



### DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

### CLACKAMAS COUNTY BOARD OF COMMISSIONERS 2051 Kaen Road, Oregon City BCC Hearing Room - 4th Floor

March 18, 2020 9:30 AM

The item will not begin before time noted. Interested parties may appear and be heard during the testimony phase of any hearing at the above address. If a hearing is set for decision only, the evidence phase has been completed, so interested parties may no longer be heard. Applications or comments may be inspected, and calls or correspondence directed to: Planning & Zoning Division, 150 Beavercreek Road, Oregon City, OR 97045, (503) 742-4500.

### LAND USE HEARING

File No.: Z0004-20-CP, Sandy Urban Growth Boundary (UGB) 6.42-acre

**Expansion** 

**Applicants**: Allied Homes & Development

**Proposal:** Allied Homes and Development (the "Applicant") requests a 6.42-acre expansion of the City of Sandy's urban growth boundary (UGB). The expansion, which has already been approved by the City, is to provide:

- 1. A planned Gunderson Road minor arterial connection between planned urban development and Hwy 211;
- 2. A roughly 2.38-acre public park on the north side of Hwy 211 and adjacent to that planned urban development; and
- 3. Associated stormwater facilities.

**Staff Contact:** Glen Hamburg, Sr. Planner, 503-742-4523, GHamburg@clackamas.us

Clackamas County is committed to providing meaningful access and will make reasonable accommodations, modifications, or provide translation, interpretation or other services upon request. Please contact us at least three (3) business days before the meeting at 503-742-4545 or email <a href="mailto:Drenhard@clackamas.us">Drenhard@clackamas.us</a>.

503-742-4696: ¿Traducción e interpretación? | Требуется ли вам устный или письменный перевод? | 翻译或口译? | Cấn Biên dịch hoặc Phiên dịch? | 번역 또는 통역?



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

Development Services Building 150 Beavercreek Road | Oregon City, OR 97045 503-742-4500 | zoninginfo@clackamas.us www.clackamas.us/planning

Hearing Date: 3/18/2020

## Land Use Hearing Item Staff Report to the Board of County Commissioners

File Number: Z0004-20-CP, Sandy Urban Growth Boundary (UGB) 6.42-Acre Expansion

**Staff Contact:** Glen Hamburg, Planning and Zoning Division, 503-742-4523

**Board of County Commissioners Hearing Date:** March 18, 2020

### **PROPOSAL:**

Allied Homes and Development (the "Applicant") requests a 6.42-acre expansion of the City of Sandy's urban growth boundary (UGB). The expansion, which has already been approved by the City, is to provide:

- 1. A planned Gunderson Road minor arterial connection between planned urban development and Hwy 211;
- 2. A roughly 2.38-acre public park on the north side of Hwy 211 and adjacent to that planned urban development; and
- 3. Associated stormwater facilities.

### **Background:**

The City has identified a need for the Gunderson Road minor arterial connection to Hwy 211 in its adopted Transportation System Plan (TSP). The Sandy Fire District, local residents who have testified, and a formal traffic study also find that the road connection would provide a secondary outlet to existing and planned residential development, hopefully decreasing emergency response times and reducing traffic impacts to established neighborhoods from new residential development in the area.

However, the precise location of the planned Gunderson Road / Hwy 211 intersection illustrated in the City's concept-level TSP drawing is problematic, in part because of sight distance issues at a curve in the highway and because of steep, superelevated road sections. Traffic engineers have determined that the nearest feasible alternative for the intersection is just outside of the City's current UGBon property zoned Exclusive Farm Use (EFU) by the County – where public facilities for urban uses are not permitted.

The Applicant therefore proposes to expand the City's UGB to include the area of the alternative intersection location. The expansion area would then be eligible for annexation and rezoning by the City to a zone that does allow urban public facilities.

In addition to right-of-way for Gunderson Road, the Applicant's proposed UGB expansion area also includes: adjacent sections of Hwy 211 that would need to be widened/modified for new turn lanes and other highway improvements; space for a stormwater facility needed to accommodate the runoff from the proposed Gunderson Road extension and the improved highway; and space for associated easements.

The City and local residents have also expressed a need for a public park on the north side of Hwy 211, and in the same general location as the Gunderson Road extension, to serve nearby planned residential development. Accordingly, the Applicant proposes for an approximately 2.38-acre park to be located between the Gunderson Road extension and current City limits, in an area that, if not included in this UGB expansion, would otherwise be an isolated jurisdictional enclave ("island") outside of the UGB. Staff finds that including this area in the expanded UGB and using it for new park land, as proposed by the Applicant, would be an efficient use of space and could allow adjacent incorporated areas to be developed more fully with needed housing.

The proposed UGB expansion is in the City's urban reserve area (URA) where lands have already been designated for priority consideration for future UGB expansions and subsequent urban development.

### **Comprehensive Plan Map Amendments:**

Expanding the City's UGB functionally requires changes to Clackamas County Comprehensive Plan Map 4-07a, and to all other maps of the County's Comprehensive Plan where the City's UGB is labeled, to include in the City's UGB the 6.42 acres<sup>1</sup> shown by the Applicant.

### **Originally Recommended Conditions:**

As detailed in the attached report, Staff recommended to the Planning Commission approval of the Applicant's proposal, provided the UGB is expanded only to include the 6.42 acres identified in the Applicant's plans.

The City and the Applicant have stated that, if and when the expansion area is annexed to the City, the park land would be rezoned by the City to "Parks and Open Space" (POS). The remainder of the expansion area would be rezoned residential, simply because the City does not have a zoning designation just for roads and public facilities that it could apply instead and because the neighboring incorporated area is already similarly zoned residential.

However, the City has not conducted a formal Housing Needs Analysis according to legally-prescribed methodology to justify expanding the UGB for additional housing units. Therefore, to comply with state regulations for UGB expansions that include residential lands, a condition of approval is warranted to ensure that the expansion area, including any portion of it that is given a residential zoning designation by the City, is not actually used for additional housing development. The condition would ensure that, regardless of any future zoning by the City, the expansion area will only be for the land uses as yet determined necessary, specifically the public facilities described in this application.

Hearing Date: 3/18/2020

<sup>&</sup>lt;sup>1</sup> The 6.42-acre figure is computed based on the need for the following: approximately 1.02 acres for the Gunderson Road right-of-way; 0.69 acres be for the stormwater facility; 2.38 acres for the park; and the remaining 2.33 acres for the improved section of Hwy 211 and an adjacent slope/construction easement.

### PLANNING COMMISSION ACTION:

A public hearing was held on March 9, 2020, for Planning Commission consideration of the application and the original staff recommendation. That recommendation, with its findings on relevant approval criteria, is attached, along with draft minutes of the Planning Commission hearing.

The Planning Commission voted unanimously to recommend approval, with the two conditions explained back on Page 2 as originally recommended by staff.

The Planning Commission also recommended, and the Applicant has agreed to, an additional condition of approval related to a section of the Barlow Road Historic Corridor that crosses the UGB expansion area.

While an inventoried historic resource and identified in the County's Comprehensive Plan, that Barlow Road section is a "third priority" segment and the County's land use regulations would not necessarily prohibit development of public facilities in the Historic Corridor, whether or not the area is outside the City's UGB. Indeed, where physical evidence of the Barlow Road existing (e.g., ruts), County regulations only "encourage" property owners to preserve the evidence and only disturb it if necessary; nothing in the record indicates there is even physical evidence of the Barlow Road in the proposed UGB expansion area.

Moreover, the City will be considering what protections this section of the Barlow Road warrants when it considers whether to annex and rezone the expansion area, as they would have jurisdiction. Approval of this UGB expansion application only makes the 6.42 acres *eligible to be considered* by the City for annexation and rezoning, and does not itself authorize any specific development that may or may not disturb the Barlow Road.

However, the Planning Commission found that a condition of approval is nonetheless warranted to *expressly* require that impacts to the Barlow Road by development of the public facilities is minimized as much as practically possible. They voted unanimously in favor of a condition specifically requiring the Applicant to: consider the Barlow Road Historic Corridor; minimize impacts caused by the proposed extension of Gunderson Rd and highway improvements, construction staging activities, and excavation for the stormwater facility; and preserve any visibly apparent portions of the Barlow Road (e.g., ruts) that may be in the park land area.

### **CPO AND HAMLET RECOMMENDATIONS:**

The local CPO, the Sandy CPO, is inactive.

However, the City of Sandy's Planning Commission and City Council both voted unanimously in favor of this UGB expansion, and a representative of the City testified in favor of this application at the County Planning Commission hearing.

Hearing Date: 3/18/2020

### **SIGNIFICANT ISSUES:**

As noted previously, the Planning Commission was concerned with recognizing and protecting a historic Barlow Road section that crosses the proposed expansion area.

No survey has been done to indicate where any physical evidence of the Barlow Road might lie in relation to the needed public facilities. However, based on the location of the road in the County's adopted maps, staff finds that the proposed stormwater facility and highway improvements would be largely – if not entirely – outside of the area of the Barlow Road itself. Furthermore, the Planning Commission's recommended conditions of approval would help ensure the protection of any visible physical evidence of the road that there may be in the park land, and that construction staging activities do not disturb the road.

Therefore, it might be that the only disturbance to the area of the historic road would be from the Gunderson Road extension.

### STAFF RECOMMENDATION:

Staff recommends **APPROVAL** of Z0004-20- by the Board of County Commissioners, subject to the following three (3) conditions:

- 1. The City of Sandy (the "City") urban growth boundary (UGB) shall be expanded to include only the approximately 6.42-acre area (the "expansion area") identified in plans submitted on February 13, 2020, with all relevant maps of the Clackamas County Comprehensive Plan updated accordingly;
- 2. The expansion area shall only be used for the public facilities described in the application, including a section of Gunderson Road connecting to Highway 211, a roughly 2.38-acre public park, and associated stormwater facilities; and
- 3. In the development of the public facilities, the Barlow Road Historic Corridor shall be considered and impacts caused by the extension of Gunderson Rd and highway improvements, construction staging activities, and excavation for the stormwater facility shall be minimized. Visibly apparent portions of the Barlow Road (e.g., ruts) that may be in the park land area shall be preserved.

Hearing Date: 3/18/2020

## Z0004-20-CP:

### SANDY URBAN GROWTH BOUNDARY (UGB) 6.42-ACRE EXPANSION

Applicant: Allied Homes & Development

Property Owners: Lawrence Pullen, Richard L. Pullen, and Sherrene Lanette TenEyck

Map and Tax Lot: T2S R4E Section 23, Tax Lot 701 W.M. (plus adjacent Hwy 211 ROW)

Site Address: (no situs)

Zoning District: Exclusive Farm Use (EFU) District

County Staff Contact: Glen Hamburg, Senior Planner (503.742.4523, ghamburg@clackamas.us)

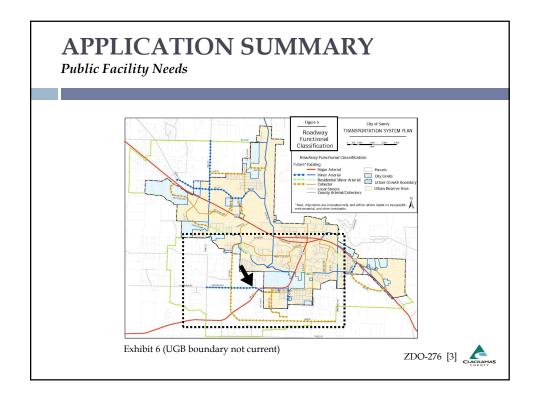


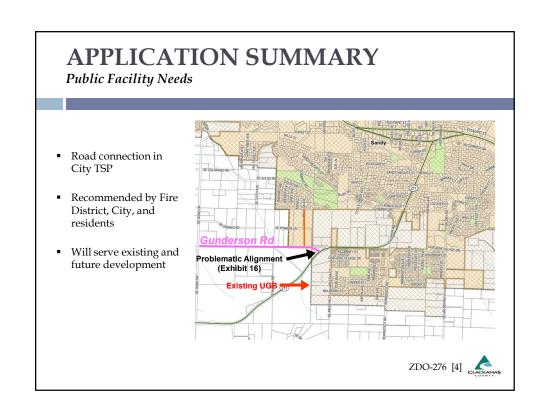
**Board of County Commissioners Hearing** CLACKAMAS March 18, 2020

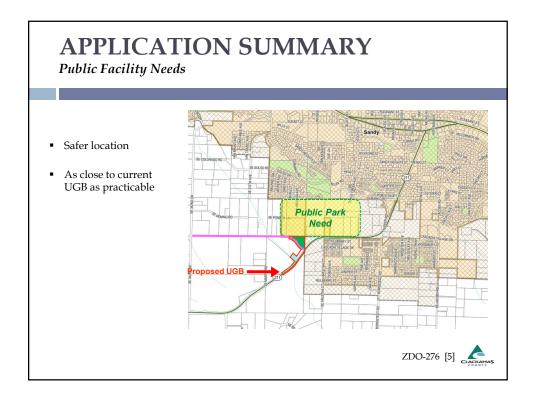
### THIS MORNING

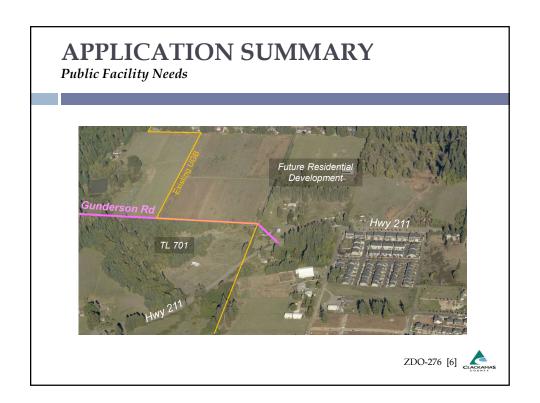
- 1. Application summary
  - Need for particular public facilities
  - In Urban Reserve Area (URA)
- Review of substantive approval criteria
- **Significant Issues**
- Recommendation: Approval, with three conditions

ZDO-276 [2] CLACKAMAS









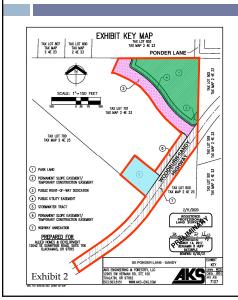
# APPLICATION SUMMARY Public Facility Needs



ZDO-276 [7] CLACKAMAS



Public Facility Needs



PUBLIC FACILITY	+/- Acres
Gunderson Rd ROW	1.02
Stormwater Facility	0.69
Park (and adjacent easements)	2.38
Hwy 211	2.05
Easement along Hwy 211	0.28
Total UGB Expansion Area:	6.42

ZDO-276 [8] CLACKAMAS

### APPLICATION SUMMARY

**Public Facility Needs** 

### Prospective Sandy zoning (if/when annexed):

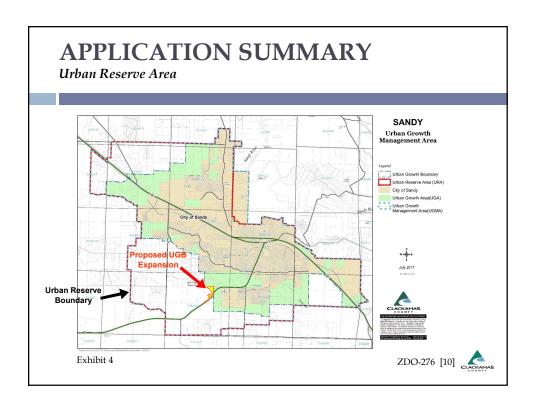
- Park land as POS
- Remainder as residential

### Restricted to identified public facilities, because:

- Those are the "needs" identified by the Applicant and the City
- No Housing Needs Analysis conducted to justify more land for 20-year housing

ZDO-276 [9] CLACKAMAS





# APPLICATION SUMMARY Barlow Road Proposed VGB Expansion Road Proposed VGB Expansion Approximate page of the state of

Exhibit 7

ZDO-276 [11] CLACKAMAS

# APPLICATION SUMMARY Barlow Road Third priority segment ZDO Section 707: Development allowed Property owners "encouraged" to preserve any physical road evidence Disturbance may only be for the road and park (not stormwater facility) In URA This application: no impact to road

### APPROVAL CRITERIA

Applicable Statewide Planning Goals

### Goal 5 - Natural Resources, Scenic and Historic Areas, and Open Spaces

County's requirements met; City will review with annexation/rezoning

### Goal 10 - Housing

Portion may later be zoned residential, but not for housing

### Goal 11 - Public Facilities

- Allows for implementation of a plan for public facilities
- Will serve a demonstrated need

### Goal 12 - Transportation

- Allows for implementation of TSP project
- Safer and more convenient transportation system (Exhibits 16 & 17)
- TPR findings (Exhibit 16): Will not "significantly affect" existing/planned systems

### Goal 14 - Urbanization

- In urban reserve area (URA)
- OAR 660-024 criteria satisfied

ZDO-276 [13] CLACKAMA

### APPROVAL CRITERIA

OAR chapter 660, division 24

### OAR 660-024-0000: Purpose and Applicability

Proposal duly "initiated" by the City (and was adopted, per Exhibit 25)

### OAR 660-024-0040: Land Need

Need for certain public facilities

### OAR 660-024-0050: Land Inventory and Response to Deficiency

"Inventory" shows current UGB insufficient for facility needs

### OAR 660-024-0065: Establishment of Study Area to Evaluate Land for Inclusion in the UGB

Only suitable location for place-specific needs

ZDO-276 [14] CLACKAMAS

### APPROVAL CRITERIA

County Comprehensive Plan

### Chapter 2: Citizen Involvement

- No changes to citizen involvement program
- ZDO Section 1307 criteria (noticing, etc.) followed

### Chapter 4: Land Use

- Expansion is in to agreed urban reserve, not in to a rural reserve
- Review coordinated with and initiated by the City

### Chapter 11: The Planning Process

- Other agencies (e.g., ODOT, DSL) notified and involved
- Notice provided according to ZDO Section 1307

ZDO-276 [15] CLACKAM

### **SIGNIFICANT ISSUES**

March 9, 2020 Planning Commission Hearing

### **Barlow Road: minimize impacts**

- Construction staging activities
- Excavation for stormwater facility
- Opportunities for preservation/recognition at park

ZDO-269 16

### **RECOMMENDATION**

### **Planning Commission Recommendation:**

Approval, with three conditions:

- 1. Expansion of only the 6.42 acres requested (maps updated as needed)
- 2. Use only for the proposed public facilities
- Minimize impacts to Barlow Road Historic Corridor
  - Location of construction staging activities
  - Excavation for stormwater facility
  - Preservation of any visible evidence of road in park land

ZDO-276 [17] CLACKAMAS



### THANK YOU





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

Development Services Building 150 Beavercreek Road | Oregon City, OR 97045 503-742-4500 | zoninginfo@clackamas.us www.clackamas.us/planning

### PLANNING STAFF REPORT/RECOMMENDATION TO THE PLANNING COMMISSION

### **SECTION I: GENERAL INFORMATION**

**Date:** March 2, 2020

**File No.** Z0004-20-CP

**Report Author:** Glen Hamburg, Senior Planner

(Tel: 503.742.4523, Email: ghamburg@clackamas.us)

**Applicant:** Allied Homes & Development

**Property Owners:** Lawrence Pullen, Richard L. Pullen, and Sherrene Lanette TenEyck

**Subject Map and Tax Lot:** T2S R4E Section 23, Tax Lot 701 W.M.

**Site Address:** (no situs)

<u>Area Proposed for Inclusion in Sandy UGB:</u> Approximately 4.37 acres of Tax Lot 701 of Map 24E23 and approximately 2.05 acres of an adjacent section of Hwy 211, for a total of 6.42 contiguous acres

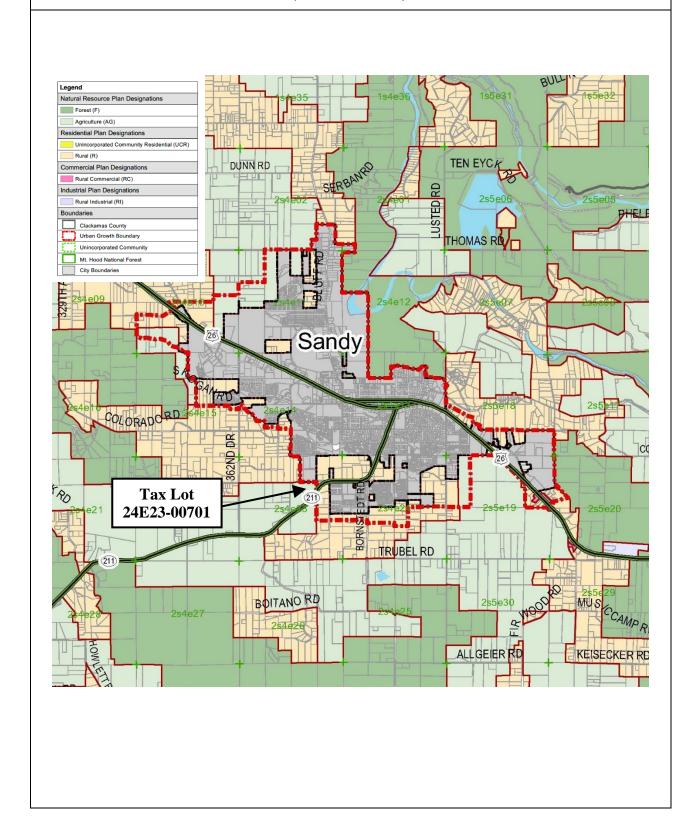
<u>Location of Proposed Expansion Area:</u> The eastern portion of Tax Lot 701 on the northwest side of Hwy 211 southwest of SE Ponder Ln and south of and adjacent to existing Sandy city limits, as well as a roughly 900-foot-long adjacent section of Hwy 211 between SE Martin Rd to the west and Arletha Ct to the east, all of which is inside of the City of Sandy Urban Reserve Area (URA)

**Zoning District:** Exclusive Farm Use (EFU) District

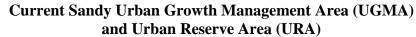
<u>Citizens Planning Organization (CPO) for Area:</u> Sandy CPO (inactive)

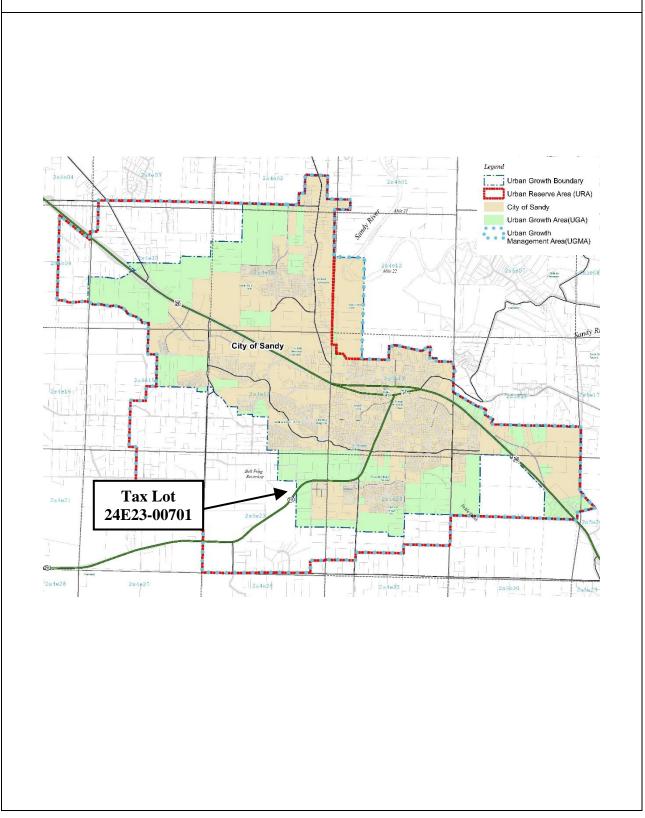
**Proposal:** An amendment to Clackamas County's Comprehensive Plan Map to bring approximately 4.37 acres of Tax Lot 701 of Map 24E23, as well as an approximately 2.05-acre, 900-foot-long adjacent section of Hwy 211, in to the City of Sandy's urban growth boundary (UGB) for certain public facilities.

