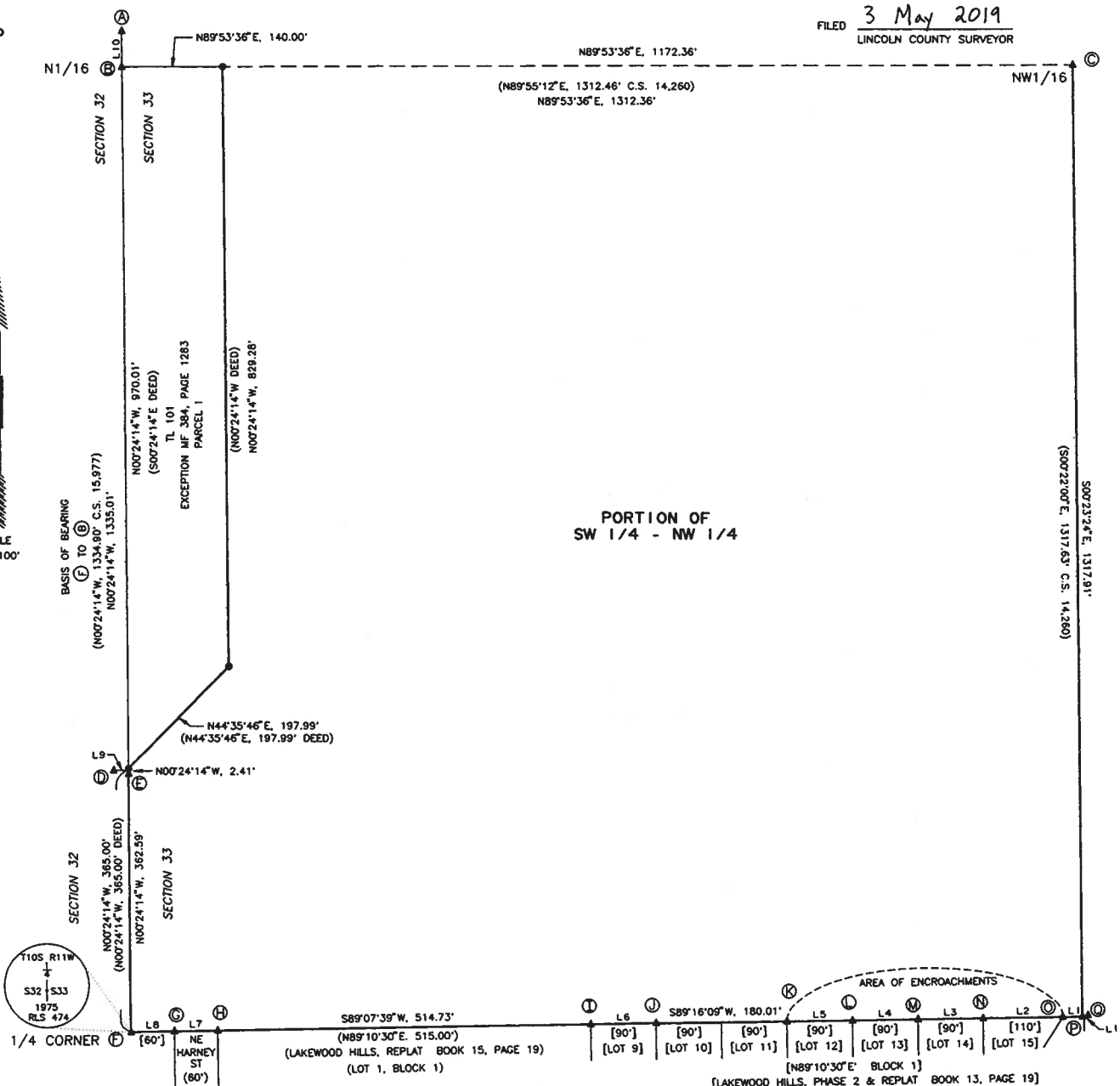
RENEWAL DATE:
DEC. 31, 2020

0 100 200 300
SCALE IN FEET

NYHUS SURVEYING INC.
GARY NYHUS / STEVEN NYHUS / ERIC NYHUS
PROFESSIONAL LAND SURVEYORS
P.O. BOX 206
740 E. THISSELL RD. TIDEWATER, ORE 97390
(541) 528-3234

CHECKED BY: GKN
DRAWN BY: GAM
DATE: 4-17-2019
SCALE: 1" = 100'
PROJECT: 19075

DRAWN BY: GM MAPPING -GREG MURRY- (541) 528-7062 / 20AASRV



Lincoln County Property Report

Account # & Prop. Info		Account Details		Owner & Address	
Account #:	R206997	Neighborhood:		Owner and	BOSTON TIMBER OPPORTUN LLC
Map Taxlot:	10-11-33-00-	RMTB		Mailing Address:	ATTN HANCOCK FOREST MGMT
00100-00		Property Class:	640		17700 SE MILL PLAIN BLVD
Tax Map:	10s11w33				STE 180
Web Map:	View Map			Site Address(es):	VANCOUVER, WA 98683
Info:	TWNShp 10, RNG 11, ACRES 116.44, POTENTIAL ADDITIONAL TAX LIABILITY, DOC200416962				
Tax Code:	100				
Acres:	116.44				

Improvements					
No Inventory					

Value History					
Year	Imp.	Land	Total Market	Total Assessed	Levied Tax
2019	0	122,260	122,260	59,570	808.64
2018	0	122,260	122,260	57,840	782.97
2017	0	122,260	122,260	56,150	798.52
2016	0	122,260	122,260	54,510	775.23
2015	0	122,260	122,260	52,930	682.53
2014	0	122,260	122,260	51,390	668.24
2013	0	122,260	122,260	49,890	634.56
2012	0	122,260	122,260	48,440	604.84

Sales History					
No Sales Data					

Land				Related Accounts	Disclaimer
Description	Acres	Market Value	Special Use Value		For assessment purposes only. Lincoln County makes no warranty as to the accuracy of the information provided. Users should consult with the appropriate City, County or State Department or Agency concerning allowed land uses, required permits or licenses, and development
DESIGNATED FOREST	40	42,000	22,910		
DESIGNATED FOREST	76.44	80,260	36,660		