# Current Sandy UGB in Clackamas County Comprehensive Plan Map 4-07a (Outlined in Red)

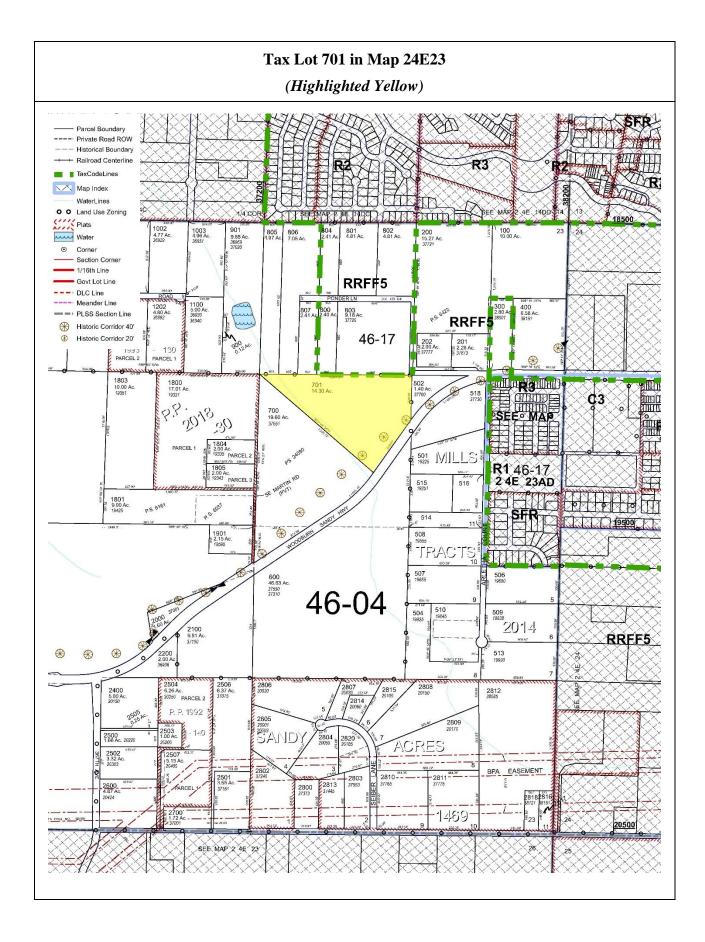


Land Use File # Z0004-20-CP Page 2 of 28

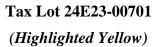




Land Use File # Z0004-20-CP Page 3 of 28

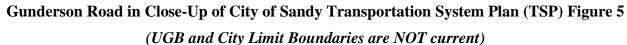


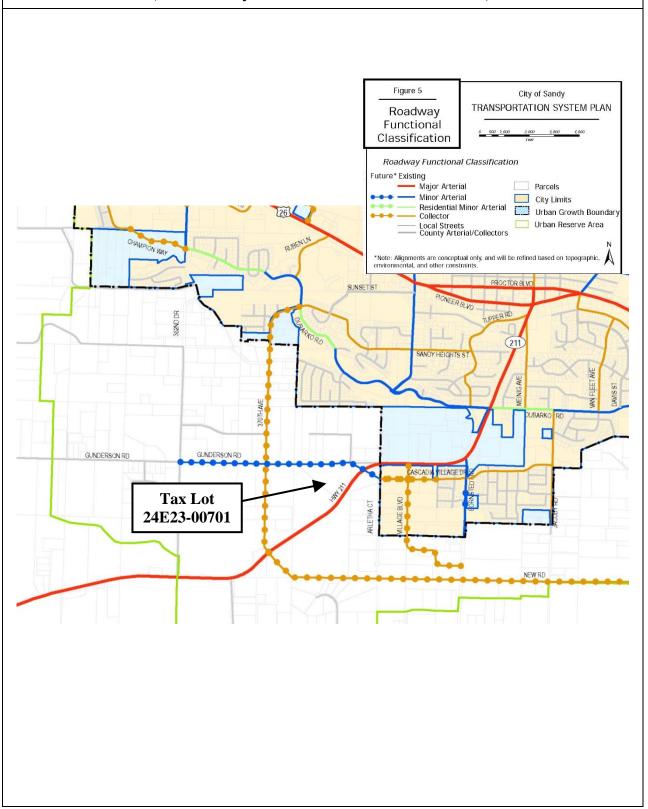
Land Use File # Z0004-20-CP Page 4 of 28



# In relation to current UGB: In relation to current city limits:

Land Use File # Z0004-20-CP Page 5 of 28

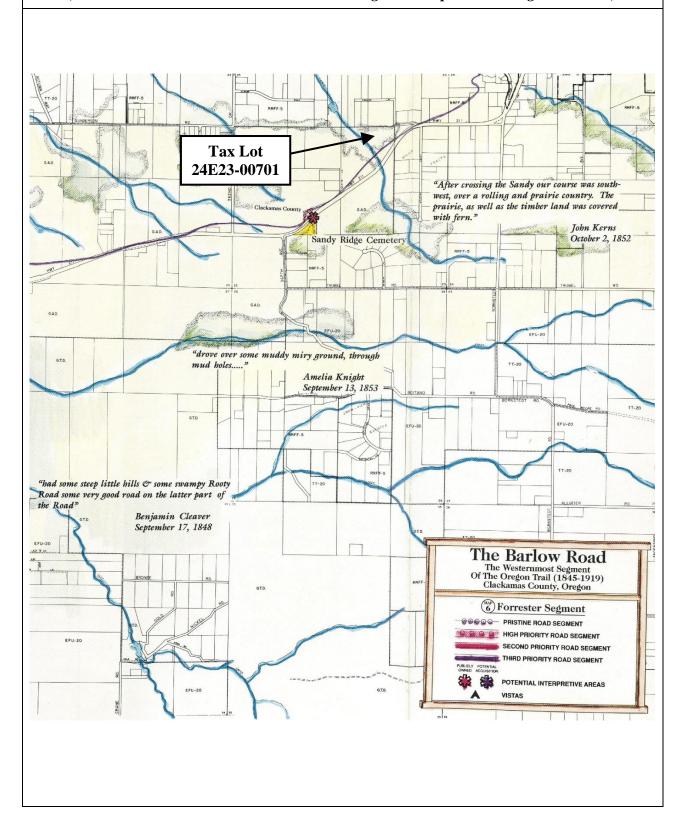




Land Use File # Z0004-20-CP Page 6 of 28

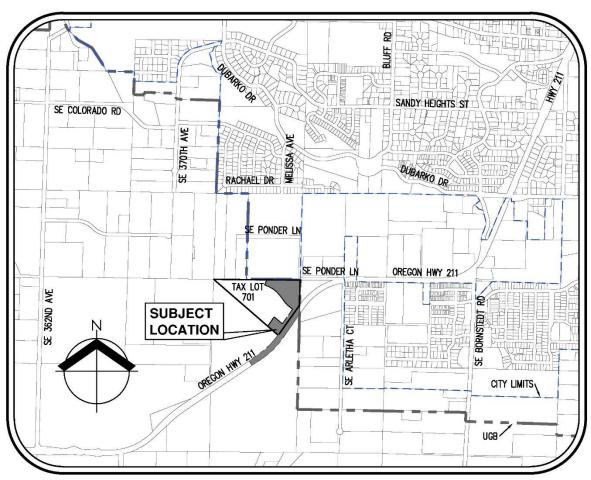
### **Barlow Road Forrester Segment**

(In 1993 Barlow Road Historic Corridor Background Report & Management Plan)



Land Use File # Z0004-20-CP Page 7 of 28

# Applicant's "Vicinity Map" (As Revised on February 13, 2020)

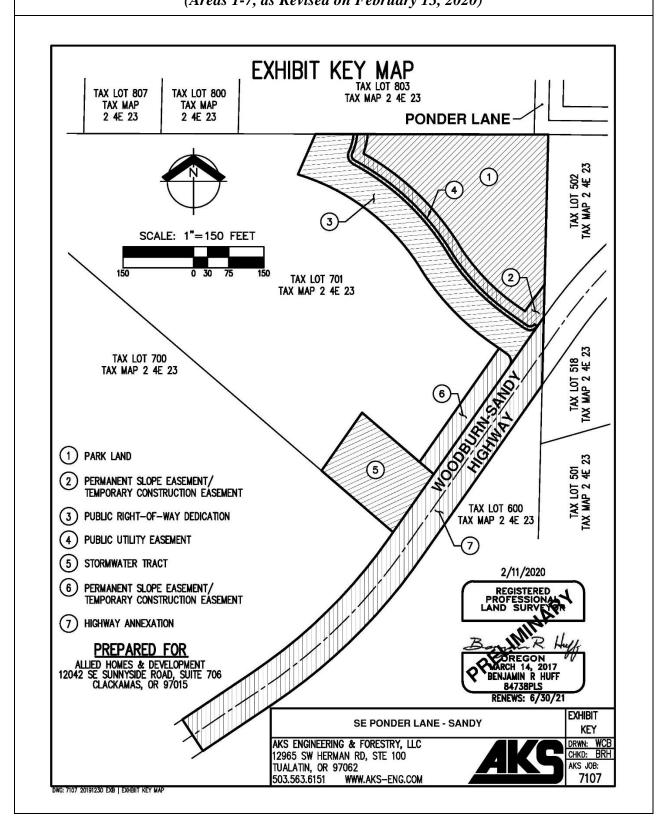


VICINITY MAP

NOT TO SCALE

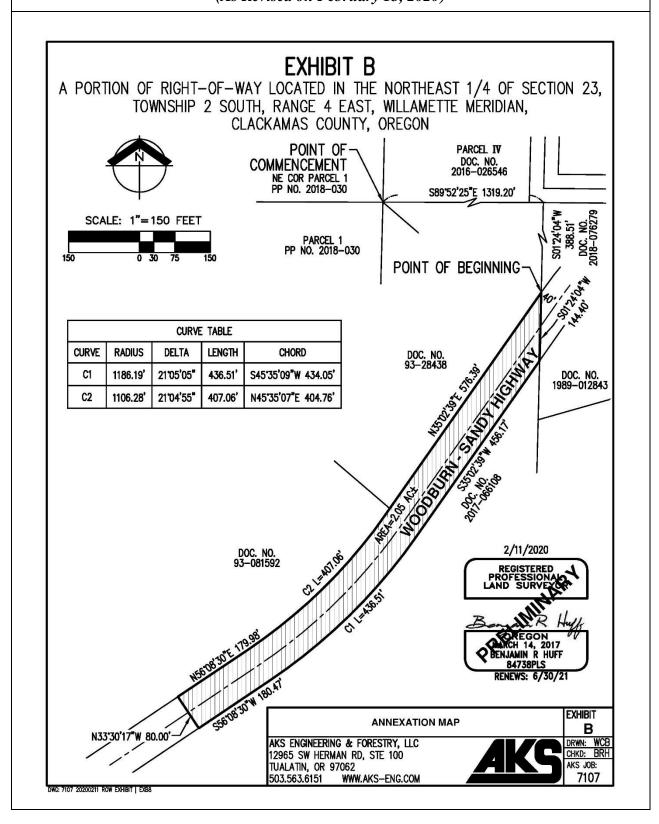
Land Use File # Z0004-20-CP Page 8 of 28

# Applicant's Close-Up Map of Subject Location Proposed for Inclusion in Sandy UGB (Areas 1-7, as Revised on February 13, 2020)



Land Use File # Z0004-20-CP Page 9 of 28

# Applicant's Close-Up Map of Hwy 211 Section Proposed for Inclusion in Sandy UGB (As Revised on February 13, 2020)



Land Use File # Z0004-20-CP Page 10 of 28

### **SECTION II: RECOMMENDATION**

Staff recommends that the Planning Commission recommend **APPROVAL** of this application to the Board of County Commissioners, subject to the following three (3) conditions:

- 1. The City of Sandy (the "City") urban growth boundary (UGB) shall be expanded to include only the approximately 6.42-acre area (the "expansion area") identified in plans submitted on February 13, 2020 (Exhibit 2), and shown on Page 9 of this report, with all relevant maps of the Clackamas County Comprehensive Plan updated accordingly; and
- 2. The expansion area shall only be used for the public facilities described in this application, including a section of Gunderson Road connecting to Highway 211, a roughly 2.38-acre public park, and associated stormwater facilities.

### SECTION III: PROJECT OVERVIEW AND BACKGROUND

This application, made by Allied Homes & Development (the "Applicant"), requests an amendment to Clackamas County's Comprehensive Plan for an expansion of the City's UGB. The amendment would specifically be to Comprehensive Plan Map 4-07a (Exhibit 3), as well as to any other maps of the Comprehensive Plan where the City's UGB is labeled.

The original application, and additional information provided by the Applicant, their representatives, and the City prior to this report (Exhibits 1, 2, 12, 13, 16 and 19), explain that the 6.42-acre requested expansion is necessary in order to provide certain public facilities:

- 1. A planned Gunderson Road minor arterial connection between planned urban development and Hwy 211;
- 2. A roughly 2.38-acre public park on the north side of Hwy 211 and adjacent to that planned urban development; and
- 3. Associated stormwater facilities.

Gunderson Road, with its connection to Hwy 211, is identified as a needed transportation facility in the City's Transportation System Plan (TSP). As explained later in this report and Exhibit 16, having the road's highway connection in the precise location shown in the TSP's conceptual-level illustrations is problematic. Engineers have determined that the nearest suitable alternative for this road connection is slightly to the south. The park that the City finds necessary to serve the area could fit between that alternative road connection location to the south and the planned urban development to the north.

However, the recommended alternative location for the road connection is just outside the City's existing UGB on property currently under the County's jurisdiction and zoned Exclusive Farm Use (EFU). Facilities serving urban uses are not permitted outright in the EFU District outside of a UGB. The requested UGB expansion, if approved, would make the subject area eligible for

Land Use File # Z0004-20-CP Page 11 of 28

annexation to the City of Sandy (the "City") and for rezoning by the City to a zoning district that does allow such public facilities. The expansion would occur in the City's Urban Reserve Area (URA), where lands have already been prioritized for inclusion in the City's UGB when deemed necessary.

The Applicant initially requested only a 5.29-acre expansion of the UGB for these public facilities. On February 13, 2020, the Applicant formally modified their application to request a 6.42-acre expansion and the modified proposal was re-noticed on February 18, 2020.

The expansion requires approval of both the City and the County. Consistent with Oregon Administrative Rules (OAR) Chapter 660, Division 24, the City has initiated consideration of the proposal by noticing and holding a public hearing with the City Planning Commission on February 11, 2020, and is scheduled to have had another public hearing with the City Council on March 2, 2020.

### **SECTION IV: FINDINGS**

This application is subject to the following provisions:

- 1. Statewide Planning Goals;
- 2. OAR chapter 660, divisions 12 and 24;
- 3. Clackamas County Comprehensive Plan Chapters 2, 4, and 11; and
- 4. Zoning and Development Ordinance (ZDO) Sections 202 and 1307.

Planning Staff has reviewed these provisions in conjunction with this proposal and makes the following findings in regarding 1-3 above; the ZDO sections listed in 4 above provide only definitions and procedural requirements that do not warrant separate written findings in this report.

### 1. STATEWIDE PLANNING GOALS:

Goal 1 – Citizen Involvement

Goal 1 calls for "the opportunity for citizens to be involved in all phases of the planning process" and requires the County to have a citizen involvement program with certain features.

This application only proposes to amend the County's Comprehensive Plan maps and, if approved, the structure of the County's existing, State-acknowledged citizen involvement program would not change.

Section 1307 of the ZDO contains adopted and acknowledged procedures for citizen involvement and public notification of quasi-judicial applications. This application has been processed consistent with those requirements, including with notice to the

Land Use File # Z0004-20-CP Page 12 of 28

Department of Land Conservation and Development (DLCD) as directed, to property owners within 750 feet of the subject property, and in the Sandy Post.

Before the Board of County Commissioners (BCC) can decide on this application, there will have been at least four public hearings: two at the City, one with the County's Planning Commission, and another with the BCC. The proposal has also been advertised on both City and County websites.

The relevant requirements of Statewide Planning Goal 1 are satisfied.

### Goal 2 – Land Use Planning

Goal 2 requires the County to have and to follow a comprehensive land use plan and implementing regulations. Comprehensive plan provisions and regulations must be consistent with Statewide Planning Goals, but Goal 2 also provides a process by which exceptions can be made to certain Goals.

The proposed amendment to Clackamas County's Comprehensive Plan maps, including to Map 4-07a, would not change the County's land use planning process. Even under the Applicant's proposal, the County will continue to have a comprehensive land use plan and consistent implementing regulations. The Applicant does not request an exception to any Statewide Planning Goal.

The relevant requirements of Statewide Planning Goal 2 are satisfied.

Goal 3 – Agricultural Lands

Goal 3 is **not applicable** to UGB amendments, per OAR 660-024-0020(1)(b).

Goal 4 – Forest Lands

Goal 4 is **not applicable** to UGB amendments, per OAR 660-024-0020(1)(b).

Goal 5 – Natural Resources, Scenic and Historic Areas, and Open Spaces

Goal 5 requires the local government with jurisdiction to adopt programs that will protect an area's natural resources and conserve scenic, historic, and open space resources for present and future generations. It requires an inventory of natural features, groundwater resources, energy sources, and cultural areas, and encourages the maintenance of inventories of historic resources.

Page 16 of the Applicant's initial submittal (Exhibit 1) states that "there are no identified Goal 5 resources on the property". However, the historic Barlow Road, an

Land Use File # Z0004-20-CP Page 13 of 28

inventoried Goal 5 resource, crosses Tax Lot 701 and the requested expansion area and would presumably be disturbed by the construction of the proposed highway connection.

Nonetheless, this particular proposal would not change the County's acknowledged programs for the protection of its historic resources, nor would it change the County's adopted and acknowledged historic resources inventory. This application would not itself authorize any development, either. The proposal, if approved, would simply make the subject area eligible for annexation to and rezoning by the City. The City, rather than the County, would evaluate Goal 5 compliance with any application for annexation and/or rezoning.

Page 7 of a February 20, 2020, letter submitted by one of the Applicant's representatives (Exhibit 16) states "the Applicant commits to and will accept a condition of approval requiring it to coordinate with the County on Barlow Road when it submits an application to construct and permit [the highway connection]".

On Page 8 of the letter, the Applicant further states that it "requests" the County impose a condition of approval reading:

"The Applicant shall consider the Barlow Road Historic Corridor and to minimize impact by the extension of Gunderson Road [the planned highway connection]."

While the Planning Commission may find that these or similar conditions are warranted, Staff finds that the requirements of Statewide Planning Goal 5 relevant to this application to the County are satisfied, even without them.

Goal 6 – Air, Water, and Land Resources Quality

Goal 6 instructs the County to consider the protection of air, water, and land resources from pollution and pollutants when developing its Comprehensive Plan. The proposed Comprehensive Plan amendment would not change any Comprehensive Plan policy or implementing regulation affecting a Goal 6 resource, nor would it modify the mapping of any protected resource.

The acreage brought in to the UGB will retain its existing County zoning (EFU) until annexed and rezoned by the City. The City will be responsible for evaluating Goal 6 in its consideration of that annexation and rezoning to determine if any measures are necessary to satisfy the goal.

Because the Statewide Wetlands Inventory indicates that Tax Lot 701 may contain state-regulated waterbodies, Staff notified the Department of State Lands of this application; their comments are included in Exhibit 14.

The relevant requirements of Statewide Planning Goal 6 are satisfied.

Land Use File # Z0004-20-CP Page 14 of 28

### Goal 7 – Areas Subject to Natural Hazards

The Applicant states on Page 16 of Exhibit 1 that the subject property does not contain "mapped areas of steep slopes 25 percent or greater" or other "known hazard areas."

Goal 7 requires the comprehensive plan of the local government with jurisdiction to address Oregon's natural hazards, and this UGB expansion application would not change the County's acknowledged Comprehensive Plan policies or implementing regulations regarding natural disasters and hazards, nor would it modify the mapping of any hazard. The acreage brought in to the UGB will retain its existing County zoning, and will continue to be subject to the County's hazard-related land use regulations, until it is annexed and rezoned by the City. The City will be responsible for evaluating Goal 7 when it considers any application for annexation or rezoning.

### The relevant requirements of Statewide Planning Goal 7 are satisfied.

### Goal 8 – Recreational Needs

Goal 8 requires relevant jurisdictions to plan for the recreational needs of their residents and visitors. The proposal would not change any existing, Stateacknowledged County Comprehensive Plan policy or implementing regulation regarding recreational needs, nor would it reduce or otherwise modify a mapped recreational resource.

The City will be responsible for formally evaluating Goal 8 when it considers any annexation and rezoning proposal, but City representatives, as well as the Applicant, have already expressed that the park land – and this requested UGB expansion to allow for it – are necessary in part to meet particular recreational needs in the area of the subject property. The Applicant has also agreed to a condition of approval limiting the subject area to only the public facilities identified in their application, which include an approximately 2.38-acre public park. As explained further in later sections of this report, Staff finds that such a condition is appropriate in order to ensure the area provides the public facilities that the Applicant and the City say the UGB expansion is needed to accommodate.

### The relevant requirements of Statewide Planning Goal 8 are satisfied.

### Goal 9 – Economic Development

The purpose of Goal 9 planning is to make sure cities and counties have enough land available to realize economic growth and development opportunities. The proposed UGB expansion would not, in and of itself, change the allowed uses of any property, and would not reduce or expand either the County's or the City's employment (i.e.

Land Use File # Z0004-20-CP Page 15 of 28

commercial, industrial) lands. The proposal would simply make the subject 6.24 acres, which are already in the City's Urban Reserve Area (URA), *eligible* for annexation and rezoning by the City. The City will be responsible for evaluating Goal 9 when it considers any annexation or rezoning application.

The proposal represents that the subject area would not be used for employment lands or for residential development, but rather only for specific public facilities. The proposed conditions of approval would restrict the area to these uses because the Applicant has not demonstrated that an economic opportunity analysis has been conducted consistent with Goal 9 for the expansion area to be used for employment lands.

The requirements of Goal 9 will be satisfied with the recommended conditions of approval.

### Goal 10 - Housing

The purpose of Goal 10 is to meet housing needs. As noted previously, the proposed UGB expansion would not, in and of itself, change the allowed uses of any property. The proposal would not reduce or expand the County's residential lands supply, or change any housing-related Comprehensive Plan policy or implementing regulation.

Information in the record (Exhibits 10 and 18) suggests that the expansion area may be assigned a residential zoning district by the City if and when it is annexed, yet the Applicant has not provided a housing needs analysis conducted consistent with Goal 10 demonstrating that the City's UGB needs to be expanded to provide additional land for residential development.

Nonetheless, the Applicant maintains that the expansion area is not to provide for more housing beyond the City's current UGB. The February 20, 2020, letter submitted by one of the Applicant's representatives (Exhibit 16) states that "the Applicant has never proposed housing for this area" and the Applicant independently requests for the County to impose a condition of approval limiting the expansion area to development of the limited public facilities identified in their application. Staff's recommended conditions of approval would ensure that the expansion area is only used for the described public facilities. Staff has confirmed with DLCD representatives that, in the absence of a housing needs analysis, such a condition would satisfy the requirements of Goal 10, even if the property were to be assigned a residential zone by the City.

The requirements of Goal 10 will be satisfied with the recommended conditions of approval.

Land Use File # Z0004-20-CP Page 16 of 28

### Goal 11 – Public Facilities and Services

The purpose of Goal 11 is to ensure that local governments plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Goal 11 guidelines specifically call for plans providing for public facilities and services to be coordinated with plans for designation of urban boundaries and urbanizable land.

The City has already demonstrated a need and planned for a Gunderson Road highway connection in its adopted Transportation System Plan (TSP), as shown in Exhibit 6. However, the intersection location illustrated in that plan has been determined to be impractical. Page 10 of the January 6, 2020, Technical Memorandum prepared by Lancaster Engineering (Pages 11-23 of Exhibit 16) includes the following findings:

"...it was determined that the alignment shown on the TSP was not feasible for construction of an intersection with Highway 211, primarily due to poor sight distance, the need for a perpendicular intersection and a very steep superelevated roadway section. Looking northeast from the TSP-identified location, sight distance is limited by both horizontal and vertical curves on Highway 211. In addition, sight distance from the future north leg of the intersection would be particularly poor. At the TSP-identified location, the highway was designed for moving traffic, not for accommodation of an intersection. Due to the high design speed and the horizontal curve, superelevation (the banking of the roadway around the curve) is very steep. This facilitates through traffic on the highway, but makes an intersection at this location problematic, due to difficult turning and crossing improvements across the steep curve."

The Technical Memorandum goes on to explain that the Applicant's proposal is the "nearest suitable intersection location", and finds that UGB expansion and highway connection would "result in improved operation at the study area roadways and intersections" and that "the connection will improve conditions for the existing neighborhood to the north of Baily Meadows subdivision by providing another means of vehicular access to the area."

A February 24, 2020, letter from Sandy Fire District No. 72 (Exhibit 17) further attests to the need for the Applicant's proposed Gunderson Road connection to the highway. The letter states that the connection would provide a "much-needed" secondary access to planned and existing residential developments within the City's existing UGB.

The City has also determined a need for a public park in the expansion area in order to serve planned residential development on the north side of Hwy 211. The Applicant proposes to locate this needed park land in an area between the highway

Land Use File # Z0004-20-CP Page 17 of 28

connection and planned urban development, which Staff finds to be an efficient use of space.

As the Applicant notes, the proposed public facilities will include necessary stormwater infrastructure. However, the area will not require water and sewer facilities, not even to the proposed park facility.

The proposed expansion area is located in the City's URA on lands already determined to be a priority for consideration for future UGB expansions.

### The relevant requirements of Statewide Planning Goal 11 are satisfied.

### Goal 12 – Transportation

The purpose of Goal 12 is to provide and encourage a safe, convenient, and economic transportation system. The City has already planned in its TSP for a Gunderson Road connection to Hwy 211 in order to serve planned residential development deemed necessary to meet the City's 20-year housing needs; however, as determined by Lancaster Engineering in their January 6, 2020, Technical Memorandum (Pages 11-23 of Exhibit 16) and detailed earlier in this report, the precise intersection location illustrated in the TSP would be problematic, while the Applicant's proposed alternative location would be better suited. The Technical Memorandum explains that the Applicant's proposed location, which requires this UGB expansion will improve conditions for existing and planned residential development on the north side of Hwy 211.

Sandy Fire District No. 72 attests in Exhibit 17 that the Applicant's proposed Gunderson Road connection to Hwy 211 "could enhance emergency service capabilities by eliminating a potential of impairment/congestion at a single point of access as well as providing first responders options that could decrease emergency response times in the event of a medical, police or fire emergency." Staff finds that this is further evidence that the proposed UGB expansion would help to provide and encourage a safe and convenient transportation system.

ODOT has signed, and therefore consented to, this application as an owner of property (Hwy 211) included in the proposed expansion area. The County's Transportation Engineering Division was notified of this application and has not raised concerns.

The relevant requirements of Statewide Planning Goal 12 are satisfied.

Land Use File # Z0004-20-CP Page 18 of 28

### Goal 13 – Energy Conservation

Goal 13 encourages land use plans to consider lot size, siting controls, building height, density, and other measures in order to help conserve energy. The proposed Comprehensive Plan Map amendment would not change any policy or implementing regulation regarding energy conservation.

### The relevant requirements of Statewide Planning Goal 13 are satisfied.

### Goal 14 – Urbanization

The purpose of Goal 14 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 area proposed for inclusion in the City's UGB is in the City's URA, meaning the area has already been prioritized over other lands for future inclusion in the UGB. The UGB expansion is also to provide for a road connection that is already planned for in the City's TSP to serve residential areas already within the UGB north of the highway. The applicant proposes to use an otherwise vacant area between the road connection and planned residential development for a park that has been deemed necessary by the City to improve the livability of the adjacent residential areas. Staff finds that using this area, which would otherwise not be practically developable or farmable under its present EFU zoning, to be an efficient use of land.

The recommended conditions of approval would ensure that the expansion area is only used for the proposed public facilities.

The rules in OAR chapter 660, division 24 clarify procedures and requirements of Goal 14 regarding amendments of UGBs. These rules are evaluated in Part IV.2 of this report beginning on Page 20.

The requirements of Goal 14 will be satisfied with the recommended conditions of approval.

### Goal 15 – Willamette River Greenway

Per OAR 660-024-0020(1)(e), Goal 15 is **not applicable** to land added to a UGB unless the land is within the Willamette River Greenway Boundary. The land proposed in this application to be included in Sandy's UGB is not within the Willamette River Greenway Boundary.

Land Use File # Z0004-20-CP Page 19 of 28

### Goal 16 – Estuarine Resources

Per OAR 660-024-0020(1)(f), Goal 16 is **not applicable** to land added to a UGB unless the land is within a coastal shorelands boundary. The land proposed in this application to be included in Sandy's UGB is not within a coastal shorelands boundary.

### Goal 17 – Coastal Shorelands

Per OAR 660-024-0020(1)(f), Goal 17 is **not applicable** to land added to a UGB unless the land is within a coastal shorelands boundary. The land proposed in this application to be included in Sandy's UGB is not within a coastal shorelands boundary.

### Goal 18 – Beaches and Dunes

Per OAR 660-024-0020(1)(f), Goal 18 is **not applicable** to land added to a UGB unless the land is within a coastal shorelands boundary. The land proposed in this application to be included in Sandy's UGB is not within a coastal shorelands boundary.

Goal 19 – Ocean Resources

Per OAR 660-024-0020(1)(g), Goal 19 is **not applicable** to a UGB amendment.

### 2. OREGON ADMINISTRATIVE RULES (OARs):

The full text of the following OARs are included in Exhibits 21 and 22.

Chapter 660, Division 12 – Transportation Planning

OAR 660-012-0060: Plan and Land Use Regulation Amendments

This OAR requires certain measures to be taken if an amendment to an acknowledged comprehensive plan would "significantly affect" an existing or planned transportation facility. This application proposes to amend maps of the County's acknowledged Comprehensive Plan with an expansion of the City's UGB. An analysis done by Lancaster Engineering and included with this application (Pages 11-23 of Exhibit 16) found that the proposed amendment would not "significantly affect" an existing or planned transportation facility, as that term is defined in section (1) of OAR 660-012-0060. As the applicant argues, the transportation system improvements that

Land Use File # Z0004-20-CP Page 20 of 28

necessitate the proposed UGB expansion would complete a section of Gunderson Road, a planned City minor arterial roadway.

The requirements of OAR 660-012-0060 are satisfied.

Chapter 660, Division 24 – Urban Growth Boundaries

OAR 660-024-0000: Purpose and Applicability

This OAR establishes that certain procedures and requirements in chapter 660, division 24 apply to UGB amendments. This application indeed proposes an amendment (an expansion) to the City's UGB, and because the application is not being considered under the "simplified UGB process" under OAR chapter 660, division 38, the requirements of division 24 must be satisfied. **No additional findings related to this OAR are necessary.** 

OAR 660-024-0010: Definitions

This OAR provides definitions to be applied to certain terms used in division 24, and does not warrant written findings.

OAR 660-024-0020: Adoption or Amendment of a UGB

This OAR clarifies what Statewide Planning Goals are applicable when establishing or amending a UGB, and **Staff have provided necessary findings concerning those goals earlier in this report**. The rule also requires UGB amendments to be shown on the County's Comprehensive Plan maps and zoning maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. **Staff finds that the proposed amendment to the Comprehensive Plan Map expanding the City's UGB can be shown in sufficient enough detail.** 

OAR 660-024-0040: Land Need

Section (1) of this rule states that the UGB must be based on the appropriate 20-year population forecast for the urban area as determined under rules in OAR chapter 600, 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.

The City expanded their UGB by approximately 629 acres in 2017 in order to accommodate 20-year housing and employment land needs following an analysis conducted according to relevant requirements and prescribed methodologies.

Land Use File # Z0004-20-CP Page 21 of 28

This latest application does not argue that the City's UGB needs to be expanded in order to provide more land for housing or employment uses. Rather, it argues that the expansion is needed for certain *public facilities*, facilities needed to support the development of housing on lands included in the (current) UGB established in 2017 based on the 20-year population forecast at the time.

Section (2) relates to UGB amendments conducted as part of a periodic review work program. The proposed amendment is not related to a periodic review work program, so this section is not applicable.

Section (3) states that 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). This application is only being considered to meet a need for certain public facilities.

Section (4) states that the determination of 20-year residential land needs for an urban area must be consistent with the appropriate population forecast, and section (8) establishes safe harbors that may be applied in determining housing needs. The City's current UGB, established in 2017, is based on a determination of 20-year residential land needs consistent with the required forecast. The UGB expansion proposed in this application would not add new land for residential development, but rather for public facilities that would serve the residential lands already within the existing UGB.

Section (5) explains how 20-year employment land needs are to be determined; Section (6) clarifies that cities and counties may jointly conduct an economic opportunity analysis for the determination of employment land needs; and section (9) establishes safe harbors that may be applied in determining employment land needs. This application does not show a need to expand the UGB for additional employment lands, but rather a need for certain public facilities.

Section (7) states that the determination of 20-year land needs for transportation and public facilities for an urban area must comply with applicable requirements of Statewide Planning Goals 11 and 12, rules in OAR chapter 600, divisions 11 and 12, and public facilities requirements in ORS 197.712 and 197.768. Compliance with Goals 11 and 12, which are interpreted by divisions 11 and 12 respectively, are reviewed earlier in this report. ORS 197.712 requires jurisdictions to develop and adopt a public facilities plan for areas within UGBs, which the City has done with its Transportation System Plan (TSP), and ORS 197.768 relates to the adoption of a public facilities strategy; the proposed UGB expansion would allow the construction of a road connection to Hwy 211 (Gunderson Road) that is already called for in the City's adopted TSP, except at a modified location that is deemed more appropriate than the exact, literal location shown in the concept-level TSP map.

The requirements of OAR 660-024-0040 are satisfied.

Land Use File # Z0004-20-CP Page 22 of 28

OAR 660-024-0045: Regional Large Lot Industrial Land

This OAR relates to UGB expansions for regional large lot industrial land. This application proposes a UGB expansion only for certain public facilities.

### **OAR 600-024-0045** is not applicable.

*OAR 660-024-0050: Land Inventory and Response to Deficiency* 

- (1) When evaluating 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 by 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.
- (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 that 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 660-024-067.

This OAR requires that, when a UGB expansion is proposed, there be an "inventory" of land inside the existing UGB to determine whether that current UGB provides adequate development capacity to accommodate 20-year needs. Representatives of the City have conducted such an inventory of lands inside the current UGB and determined that the current boundary is inadequate to provide the needed public facilities, specifically a highway connection in the area planned for Gunderson Road in the City's adopted TSP, associated stormwater facilities, and a public park in this general location.

Staff finds that these particular, place-specific public facility needs could not be accommodated by expanding the UGB in any other location. Indeed, when considering alternative boundary locations, it is clear that it would not be necessary or appropriate to expand the UGB elsewhere in order to provide this Gunderson Road highway connection, the associated stormwater facilities, and this area's park; the

Land Use File # Z0004-20-CP Page 23 of 28

only place where it makes sense to expand the UGB to meet the City's determined needs is in the location proposed by the Applicant.

OAR 660-024-0065 and 660-024-067 set rules for the establishment of a study area to evaluate land for inclusion in the UGB, and are largely concerned with identifying possible alternative locations for housing and employment land needs, rather than relevant to the place-specific public facility needs identified by the City. When the primary purpose for expansion of the UGB is to accommodate a public facility that requires specific site characteristics, and when the site characteristics may be found in only a small number of locations, OAR 660-024-0065 (1) allows for a prescribed study area to be limited to those areas that can provide the required site characteristics. In this case, the required site characteristics are a Gunderson Road connection to Hwy 211, as identified in the City's acknowledged TSP, and a park north of the highway and adjacent to planned residential development. As noted previously in this report, the memorandum comprising Pages 11-23 of Exhibit 16 explains that the location of the Applicant's proposed Gunderson Road location (which necessitates this UGB expansion) would be preferable to the location of the Gunderson Road connection illustrated in the TSP. ODOT, who owns the section of Hwy 211 proposed for inclusion in the UGB, has signed this application.

The evaluation of alternative boundary locations does not need to be consistent with OAR 660-024-0060, which relates only to amendments of the Metro UGB. ORS 197.296 does not apply to this application because the City has a population of less than 25,000.

Staff have not included the full text of the other sections of this OAR in this report for brevity. However, section (6) requires the City to assign appropriate urban plan designations to the land added to its UGB and either: annex and apply appropriate zoning to the added land consistent with the plan designation; or maintain the County's present zoning until it is annexed, and then apply appropriate urban zoning at that time. Section (7) requires that any land included in the UGB to provide particular public facilities be planned and later zoned for the intended public facilities. While information in the record suggests that the City may plan and later zone the subject 6.42 acres for residential use, the Applicant makes clear that the expansion area will only be used for the specified public facilities, and Staff's recommended conditions of approval would ensure that the expansion area is only used for these facilities. Staff with DLCD have confirmed that such a condition would satisfy the requirements of sections (6) and (7).

The requirements of OAR 660-024-0050 will be satisfied with the recommended conditions of approval.

Land Use File # Z0004-20-CP Page 24 of 28

OAR 660-024-0060: Metro Boundary Location Alternatives Analysis

This application does not propose a modification to the Metro UGB.

### **OAR 660-024-0060** is not applicable.

OAR 660-024-0065: Establishment of Study Area to Evaluate Land for Inclusion in the UGB

As noted previously, Staff finds that this OAR is primarily concerned with identifying possible alternative locations for housing and employment land needs rather than lands for public facilities. It allows for a more limited study area for UGB expansions for public facilities with specific site requirements, such as those in this application. The applicant's proposed Gunderson Road highway connection location is more appropriate than the location illustrated in the City's TSP, as evidenced by the technical memorandum in Pages 11-23 of Exhibit 16. The undeveloped space between the proposed road connection and planned residential development is a logical place to site the public park that the City has determined is needed in this general location. The recommended conditions of approval will prohibit the expansion area from being used for housing or employment uses.

The requirements of OAR 660-024-0065 will be satisfied with the recommended conditions of approval.

*OAR* 660-024-0067: Evaluation of Land in the Study Area for Inclusion in the UGB; Priorities

Again, Staff finds that this OAR is primarily concerned with identifying possible alternative locations for housing and employment land needs, and allows for a more limited study area for UGB expansions for public facilities with specific site requirements. The recommended conditions of approval will prohibit the expansion area from being used for housing or employment uses.

The requirements of OAR 660-024-0067 will be satisfied with the recommended conditions of approval.

OAR 660-024-0070: UGB Adjustments

This OAR reiterates that expansions of a UGB must be consistent with Goal 14 and division 24, which are evaluated elsewhere in this report and will be satisfied with the recommended conditions of approval. This OAR also establishes requirements for the removal of land from a UGB and for the exchange of lands within a UGB for those outside it, neither of which are proposed in this application.

Land Use File # Z0004-20-CP Page 25 of 28

The requirements of OAR 660-024-0070 will be satisfied with the recommended conditions of approval.

OAR 660-024-0075: Airport Economic Development Pilot Program

This OAR relates to the selection of a city to implement a pilot program to promote economic development and industry growth and job creation at an airport. It is **not relevant to this application**.

OAR 660-024-0080: LCDC Review Required for UGB Amendments

This OAR has specific requirements for city UGB expansions of more than 50 acres. This application proposes an expansion of only 6.42 acres.

**OAR 660-024-0080** is not applicable.

### 3. CLACKAMAS COUNTY COMPREHENSIVE PLAN GOALS AND POLICES:

Chapter 2: Citizen Involvement

Chapter 2 aims to promote public participation in the County's land use planning. Its policies largely focus on the County's Community Planning Organization (CPO) program and methods for informing and involving the public, policies which this application does not propose to change. This application is being processed according to the requirements of ZDO 1307, which implement public notification policies of Chapter 2.

### This application is consistent with Comprehensive Plan Chapter 2.

Chapter 4: Land Use

Chapter 4 includes the definitions of urban and rural land use categories and outlines policies for determining the appropriate Comprehensive Plan land use designation for all lands within the County. This application does not propose to change any Comprehensive Plan land use designation, but rather to expand a UGB to allow it to be annexed by the City and used for public facilities supportive of urban uses.

The '*Urbanization*' section of Chapter 4 addresses the designation of lands for urban uses. Staff finds that the following policies are relevant to this application:

Land Use File # Z0004-20-CP Page 26 of 28

4.A.2: Coordinate with affected cities in designating urban areas outside of Metro. Land designated as a Rural Reserve, as shown on Map 4-9, shall not be designated as an Urban Reserve or added to an urban growth boundary.

The proposed amendment would expand the City's UGB only into a URA and not into a Rural Reserve. The City has initiated review of this application and concurs with the applicant that the proposed expansion is necessary to meet identified longer-term needs.

4.A.4: Establish Urban Growth Management Areas and Urban Growth Management Agreements to clarify planning responsibilities between the County and cities for areas of mutual interest.

The County and the City jointly adopted an Urban Growth Management Agreement (UGMA) in 2001. The UGMA requires that an amendment proposed to the City's UGB be a coordinated City-County effort, with adoption by both the City and the County. The UGMA prohibits the County from considering adoption of any City UGB amendment unless adopted by the City first, and holds that the City is responsible for initiating all legislative amendments.

As noted previously, review of this application was initiated by the City with a noticed public hearing before their Planning Commission on February 11, 2020, and another before their City Council on March 2, 2020.

4.C.3: For land within the urban growth boundaries of Canby, Estacada, Sandy, and Molalla, require annexation to a city as a requirement for conversion to Immediate Urban unless otherwise agreed to be the City and the County.

The expansion area would continue to be zoned EFU and under the jurisdiction of the County until it is annexed and rezoned by the City under a separate application.

4.E.1: The following policies apply to Urban Reserve areas established pursuant to OAR 660, Division 21: (1) ... The cities of Sandy, Molalla, Estacada and Canby, in coordination with Clackamas County, may designate and adopt other urban reserve areas in a manner consistent with OAR 660-021-000; (5) Lands within a designated Urban Reserve area shall continue to be planed and zoned for rural uses in a manner that ensures a range of opportunities for the orderly, economic and efficient provision of urban services when the lands are included in the Urban Growth Boundary. Planning and zoning shall be done in a manner consistent with OAR 660-021-000 and the Metro Code, in areas where Metro has jurisdiction.

The City's URA has already been designated in coordination with the County. This application proposes to expand the UGB in to that established URA to provide public facilities that the City agrees are necessary. Until the expansion area is annexed by the City and appropriately rezoned, it will continue to be

Land Use File # Z0004-20-CP Page 27 of 28

subject to the County's jurisdiction and the land use provisions for the EFU zoning district. Metro does not have jurisdiction over the proposed expansion area.

### This application is consistent with Comprehensive Plan Chapter 4.

### Chapter 11: The Planning Process

Chapter 11 contains polices under its 'City, Special District, and Agency Coordination' section that encourage the involvement of relevant state and regional governments, cities, and special districts in the planning process, consistency between city and County plans, and public engagement. The 'Amendments and Implementation' section of this chapter also contains procedural standards for Comprehensive Plan amendments and requirements for the Plan and implementing regulations in ZDO Section 1307 to be consistent with Statewide Planning Goals.

Earlier sections of this report demonstrate that, with conditions of approval, the proposed UGB expansion will indeed be consistent with Statewide Planning Goals. The process followed for consideration of this application is in compliance with Section 1307's notification standards. Specifically, notice of the County's public hearings was provided to property owners within 750 of the proposed expansion area 20 days in advance, and notice published in the local newspaper at least 10 days in advance. ODOT signed this application as an owner of some of the property proposed for inclusion in the UGB, and DSL was provided notice in order for them to comment on any wetland-related requirements of the State. The Sandy CPO is currently inactive.

This application is being processed consistent with Comprehensive Plan Chapter 11 and implementing regulations in ZDO Section 1307.

Land Use File # Z0004-20-CP Page 28 of 28

# PLANNING COMMISSION DRAFT MINUTES

### March 9, 2020 6:30 p.m., DSB Auditorium

Commissioners present: Brian Pasko, Louise Lopes, Mary Phillips, Gerald Murphy, Thomas Peterson, Tammy

Stevens, Michael Wilson

Commissioners absent: Steven Schroedl Staff present: Jennifer Hughes, Glen Hamburg.

Commission Chair Pasko called the meeting to order at 6:30 pm.

General public testimony not related to agenda items: none.

The public hearing tonight is to review Z0004-20-CP, a proposal from Allied Homes and Development to expand the City of Sandy's urban growth boundary (UGB). Commissioner Pasko read opening statements.

Glen Hamburg explained that the proposal is to expand the City of Sandy's UGB by approximately 6.42 acres. The applicant is Allied Homes & Development. Currently, the property is under Clackamas County jurisdiction and is zoned Exclusive Farm Use. It is already inside the City's urban reserve. The application does not propose for the expansion area to be used for any housing. The City has identified a need in their Transportation System Plan (TSP) for an arterial road (Gunderson Rd) connecting to Hwy 211. There is, however, a problematic alignment in the TSP's illustration of the intersection between Gunderson Road and Hwy 211. If the current intersection plan is used, there would be sight distance and safety issues. The City has also identified a need for a public park on the north side of Hwy 211 for existing and future urban development. Transportation engineers have found a nearby suitable alignment alternative for Gunderson Rd and Hwy 211, but the alternative location is outside of the City's current UGB on where urban public facilities, such as the road extension and park, are not permitted. The County would have to approve the UGB expansion application to move this area into the Sandy UGB, and the City would then have to annex the area. The applicant and the City have agreed that there would be no housing units within the new UGB expansion area. The park area would be zoned POS (Parks & Open Space) if annexed. Only the public facilities shown in the application would be constructed in the expansion area (Exhibits 23 and 25). Approval of this proposal could also allow better access for emergency vehicles into the area to the north, which is slated for future residential development.

Glen reviewed the standards in Statewide Planning Goal 5, Goal 10, Goal 11, Goal 12, and Goal 14 and explained the applicability of each. The City would be charged with evaluating any necessary protections of the Barlow Road when the expansion area is annexed and rezoned. The applicant states that they are working to minimize any impacts to the Barlow Road (Goal 5).

There is no need to perform a housing needs analysis in this case since the applicant is not proposing to put any housing on this site (Goal 10). There is a demonstrated need for the public facilities associated with this proposal (Goal 11). This road is already planned in the County's Transportation System Plan (TSP), and the proposed alternative alignment would be safer and more convenient than what is already in the TSP. This proposal will not have a significant negative impact on current transportation systems (Goal 12). The area is already within an urban reserve, which addresses Goal 14.

Glen demonstrated how the proposal complies with OAR 660-024-0000: Purpose and Applicability (the proposal was initiated by the City); OAR 660-024-0040: Land Need (there is a demonstrated need for the public facilities); OAR 660-024-0050: Land Inventory and Response to Deficiency (the current UGB is insufficient for the facility needs); and OAR 660-024-0065: Establishment of Study Area to Evaluate Land for Inclusion in the UGB (this is the only suitable location for the specific needs of this place).

The proposal also complies with the County Comprehensive Plan. Chapter 2-Citizen Involvement: the proposal was appropriately noticed. Chapter 4-Land Use: The expansion is within an urban reserve, not a rural reserve and the review was initiated by the City. Chapter 11-The Planning Process: other agencies were notified and involved, and notice was provided in accordance with Clackamas County Zoning & Development Ordinance, Section 1307.

The staff recommendation is for the Planning Commission to recommend approval by the BCC subject to specific conditions as stated in the staff report. The actual timeline for building the park would be up to the City. The 100-lot subdivision that is already approved to go in to the north of this area will be developed regardless of whether or not this application is approved. Commissioner Phillips has concerns about the real impacts that the construction may have on the Barlow Road. Perhaps construction staging could be designated to an area that would not impact the Barlow Road.

Exhibits 23-25 were entered into the record.

Michael C. Robinson-Schwabe, Williamson & Wyatt: Mr. Robinson represents the applicant. The applicant's goal is to have the road constructed prior to the subdivision going in. Turning the annexed area into a park and the proposed alignment for Gunderson Road has been a collaborative effort. The Sandy Planning Commission voted unanimously to build the alignment from Gunderson Road prior to full build-out of the Bailey Meadows subdivision. The utilities for that subdivision to the north of the proposed expansion area will come from that subdivision's north, not from the expansion area. Regarding the park and the Barlow Road, if the UGB expansion is approved, his client will be purchasing the land to site the park and then dedicate it to the City for park use. Otherwise, the applicant will provide the City a fee-in-lieu of providing a park. The City's Comprehensive Plan acknowledges the Barlow Road as historic, and the applicant realizes that there needs to be considerations on how to memorialize the road. The storm water facility would only be for runoff from the road; it will not be to serve the Bailey Meadows subdivision. They agree with the recommendation from County staff, and the applicant has no intention to do anything with the property other than use it for the proposed public facilities. There is no development of housing being proposed for this property.

<u>Marie Holladay-AKS Engineering:</u> The proposed area is 6.42 acres, and located south of the Bailey Meadows subdivision and north of Hwy 211. The only construction would be for a park and the other public utilities as indicated in the application. The application is stand-alone and not for any sort of housing development.

Rand Wall-AKS Engineering: The proposed Gunderson Road section would allow Melissa Ave to connect to Hwy 211. The original TSP alignment for the Gunderson Road connection to Hwy 211 will not work, in part, because of the berm to the north which obstructs the sight distance as you enter Hwy 211. The contractor will likely have the staging area for development of the proposed public facilities within the interior of the Bailey Meadows subdivision construction site to the north. The storm water facility is only meant to treat the runoff from the widening of Hwy 211 that is necessary to accommodate the turn lanes. It is the only place that the road is wide enough to allow turn lanes, and the proposed location is really the only place where the

runoff water can get to. The road itself would be a built-up road, meaning that it will require fill to be brought in.

Kelly O'Neill-City of Sandy: The Sandy City Council voted 6-0 to approve the UGB expansion last Monday. The Sandy Planning Commission also voted unanimously to recommend approval by the City Council. The City is moving forward on their 2020 TSP and working closely with ODOT. The Gunderson Road extension will serve the 100-lot subdivision as well a 200-250 more lots in the future. The location of the proposed park is well-suited to serve the proposed subdivisions and residents of the area. The City is currently reviewing their Parks Master Plan, which would include this new park in the near future. If there are identifying features of the Barlow Road, they feel that it would be a good fit to incorporate them into the features of the park.

<u>Erin Findlay-Rachael Drive, Sandy</u>: Ms. Findlay's home is just above the proposed subdivision. Speaking on behalf of more than 40 of her neighbors who have been part of this process at the city level, they are very much in favor of the proposal. The park is a big deal for the community, and the safety of the road is a high priority for their community. An additional consideration is what would happen if an evacuation were necessary and all of the residents only had Melissa Avenue to use as a route.

Mr. Robinson added that the applicant feels that they have done everything that they can to work with the neighbors and the community to minimize any impacts and to collaborate on this project.

Commissioner Pasko closed the public hearing and moved to deliberations.

Commissioner Phillips has some concerns about the preservation of Barlow Road. She likes having a condition of approval that the applicant shall consider the impacts to Barlow Road, including, but not limited to, staging of construction equipment and excavation of the storm water facility. Commissioner Stevens agrees and thinks that the proposal is needed and has been well planned. Commissioner Murphy feels that it is a blessing to the community to have this open space offered. Commissioner Pasko's only concern is that the zoning on the annexed property would be residential and the County would have no way to enforce it in the future.

Commissioner Phillips moved to recommend approval of File No. Z0004-20-CP based on the findings and recommendations in the March 2, 2020, staff report, including the two conditions, with an additional condition that the applicant shall consider the Barlow Road Historic Corridor and to minimize impacts by the extension of the Gunderson Road and the planned highway facilities, including but not limited to: the location of construction staging activities; excavation of the stormwater facility; and preserving any portions of the road that are apparent in the park land. Commissioner Lopes seconded the motion. *Ayes=7; Nays=0. Motion is passed.* 

Jennifer Hughes provided an update on Planning Commission recruitment. Commissioners Wilson, Phillips, and Peterson's terms expire at the end of April. Additionally, Commissioner Drazan resigned, which leaves four seats that will be open. Recruitment runs through the 15<sup>th</sup> of March, but we may extend it if needed.

The BCC is currently discussing Short-Term Rentals. Assuming that the BCC does want to allow them, we will need to do a minor amendment to the ZDO. We are waiting for their decision on which direction to go. The April 13<sup>th</sup> PC agenda is now happening on April 27<sup>th</sup> (BCC is deciding on whether or not they want to repeal hours of operation for marijuana retailers). The meeting on March 23<sup>rd</sup> is cancelled, and it is likely that the April 13<sup>th</sup> meeting will be cancelled. We will make that call as we get closer. There is a Comp Plan/Zone Change that has been submitted, but it is still incomplete a this time.

Commissioner Stevens moved to approve the minutes from January 13<sup>th</sup> as written. Commissioner Murphy seconds. *Ayes= 7, Nays=0. Minutes are approved.* 

There being no further business, the meeting was adjourned at 7:56 pm.



### **HEARINGS OFFICER'S EXHIBIT LIST** IN THE MATTER OF Z0004-20-CP (Allied Homes & Development - Sandy UGB Expansion)

Ex. No.	Date Received	Author or source	Subject & Date of document	
1	2/13/2020	Allied Homes & Development (Applicant)	Original application submitted on 1/8/2020, with ODOT signature added 2/13/2020	
2	2/13/2020	Randy Waltz of AKS Engineering & Forestry, on behalf of the Applicant	Revised maps of proposed UGB expansion area, including a revised "Vicinity Map", "Exhibit Key Map", "Exhibit A – Annexation Description", and "Exhibit B", first emailed by Randy Waltz to Planning Staff on 2/12/2020	
3	1/16/2020	Clackamas County Planning and Zoning Division	County Comprehensive Plan Map 4-07a: Non- Urban Area Land Use Plan	
4	1/16/2020	Clackamas County Planning and Zoning Division	Sandy Urban Growth Management Area Map	
5	1/16/2020	Clackamas County Tax Assessor	Tax Map 24E23 with Tax Lot 701 Highlighted	
6	1/16/2020	City of Sandy	Sandy Transportation System Plan (TSP) Figure 5: Roadway Functional Classification	
7	1/16/2020	Clackamas County Planning and Zoning Division	Barlow Road Map in 1993 Barlow Road Historic Corridor Background Report & Management Plan	
8	1/16/2020	City of Sandy	Sandy Zoning Map created 11/22/2019	
9	1/24/2020	City of Sandy	Draft Sandy Planning Commission minutes from 1/23/2020 meeting	
10	1/24/2020	Chris Goodell (Representative of Applicant) and Planning Staff	1/24/2020 email correspondence concerning prospective City zoning of expansion area	
11	2/3/2020	Paul Savage	2/3/2020 emailed letter supporting proposed UGB expansion	
12	2/4/2020	Kelly O'Neill Jr (City of Sandy Development Services Director) and Planning Staff	2/4/2020 emailed responses from the City to Planning Staff's 1/24/2020 questions	
13	2/4/2020	Kelly O'Neill Jr (City of Sandy Development Services Director) and Planning Staff	2/4/2020 emailed responses to eight preliminary findings made by Planning Staff on 1/31/2020	
14	2/11/2020	Christine Stevenson (Aquatic Resource Management Program, Oregon Department of State Lands)	2/11/2020 emailed results and conclusions from review of Wetland Land Use Notification WN2020-0097	
15	2/13/2020	Jennifer Donnelly (DLCD Regional Representative)	2/13/2020 letter to Kelly O'Neill at City of Sandy	

Page 1 of 2 PL-0023-0

Exhibits received during hearing Exhibits received during open record after hearing

Oversized exhibits

### **HEARINGS OFFICER'S EXHIBIT LIST** IN THE MATTER OF Z0004-20-CP (Allied Homes & Development - Sandy UGB Expansion)

Ex. No.	Date Received	Author or source	Subject & Date of document	
16	2/20/2020	Michael C. Robinson (Schwabe, Williamson & Wyatt), on behalf of the Applicant	2/20/2020 emailed letter, with 1/6/2020 Lancaster Engineering Technical Memorandum ("Exhibit C"), City responses to County Planning Staff's 1/24/2020 questions, and applicable OARs	
17	2/26/2020	Gary Boyles (Sandy Fire District No. 72)	2/26/2020 emailed letter dated 2/24/2020 in support of UGB expansion application	
18	2/26/2020	Kelly O'Neill Jr (City of Sandy Development Services Director) and Planning Staff	2/26/2020 email correspondence concerning conditions of approval of UGB expansion	
19	2/27/2020	City of Sandy	Agenda for March 2, 2020 Sandy City Council Meeting and City Staff Report on UGB expansion	
20	2/28/2020	Sarah Bettey and Planning Staff	2/27-28/2020 email correspondence with comments from Sarah Bettey in support of UGB expansion	
21	2/28/2020	Oregon Secretary of State	OAR chapter 660, division 12, section 60	
22	2/28/2020	Oregon Secretary of State	OAR chapter 660, division 24	
23	3/5/2020	Michael C. Robinson (Schwabe, Williamson & Wyatt), on behalf of the Applicant	Two letters dated 3/5/2020, one addressed to County Planning Staff and the other to the City of Sandy Planning & Building Department, responding to questions asked by Planning Staff in a 3/3/2020 email regarding review of Goal 5 provisions for the Barlow Road, zoning of the expansion area's park land to POS, and a potential easement for Gunderson Rd	
24	3/5/2020	Marie Holladay, AKS Engineering & Forestry, LLC	PowerPoint slides emailed to Planning Staff on 3/5/2020 for presentation by one of the applicant's representatives at the Planning Commission public hearing	
25	3/3/2020	Kelly O'Neill Jr (City of Sandy Development Services Director)	Signed City of Sandy Ordinance #2020-03 approving the UGB expansion, with findings	

Page 2 of 2 PL-0023-0

- Exhibits received during hearing Exhibits received during open record after hearing
- Oversized exhibits



CLACKAMAS COU' Y PLANNING AND ZONING DIVISION
DEPARTMENT OF 1 ANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD | OREGON CITY, OR 97045
503-742-4500 | ZONINGINFO@CLACKAMAS.US

### **Land Use Application**

	The state of the s	For Staff Use Only		
Date received:	18/20	Staff initials:		
Application type:	CT	File number:	20004-a0	CP
Zone: EF	<u> </u>	Fee: \$\40	00	- (
Violation #:		CPO/Hamlet:	sundy (In	active)
		Applicant Information:		
What is proposed	?This application involv	es the expansion of the	e City of Sandy	Urban Growth Box
to accommodat	e a nublic transportatio	n facility (e.g. Gunders	on Boad)	
Name of applican	4.		on noda).	
Mailing address:	Allied Homes & Dev			
•	12404 SE Sunnyside		7:	
City Clackamas		State OR	<sup>Zip</sup> 97015	
Applicant is (selec	t one): Property owner	Contract purchaser	Agent of the prope	erty owner or contract
Name of contact	parcan lif ather than applie	antl:	purchaser	
Name of contact p	berson (ii other than applica	ant): Chris Goodell; AKS	S Engineering 8	Forestry, LLC
Mailing address o	f contact person: 12965 S	SW Herman Road, Suit	e 100	
		OR 97062		
Applicant #s:		ultant Cell: Contact Applicant's Co	nsultant Email:	ntact Applicant's Consultant
Contact person #s			Email: oh	risg@aks-eng.con
· ·	any)to be mailed notices re		C1	insywaks-eng.com
Sherrene Teney	ence Pullen, 27020 C	E Deming Road, Sand	v OD 07055	Property Owner
Name	Address	E Deming Hoad, Sand	Zlp	Relationship
Michael Robins	on Pacwest Center 1	211 SW 5th Avenue, S	uite 190	Legal Counsel
Name	Address	Portland, OF		Relationship
SITE ADDRESS:	No situs, Tax Lot 70	1		
TAX LOT #:	- OAC - AF	0.00	Tax	
A .1:	<u>T 2                                   </u>	Section 23	Lot(s) 7	<del>- 1</del>
	es under same ownership:	Continu NI/A	<del></del>	d area: ±14.30 acre
T_N/A	RN/A	Section <u>N/A</u> Section	Tax lot(s) Tax lot(s)	
T T	R R	Section	Tax lot(s)	
'	11	JECHOII		
I hereby certify the	at the statements contained	d herein, along with the evid	dence submitted. o	are in all respects true
and correct to the	best of my knowledge. 12/1	20/2019	DocuSigned by:	Docusigned by: Docusig
ichard L Pullen herrene Lanette	, Lawrence Pullen, 12/	27/2019 12/21/2019	1 for pull	Han Ochba
Property owner or contr	<del></del>	Date	Owner or contract	purchaser's signature 00C135E
(print)			DocuSigned by:	
Cody Bjugan	1.	2/30/2019 r	Cody Bjugar	
Applicant's name	n 1 2 1	Date	Applications of the Application	n /
(print) Glan	Calen Rasian 1-	DIDT 2/13/2020	2 7 1	161

13



### LAND USE APPLICATION FORM

(Please print or type the information below)

Planning Department 39250 Pioneer Blvd. Sandy OR 97055 503-489-2160

Name of Project City of Sandy Orban Growin	Boundary Expansion				
Location or Address Southeast of Ponder Lane, northwest of Oregon Highway 211					
Map & Tax Lot Number T 25 , R 4E , Section 23 ; Tax Lot(s) 701					
Request: This application involves the expansion of the City of Sandy's Urban Growth					
Boundary to accommodate a public transpo	rtation facility (e.g. Gunderson Road).				
Please contact the Applicant's consultant an	d legal counsel (below) with any inquiries:				
AKS Engineering & Forestry, LLC - Chris Go					
	nson: (503) 796-3756; mrobinson@schwabe.con				
I am the (check one) $\square$ owner lessee of the property listed above, and the statements and information contained herein are in all respects true, complete and correct to the best of my knowledge and belief.					
Applicant (if different than owner)	Owner Richard L Pullen, Lawrence Pullen,				
Allied Homes & Development	Sherrene Teneyck				
Address	Address				
12404 SE Sunnyside Road, Suite 706	37020 SE Deming Road				
City/State/Zip	City/State/Zip				
Clackamas, OR 97015	Sandy, OR 97055				
Phone	Phone				
Please contact Applicant's consultant	Please contact Applicant's consultant				
Email	Email				
Please contact Applicant's consultant	Please contact Applicant's consultant				
Signature Cody Brugan	Signature DocuSigned by: DocuSigned				
765 ff reigned by Agent, owner's writt	en authorization must be attached.				
Eile No	Dog No				



## Submittal **Transmittal**

AKS Engineering & Forestry LLC | 12965 SW Herman Rd. Suite 100 Tualatin, OR 97062

Chris Goodell

AKS Engineering & Forestry LLC

12965 SW Herman Rd.

Suite 100

Tualatin, OR 97062 chrisg@aks-eng.com

503-563-6151

TO: Martha Fritzie

Clackamas County DTD Planning

150 Beavercreek Road Oregon City, OR 97045 MFritzie@clackamas.us

503-742-4529

PROJECT:

**Bailey Meadows** 

7107

DATE SENT:

1/7/2020

SUBJECT:

Clackamas County UGB

Amendment LUA

ID:

00031

PURPOSE!

For Review

VIA:

Courier

REMARKS:

Sub 1

CONTENTS

DATED

DESCRIPTION:

QTY:

DATED

2 1/6/2020

DESCRIPTION:

ACTION:

ACTION:

1 1/6/2020

Check No.33748 in the amount of

LUA UGB Amendment FINAL

\$4,000



January 6, 2020

Olaf & Company Attn. Shaun Olson 3040 Signature Court Medford, Oregon 97504

Re: Condominium Platting Services – 3605 SE Tibbetts Street, Portland, Oregon

Dear Shaun:

AKS Engineering & Forestry is pleased to submit for your review and approval this lump-sum proposal for the surveying services and costs associated with the completion of a condominium plat survey of the above referenced site. To prepare this proposal we have reviewed the architectural plans attached to your email, online Multnomah County survey records, and in-house survey records of projects similar in nature.

We look forward to working with you on this project. If you have any questions or comments, you can contact me at (503) 563-6151 or by email at <a href="mailto:paulg@aks-eng.com">paulg@aks-eng.com</a>.

Sincerely,

AKS ENGINEERING & FORESTRY, LLC

my E Ban

Gary E Paul, PLS Project Surveyor

12965 SW Herman Road, Suite 100

Tualatin, OR 97062

503-563-6151 | paulg@aks-eng.com

### LETTER OF AGREEMENT FOR PROFESSIONAL SERVICES

This agreement is made between Olaf & Company (Client) and AKS Engineering & Forestry, LLC (AKS) to provide condominium platting survey services for the property located at 3605 SE Tibbetts Street in Portland, Oregon (being Tax Lot 500, Map 1S 1E 12AC).

The Client authorizes AKS to provide surveying services, acting as an independent consultant for this project as individually named. The scope of work and fees are as follows:

### **SCOPE OF WORK**

The following list of work items outlined below are services AKS will be responsible for completing. All work will be performed by or under the direct supervision of a Professional Land Surveyor registered in the state of Oregon.

### **BOUNDARY SURVEY**

A boundary survey is required in the tri-county metropolitan area prior to a subdivision or condominium plat. Our research of Multnomah County survey records did not discover a survey meeting the pre-plat boundary requirements. The boundary survey includes the following tasks:

- Property records research
- Establish site control
- Search for and locating existing property corner monuments of record
- Process field data and resolve property lines
- Prepare boundary survey and record with the Multnomah County Surveyor's Office
- Establish property corner monument(s) at all corners of site where an existing corner monument was not recovered

### CONDOMINIUM PLAT SURVEY

Within the condominium declaration are the definitions of the condominium elements (Units, GCE, LCE's). A copy of the declaration will be required to complete the condominium plat. Data obtained during completion of the boundary survey may be utilized for preparation of the condominium plat survey. AKS anticipates the condominium plat survey will include the following tasks:

- Coordinate with client concerning site access and applicable site restrictions
- Prepare legal description of property in Word format for attorney / title company use
- Obtain as-built measurements of Units and Limited Common Elements
- Draft condominium plat and submit to client and attorney for review
- Prepare condominium plat for state and county review
- Provide support / assistance to attorney and to title company
- Complete state / county plat redline comments
- Provide attorney with plat revisions affecting declaration
- Prepare final condominium plat mylars



**EXHIBIT 1** 



### **LUMP SUM FEE**

BOUNDARY SURVEY:	5,000
CONDOMINIUM PLAT SURVEY:\$	4,800

TOTAL Lump Sum Fee: \$ 9,800

### BASIS OF FEE AND BILLING

In consideration for performing said services, the Client agrees to compensate AKS based on the above lump sum fee. Invoices will be issued monthly based on percentage complete.

### **SCHEDULE**

AKS office staff is available to begin work immediately upon receipt of a signed agreement/notice to proceed. AKS field staff is available to be on site within 3 business days. Access to the building to obtain measurements will be coordinated through Olaf & Company. A draft of the boundary survey will be available for review three weeks after completion of the field work and a draft condominium plat will be available for review 2 weeks after completion of building measurements. Allow 4-6 weeks for county / state review and processing.

### **ASSUMPTIONS**

- Client will provide at their expense a title report from the title company of their choice
- Multnomah County survey review and recording fees are responsibility of the client
- Multnomah County condominium plat review and recording fees are responsibility of the client

### **EXCLUSIONS**

Services that do not fall within the Scope of Work outlined herein are excluded from this agreement.

See attached "General Provisions"

AKS Engineering & Forestry, LLC

Date \_\_\_\_January 6, 2020 AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062 Date 1.6.20
Olaf & Company
3040 Signature Court
Medford, Oregon 97504



### **GENERAL PROVISIONS**

- 1. Expenses: AKS Engineering & Forestry, LLC's ("AKS") reimbursable expenses shall be those expenses incurred directly for a project, including but not limited to services provided by outside consultants or contractors, transportation costs, meals, lodging, computer services, printing, permit fees, in-house deliveries, clerical, and binding charges. Client shall pay for such expenses on the basis of actual costs (if incurred through an outside vendor) plus 10%, or at AKS's regular rates at the time the cost is incurred.
- 2. AKS's Fees / Fee Estimates: Unless otherwise agreed in writing: (a) charges for AKS's services will be billed per AKS's rate schedule in effect at the time services are performed; (b) services include, without limitation, all office time, field time, meetings, phone calls, travel time, and all other time incurred for a project; (c) AKS bills in 15-minute increments; (d) AKS bills for travel time door-to-door at its regular rates; (e) AKS's rates may be adjusted from time to time, without notice; and (f) AKS does not warrant that actual fees and expenses will not vary from estimates.
- 3. Payment: AKS will issue invoices approximately monthly. Invoices are due and payable on receipt. All amounts more than 30 days past due will be subject to finance charges. Finance charges are computed at a rate of 1.5% per month, unless such rate exceeds the maximum amount allowed by law, in which case the finance charge will equal the maximum rate allowed by law. If Client disputes any portion of an invoice, Client must notify AKS of the dispute in writing within 30 days of the invoice date. The notice must state the disputed amount and basis for dispute. Client hereby waives the right to dispute an invoice more than 30 days after an invoice's date, and/or if Client fails to provide the required notice.
- 4. Failure to Pay: Failure to timely pay any amount due to AKS is a material breach of this Agreement and, in the case of late payment, AKS may, in its sole discretion, suspend or terminate service and all other obligations under this contract and/or under any other contract between AKS and Client (and/or between AKS and any other client subject to control by Client or any of Client's principals). If any payment is not timely made, AKS may withhold plans, documents, and information (whether such documents and/or information was prepared under this contract, another contract between AKS and Client, or a contract between AKS and another client subject to control by Client or one of Client's principals). If AKS suspends or terminates work due to Client's non-payment, AKS may require an additional "start-up fee" to re-start work, even if Client cures all past defaults. These remedies are in addition to any others available to AKS at law or in equity.
- 5. Additional Charges: If AKS performs any work pursuant to a lump sum agreement, AKS reserves the right to charge additional amounts (and client shall timely pay such extra amounts) when: (a) AKS provides any services not specified in the agreement; (b) unforeseen or differing conditions modify the scope of work anticipated by AKS; (c) any law, ordinance, regulation or similar item changes after the date of the agreement and such change requires AKS to reperform any work; and (d) delay or other conduct by others impact AKS's services; and/or (e) any other circumstance justifies an equitable adjustment to the contract price. Unless otherwise agreed, additional charges shall be at AKS's standard rates.
- 6. **Cost Estimates:** Any construction or development cost estimates provided by AKS are only estimates. AKS has no control over market conditions or bidding procedures. AKS cannot warrant that bids or actual costs will not vary from estimates. AKS will not be liable to Client for any inaccurate cost estimates, and Client assumes all risks associated with construction and development cost estimates that AKS provides to Client.
- 7. **Standard of Care**: AKS shall only be responsible to the level of competency and the standards of care and skill maintained by similarly licensed professionals providing similar services on projects of similar type, size and scope as a subject project, in the locale where the subject project is located, at the time that AKS provides services. AKS shall not be liable to Client for any standard of care higher than such standard.
- 8. **Termination**: Without any liability to the other party, either Client or AKS may terminate this Agreement for any reason by giving 30 days written notice to the other party. In such event, Client shall immediately pay AKS in full for all work performed prior to the effective date of termination. AKS need not give 30-days' notice if the reason for termination is client's non-payment.
- 9. **Limitation of Liability:** In recognition of the fees charged by AKS, and the relative risks, rewards, and benefits of the project to AKS and Client, *Client agrees that AKS's liability to Client relating to this Agreement and the services that AKS performs hereunder, for any cause or combination of causes, under any theory of law, including tort (including negligence), contract or otherwise, shall be limited, in the aggregate, to the lesser of: (a) the amount of the fee received by AKS in connection with the project; and (b) the remaining insurance coverage available to AKS (after deduction of any costs, claim payments or other amounts that may have reduced policy limits). Client hereby expressly waives all claims of every nature against AKS that exceed these liability limitations. Client had the opportunity to negotiate a higher limitation for a higher fee.*
- 10. Release of Individuals: No member, employee or other representative of AKS shall have any personal liability to Client for any act or omission, whether based on a claim of negligence or any other tort, or otherwise, arising out of or relating to this Agreement or the services that AKS performs hereunder, and Client hereby releases all such individuals from all claims of every nature.
- 11. Consequential Damage Waiver: AKS and Client hereby waive all claims against each other for indirect and consequential damages that arise in any manner out of this Agreement or the services performed hereunder. This mutual waiver includes a release of all claims for consequential damages, whether based in tort, contract or otherwise, and includes, without limitation, a release of claims for economic losses such as rental expenses, losses of use, income, profit, financing, business and reputation, and for loss of management or productivity.
- 12. **Enforceability:** If any provision contained in this Agreement (or any portion thereof) is held to be unenforceable by a court of competent jurisdiction, the remaining provisions contained herein (and all parts thereof) shall remain unimpaired, in full force and effect. Each clause shall be enforced to the greatest extent not prohibited by law, and shall be modified to enforce the expressed intent to the greatest extent allowed.
- 13. Assignment: This Agreement is not assignable by Client without the written consent of AKS.
- 14. Access; Client Cooperation: Client represents and warrants that it has unrestricted access to the site, and that AKS has access to the site, to the same degree as Client. Client shall cooperate with AKS and timely provide AKS information that AKS requests.
- 15. Work Product: Calculations, drawings, and specifications prepared pursuant to this Agreement ("Work Product"), in any form, are instruments of professional service intended for one-time use by Client only, for this project only. Work Product is and shall remain the property of AKS and its consultants. Client may not use any Work Product on other projects without AKS's express written permission. Client shall not obtain the right to use the Work Product, even for one-time use on this project, unless all amounts due to AKS are paid in full. If Client is in possession of any Work Product and has not paid any amount due to AKS, AKS may demand return of the Work Product, and may specifically enforce Client's obligation to return the Work Product. Client agrees that AKS shall not have waived its rights in any Work Product by virtue of submission to a public body, by dissemination of Work Product without copyright designations or via any other conduct other than a written waiver signed by AKS.
- 15.1: If Client uses any Work Product without retaining AKS for any portion of the project (including construction phase) or any other project, then Client releases AKS and AKS's consultant(s) from all claims and causes of action that relate in any manner to the project and the Work Product. Client recognizes, acknowledges and agrees that the design for a project can be a work in progress and that changes occur and information become with the even during construction, and that, unless AKS can stay involved in the project through completion, AKS should be relieved of liability associated with the services it provided for the project. Client agrees to indemnify and hold AKS harmless from and against any claims, demands, damages and amounts of every nature, to the extent caused by Client's use of the Work Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's allowing someone else to (Atlied) Promes & The Product (or Client's

- of AKS. If this Agreement is terminated prior to completion of the project, for any reason other than AKS's termination as a result of Client's breach, then Client may continue to use the Work Product prepared by AKS prior to the date of termination, pursuant to the license granted herein, but only if: (a) Client pays AKS all amounts due to AKS; (b) Client removes all indicia of AKS's involvement in the Project from such documents, including title blocks and stamps; (c) Client retains another licensed design professional to review, approve and assume all responsibility for all design documents (the new design professional shall stamp the Work Product and, if anything has been submitted to a jurisdiction prior to termination, then the new design professional shall notify the jurisdiction that the new design professional is the new design professional of record).
- 15.2: If Client makes, authorizes or consents to changes to any Work Product, and such changes are not approved in writing by AKS, then such changes and the results thereof are not the responsibility of AKS. In that case, Client releases AKS from any liability arising from construction, use or result of such changes, and Client shall indemnify, defend and hold AKS harmless from and against any liabilities, costs, damages, demands, claims or other amounts to the extent caused by such changes.
- 16. Indemnity: Client hereby agrees to defend, indemnify and hold AKS (and each of AKS's owners, employees and agents) harmless from any claim, demand, loss, damages and/or liability, including reasonable attorneys' fees, to the extent such arises out of any acts by the Client, its agents, staff, and/or other consultants or contractors that act at Client's direction.
- 17. Work of Others: Client agrees that AKS shall not be responsible or liable for any work performed or services provided by anyone other than AKS and/or AKS's direct employees. If AKS assists Client with the coordination of other contractors and/or design professional and/or consultants, and/or AKS arranges for the provision of services by others, such coordination and/or other efforts is done as a convenience to Client and does not make AKS liable for the services provided by others. Client understands and expressly acknowledges that AKS does not provide geotechnical engineering, traffic engineering, structural engineering, and electrical engineering services. Client acknowledges that AKS does not assume responsibility for determining, supervising, implementing or controlling the means, methods, technique, sequencing or procedures of construction, or monitoring, evaluating or reporting job conditions that relate to health, safety or welfare.
- 18. All Terms Material; Negotiation; Construction: All provisions herein are material to AKS's agreement to provide services, and were expressly negotiated by the parties. Client had the opportunity to negotiate each term hereof, and waives any argument that this Agreement should be construed against the drafter.
- 19. Authorization to Proceed: Any request by Client for AKS to proceed with work shall constitute an express acceptance of all terms to this Agreement, including these General Provisions.
- 20. Law/Venue: All claims that relate to this Agreement or the services provided hereunder shall be subject to Oregon law, and any litigation shall be filed in Multnomah County, Oregon, except: (a) if any case involves a lien claim that must be litigated elsewhere as a matter of law, all issues may be litigated in the same forum as the lien foreclosure; and (b) if <u>all</u> work performed hereunder occurred in Washington, disputes shall be subject to Washington law and litigation shall be filed in Clark County, Washington.
- 21. Mediation: Client agrees to mediate any dispute between AKS and Client, at AKS's request. The parties shall equally share the costs of mediation.
- 22. **Notice of Claims:** Client shall provide AKS immediate written notice of any facts that could potentially result in any potential claim against AKS. As a condition precedent to any recovery from AKS, Client shall give AKS written notice of any claim or facts that could result in a claim not later than ten (10) days after the date of the occurrence of the event causing the potential claim. Client's failure to provide such notice shall constitute waiver of such claim.
- 23. No Third-Party Beneficiaries: Client and AKS are the only beneficiaries of this Agreement; no term herein is intended to benefit any third party.
- 24. Time Limitation/Accrual: Any claim or cause of action by Client against AKS arising out of or relating to this Agreement or the services performed hereunder (under any theory of law) must be initiated within two (2) years of the earlier of the date: (a) of AKS's last invoice; (b) of substantial completion; (c) of abandonment; (d) that Client knew or should have known of the damages claimed; and (e) that Client knew or should have known the facts giving rise to the claim. For purposes of this provision, AKS statements shall not constitute invoices; the "last invoice" shall be the last invoice that reflects new charges not previously charged for base contract work. A signed certificate of substantial completion shall be conclusive evidence of the date of substantial completion. If no certificate of substantial completion is executed, substantial completion shall be the earliest of the date that (a) the project is fit for its intended purpose; (b) the project is utilized for its intended purpose; and (c) a certificate of occupancy (permanent or temporary) is issued for any portion of the Project.
- 25. Integration; Amendments: This Agreement represents the entire and integrated agreement between Client and AKS, and supersedes all prior and contemporaneous negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by the party against which such amendment if asserted.
- 26. **Binding Nature; Survival:** This Agreement shall be binding on the parties and their respective successors, heirs and permitted assigns. Each of Client's principals agrees to be bound by the terms hereof, to the same extent as Client. Any clauses intended to survive termination or expiration of this Agreement (including without limitation indemnity, waivers, limitations, and dispute resolution clauses) shall survive termination or expiration.
- 27. Waiver: No failure on the part of either party to exercise its rights under this Agreement shall be considered a waiver, release or relinquishment of any rights or powers conferred under this Agreement.
- 28. Unmanned Aerial Systems (UAS): AKS may utilize UAS to compile aerial photography of the project site before, during, and after construction. Client hereby grants AKS permission to operate the UAS over the project site. Client represents that all persons, vessels, vehicles, and structures related to the project are considered participants consenting to be involved with any UAS operations by AKS, and that Client has authority to grant these rights and to make these representations. Client shall defend, indemnify and hold AKS harmless from any breach of these representations, and from any claims or demands against AKS arising from any allegation of trespass, non-consent, or any other issues arising out of AKS's UAS operations (except to the extent that AKS causes property damage or personal injury that arises out of AKS's negligence).
- 29. **Electronic Media:** Client may only rely on printed Work Product, with AKS's wet stamp. Any files provided to Client in electronic format are for convenience only, and should not be relied upon as final documents. Any use of electronic files shall be at the user's sole risk. AKS makes no representation as to the accuracy or completeness of electronic documents, or as to the compatibility, usability or readability of such files.
- 30. Court Materials: If AKS receives a subpoena or is otherwise required to produce documents, provide testimony, or otherwise get involved in a court case that relates to your project (and to which AKS is not a party), the Client will pay all time and costs incurred for such matters at AKS' current staff billing rates.



# Condominium Surveying Services

**New Construction** 

Conversions

Mixed-Use

**Townhomes** 

Industrial/Commercial

Airspace Lease

Shoebox

Mid-rise

High-rise

**Amendments** 

# PEARL

### **EXPERIENCE**

For all types of condominium projects – new construction or conversion – AKS brings the right tools to the project. AKS understands the complexities of condominium surveys and the variations of unit and common element definitions. Our broad experience from high-rise towers to duplex buildings provides you with confidence that your project will be surveyed correctly and within your project time schedule.



Conversion Shoebox Condominium Portland, Oregon



Conversion Industrial Condominium Tualatin, Oregon

### **KNOWLEDGE**

AKS blends our comprehension of condominium statutes with our survey experience to provide you with accurate and efficient service. Our survey team knows the requirements of both Chapter 100 (Oregon) and Chapter 64.34 (Washington). Our expertise allows us to understand the condominium as defined by you in the declaration, and efficiently obtain measurements of the various condominium elements.

New Construction High-rise Condominiums Portland, Oregon



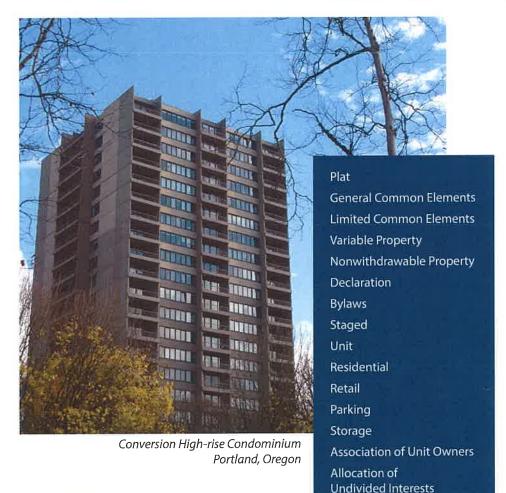




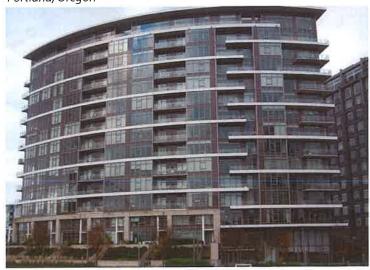


### COMMUNICATION

AKS understands a successful condominium project is a team effort between you, your condominium attorney, and surveyor. The condominium elements as envisioned by you and defined in the attorney's declaration are graphically depicted by AKS in the condominium survey. For larger and complex condominium surveys, AKS will organize a team meeting early in document preparation to review condominium element definitions, and team members will reach a consensus in project understanding. We work closely with your title company and communicate the plat review status and applicable redline comments to allow other team members to fulfill their roles in a timely manner.



New Construction Mid-rise Condominium Portland, Oregon



AKS Engineering & Forestry, LLC is a Northwest based, locally owned multi-disciplinary consulting firm that has been providing professional civil engineering, land surveying, land use planning, landscape architecture, natural resources, arborist, water rights, flood elevation surveying and permitting, and forestry and forest engineering services to a broad range of clients since 1996

AKS has Professional Land Surveyors licensed in OR, WA, CA, ID, MT, WY, CO, UT, and MA.

(Allied Homes & Development)

www.aks-eng.com

Page 10 of 174

# **City of Sandy Urban Growth Boundary Amendment**

Date:

January 2020

Submitted to:

City of Sandy

Planning Department 39250 Pioneer Boulevard

Sandy, OR 97055

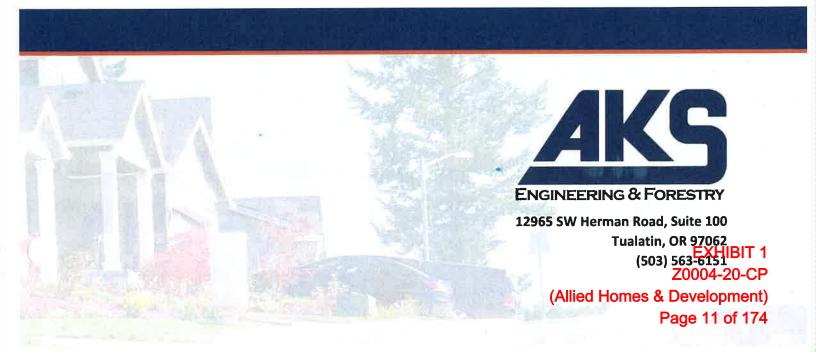
**Applicant:** 

Allied Homes & Development

12042 SE Sunnyside Road, Suite 706

Clackamas, OR 97015

**AKS Job Number:** 7107



### **Table of Contents**

. Ex	ecutive Summary	3
II.Sit	e Description/Setting	
III.	Applicable Review Criteria	
	OREGON STATEWIDE PLANNING GOALS AND GUIDELINES (The Goals)	4
	Goal 1 (Citizen Involvement)	
	Goal 2 (Land Use Planning)	
	Goal 6 (Air, Water and Land Resources Quality)	5
	Goal 8 (Recreational Needs)	
	Goal 11 (Public Facilities and Services)	6
	Goal 12 (Transportation)	6
	Goal 14 (Urbanization)	
	FINDINGS FOR TRANSPORTATION PLANNING RULE COMPLIANCE	7
	OREGON ADMINISTRATIVE RULES	
	Chapter 660 Division 12 TRANSPORTATION PLANNING	
	Chapter 660 Division 14 APPLICATION OF THE STATEWIDE PLANNING GOALS TO NEW	_Y
	INCORPORATED CITIES, ANNEXATION, AND URBAN DEVELOPMENT ON RURAL LANDS.	12
	Chapter 660 Division 24 URBAN GROWTH BOUNDARIES	
	SANDY COMPREHENSIVE PLAN GOALS AND POLICIES	18
	Goal 1 – Citizen Involvement	18
	Goal 2 – Land Use Planning	18
	Goal 8 – Recreational Needs	20
	Goal 11 – Public Facilities and Services	21
	Goal 12 – Transportation	21
	Goal 14 – Urbanization	22
	CLACKAMAS COUNTY COMPREHENSIVE PLAN GOALS AND POLICIES	25
	GOALS	25
	Chapter 4: LAND USE	
	URBAN GROWTH MANAGEMENT AGREEMENT BETWEEN CITY OF SANDY AND CLACKAMAS	5
	COUNTY	27
	IV. Boundaries	
	V. Coordination and Planning	28
	VI. Zoning and Development Proposals in Unincorporated UGA and URA	28
IV.	Conclusion	29
	Exhibits	
Exhil	bit A: City of Sandy Land Use Application Form	
Exhil	bit B: Clackamas County Land Use Application Form	· ·
Exhil	bit C: Property Ownership Infolimation	יותר יון ורו
Exhil	bit D: Clackamas County Assessor's Map	Sec. 25 (197)
	bit E: City of Sandy Noticing Materials	a a
	bit F: Lancaster Mobley Engineering Traffic Documentation	
	bit G: Supplemental Materials	EXHIBIT 1

# Land Use Application for an Urban Growth Boundary Amendment

**Submitted to:** 

City of Sandy

Planning Department 39250 Pioneer Boulevard

Sandy, OR 97055

**Applicant:** 

Allied Homes & Development

12042 SE Sunnyside Road, Suite 706

Clackamas, OR 97015

**Property Owners:** 

Lawrence Pullen 36940 Deming Road Sandy, OR 97055

Richard Pullen 36969 Deming Road

Sandy, OR 97055

Sherrene TenEyck 37020 SE Deming Road Sandy, OR 97055

**Applicant's Consultant:** 

AKS Engineering & Forestry, LLC

12965 SW Herman Road, Suite 100

Tualatin, OR 97062

Contact:

Chris Goodell, AICP, LEEDAP

Email:

chrisg@aks-eng.com

Phone:

(503) 563-6151

**Applicant's Legal Counsel:** 

Schwabe, Williamson & Wyatt

Pacwest Center 1211 SW 5th Avenue, Suite 190

Portland, OR 97204

Contact:

Michael Robinson

Email:

mrobinson@schwabe.com

Phone:

(503) 796-3756

**Site Location:** 

North of Highway 211 and south of Ponder Lane



Clackamas County Assessor's Map:

2 4E 23, Tax Lot 701

**Site Size:** 

±14.24 acres

**Land Use District:** 

Exclusive Farm Use (EFU)

Nor

### I. Executive Summary

The City of Sandy is currently processing a land use application for the Bailey Meadows subdivision (local file No. 19-023 SUB/VAR/TREE). Bailey Meadows is located in the southwestern portion of the City, near Oregon Route 211 (OR 211) and SE Ponder Lane. A condition of approval is anticipated to be included in the City's Notice of Decision that would cause submittal of an application for an amendment to the City's UGB. This application, if approved, would permit the construction of Gunderson Road (a Minor Arterial roadway per City of Sandy's Transportation System Plan) and provide an additional means of access to Bailey Meadows. The purpose of this application is to fulfill this forthcoming condition of approval. Additionally, the Applicant is willing to dedicate a portion of the subject site for parkland.

The alignment for the Gunderson Road extension, as discussed above, falls within property (Clackamas County Assessor's Map 2 4E 23 Tax Lot 701) that is located outside of Sandy's City limits and UGB. This property is currently designated Exclusive Farm Use (EFU) by Clackamas County, but is within the City of Sandy's Urban Reserve Area (URA). The portion of the property that is planned to be included within the amended UGB is limited to areas necessary to construct the Gunderson Road extension, including land for the roadway, associated storm drainage improvements, accompanying utilities, grading, etc. and additional area for parkland dedication.

Based upon the Urban Growth Management Agreement between the City of Sandy and Clackamas County, this UGB amendment application is subject to a coordinated City-County effort. Although it is understood that the City will hold hearings for the application prior to the County doing so, the application is being submitted to both jurisdictions for review at the same time.

### II. Site Description/Setting

The property (Tax Lot 701) included in this application has a total area of ±14.30 acres, though only the acreage required for the road right-of-way and associated improvements and parkland dedication are planned to be incorporated within the Sandy UGB. Tax Lot 701 is located outside of, but adjacent to the UGB, immediately south of the active Bailey Meadows Subdivision application (City of Sandy Local Case File No. 19-023 SUB/VAR/TREE), northwest of OR 211, and west of the intersection of SE Ponder Lane and OR 211.

The property is fairly flat with wooded areas on the northwest half and pasture on the eastern half. The property does not contain structures and access is served from OR 211 on the south side of the site.

### III. Applicable Review Criteria

The Oregon Statewide Planning Goals, Oregon Administrative Rules, and Oregon Revised Statutes are relevant to the UGB Amendment application. Therefore, the responses are applicable for review by both the City of Sandy and Clackamas County.

The Sandy Comprehensive Plan Goals and Policies and the Clackamas County Comprehensive Plan Goals and Policies are applicable to the City and County jurisdictions respectively. If any of the findings for these items are needed for responses to other jurisdictions (e.g., City, County, ODOT, DLCD, or LCDC), they will be referenced specifically. This limitation applies to this complete application parative.



### OREGON STATEWIDE PLANNING GOALS AND GUIDELINES (The Goals)

The following Oregon Statewide Planning Goals are applicable to this action:

- Goal 1 Citizen Involvement
- Goal 2 Land Use Planning
- Goal 6 Air, Land, and Water Resources Quality
- Goal 8 Recreational Needs
- Goal 11 Public Facilities and Services
- Goal 12 Transportation
- Goal 14 Urbanization

Goals 3 (Agricultural Lands) and 4 (Forest Lands) are not applicable to UGB amendments pursuant to Oregon Administrative Rule (OAR) 660-024-0020(1)(b) and have been omitted for brevity.

Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces) is not applicable, pursuant to OAR 660-023-0250(3)(a)-(c), because there are no identified Goal 5 resources on the property, and has been omitted for brevity.

Goal 7 (Areas Subject to Natural Hazards) is not applicable and has been omitted because the subject site does not contain mapped areas of steep slopes 25 percent or greater or other known hazard areas.

Goals 9 (Economic Development) and 10 (Housing) are not applicable because the proposed comprehensive plan amendments allow for a public transportation facility and are not associated with employment lands or residential development.

Goal 13 (Energy Conservation) is not applicable because the amendment does not affect the City or County goals or policies governing energy conservation.

Goals 15 (Willamette River Greenway), 16 (Estuarine Resources), 17 (Coastal Shorelands), 18 (Beaches and Dunes), and 19 (Ocean Resources) are not applicable because the subject site does not contain lands described in those goals. Thus, the approval criteria have been omitted for brevity.

### Goal 1 (Citizen Involvement)

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

### Response:

Goal 1 calls for the opportunity for citizens to be involved in all phases of the planning process. The City of Sandy has an established citizen involvement program. The application will be processed according to Chapter 17.12 of the LDC, which involves public notification, public hearings, and decision appeal procedures, as established in City of Sandy LDC Section 17.12.30 and 17.12.40.

Clackama's County maintains a Committee for Citizen Involvement with inembership that includes representatives of Community Planning Organizations. The application will be processed in accordance with Section 1307 of the Clackamas County Zening and

Development Ordinance (ZDO) which involves public notification, public hearings, and decision appeal procedures. Therefore, the application is consistent with Goal 1.

### Goal 2 (Land Use Planning)

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

### Response:

This application will be processed by the City through a Quasi-Judicial Type IV procedure in accordance with LDC Chapter 17.12. The City and County have acknowledged comprehensive plans and land use development (zoning) codes that implement the irrespective comprehensive plans. The City will review and process this application consistent with the procedures detailed in the LDC. The County will review and process this application consistent with the process detailed in Section 1307 of the Clackamas County ZDO.

This application provides an adequate factual basis for the City and County to approve the application because it describes the current and planned future site characteristics and applies the relevant approval criteria to those characteristics. Therefore, following this process will ensure consistency with Statewide Planning Goal 2.

### Goal 6 (Air, Water and Land Resources Quality)

To maintain and improve the quality of the air, water and land resources of the state.

### Response:

Goal 6 is implemented by Comprehensive Plan policies to protect air, land, and water resource quality. Generally, these policies rely on coordination with the Department of Environmental Quality (DEQ) for their implementation. Specific standards related to the project include requirements for addressing stormwater runoff, grading, and erosion control standards related to a minor public facility (i.e. Gunderson Road) and requirements related to site planning for parkland dedication will be addressed in the future. The property planned to be brought into the UGB is within the City's existing Urban Reserve Area and will retain its' existing zoning until annexed into the City in the future. Thus, the application is consistent with Goal 6.

### Goal 8 (Recreational Needs)

To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

### Response:

Goal 8 is implemented by Comprehensive Plan policies pertaining to parks, open space, and recreation facilities. The City's Comprehensive Plan with respect to Goal 8, its parks master plan, and its development regulations governing recreational needs (e.g., park dedication/fee in-lieu-of requirements, open space provisions, etc.) are supported by this application. The subject property is providing land to be brought within the UGB to dedicate as parkland and satisfy the recreational needs of citizens in the area. Although a land Bailey Meadows Subdivision provides for and meets SDC criteria for on-site needs, in this case the City and Applicant agree to an off-site improvement. The site-specific location of the off-site extension of Gunderson Road and parkland improvements are outside the CUGB, as described in this written document, and require a UGB amendment to allow an

urban facility to be built on land currently within the County's jurisdiction. The planned parkland dedication provided by this application will benefit the City and its residents. Therefore, Goal 8 is satisfied.

### Goal 11 (Public Facilities and Services)

To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

### Response:

The subject property is currently located outside the UGB and the City limits. Since the purpose of the amendment is to permit construction of a road, public facilities, water, and/or sanitary sewer service are not required. The property is planned for the extension of a public road and will include necessary stormwater infrastructure. Additionally, the Applicant is willing to dedicate area for a park facility to satisfy needs of the residents in the general vicinity. This application will not impact urban services or utilities and will serve the transportation system in the area consistent with the Sandy TSP. Therefore, this application is consistent with Goal 11.

### Goal 12 (Transportation)

To provide and encourage a safe, convenient and economic transportation system.

### Response:

A portion of the subject property is planned to be used as a public transportation facility, connecting to the transportation system north of the site. The UGB Amendment & Gunderson Road Connection Traffic Impact Analysis (TIA) prepared by Lancaster Engineering is included in Exhibit F that documents compliance with Goal 12 and applicable State, County, and City transportation-related requirements. Please refer to the TIA for further information. The intended street and connectivity improvements encourage a safe, convenient, and economic transportation system. Therefore, this application is consistent with Goal 12.

### Goal 14 (Urbanization)

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

### Response:

Tax Lot 701 is located within the URA and is currently designated with Clackamas County EFU zoning designation. An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow creation of the public transportation and parkland facilities. The subject application accommodates urban population within the UGB by providing an efficient transportation network per the Sandy TSP and does not involve new commercial, industrial, or agricultural uses. Additionally, the Applicant is providing area for parkland to dedicate to the City and enhance the lives of the residents in the vicinity. The Applicant plans to obtain City Low-Density Residential (LDR) Comprehensive Plan and Single-Family Residential (SFR) Zoning designations for the property to permit both the minor public facility uses. Interim use and development, prior to annexation, is not associated with this application. Therefore, the application is consistent with Goal 14.



### FINDINGS FOR TRANSPORTATION PLANNING RULE COMPLIANCE

### Response:

OAR 660, Division 12, is the Oregon Transportation Planning Rule (the TPR) adopted by the Land Conservation and Development Commission (LCDC). The TPR implements Goal 12, Transportation, and is an independent approval standard in addition to Goal 12 for map amendments. OAR 660-012-0060(1) and (2) apply to amendments to acknowledged maps, as is the case with this application.

The TPR requires a two-step analysis. First, under OAR 660-012-0060(1), the Applicant must determine if the application has a "significant affect," as that term is defined in OAR 660-012-0060(1). The City may rely on transportation improvements found in transportation system plans, as allowed by OAR 660-012-0060(3)(a), (b), and (c), to show that failing intersections will not be made worse or intersections not now failing will not fail. If there is a "significant affect," then the Applicant must demonstrate appropriate mitigation under OAR 660-012-0060(2), et seq.

### OREGON ADMINISTRATIVE RULES

Chapter 660 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);
  - (b) Change standards implementing a functional classification system; or
  - (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection 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;
    - (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
    - (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:

The analysis provided by Lancaster Engineering found that this amendment would not "significantly affect" an existing or planned transportation facility. In fact, the purpose of





the application is to implement the City's adopted TSP, by providing for the completion of Gunderson Road, a planned City Minor Arterial roadway. Please refer to the TIA (Exhibit A) for further information. Therefore, the criteria are met.

- (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.

### Response:

Since a "significant affect" is not found, this section does not apply. Please refer to the TIA (Exhibit A) for further information. Therefore, the criteria are met.

- 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 **EXHBIT 1**

- 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;
- The amendment does not involve property located in an interchange area as (c) defined in paragraph (4)(d)(C); and
- For affected state highways, ODOT provides a written statement that the (d) 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.

### Response:

Since a "significant affect" is not found, this section does not apply. Please refer to the TIA (Exhibit A) for further information. Therefore, the criteria are met.

- (4) Determinations under sections (1)-(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.
  - In determining whether an amendment has a significant effect on an existing (a) 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.
    - 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.

### Response:

The subject site is located outside of interstate interchange areas. Therefore, these criteria apply. That said, the amendment is sought to implement a portion of the City's adopted TSP (e.g. Gunderson Road). The amendment has no other purpose and does not include re-designation/amendments that serve another purpose than those already considered as part of the City's TSP.

- (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.

### Response:

The subject site is located outside of interstate interchange areas. Therefore, the above criteria are not applicable.

(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).

### Response:

This section of the TPR requires coordination with affected transportations service providers. The Oregon Department of Transportation (ODOT) provides the road that serves the subject property. The subject property (Tax Lot 701) is within unincorporated Clackamas County and served by OR 211. Additionally, OR 211 is functionally classified as a Major Arterial in both the City and County TSPs but is under the jurisdiction of the State of Oregon. The Applicant met with City, County, and ODOT staff prior to submitting this application to discuss the effects of the application on their respective roads. The City will ensure coordination of the application with Clackamas County, as required by

197.015, by providing the County with timely notice of this application, allowing the County to comment on the application, and including the County's comments in the decision, as is reasonable. The City will also coordinate with ODOT and TriMet as applicable. Therefore, the criteria of OAR 660-012-0060 (4) are met.

(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.

### Response:

The application is to include land within the UGB to allow the siting of a public transportation facility and dedication of parkland. This project does not involve an exception to allow residential, commercial, institutional, or industrial development on rural lands. The criterion is not applicable.

- (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.

### Response:

The analysis provided by Lancaster Engineering does not rely upon credit for potential reductions in vehicle trips as described in this section. Therefore, these criteria do not apply.

Chapter 660 Division 14 APPLICATION OF THE STATEWIDE PLANNING GOALS TO NEWLY INCORPORATED CITIES, ANNEXATION, AND URBAN DEVELOPMENT ON RURAL LANDS

### 660-014-0060

Annexations of Lands Subject to an Acknowledged Comprehensive Plan

A city annexation made in compliance with a comprehensive plan acknowledged pursuant to ORS 197.251(1) or 197.625 shall be considered by the commission to have been made in accordance with the goals unless the acknowledged comprehensive plan and implementing ordinances do not control the annexation.

### Response:

This application includes an analysis of compliance with the goals and policies of the City of Sandy Comprehensive Land Use Plan (adopted October 20, 1997). Therefore, a City annexation for the subject property should be considered by the commission to have been made in accordance with the goals. The criterion is met.

### Chapter 660 Division 24 URBAN GROWTH BOUNDARIES

### 660-024-0000 Purpose and Applicability

- The rules in this division clarify procedures and requirements of Goal 14 regarding a (1) local government adoption or amendment of an urban growth boundary (UGB). The rules in this division do not apply to the simplified UGB process under OAR chapter 660, division 38.
- The rules in this division interpret Goal 14 as amended by the Land Conservation and **(2)** Development Commission (LCDC or commission) on or after April 28, 2005, and are not applicable to plan amendments or land use decisions governed by previous versions of Goal 14 still in effect.
- The rules in this division adopted on October 5, 2006, are effective April 5, 2007. The (3) rules in this division amended on March 20, 2008, are effective April 18, 2008. The rules in this division adopted March 13, 2009, and amendments to rules in this division adopted on that date, are effective April 16, 2009, except as follows:
  - A local government may choose to not apply this division to a plan (a) amendment concerning the evaluation or amendment of a UGB, regardless of the date of that amendment, if the local government initiated the evaluation or amendment of the UGB prior to April 5, 2007;
  - For purposes of this rule, "initiated" means that the local government either: (b)
    - (A) Issued the public notice specified in OAR 660-018-0020 for the proposed plan amendment concerning the evaluation or amendment of the UGB; or
    - **(B)** Received LCDC approval of a periodic review work program that includes a work task to evaluate the UGB land supply or amend the UGB;

**EXHIBIT 1** 



- A local government choice whether to apply this division must include the (c) entire division and may not differ with respect to individual rules in the
- The rules in this division adopted on December 4, 2015, are effective January 1, 2016, **(4)** except that a local government may choose to not apply the amendments to rules in this division adopted December 4, 2015 to a plan amendment concerning the amendment of a UGB, regardless of the date of that amendment, if the local government initiated the amendment of the UGB prior to January 1, 2016.

#### Response: The purpose of this division applies to the subject amendment of the UGB, which complies with the dates listed above.

#### 660-024-0040 Land Need

A local government may review and amend the UGB in consideration of one category (3) 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).

#### Response: This UGB amendment satisfies one need, public facilities (e.g. Gunderson Road and parkland dedication). Accordingly, other needs are not considered.

(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.

#### This UGB amendment satisfies one need, public facilities (e.g. Gunderson Road and Response: parkland dedication). Accordingly, other needs are not considered.

#### 660-024-0050 Land Inventory and Response to Deficiency

When evaluating or amending a UGB, a local government must inventory land inside (1) 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.

#### Response:

This application involves a City of Sandy UGB Amendment to provide a public transportation facility (i.e. Gunderson Road) as illustrated in the Sandy TSP and to dedicate land to provide a park. The conceptual alignment of Gunderson Road shown in the Sandy TSP is on property not currently within the UGB; thus, the UGB amendment is needed to provide an efficient transportation network and serve residential lands already previously brought into the UGB. The subject property, Tax Lot 701, is the most feasible location where the extension of the transportation network and connection to OR 211 can be made safely. Please see the supplemental materials and TIA for further detailed information. Additionally, please refer to the narrative responses which address OAR 660-024-0050(6) and (7) and OAR 660-024-0065(3).

- 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:
  - The infill potential of developed residential lots or parcels of one-half acre or (a) 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.
- As safe harbors when inventorying land to accommodate industrial and other (3)employment needs, a local government may assume that a lot or parcel is vacant if it
  - Equal to or larger than one-half acre, if the lot or parcel does not contain a (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.
- If the inventory demonstrates that the development capacity of land inside the UGB is **(4)** 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.

#### Response:

On February 6, 2017 the City of Sandy adopted the Urban Growth Boundary Expansion Analysis, Final Report. The analysis concluded the existing UGB did not contain sufficient residential lands to meet the City's housing needs to 2034 and subsequently annexed in property north of Tax Lot 701. To satisfy the needs of lands previously brought into the UGB, according to 660-024-050(4) above, the local government must amend the plan to satisfy the need by amending the UGB when applicable. Therefore, this application involves a Sandy UGB Amendment to respond to a public transportation facility need. Changes to the Sandy UGB are made consistent with Goal 14 and OAR 660-024-0065 and 660-024-0067, as addressed in this written document. OAR 660-024-0060 is not applicable to this application because the property is not within the Portland Metro UGB.

In evaluating an amendment of a UGB submitted under ORS 197.626, the director or **(5)** 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.

Response: ORS 197.626 is not applicable to the UGB amendment because the amendment is not by क पहर a metropolitan service district, does not add more than 50 acres within the UGB, does not designate new lands as an urban reserve, does not amend the boundary of urban reserve

EXHIBIT 1



by a metropolitan service district, or designate or amend rural reserves. Therefore, the above criterion is not applicable to the application.

(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.

#### Response:

The land involved within the amendment area is anticipated to be designated Low Density Residential (LDR), but to retain Clackamas County zoning until annexed into the City of Sandy.

(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.

### **Response:**

The lands brought into the UGB are within the City's existing URA and will retain their existing Clackamas County zoning until annexed into the City in the future. Upon annexation and the application of City zoning designations to those lands, the land is intended to be converted for use as a public transportation facility and parkland and remain as such.

- (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.

### Response:

The density and mix safe harbors standards in OAR 660-024-0040(8) are not applicable to this application. The criteria do not apply.

#### 660-024-0065 Establishment of Study Area to Evaluate Land for Inclusion in the UGB

When considering a UGB amendment to accommodate a need deficit identified in OAR 660-024-0050(4), a city outside of Metro must determine which land to add to the UGB by evaluating alternative locations within a "study area" established pursuant to this rule. To establish the study area, the city must first identify a "preliminary study area" which shall not include land within a different UGB or the corporate limits of a city within a different UGB. The preliminary study area shall include:



- (a) All lands in the city's acknowledged urban reserve, if any;
- (b) All lands that are within the following distance from the acknowledged UGB:
  - (A) For cities with a UGB population less than 10,000: one-half mile;
  - (B) For cities with a UGB population equal to or greater than 10,000: one mile;
- (c) All exception areas contiguous to an exception area that includes land within the distance specified in subsection (b) and that are within the following distance from the acknowledged UGB:
  - (A) For cities with a UGB population less than 10,000: one mile;
  - (B) For cities with a UGB population equal to or greater than 10,000: one and one-half miles;
- (d) At the discretion of the city, the preliminary study area may include land that is beyond the distance specified in subsections (b) and (c).
- (2) A city that initiated the evaluation or amendment of its UGB prior to January 1, 2016, may choose to identify a preliminary study area applying the standard in this section rather than section (1). For such cities, the preliminary study area shall consist of:
  - (a) All land adjacent to the acknowledged UGB, including all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency, and
  - (b) All land in the city's acknowledged urban reserve established under OAR chapter 660, division 21, if applicable.

#### Response:

This application involves a UGB Amendment to accommodate a need deficit identified in OAR 660-024-0050(4), as described above. Additionally, the purpose is to provide a specific public transportation facility and the location must be compliant with the Sandy TSP. Therefore, the above criteria are not applicable. Please see the following narrative response addressing OAR 660-024-0065(3).

- (3) When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site characteristics may be found in only a small number of locations, the preliminary study area may be limited to those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:
  - (a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular industrial use.
  - (b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks, schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.

#### Response:

The primary purpose of this UGB Amendment application is to accommodate Gunderson Road, a future minor arterial roadway depicted in the Sandy TSP. Additionally, on the February 6, 2017 the City of Sandy adopted the Urban Growth Boundary Expansion Analysis, Final Report. The analysis contains "Map #9 – Transportation System Plan and The action Street Stubs" which includes the Gunderson Road extension to OR 211.





To provide this public transportation facility improvement, the road should be extended to match the conceptual alignment in the Sandy TSP. In doing so, the road extension requires use of the subject property due to the specific location dictated in the Sandy TSP. Due to geometrical issues, safety concerns, and potential for transportation hazards, the alignment illustrated in the Sandy TSP is not practicable for construction. This application provides for a solution to extend Gunderson Road and fulfill the anticipated condition of approval associated with Bailey Meadows Subdivision. The location shown in the Supplemental Materials of Exhibit G can be improved to provide the required site characteristics and execute the extension of the transportation network to satisfy the needs of citizens in the general area. Please see the TIA and Supplemental Materials of Exhibit G for further details.

## 660-024-0067 Evaluation of Land in the Study Area for Inclusion in the UGB; Priorities

- (1) A city considering a UGB amendment must decide which land to add to the UGB by evaluating all land in the study area determined under OAR 660-024-0065, as follows:
  - (a) Beginning with the highest priority category of land described in section (2), the city must apply section (5) to determine which land in that priority category is suitable to satisfy the need deficiency determined under OAR 660-024-0050 and select for inclusion in the UGB as much of the land as necessary to satisfy the need.
  - (b) If the amount of suitable land in the first priority category is not sufficient to satisfy all the identified need deficiency, the city must apply section (5) to determine which land in the next priority is suitable and select for inclusion in the UGB as much of the suitable land in that priority as necessary to satisfy the need. The city must proceed in this manner until all the land need is satisfied, except as provided in OAR 660-024-0065(9).
  - (c) If the amount of suitable land in a particular priority category in section (2) exceeds the amount necessary to satisfy the need deficiency, the city must choose which land in that priority to include in the UGB by applying the criteria in section (7) of this rule.
  - (d) In evaluating the sufficiency of land to satisfy a need under this section, the city may use the factors identified in sections (5) and (6) of this rule to reduce the forecast development capacity of the land to meet the need.
  - (e) Land that is determined to not be suitable under section (5) of this rule to satisfy the need deficiency determined under OAR 660-024-0050 is not required to be selected for inclusion in the UGB unless its inclusion is necessary to serve other higher priority lands.
- (2) Priority of Land for inclusion in a UGB:
  - (a) First Priority is urban reserve, exception land, and nonresource land. Lands in the study area that meet the description in paragraphs (A) through (C) of this subsection are of equal (first) priority:
    - (A) Land designated as an urban reserve under OAR chapter 660, division 21, in an acknowledged comprehensive plan;
    - (B) Land that is subject to an acknowledged exception under ORS 197.732; and
    - (C) Land that is nonresource land.

EXHIBIT 1



## Response:

The land to be brought within the UGB is within the City of Sandy's Adopted URA. Therefore, the land is first priority for inclusion in a UGB. The criteria are met.

- (b) Second Priority is marginal land: land within the study area that is designated as marginal land under ORS 197.247 (1991 Edition) in the acknowledged comprehensive plan.
- (c) Third Priority is forest or farm land that is not predominantly high-value farm land: land within the study area that is designated for forest or agriculture uses in the acknowledged comprehensive plan and that is not predominantly high-value farmland as defined in ORS 195.300, or that does not consist predominantly of prime or unique soils, as determined by the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS). In selecting which lands to include to satisfy the need, the city must use the agricultural land capability classification system or the cubic foot site class system, as appropriate for the acknowledged comprehensive plan designation, to select lower capability or cubic foot site class lands first.
- (d) Fourth Priority is agricultural land that is predominantly high-value farmland: land within the study area that is designated as agricultural land in an acknowledged comprehensive plan and is predominantly high-value farmland as defined in ORS 195.300. A city may not select land that is predominantly made up of prime or unique farm soils, as defined by the USDA NRCS, unless there is an insufficient amount of other land to satisfy its land need. In selecting which lands to include to satisfy the need, the city must use the agricultural land capability classification system to select lower capability lands first.

### Response:

The land to be brought within the UGB is within the City of Sandy's URA and is therefore first priority for inclusion. Therefore, second, third, and fourth priority lands are not under consideration.

### SANDY COMPREHENSIVE PLAN GOALS AND POLICIES

### Goal 1 - Citizen Involvement

POLICY 1: The City of Sandy shall maintain a citizen involvement program to allow opportunity for citizen involvement in the ongoing planning process.

POLICY 2: Comprehensive Plan changes shall include the opportunity for participation of citizens affected by the change.

POLICY 4: The City shall disseminate information and public notice to the residents of the Sandy area concerning on-going planning activities and pending actions.

### Response:

The City of Sandy has an established citizen involvement program. The application will be processed according to Chapter 17.12 of the LDC, which involves public notification, public hearings, and decision appeal procedures, as established in City of Sandy LDC Section 17.12.30 and 17.12.40. Therefore, the application is consistent with Goal 1.

### Goal 2 - Land Use Planning

POLICY 2: Changes to the Comprehensive Plan Map shall be consistent with the policies of the Comprehensive Plan, state law, and intergovernmental agreements.

### Response:

igg ce a

Changes to the Comprehensive Plan Map are consistent with SDC Chapter 17.12 and the applicable policies of the Comprehensive Plan, as detailed in this written narrative. Consistency with applicable State statute and rules and the Urban Growth Management

**EXHIBIT 1** 

Z0004-20-CP



Agreement (UGMA) between City of Sandy and Clackamas County have been addressed in this document. The amendment is Therefore, Policy 2 above is met.

POLICY 10:

Due to the demand which new development places upon the community's infrastructure, the city may impose off-site improvement requirements necessitated by a development. Each development shall provide for all onsite needs, and in areas which represent a critical link in the facility and service delivery systems, the city may require the over-sizing of these systems. The City may negotiate late-comer fees or other arrangements to compensate developers for over-sizing of facilities.

Response:

The Applicant is submitting this application to satisfy an anticipated condition of approval associated with City of Sandy Local File No. 19-023 SUB/VAR/TREE. Although Bailey Meadows Subdivision provides for and meets SDC criteria for on-site needs, in this case the City and Applicant agree to an off-site improvement requirement (i.e., Gunderson Road extension and parkland dedication). The off-site extension of Gunderson Road and improvements are outside the UGB, as described in this written document, and require a UGB amendment to allow an urban facility to be built on land currently within the County's jurisdiction. The policy above is understood and met by this application submittal.

**POLICY 14:** 

Proposed plan elements such as parks, roadways, schools, etc., are intended to be conceptual. Actual locations and quantities should be determined through the development process.

Response:

The alignment of the extension of Gunderson Road to OR 211, a proposed plan element in the City's TSP, is conceptual. The actual location should be determined through the development process, as outlined above. To provide this public transportation facility improvement, the road should be extended to match the conceptual alignment in the Sandy TSP. However, due to geometrical issues, safety concerns, and potential for transportation hazards, the alignment illustrated in the Sandy TSP is not practicable for construction. This application provides for a solution to extend Gunderson Road and determine the actual functionable location through site analysis and development review. The location shown in the Supplemental Materials of Exhibit G can be improved to provide the required site characteristics and execute the extension of the transportation network to satisfy the needs of citizens in the general area. Please see the TIA and Supplemental Materials of Exhibit G for further details.

Additionally, according to the Sandy Parks Master Plan adopted May 15, 1997, there is not a conceptual location for a park on or near the subject site. Therefore, the location for the improvement should be determined through the development process. Though parkland dedication is not required of the Bailey Meadows Subdivision application, the Applicant is providing it and it must be brought within the Sandy UGB and annexed to allow for it. Policy 14 above is met.

Goal 5 - Natural Resources

van zar ban

Response:

Goal 5 is not applicable to the decision. The decision does not affect a Goal 5 resource under OAR 660-023-0250(3)(a)-(c) because:

**EXHIBIT 1** 

- a) The decision does not "create or amend" a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5."
- b) The decision does not "allow" new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list."
- c) While the decision "amends an acknowledged UGB" no "factual information [was] submitted demonstrating that a resource site, or the impact areas of such a site, is included in the amended UGB area."

#### Goal 6 - Air, Water, and Land Resources Quality

POLICY 4:

Reduce congestion and delay on major streets to lessen localized pollution impacts of automobile travel through methods such as signal timing, access management, intersection improvements, etc.

Response:

The City's Comprehensive Plan with respect to Goal 6 and its development regulations governing land, air, and water quality are not affected by the decision. The intent of extending Gunderson Road to OR 211 is to enhance neighborhood circulation, thereby reducing congestion and delay in the area. This mitigates localized pollution impacts of vehicle activity in the area.

### Goal 7 - Areas Subject to Natural Hazards

Response:

The City's Comprehensive Plan, with respect to Goal 7 and its development regulations governing natural hazards, is not affected by the decision. The subject site does not contain mapped areas of steep slopes 25 percent or greater or other known hazard areas.

#### Goal 8 - Recreational Needs

**POLICY 1:** Ensure that new residential development contributes equitably to park land

acquisition, development, and maintenance.

**POLICY 2:** Establish methods to maintain and enhance the quality and quantity of parks, open space, and recreational facilities and services. Ensure that these facilities and services serve the diverse recreational needs and interests of area residents and are accessible

to all members of the community.

The conceptual location of community and neighborhood parks and areas of open POLICY 10:

space have been indicated on the City of Sandy Land Use Map. Actual park locations

may be determined based on more site-specific information.

Response:

According to the Sandy Parks Master Plan adopted May 15, 1997, there is not a conceptual location for a park on or near the subject site. Therefore, the location for the improvement should be determined through the development process. Though parkland dedication is not required of the Bailey Meadows Subdivision application, the Applicant is providing it and it must be brought within the Sandy UGB and annexed to allow for it. Goal 8 above is met.

#### Goal 9 - Economic Development

Response:

The City's Comprehensive Plan with respect to Goal 9 and tasmployment lands are not affected by the decision.

919 -7 - 40





#### Goal 10 - Housing

#### Response:

The subject property associated with this application to be incorporated within the UGB will be strictly for the purpose of constructing a public transportation facility and providing land for a park, and is not planned to include land for residential use. Therefore, the City's Comprehensive Plan with respect to Goal 10 and residential land is not affected by the decision.

#### Goal 11 - Public Facilities and Services

#### Response:

The City's Comprehensive Plan contains an acknowledged Goal 11 element that includes policies to ensure sufficient and adequate public services are available (or will be available as appropriate) to serve lands within the UGB. The property north of the subject site, Bailey Meadows Subdivision, was found to be sufficiently served by public services at the time it was annexed into the City in June 2017. This application involves amending the City's UGB to permit the extension of a public transportation facility (i.e., Gunderson Road) to allow for a future connection to OR 211. If approved, the extension is intended as an additional access to the subdivision and to distribute traffic from local streets to the surrounding area. The extension is not required for subdivision approval. Although providing parkland on the northeast portion of Tax Lot 701 will enhance quality of life for the residents in the area, it is not required for subdivision approval. Goal 11 is satisfied.

- POLICY 3: Consider the needs of emergency service providers in the review of all development.

  Particular attention should be paid to:
  - a) Street and driveway layout and site design features that ensure emergency vehicle access and building identification.
  - b) Fire hydrant locations and fire flow.
  - c) Security through appropriate lighting and landscape design.

#### Response:

Policy 3 above, regarding emergency service provider access, is discussed in detail under Goal 12, Policy 2.

#### Goal 12 - Transportation

### POLICY 1:

Support a pattern of connected streets, sidewalks, and bicycle routes to: a) provide safe and convenient options for cars, bikes, and pedestrians; b) create a logical, recognizable pattern of circulation; and, c) spread traffic over local streets so that collector and arterial streets are not overburdened.

#### Response:

This application involves the extension of a public transportation facility (i.e., Gunderson Road) to allow Bailey Meadows Subdivision a future connection to OR 211, as illustrated in the City of Sandy TSP. If approved, the extension is intended as an additional access to the subdivision and to distribute traffic from local streets to the surrounding area. The extension is planned to support a pattern of connected streets as stated above but is not required for subdivision approval.

POLICY 2: Work with fire district, police, and other emergency service providers to ensure that adequate emergency access is possible on all streets.

#### Response:

Appendix D, Section D107 of the Oregon Fire Code addresses standards regarding fire apparatus access roads for one or two-family developments. As discussed in the Bailey

EXHIBIT 1

Meadows Subdivision application (City of Sandy Local File No. 19-023 SUB/VAR/TREE), the subdivision currently provides two separate and approved fire apparatus access roads (Melissa Avenue and SE Ponder Lane) and shall meet the requirements of Section D104.3.

The extension of Gunderson Road would provide an additional access to the subdivision. Therefore, if approved, the Gunderson Road extension will provide the secondary access to the subdivision and SE Ponder Lane will not be utilized to serve as an emergency access as described above.

Additionally, the nature of Policy 2 above requires coordination of the application by the City with affected governmental entities. Coordination requires notice of an application, an opportunity for an affected governmental entity to comment on the application, and the City's incorporation of the comments to a reasonable extent. The City can find that coordination of this application will be accomplished in two ways: by the Applicant prior to application submittal, and by the City in the review process for the application. Goal 12, Policy 2 is satisfied.

**POLICY 21:** 

Work with ODOT to determine locations for necessary traffic control signals. Proposed locations for future traffic signals have been determined for the downtown area in the City of Sandy Transportation System Plan. Other locations need to be determined in order to improve the safety and convenience of pedestrians, bicycles, and automobiles. The location of traffic signals should be consistent with the street network indicated in the Comprehensive Plan Map and current traffic engineering standards.

**POLICY 22:** 

Submit notice of development proposals impacting Highways 26 and 211 to ODOT for review and comment.

Response:

The above criteria applies to City processes for noticing and coordinating with ODOT, as applicable. The standards above apply as the project plans to extend Gunderson Road to OR 211. Direct action by the Applicant will be taken as applicable. Policy 21 and 22 can be satisfied.

#### Goal 13 - Energy Conservation

Response:

The City's Comprehensive Plan with respect to Goal 13 and its standards governing energy conservation are not affected by the decision.

#### Goal 14 - Urbanization

**POLICY 1**:

Maintain an urban growth boundary with sufficient residential, commercial, industrial, and public use lands necessary to support forecast population and employment for a 20-year horizon. The City will evaluate and update the 20-year land supply at each periodic review plan update.

Response:

This application to amend the City UGB is necessary to provide a public transportation facility (i.e., Gunderson Road) to support residential land north of the project site which was included within the UGB and subsequently annexed in 2017. Additionally, this application provides parkland dedication which will benefit residential lands in the vicinity. As described above, the City is required to maintain a UGB with sufficient residential lands, as addressed in the February 2017 City of Sandy Urban Growth Boundary Expansion Analysis. This application will provide a public road as illustrated in

**EXHIBIT 1** 



the Sandy TSP that aligns with the existing transportation network in the area and implement a connection to OR 211.

- POLICY 2: Urban growth should be directed in a generally contiguous manner consistent with the city's ability to economically maintain and extend public services and facilities.
- POLICY 3: The City of Sandy shall encourage the development of land according to the following priorities:
  - a) Vacant, buildable lands or underutilized lands located within developed or developing areas.
  - Lands contiguous to development areas where services can be easily and economically extended.
  - c) Lands which are significantly separated from developing areas by vacant land, or areas which would place an undue burden on the city's infrastructure.

#### Response:

The project site is currently vacant, with pasture and vegetated areas. As stated above, urban growth should be directed in a contiguous manner and the planned Gunderson Road extension will facilitate growth north of the project site while having no impact on urban services or utilities. Per Goal 14, Policy 3(b) above, the City shall encourage the development of land which is contiguous to development areas where services can be easily and economically extended. The extension of Gunderson Road will provide access and distribute traffic from local streets to the surrounding area and provide parkland dedication, a benefit to lands north of the project site and those within the City limits.

**POLICY 4:** 

An Urban Growth Boundary (UGB) and Urban Reserve Area (URA) shall be jointly adopted by the City of Sandy and Clackamas County. Procedures for coordinated management of the unincorporated lands within the UGB and URA shall be specified in an intergovernmental agreement adopted by the Sandy City Council and the Clackamas County Board of Commissioners.

#### Response:

The property involved in this application, Tax Lot 701, is associated with an UGMA, as it is within the Sandy Adopted URA. The applicable elements are addressed within this written narrative.

**POLICY 6:** 

Designated URA lands will be considered for inclusion within the UGB on a phased basis, primary at periodic review. Legislative amendments to the UGB shall be large enough to facilitate cohesive neighborhood framework planning and efficient provision of public facilities. Property owners will also have the opportunity to request that land within the designated URA be included within the Sandy UGB, based on the criteria outlined in LCDC Goal 14 and the Urban Growth Management Agreement with Clackamas County.

#### Response:

This application involves a property owner's (i.e., the Applicant's) request that Tax Lot 701, land within the designated Sandy URA, be included with the Sandy UGB. The applicable criteria, including Land Conservation and Development Commission (LCDC) Goal 14 noted above, have been addressed in this written document. Policy 6 is relevant and satisfied.

**POLICY 7:** 

The City of Sandy shall have the lead role in designating planned land uses and densities for incorporated and unincorporated lands within the UGB and the URA. The Comprehensive Plan shall constitute the comprehensive plan for all land within the Urban Growth Boundary and Urban Reserve Area.

EXHIBIT 1

Z0004-20-CP



### Response:

The subject application involves property which is located within the URA. This written document contains analysis of the City's comprehensive plan goals and policies associated with the property. Therefore, Policy 7 is applicable.

**POLICY 8:** 

The City of Sandy shall have the lead role in coordinating public facility planning (streets, sanitary and storm sewers, water, parks and open space, schools) within the UGB and the URA.

#### Response:

Tax Lot 701 is located within the Sandy Adopted URA. Therefore, Policy 8 is applicable, and the City of Sandy shall have the lead role in coordinating this application for the planned public transportation facilities and parkland.

POLICY 9: County zoning shall apply to unincorporated lands within the UGB and URA until annexation to the City of Sandy.

#### Response:

Tax Lot 701 is located within the Sandy Adopted URA and is currently designated with Clackamas County EFU zoning. An application for annexation and a comprehensive plan amendment is necessary to apply City zoning to allow for the public transportation facilities and parkland. Policy 9 is applicable and satisfied.

POLICY 11: Clackamas County shall have the lead role in processing land use and development applications for unincorporated lands within the UGB and URA.

#### Response:

Tax Lot 701 is located within the Sandy Adopted URA. Therefore, Policy 11 is applicable, and the City of Sandy shall coordinate with Clackamas County in processing the subject land use and development application for unincorporated lands within the URA.

POLICY 12: The City of Sandy will support development within the areas outside the city limits but within the Sandy Urban Growth Boundary or Urban Reserve Area based on the following standards and restrictions:

- a) County zoning in effect at the time of adoption of the Urban Reserve Area will be frozen until the unincorporated land is included within the UGB and annexed for urban development.
- b) New commercial and industrial uses will generally be discouraged outside the City limits and within the UGB or within the Urban Reserve Area.
- c) Agricultural and forest uses will be allowed in accordance with Clackamas County zoning.
- d) The City and County shall coordinate plans for interim rural residential development within the designated Urban Reserve Area. The following strategies will be used to ensure that interim rural development does not inhibit long-term urbanization of lands within the Sandy UGB and Urban Reserve Area:
  - shadow plats
  - cluster development
  - 3) redevelopment plans
  - 4) non-remonstrance agreements or deed restrictions for annexation and provision of urban facilities

### Response:

Tax Lot 701 is located within the Sandy Adopted URA and is currently designated with Clackamas County EFU zoning. An application for annexation and a comprehensive plan amendment is necessary to apply City zoning allowing this urban development EXFIBIT 1



creation of a public transportation facility and parkland). Therefore, the subject application does not involve new commercial, industrial, or agricultural uses. The Applicant understands that City Low-Density Residential (LDR) Comprehensive Plan and Single-Family Residential (SFR) Zoning designations are intended for the property. Interim use and development, prior to annexation, is not associated with this application. The application complies with the applicable components of Policy 12 above.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN GOALS AND POLICIES

#### **GOALS**

The overall goals of the plan are:

- Balance public and private interests and adopt a coordinated set of goals and policies to guide future development in Clackamas County.
- Identify the most appropriate land uses for individual sites by evaluating site characteristics in light of market demand, human needs, technology, and state, regional, and County goals.
- Provide for growth in areas where public facilities can economically be provided to support growth.
- Create development opportunities most compatible with the fiscal and financial capacity of the County and its residents.

#### Response:

This application balances public and private interests by complying with goals and policies in the Clackamas County Comprehensive Plan. The primary purpose of this application is to facilitate a transportation need in the area by extending Gunderson Road to provide a connection to OR 211, as illustrated in the Sandy TSP. Additionally, the Applicant plans to provide area for parkland. The project site is relatively flat with no existing improvements which makes it an appropriate site to facilitate the City's transportation vision. To distribute traffic from local streets to arterials and collectors, the extension of this public facility can economically be provided to support growth north of the subject site. The overall goals of the plan are incorporated into this UGB Amendment.

### Chapter 4: LAND USE

#### **URBANIZATION**

#### **URBANIZATION GOALS**

- Clearly distinguish Urban and Urban Reserve areas from non-urban areas.
- Encourage development in areas where adequate public services and facilities can be provided in an orderly and economic way.
- Insure an adequate supply of land to meet immediate and future urban needs.
- Provide for an orderly and efficient transition to urban land use.
- Distinguish lands immediately available for urban uses from Future Urban areas within Urban Growth Boundaries.

#### Response:

A no ed :

The subject property is within the Sandy Urban Reserve Area. This application supports development in an area of the City where a public transportation facility has been deemed necessary to accommodate planned growth. Tax Lot 701 is relatively flat and unimproved, allowing the extension of Gunderson Road to be provided in an economic way and

Z0004-20-CP





facilitate the needs of urban residential housing north of the site. This application provides for an efficient transition to urban land use because the portion of land to be annexed is the necessary area for the improvement and land will not be annexed to allow or develop homes. The area for parkland dedication will enhance the lives of local residents. The subject site will be available for urban uses, specifically both minor public facilities, after annexation.

#### 4.A. General Urbanization Policies

- 4.A.2 Coordinate with affected cities in designating urban areas outside of Metro.

  Land designated as a Rural Reserve, as shown on Map 4-9, shall not be designated as an Urban Reserve or added to an urban growth boundary. The following areas may be designated as Urban:
  - 4.A.2.3. Land to which public facilities and services can be provided in an orderly and economic way.

#### Response:

The subject property is not designated as a Rural Reserve on Map 4-9. Tax Lot 701 is planned to provide a public transportation facility to meet the needs of the surrounding area.

- 4.A.3 Land use planning for urban areas shall integrate all applicable policies found throughout the Plan including the following:
  - 4.A.3.1. Locate land uses of higher density or intensity to increase the effectiveness of transportation and other public facility investments.

### Response:

The purpose of this application is to allow the extension of a public transportation facility (e.g. Gunderson Road) thereby providing the improvement illustrated in the Sandy TSP and to provide land for a park. Therefore, the application will increase effectiveness of the City's transportation network.

4.A.4 Establish Urban Growth Management Areas and Urban Growth Management Agreements to clarify planning responsibilities between the County and cities for areas of mutual interest.

## Response:

The Urban Growth Management Agreement (UGMA) between Clackamas County and the City of Sandy coordinates the development and amendment of comprehensive plans and implementing measures affecting the City's urban growth. The document is addressed in this written document and is included as Exhibit H.

#### 4.E. Urban Reserve Area Policies

- 4.E.1. The following policies apply to Urban Reserve areas established pursuant to OAR 660, Division 21:
  - 4.E.1.1 Clackamas County shall recommend to Metro land in Clackamas County which should be designated Urban Reserve, when Urban Reserve amendments to the Region 2040 Urban Growth Management Functional Plan are considered by Metro. The cities of Sandy, Molalla, Estacada and Canby, in coordination with Clackamas County, may designate and adopt other urban reserve areas in a manner consistent with OAR 660-021-0000.

### Response:

The Urban Growth Management Agreement (UGMA) between Clackamas County and the City of Sandy coordinates the development and amendment of comprehensive plans and implementing measures affecting the City's urban growth. The document is addressed in this written narrative and is included as Exhibit H.

4.E.1.5 Lands within a designated Urban Reserve area shall continue to be planned and zoned for rural uses in a manner that ensures a range of opportunities for the orderly, economic and efficient provision of urban services when these lands are included in the Urban Growth Boundary. Planning and zoning shall be done in a manner consistent with OAR 660-021-0000 and the Metro Code, in areas where Metro has jurisdiction.

#### Response:

Tax Lot 701 is located within the Sandy Adopted URA and is currently designated with Clackamas County EFU zoning. An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow for the urban development (i.e., creation of a minor public transportation facility and parkland). The Applicant plans to obtain City Low-Density Residential (LDR) Comprehensive Plan and Single-Family Residential (SFR) Zoning designations for the property. Interim use and development, prior to annexation, is not associated with this application

- The following policies apply to Urban Reserve areas established pursuant to OAR 660, 4.E.2. Division 27, as shown on Map 4-9:
  - 4.E.2.3 The County shall not amend the Comprehensive Plan or Zoning and Development Ordinance or the Comprehensive Plan Map or zoning designations:
    - To allow within Urban Reserve areas, new uses that were not allowed a. on the date the Urban Reserve areas were designated, except those uses authorized by amendments to the Oregon Revised Statutes or Oregon Administrative Rules enacted after designation of Urban Reserve areas.
    - To allow within Urban Reserve areas, the creation of new lots or Ь. parcels smaller than allowed on the date Urban Reserve areas were designated, except as authorized by amendments to the Oregon Revised Statutes or Oregon Administrative Rules enacted after designation of Urban Reserve areas.

#### Response:

Tax Lot 701 is located within the Sandy Adopted URA and is currently designated with Clackamas County EFU zoning. An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow for the urban development (i.e., creation of a minor public transportation facility and parkland). The Applicant plans to obtain City Low-Density Residential (LDR) Comprehensive Plan and Single-Family Residential (SFR) Zoning designations for the property. Interim use and development, prior to annexation, is not associated with this application. This application will not allow new uses that were not allowed on the date the URA was designated or allow the creation of new lots.

## URBAN GROWTH MANAGEMENT AGREEMENT BETWEEN CITY OF SANDY AND **CLACKAMAS COUNTY**

IV. Boundaries

A. The Urban Growth Boundary (UGB) and Urban Growth Area (UGA) shall be as shown on map Attachment "A" to this agreement. STERL OF STATE





41 200 36.

. . .

- B. The Urban Reserve Area (URA) shall be established as shown on map Attachment "A" to this Agreement. The URA shall establish the planned limits of the City's urban growth for the mutually coordinated population and employment growth for a 30 to 50-year timeframe.
- C. Amendments to the City's and County's Comprehensive Plans which modify the Urban Growth Boundary or Urban Reserve Area shall be deemed incorporated into this agreement. Any amendment proposed to the City's UGB or URA shall be a coordinated city-county effort with adoption by both city and county. The county shall not consider adoption of any City UGB or URA amendment unless adopted by the city first. The city shall be responsible for initiating all legislative documents.

#### Response:

This application involves an amendment to the City's UGB and should be a coordinated city-county effort with adoption by both the City of Sandy and Clackamas County. As stated above, the City is responsible for initiating the legislative amendments.

#### V. Coordination and Planning

- A. The City comprehensive plan shall establish urban comprehensive plan land use designations and densities for all incorporated and unincorporated lands within the Urban Growth Boundary and Urban Reserve Areas.
- B. The City shall have the lead role on all urban legislative and quasi-judicial plan amendments within the City's UGB and URA, with notice to the County. Proposed amendments to the comprehensive plan may be made at any time, whether initiated by the city or in response to a development application. The city may hear and act on comprehensive plan and zone change applications prior to annexation, although such actions will not be effective until the effective date of annexation.
- C. After annexation to the City, the County zoning districts will continue to apply in accordance with the provisions of ORS 215.130 until the City applies its own land use plan and/or zoning designations.

#### Response:

An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow for the urban development (i.e., creation of a minor public transportation facility and parkland). The Applicant plans to obtain City Low-Density Residential (LDR) Comprehensive Plan and Single-Family Residential (SFR) Zoning designations for the property. Interim use and development, prior to annexation, is not associated with this application.

- D. The City shall be responsible for public facilities planning with the County.
- E. The City shall be responsible for preparing and adopting a local transportation system plan for all lands within the City's UGB and URA. As required by OAR 660, Division 12, the City shall coordinate its transportation planning with the County, affected state agencies, special districts and affected private transportation service providers.

### **Response:** The Sandy TSP provides

F. Where applications are made for a use of property under the same ownership that is divided by the City limit boundary, the City shall be responsible for processing both the City and County applications. Except as otherwise provided in this Agreement, the application for the County portion of the property shall be evaluated pursuant to City Code procedures, but applying the applicable substantive provisions of the County's Comprehensive Plan and Zoning and Development Ordinance.

VI. Zoning and Development Proposals in Unincorporated UGA and URA





- B. Land use applications for the following permits within the unincorporated UGB or URA shall be forwarded to the City prior to a County Decision. These applications shall include:
  - 1. Comprehensive plan and zone changes
  - 2. Subdivisions and partitions
  - 3. Conditional use permits
  - 4. Design review applications for new commercial or industrial buildings, and communication towers. Any city comments shall be made within 14 days.

#### Response:

This UGB Amendment application involves a comprehensive plan and zone change for a property within the unincorporated UGB and URA and is therefore submitted to the City prior to a County decision.

### IV. Conclusion

The required findings have been made and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the Oregon Statewide Planning Goals, Oregon Administrative Rules, Oregon Revised Statutes, City of Sandy Comprehensive Plan, and Clackamas County Comprehensive Plan. The City and County can rely upon this information in their approval of this application.

## WARRANTY DEED - STATUTORY FORM (Individual or Corporation)

JOE B. PHILLIPS

Grantor, conveys and warrants to:

LAWRENCE L. PULLEN and RICHARD L. PULLEN and MARK D. TEN EYCK

Grantee, the following described real property free of encumbrances except as specifically set forth herein:

PLEASE SEE ATTACHED DESCRIPTION SHEET

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.

**ENCUMBRANCES:** 

NONE

The true consideration for this conveyance is \$40,000.00.

8/08	Dated this 21st day of April name to be signed by order of its b	., 1993; if a corporational of directors.	te grantor, it ha	as caused its
3016	OE B. PHILLIPS			440000
COMPANY				
INSURANCE	STATE OF OREGON,  County of Clackamas  April 21 , 1993.	) )ss. )		
冒	Personally appeared the above	named JOE	ų.	37

STATE OF OREGO		)	
County of	Clackamas		) 85.
April	21.	1993.	)

Personally appeared the above named JOE B. PHILLIPS and acknowledged the foregoing instrument to be his/her/their voluntary act and deed.

Before me:

Jeneral Ferr Notary Public for Oregon My commission expires: 3-2-94

After recording return and send tax statements to: LAWRENCE L. PULLEN 36940 SE Deming Sandy, OR 97055

Escrow No. 2300-00570-LF - Order No. 108108

A portion of the Southwest one-quarter of the Northeast one-quarter of Section 23, Township 2 South, Range 4 East of the Willamette Meridian, in the County of Clackamas and State of Oregon, being more particularly described as follows:

Beginning at a stone marking the Northwest corner of said legal subdivision; thence N.88°26'40"E., along the North line thereof, a distance of 1321.91 feet to the Northeast corner of said legal subdivision; thence S.0°18'10"E., along the East line thereof, a distance of 388.20 feet to a point in the Northwesterly right-of-way line of Oregon State Highway No. 211; thence S.33°18'01"W., along said right-of-way line, a distance of 558.61 feet to an iron rod; thence N.51°08'54'W., leaving said right-of-way line, a distance of 1305.73 feet to the point of beginning.

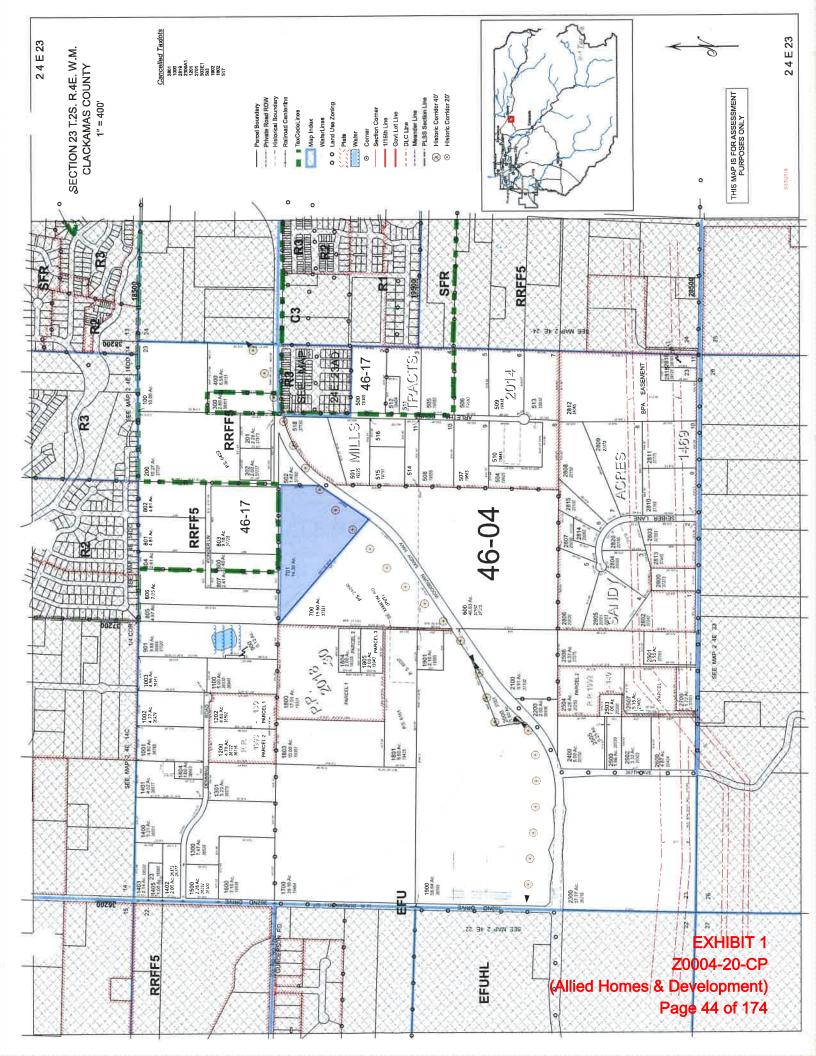
), John Naulman, County Clerk, for the County of Clackanas, do hereby certify that the unstrument of writing was received for recording in the records of said county at

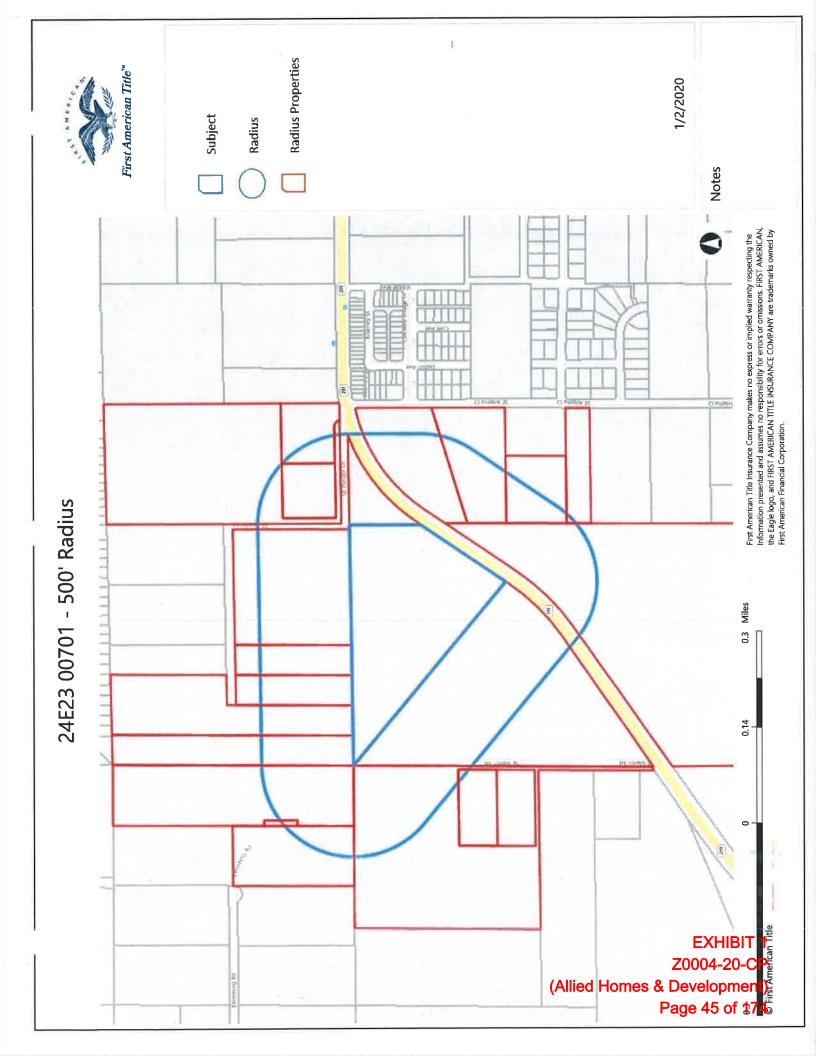
STATE OF OREGON County of Clackames Winness my hydrand and an allines the county Control of County Clerk

3 28438

2

EXHIBIT 1
Z0004-20-CP
(Allied Homes & Development)
Page 43 of 174





24E23 00200 Leslie Geren 37721 SE Ponder Ln ndy, OR 97055

24E23 00501 Nancy Bennett 19225 SE Arletha Ct Sandy, OR 97055

24E23 00515 William Fisher 19251 SE Arletha Ct Sandy, OR 97055

24E23 00700 Calvin & Teresa Mckinnis 37551 SE Highway 211 Sandy, OR 97055

24E23 00803 Grant Sturm 647 E Historic Columbia River Hwy Troutdale, OR 97060

.£23 00807 Sherrene Teneyck 37020 Deming Rd Sandy, OR 97055

24E23 01100 Richard Pullen 36940 Deming Rd Sandy, OR 97055 24E23 00201 Paul Klahn Po Box 671 Sandy, OR 97055

24E23 00502 Broek Boaz & Brian Galovin 244 Plant Ln SE Salem, OR 97317

24E23 00518 Garrett & Meri Lang 37730 SE Highway 211 Sandy, OR 97055

24E23 00701 Lawrence Pullen 36940 Deming Rd Sandy, OR 97055

24E23 00805 Sherrene Teneyck 37020 Deming Rd Sandy, OR 97055

24E23 00900 Eyck Ten & Richard Pullen 37020 Deming Rd Sandy, OR 97055

24E23 01800 University Developments Llc 17150 University Ave STE 200 Sandy, OR 97055 24E23 00202 Lucille Tiscus 37777 SE Ponder Ln Sandy, OR 97055

16126

24E23 00514 Robert & Barbara Johnson 19555 SE Arletha Ct Sandy, OR 97055

24E23 00600 Robert & Shana Foster 21442 S Parkview Ln Estacada, OR 97023

24E23 00800 Grant Sturm 647 E Historic Columbia River Hwy Troutdale, OR 97060

24E23 00806 Sherrene Teneyck 37020 Deming Rd Sandy, OR 97055

24E23 00901 Sherrene Teneyck 37020 Deming Rd Sandy, OR 97055

24E23 01804 Sixth Generation Properties Llc Po Box 1750 Oregon City, OR 97045

## **Technical Memorandum**

To:

Cody Bjugan, Allied Homes & Development

From:

Jessica Hijar

Date:

January 6, 2020

Subject:

UGB Amendment & Gunderson Road Connection

Traffic Impact Analysis, Addendum #1



RENEWS: 12/31/202



321 SW 4th Ave., Suite 400 Portland, OR 97204 phone: 503.248.0313 fax: 503.248.9251 lancasterengineering.com

This memorandum is written as an addendum to the Bailey Meadows Subdivision Traffic Impact Analysis prepared by Lancaster Engineering dated June 20, 2019. Specifically, analysis is provided regarding the potential new roadway connection to Highway 211. The current planning effort includes a connection of Gunderson Road to Highway 211 as considered in the City of Sandy's Transportation System Plan (TSP).

In addition, this memorandum addresses the Transportation Planning Rule and associated approval criteria relative to the proposed Urban Growth Boundary (UGB) amendment, comprehensive plan and zone map amendments, and annexation applications. All of these are necessary to accommodate a connection of Gunderson Road to Highway 211.

# **Future Roadway Connection**

The planned connection of Gunderson Road to Highway 211 will provide an additional route into and out of the Bailey Meadows subdivision as well as the existing neighborhood to the north. This will reduce reliance on Melissa Avenue, which will provide access to the Bailey Meadows subdivision via Dubarko Road. The planned intersection of Gunderson Road at Highway 211 will be a three-legged intersection that is stop-controlled for the SE Gunderson Road approach. Future development on the south side of Highway 211 could extend the street to the east, to eventually connect with Cascadia Village Drive, as shown in the TSP. The existing characteristics of the subject roadways are shown in Table 1. The existing and future intersection configurations are shown in Figure 1 on page two.

Table 1: Vicinity Roadway Characteristics

Street Name	Jurisdiction	Classification	Speed (MPH)	Curbs	Sidewalks	Bicycle Lanes
Highway 211	ODOT	District Highway	45-55 mph posted	No	No	Partial
Gunderson Road (planned)	City of Sandy	Future Minor Arterial	Not Posted	Partial	Partial	Yes

## LEGEND

STUDY INTERSECTION (EXISTING)

() STUDY INTERSECTION (PROPOSED)

STOP SIGN

BIKE LANE

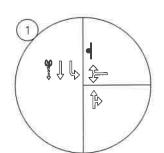
PROJECT SITE

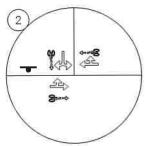
- ARTERIAL ROADWAY

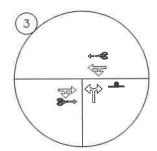
- COLLECTOR ROADWAY

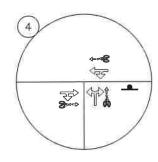
— LOCAL ROADWAY

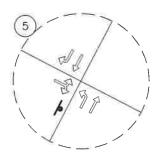
--- FUTURE MINOR ARTERIAL

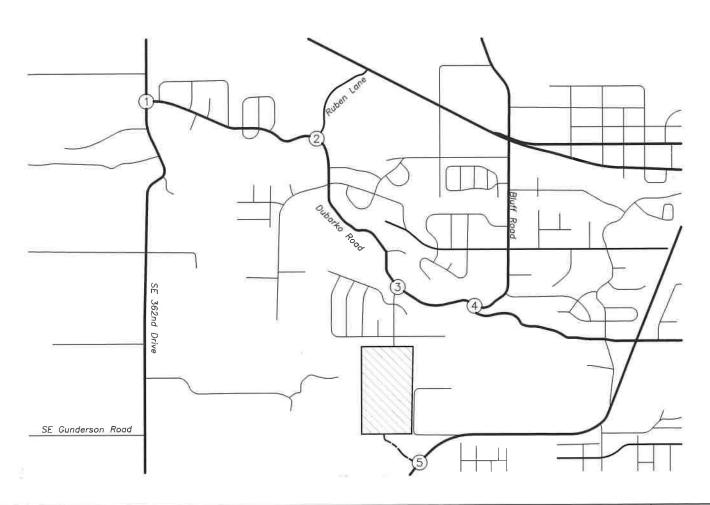














VICINITY MAP

EXHIBIRE1
20004-20-CP
(Allied Homes & Development)



## **Trip Distribution**

The Gunderson connection to Highway 211 is expected to serve trips to and from the Bailey Meadows subdivision, as well as trips from the existing neighborhood north of Bailey Meadows, which currently uses only Melissa Avenue. Based on travel time studies, it is not expected that traffic from outside the immediate area (such as residents in Bornstedt Village or Cascadia Village) would use the new Gunderson Road connection as a bypass route. Those trips would have to use Gunderson Road, three different streets within Bailey Meadows, Melissa Avenue, and Dubarko Road. This would be a very circuitous route and would not be faster that existing travel routes serving these neighborhoods.

## Bailey Meadows Trips

The overall directional distribution of site trips to and from Bailey Meadows was based on the the original TIS, but trip routing was modified to reflect the new street connection.

#### To & From the East

It is expected that the 15 percent of site trips in the TIS previously assigned to Dubarko Road to the east will all use the new Gunderson Road connection. Turning left onto Highway 211 at the new intersection will have significantly lower delay than turning left or crossing Highway 211 at Dubarko Road.

Contribution: 15% via Gunderson

#### To & From the South

A total of 10 percent of the trips are expected to be to and from the south, and all these trips will use the Gunderson Road connection to Highway 211, since that will be a much more direct route.

Contribution: 10% via Gunderson

#### To & From the West

Trips to and from the west (30%) were assigned primarily to 362<sup>nd</sup> Avenue, as this is the quickest route to shopping destinations as well as Highway 26 west of Sandy. Travel time studies show that the route using Dubarko Road to 362<sup>nd</sup> Avenue is identical in time to the route using Highway 211 to 362<sup>nd</sup> Avenue. Therefore, the 30% was split evenly via Melissa Avenue to the north and Gunderson Road to the south.

Contribution: 15% via Gunderson

The total percentage of site trips using Gunderson Road is 40 percent, or 378 of the site's 944 trips per day.

= 60



## Rerouted Existing Trips

Since 40 percent of the Bailey Meadows trips are expected to use the Gunderson Road connection to Highway 211, it is expected that a similar, although slightly lower percentage of the existing neighborhood traffic would also use Gunderson. Since the existing neighborhood is north of the project site, the use of Gunderson could decrease from 40 percent to approximately 30 percent. As shown in the TIS, the existing traffic volume on Melissa Avenue was measured to be 1160 vehicles per day.

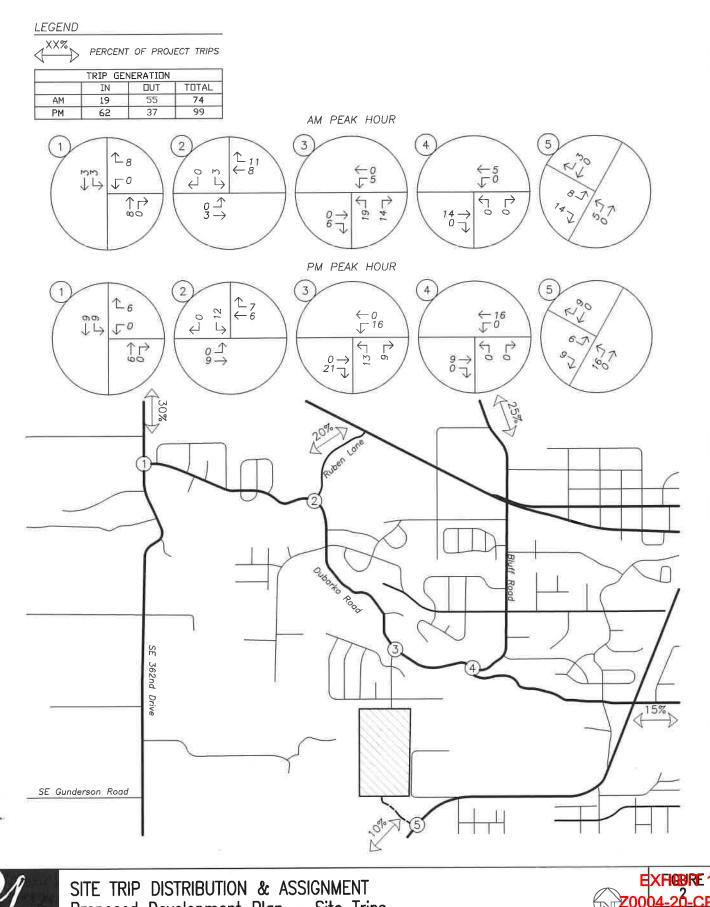
In total, 30 percent of the existing 1160 average daily traffic (ADT) on Melissa Avenue would reroute via Gunderson Road, or 348 trips per day.

In summary, the table below shows the total daily traffic volumes to the north (via Melissa Avenue) and to the south (via Gunderson Road) with the future street connection in place.

Table 2: Trip Distribution Summary

	Daily Traffic Volumes		
	Melissa Avenue	Gunderson Road	
Existing neighborhood traffic	1160	0	
Existing neighborhood traffic w/ Gunderson	812	348	
Bailey Meadows site trips with Gunderson	566	378	
Total Daily Volume with Gunderson	1378	726	

The updated trip distribution and assignment during the morning and evening peak hours are shown in Figure 2 on page five.



le

SITE TRIP DISTRIBUTION & ASSIGNMENT Proposed Development Plan — Site Trips AM & PM Peak Hours EXHQUEST 1
Z0004-26-CP
(Allied Homes & Develophent)



## **Traffic Volumes**

## **Existing Conditions**

Twenty-four-hour speed data was collected on Highway 211 near the intersection with Ponder Lane on December 4th, 2018. The morning and evening peak hours of traffic occurred between 7:00 AM and 8:00 AM and between 4:00 PM and 5:00 PM, respectively.

Since Highway 211 is under the jurisdiction of ODOT, highway traffic volumes were seasonally adjusted to reflect the 30th highest hour per methodologies in ODOT's Analysis Procedures Manual (APM). Based on the commuter seasonal trend in ODOT's 2018 Seasonal Trend Table, a seasonal factor of 1.122 was calculated and applied to through volumes on Highway 211.

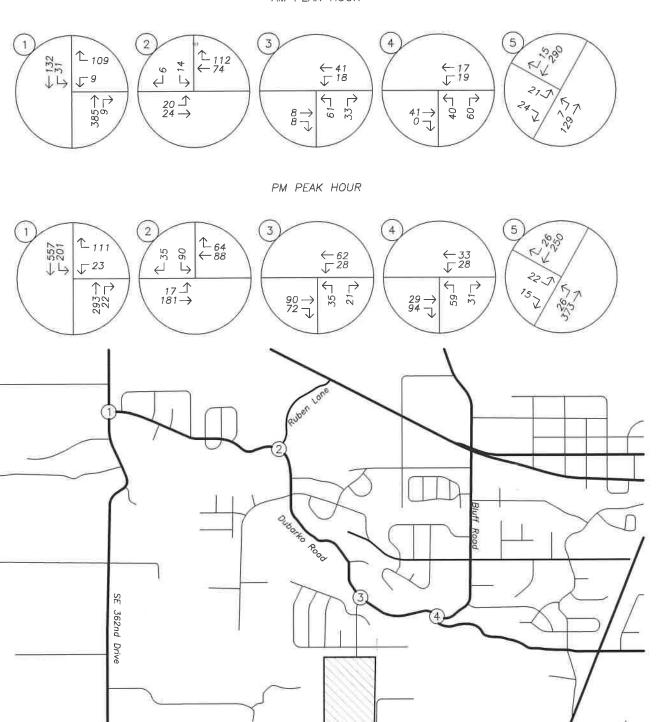
#### **Buildout Conditions**

A compounded growth rate of two percent per year was used to estimate growth on all streets under the City of Sandy jurisdiction as described within the TIS. Growth rates for traffic volumes on Highway 211 were derived using ODOT's 2037 Future Volume Tables in accordance with the APM. Using data corresponding to mileposts 3.75 and 5.07, a linear growth rate of 2.8 percent was calculated and applied to through volumes on the highway. Traffic volumes were projected over a period of four years in order to estimate the year 2022 buildout traffic volumes (traffic count data was collected in 2018).

The year 2022 buildout scenario was updated to include a redistribution of existing trips that are likely to use the new Highway 211 roadway connection. Finally, site trips generated by the Bailey Meadows subdivision, discussed previously within the Trip Distribution section, were added to the projected year 2022 volumes in order to obtain the year 2022 buildout traffic volumes.

The year 2022 buildout traffic volumes are shown in Figure 3 on page seven.

## AM PEAK HOUR





SE Gunderson Road

TRAFFIC VOLUMES Year 2022 Buildout Traffic Volumes AM & PM Peak Hours EXHOURE 1
20004-20-CP
(Allied Homes & Developh) Ent)



## **Preliminary Traffic Signal Warrants**

Preliminary traffic signal warrants were examined for all study intersections based on methodologies in the Manual on Uniform Traffic Control Devices<sup>1</sup> (MUTCD) and the Analysis Procedures Manual. Warrant 1, Eight Hour Vehicular Volumes, was used from the MUTCD. Warrants were evaluated based on the common assumption that traffic counted during the evening peak hour represents ten percent of the AADT and that the eighth-highest hour is 5.6 percent of the daily traffic. Volumes were used for the evening peak hour under the year 2022 buildout scenario.

For the intersection under ODOT jurisdiction, the APM dictates that minor-street right turns are only used if the volume exceeds 85 percent of the lane capacity, and even then, only the increment of volume in excess of 85 percent can be used. In this case, none of the right turns can be used for the purpose of the signal warrant analysis.

Due to insufficient minor street volumes, traffic signal warrants are not met at the intersection of SE Gunderson Road at Highway 211 under year 2022 buildout scenario.

## Left-Turn Lane Warrants

Left-turn lane warrants were examined at the planned intersection of Highway 211 at SE Gunderson Road. A left-turn refuge is primarily a safety consideration for the major-street approach, removing left-turning vehicles from the through traffic stream.

Warrants were examined based on the design curves developed by the Texas Transportation Institute, as adopted by the APM. This methodology evaluates the need for a left-turn lane based on the number of left-turning vehicles, the number of travel lanes, the number of advancing and opposing vehicles, and the roadway travel speed.

A left-turn lane is warranted at the intersection of SE Gunderson Road at Highway 211 under the year 2022 buildout scenario and it is recommended that a left-turn lane be constructed as part of the intersection improvements.

<sup>&</sup>lt;sup>1</sup> Federal Highway Administration (FTA), American Traffic Safety Services Association (ATSSA), Institute of Transportation Engineers (ITE), American Association of State Highway and Transportation Officials (AASHTO), Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 Edition, 2010



## **Operational Analysis**

A capacity analysis was conducted for the study intersection per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual*<sup>2</sup> (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

The City of Sandy's TSP states that both signalized and unsignalized intersections are required to operate at LOS D or better.

The applicable minimum operational standards for ODOT facilities are established under the Oregon Highway Plan and are based on the classification of the roadway and its v/c ratio. District highways located outside the Urban Growth Boundary and within an unincorporated community has a peak hour v/c ratio target of 0.80.

Table 3: Intersection Capacity Analysis Summary

	Morn	Morning Peak Hour			Evening Peak Hour		
	Delay	LOS	V/C	Delay	LOS	V/C	
SE 362 <sup>nd</sup> Drive at Dubarko Road							
Year 2022 Buildout Conditions	13	В	0.24	19	С	0.36	
Ruben Lane at Dubarko Road							
Year 2022 Buildout Conditions	10	Α	0.03	12	В	0.21	
Dubarko Road at Melissa Avenue							
Year 2022 Buildout Conditions	9	A	0.13	10	В	0.09	
Dubarko Road at Bluff Road							
Year 2022 Buildout Conditions	8	Α	0.16	8	Α	0.15	
Highway 211 at SE Gunderson Road							
Year 2022 Buildout Conditions	11	В	0.08	13	В	0.08	

All intersections are projected to operate within the City of Sandy and ODOT's operational standards under all analysis scenarios.

<sup>&</sup>lt;sup>2</sup> Transportation Research Board, Highway Capacity Manual, 6th Edition, 2016.



### Intersection Location

The City of Sandy TSP shows a planning-level depiction of the Gunderson Road extension that was outside of the UGB at the time the TSP was adopted but is within the current UGB. This is shown below in Figure 4.

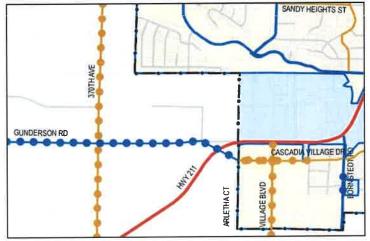


Figure 4: Alignment from Sandy TSP

However, upon closer investigation and engineering analysis, it was determined that the alignment shown on the TSP was not feasible for construction of an intersection with Highway 211, primarily due to poor sight distance, the need for a perpendicular intersection, and a very steep superelevated roadway section.

Looking to the northeast from the TSP-identified location, sight distance is limited by both horizontal and vertical curves on Highway 211. In addition, sight distance from the future fourth leg of the intersection would be particularly poor. At

the TSP-identified location, the highway was designed for moving traffic, not for accommodation of an intersection. Due to the high design speed and the horizontal curve, superelevation (the banking of the roadway around the curve) is very steep.

This facilitates through traffic on the highway, but makes an intersection at this location problematic, due to difficult turning and crossing movements across the steep curve.

## Need for UGB Expansion

The nearest suitable intersection location was found to be farther to the southwest, at the location currently proposed for a UGB amendment. From this location, it is far enough from the horizontal and vertical curves to the northeast to have adequate sight distance and far enough southwest of the curve to not be in a

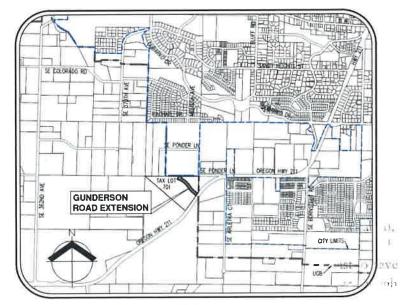


Figure 5: Planned Alignment

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 56 of 174



superelevated roadway section. However, this alignment is outside of the current UGB of the City of Sandy, as shown in Figure 5. As such, a UGB amendment is proposed to accommodate the road extension.

With the proposed UGB amendment, there will be a triangle-shaped remnant piece of property that will also be brought into the UGB. This remnant is approximately 2.38 acres in size and is proposed to be dedicated as a public neighborhood park. This will be a small, passive-use neighborhood park that will be used primarily by the residents in the area. Trips to and from the park will be primarily pedestrian and bicycle trips and no separate parking lot is planned.

## **Oregon Administrative Rules**

The proposed UGB amendment, comprehensive plan and zone map amendments, and annexation applications trigger the need to address the Transportation Planning Rule (TPR) and associated criteria from the Oregon Administrative Rules. These are addressed below.

## OAR 660-012-0060 Transportation Planning Rule

The primary purpose of the TPR is to account for the potential transportation impacts associated with any amendments to adopted plans and land use regulations. The TPR is quoted in *italics* below, with a response immediately following each section.

- 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 UGB amendment, comprehensive plan and zone map amendment, and annexation will not change the functional classification of any transportation facilities. In fact, it will implement planned roadway connections in the TSP.

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

Response: The standards that implement the functional classification system are contained in the TSP and will not change as part of this proposal.

(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

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 57 of 174



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;
- (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
- (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: The proposed UGB amendment and associated plan amendments will facilitate the Gunderson Road connection and will not result in developable property that will increase trip generation. In fact, by facilitating an important street connection it is implementing the City of Sandy TSP, will improve connectivity for the neighborhood, and will improve performance of the surrounding transportation system. The proposal will not result in a significant effect as defined by the TPR and no mitigations are necessary.

## OAR 660-024-0065 Establishment of Study Area to Evaluate Land for Inclusion in the UGB

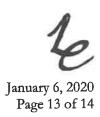
This section of the OAR is specific to UGB expansions and speaks to public facilities (such as transportation facilities) that require specific site characteristics. The OAR is quoted in *italies* below, with a response immediately following each section.

- 3. When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site characteristics may be found in only a small number of locations, the preliminary study area may be limited to those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:
  - (a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular industrial use.

Response: In OAR 660-009-0005(11), "Site Characteristics" are defined by visibility, proximity to a particular transportation facility, and major transportation routes. In this case, the "site" for the UGB amendment is very narrowly defined and the location between the subdivision and Highway 211 is dictated by engineering standards that must be satisfied for a safe and efficient intersection location.

(b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks, schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 58 of 174



Response:

Since the primary purpose of the proposed UGB amendment is to accommodate the extension of Gunderson Road to Highway 211, it is by definition a "public facility". Site characteristics such as topography are what have dictated the need for the intersection in the location as proposed. Additionally, the applicant is providing area for a neighborhood park, a minor public facility.

## **Summary & Conclusions**

The proposed UGB amendment, comprehensive plan and zone map amendments, and annexation will implement the City of Sandy TSP and result in improved operation at the study area roadways and intersections. The connection will improve conditions for the existing neighborhood to the north of the Bailey Meadows subdivision by providing another means of vehicular access to the area.



# Appendix

# **Traffic Signal Warrant Analysis**

Project:

18197 - Ponder Subdivision

Date:

1/6/2020

Scenario:

Year 2022 Buildout Conditions - Evening Peak Hour

Major Street:

Highway 211

Minor Street:

SE Gunderson Road

Number of Lanes:

1

Number of Lanes:

1

PM Peak

Hour Volumes:

675

PM Peak

Hour Volumes:

22

Warrant Used:

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

	f Lanes for Moving Each Approach:		Major St. approaches)		Minor St. ne approach)
WARRANT 1, CC	NDITION A	100%	70%	100%	70%
Major St.	Minor St.	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CC	NDITION B				
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volum	е		
Major Street	6,750	8,850	
Minor Street*	220	2,650	No
Condition B: Interruption of Continuous	Traffic		
Major Street	6,750	13,300	
Minor Street*	220	1,350	No
Combination Warrant			
Major Street	6,750	10,640	t
Minor Street*	220	2,120	No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 85% of the turn lane capacity.

**EXHIBIT 1** 



Project:

**Bailey Meadows Subdivision** 

Intersection: Highway 211 at SE Gunderson Road

Date:

1/6/2020

Scenario:

2022 Buildout conditions

Speed?

45 mph

### **PM Peak Hour**

Left-Turn Volume 26

Approaching DHV 250

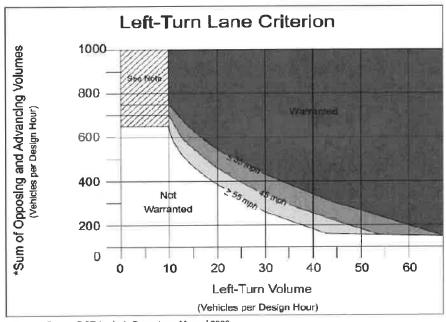
# of Advancing Through Lanes

1

Opposing DHV # of Opposing Through Lanes 399 1

O+A DHV 649

Lane Needed? Yes



Source: Oregon DOT Analysis Procedures Manual 2008

\*(Advancing Vol/ # of Advancing Through Lanes)+ (Opposing Vol/ # of Opposing Through Lanes)

Note: The criterion is not met from zero to ten left turn vehicles per hour, but careful consideration should be given to installing a left turn lane due to the increased potential for accidents in the through lanes. While the turn volumes are low, the adverse safety and operational impacts may require installation of a left turn. The final determination will be based on a field study.

**EXHIBIT 1** Z0004-20-CP (Allied Homes & Development) Page 62 of 174

	•	4	<b>†</b>	-	-	<b>↓</b>
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W/		1→		M	<b>^</b>
Traffic Volume (vph)	9	109	385	9	31	132
Future Volume (vph)	9	109	385	9	31	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	115	
Storage Lanes	1	0		0	1	In the
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.876		0.997			
Flt Protected	0.996				0.950	
Satd. Flow (prot)	1641	0	1857	0	1703	1792
Flt Permitted	0.996		- RI	100	0.950	A LAND
Satd. Flow (perm)	1641	0	1857	0	1703	1792
Link Speed (mph)	25	2 x 5	35	1100		35
Link Distance (ft)	435		701			662
Travel Time (s)	11.9		13.7	7-0	5 5	12.9
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	1%	1%	2%	2%	6%	6%
Adj. Flow (vph)	11	128	453	11	36	155
Shared Lane Traffic (%)	- 77-11				- 7	The same
Lane Group Flow (vph)	139	0	464	0	36	155
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16	- 1		16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary		44,00	m " s			선보다
	Other		AL S			
Control Type: Unsignalized	i 00 70/			1/	Oll Love	of Consider A
Intersection Capacity Utilizat	ion 39./%			- 10	U Level	of Service A

Analysis Period (min) 15

Intersection				170		E vi	
Int Delay, s/veh	2.7						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	N/W		1>		7	<b>↑</b>	
Traffic Vol, veh/h	9	109	385	9	31	132	
Future Vol, veh/h	9	109	385	9	31	132	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	1	None	111	None	V 150	None	
Storage Length	0	_	-	-	115	_	
Veh in Median Storage	,# 0		0		-	0	
Grade, %	0	-	0	-		0	
Peak Hour Factor	85	85	85	85	85	85	
Heavy Vehicles, %	1	1	2	2	6	6	
Mvmt Flow	11	128	453	11	36	155	
Major/Minor	Minor1		Major1	1	Vajor2		
Conflicting Flow All	686	459	0	0	464	0	
Stage 1	459	-			704		The state of the s
Stage 2	227	-		-			
Critical Hdwy	6.41	6.21		4	4.16	1,2	
Critical Hdwy Stg 1	5.41	0.21	R:		4.10	15	
Critical Hdwy Stg 2	5.41					-	
Follow-up Hdwy	3.509	3.309			2.254	: (#E	
Pot Cap-1 Maneuver	415	604	T 199		1077		
Stage 1	638	004	4	2		-	
Stage 2	813				1	TH 192	
Platoon blocked, %	0.0		-				
Mov Cap-1 Maneuver	401	604			1077		
Mov Cap-2 Maneuver	401	-	-		-		
Stage 1	617	-		1 -11	- 1		
Stage 2	813	-		말	4	-	
		100	417	m			
Approach	WB	-	NB	-	SB		STATE OF THE PARTY
THE STATE OF THE S	13.1		0		1.6		
HCM Control Delay, s HCM LOS	В		U		1.0		
HCIVI LOS	D			(F., 1			
		NOT	KIPSPE	MD) - 4	OFI	COT	
Minor Lane/Major Mvn	nt	NBT	NBK	VBLn1	SBL	SBT	
Capacity (veh/h)				582	1077	-	
HCM Lane V/C Ratio				0.239			
HCM Control Delay (s	)	-	- 4	13.1	8.5		المداخة المطالبات المعالدة بالمساوية والزاراة والم
HCM Lane LOS		-	-	В	A		
HCM 95th %tile Q(veh	1)	LI.		0.9	0.1	-	

	<b>≯</b>	<b>→</b>	•	*	1	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	55
Lane Configurations		स			N.		
Traffic Volume (vph)	20	24	74	112	14	6	
Future Volume (vph)	20	24	74	112	14	6	
ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		410	0.919		0.959		
Flt Protected		0.978			0.966		
Satd. Flow (prot)	0	1753	1712	0	1558	0	
Flt Permitted		0.978			0.966		
Satd. Flow (perm)	0	1753	1712	0	1558	0	
Link Speed (mph)		25	25		25		
Link Distance (ft)		560	633		717		W.
Travel Time (s)		15.3	17.3		19.6		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Heavy Vehicles (%)	6%	6%	2%	2%	13%	13%	
Adj. Flow (vph)	22	27	83	126	16	7	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	49	209	0	23	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		12		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		4-1-1	4.15				М,
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	ш,
Sign Control		Free	Free		Stop		
Intersection Summary	MI DA			1 V	- 1571	ria di G	
	Other						
Control Type: Unsignalized		1 (4)	100		"		H
Intersection Capacity Utilizat	tion 27.4%			10	CU Level	of Service i	Α
Analysis Period (min) 15			15.			italia e	

# 2: Dubarko Road & Ruben Lane

more

Intersection	Zisi i	1,8		T 1		
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		स	7>		W	
Traffic Vol, veh/h	20	24	74	112	14	6
Future Vol, veh/h	20	24	74	112	14	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None	-	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	.# -	0	0	= 1/1-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	6	2	2	13	13
Mymt Flow	22	27	83	126	16	7
WIVING TOW				120	10	
					4	
	Vajor1		Major2		Minor2	
Conflicting Flow All	209	0	i.e.	0	217	146
Stage 1			100		146	
Stage 2	-	i iii	₹.	:=	71	-
Critical Hdwy	4.16	118	1	-	6.53	6.33
Critical Hdwy Stg 1		1	142	-	5.53	-
Critical Hdwy Stg 2			11/4		5.53	
Follow-up Hdwy	2.254			-	3.617	
Pot Cap-1 Maneuver	1338			-	747	873
Stage 1			•	:-	855	-
Stage 2				-	925	1 50
Platoon blocked, %			-	æ		
Mov Cap-1 Maneuver	1338	12		140	734	873
Mov Cap-2 Maneuver	-			-	734	
Stage 1	I V	F1 .	- 12		840	- 12
Stage 2	-		-	-	925	-
Jugo L		чν.,			, EI-J	TUD I
			-			
Approach	EB		WB		SB	
HCM Control Delay, s	3.5		0	عب قرا	9.8	LL T
HCM LOS					Α	
	18.48		H.W.			
Minor Lane/Major Mvm	it .	EBL	EBT	WBT	WRR	SBLn1
		1338		TO T	WOIN	771
Capacity (veh/h)						
HCM Control Polov (a)		0.017	0		_	9.8
HCM Control Delay (s)		7.7				
HCM Lane LOS HCM 95th %tile Q(veh)	= 7	0.1	Α -		-	0.1

	-	*	1	-	1	1
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7			सी	M	
Traffic Volume (vph)	8	8	18	41	61	33
Future Volume (vph)	8	8	18	41	61	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.952	
Flt Protected				0.985	0.969	
Satd. Flow (prot)	1451	0	0	1835	1718	0
Flt Permitted				0.985	0.969	
Satd. Flow (perm)	1451	0	0	1835	1718	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	1479	T. 1.		1123	1279	100
Travel Time (s)	40.3			30.6	34.9	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles (%)	22%	22%	2%	2%	2%	2%
Adj. Flow (vph)	10	10	23	52	77	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	75	119	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	- 485	9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary					al J88	
,	Other					
Control Type: Unsignalized				40.0	Sec. 15	
Intersection Capacity Utilizat	tion 21.9%			10	CU Level	of Service A
Analysis Period (min) 15						

Intersection		100	ľa T			affi
Int Delay, s/veh	6			-		
					4	Men
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ĵ∍			र्भ	A	
Traffic Vol, veh/h	8	8	18	41	61	33
Future Vol, veh/h	8	8	18	41	61	33
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	1110	None		None
Storage Length	-	140	-	-	0	-
Veh in Median Storage, #	<b>#</b> 0	1174	100	0	0	VIII-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	22	22	2	2	2	2
Mvmt Flow	10	10	23	52	77	42
Metalog Harris Ma	a entre I		New trails		Villamond	
	ijor1		Major2		Minor1	45
Conflicting Flow All	0	0	20	0	113	15
Stage 1	-			-	15	0 1 1
Stage 2	-	-	4.40	-	98	-
Critical Hdwy	-	•	4.12	•	6.42	6.22
Critical Hdwy Stg 1	0. <del>∏</del> £	/ <u>s</u>		-	5.42	-
Critical Hdwy Stg 2	100	383	1.5	- 1	5.42	1
Follow-up Hdwy	::=:		2.218	-	3.518	
Pot Cap-1 Maneuver	(6)		1596	-	884	1065
Stage 1	0#1	106	7€0	( <b></b> )	1008	
Stage 2		16	200	-	926	1
Platoon blocked, %	// <b>&amp;</b>	74		2		
Mov Cap-1 Maneuver	- 15		1596		871	1065
Mov Cap-2 Maneuver	-	15	7,51		871	•
Stage 1	18	100			993	
Stage 2		(*	(( <del>41</del> )	5 <b>-</b> 2	926	
	100					1 X 5
K DOOR OF THE REAL PROPERTY.	ED		- VAID		MD	
Approach	EB		WB	ME L	NB	1
HCM Control Delay, s	0		2.2	14.7	9.4	14.
HCM LOS					Α	
	31	N. N.				100
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-70	931				
HCM Lane V/C Ratio		0.128	1945			
HCM Control Delay (s)	4	9.4		-	7.3	0
HCM Lane LOS		A	:(+:	{( <del>4</del> }	A	A
HCM 95th %tile Q(veh)	7	0.4	74	- 1 -	0	
		0.1				1

	$\rightarrow$	*	1	•	1	1
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1→			ની	W	
Traffic Volume (vph)	41	0	19	17	40	60
Future Volume (vph)	41	0	19	17	40	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			401	1000	0.919	100
Flt Protected				0.974	0.980	
Satd. Flow (prot)	1696	0	0	1698	1645	0
Flt Permitted				0.974	0.980	
Satd. Flow (perm)	1696	0	- 0	1698	1645	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	750	Les		780	615	172 11
Travel Time (s)	20.5			21.3	16.8	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles (%)	12%	12%	9%	9%	4%	4%
Adj. Flow (vph)	59	0	27	24	57	86
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	0	51	143	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	والمحاك					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Stop	Stop	
Intersection Summary		. F	VII S. F.	1 -1 -1	1717	9=194
Area Type:	Other					
Control Type: Unsignalized	Man .			- 13		
Intersection Capacity Utilizat	ion 21.2%			10	CU Level	of Service A
Analysis Period (min) 15		-70				

4:	Dubarko	Road	&	Bluff	Road
-			_		

Intersection					4 7 13	
Intersection Delay, s/veh	7.7					
Intersection LOS	Α	الماكيات			1,27,1	VI 27
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7>			स	N/F	
Traffic Vol, veh/h	41	0	19	17	40	60
Future Vol, veh/h	41	0	19	17	40	60
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	12	12	9	9	4	4
Mymt Flow	59	0	27	24	57	86
Number of Lanes	1	0	0	1	1	0
Approach	EB	1 1 1	WB		NB	N L
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left			NB		EB	
Conflicting Lanes Left	0	ASSESSED TO	1	10.	1	
Conflicting Approach Right	NB				WB	
Conflicting Lanes Right	1	100	0	alla "LET	1	1 1 2 1
HCM Control Delay	7.8		7.8		7.7	
HCM LOS	A		A		Α	
Lane	30	NBLn1	EBLn1	WBLn1	LATE OF	1,5
Vol Left, %		40%	0%	53%		
Voi Thru, %	la Li	0%	100%	47%		
Vol Right, %		60%	0%			
Sign Control		-010	U /0	11%		
		Stop		0% Stop	Sire	
Traπic Vol by Lane		Stop 100	Stop	Stop	Sirs	
Traffic Vol by Lane LT Vol		100		Stop 36	Sing	
LT Vol			Stop 41	Stop 36 19	513 70 J	211
		100 <b>40</b>	Stop 41 0	Stop 36	514 704	
LT Vol Through Vol		100 40 0	Stop 41 0 41	Stop 36 19 17	56 30)	
LT Vol Through Vol RT Vol Lane Flow Rate		100 40 0 60	Stop 41 0 41 0	Stop 36 19 17	56 50) 50)	
LT Vol Through Vol RT Vol		100 40 0 60 143	Stop 41 0 41 0 59	Stop 36 19 17 0 51		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		100 40 0 60 143	Stop 41 0 41 0 59	Stop 36 19 17 0 51		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		100 40 0 60 143 1 0.154	Stop 41 0 41 0 59 1 0.072	Stop 36 19 17 0 51 1 0.064		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		100 40 0 60 143 1 0.154 3.877	Stop 41 0 41 0 59 1 0.072 4.396	Stop 36 19 17 0 51 1 0.064 4.456		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		100 40 0 60 143 1 0.154 3.877 Yes	Stop 41 0 41 0 59 1 0.072 4.396 Yes	Stop 36 19 17 0 51 1 0.064 4.456 Yes	515 704 527 600 600 600 600 600 600 600 600 600 60	
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		100 40 0 60 143 1 0.154 3.877 Yes 913	Stop 41 0 41 0 59 1 0.072 4.396 Yes 807	Stop 36 19 17 0 51 1 0.064 4.456 Yes 796		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		100 40 0 60 143 1 0.154 3.877 Yes 913 1.95	Stop 41 0 41 0 59 1 0.072 4.396 Yes 807 2.466	Stop 36 19 17 0 51 1 0.064 4.456 Yes 796 2.528		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		100 40 0 60 143 1 0.154 3.877 Yes 913 1.95 0.157	Stop 41 0 41 0 59 1 0.072 4.396 Yes 807 2.466 0.073	Stop 36 19 17 0 51 1 0.064 4.456 Yes 796 2.528 0.064		

11/1

	4	1	7	×	1	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	To A		ħ	*	4	7
Traffic Volume (vph)	21	24	7	129	290	15
Future Volume (vph)	21	24	7	129	290	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)	0	0	100			100
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.928					0.850
Fit Protected	0.977		0.950			7 57
Satd. Flow (prot)	1556	0	1630	1716	1716	1458
Flt Permitted	0.977	1, 13	0.950	4864		
Satd. Flow (perm)	1556	0	1630	1716	1716	1458
Link Speed (mph)	30	-40		30	30	
Link Distance (ft)	827			1043	1164	
Travel Time (s)	18.8			23.7	26.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	26	8	140	315	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	49	0	8	140	315	16
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0		Y Y	0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				l Epot		
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary			s p <sup>h</sup> d			E B
	Other					
Control Type: Unsignalized	- Y-13			11217		
Intersection Capacity Utiliza	ation 26.6%			IC	U Level	of Service /
Analysis Period (min) 15				411		

Intersection	HEE				18.18	
Int Delay, s/veh	1.1					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	14		ሻ	<b>^</b>	1	7
Traffic Vol, veh/h	21	24	7	129	290	15
Future Vol, veh/h	21	24	7	129	290	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	U.Op	None	1100	None	-	None
Storage Length	0	-	100	-	-	100
Veh in Median Storage		-		0	0	1
Grade, %	0			0	0	
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	23	26	8	140	315	16
	Minor2		Major1		Najor2	علالا
Conflicting Flow All	471	315	331	0		0
Stage 1	315	-	-	- 1.5		100
Stage 2	156	-	-	-	1/20	841
Critical Hdwy	6.42	6.22	4.12	1 12	100	G.
Critical Hdwy Stg 1	5.42	-	-	•	) <del>S</del>	
Critical Hdwy Stg 2	5.42	-	-			-
Follow-up Hdwy	3.518	3.318			-	10-
Pot Cap-1 Maneuver	551	725	1228			700
Stage 1	740	-	-	¥	40	18
Stage 2	872	-	-	- 4	1 1 2	1 12
Platoon blocked, %					-	12
Mov Cap-1 Maneuver	547	725	1228			
Mov Cap-2 Maneuver	547	-	-		•	1.50
Stage 1	735	£ .				
Stage 2	872	-	-		#:	•
in the first state of		1		1 1		
Approach	SE		NE		SW	J/SI
	11.2		0.4		0	414
HCM Control Delay, s HCM LOS	11.2 B		0.4		U	
LOIN FOS	D	-				
	HIII					
Minor Lane/Major Mvn	nt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)		1228		629		
HCM Lane V/C Ratio		0.006		0.078	-	₹:
HCM Control Delay (s)		8	-	11.2	1 i =	T ret
HCM Lane LOS		Α		В	*	+
HCM 95th %tile Q(veh	)	0		0.3		

3	•	4	<b>†</b>	-	-	<b>↓</b>
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	*/		1>		7	<b>^</b>
Traffic Volume (vph)	23	111	293	22	201	557
Future Volume (vph)	23	111	293	22	201	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	115	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.888		0.991			
Flt Protected	0.992	100	1 1 2 1	Y IP	0.950	10.57
Satd. Flow (prot)	1641	0	1846	0	1787	1881
Flt Permitted	0.992	70.75	30.00	THE PERSON	0.950	
Satd. Flow (perm)	1641	0	1846	0	1787	1881
Link Speed (mph)	25	441	35	1000		35
Link Distance (ft)	435		701			662
Travel Time (s)	11.9		13.7		11.	12.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	25	121	318	24	218	605
Shared Lane Traffic (%)				6.1	11 Y 11	
Lane Group Flow (vph)	146	0	342	0	218	605
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free	7		Free
Intersection Summary		the second			" a _ "	
	Other					
Control Type: Unsignalized						
Intersection Capacity Utilizat	ion 46.0%		1	I	CU Level	of Service

Analysis Period (min) 15

Intersection		_WE				e en
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	14		1		7	<b>^</b>
Traffic Vol, veh/h	23	111	293	22	201	557
Future Vol, veh/h	23	111	293	22	201	557
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None		None
Storage Length	0	-	-	-	115	-
Veh in Median Storage		143	0		1,12-5	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	25	121	318	24	218	605
Major/Minor	Minor1		Major1		Vlajor2	
Conflicting Flow All	1371	330	0	0	342	0
Stage 1	330	116	-	- 40		L I 🗪
Stage 2	1041		-	-	120	:=:
Critical Hdwy	6.42	6.22		-	4.11	-
Critical Hdwy Stg 1	5.42		-	j.	*	
Critical Hdwy Stg 2	5.42	-	. 5		-	1 -
Follow-up Hdwy		3.318		(●)	2.209	
Pot Cap-1 Maneuver	161	712			1223	11/100
Stage 1	728	-		-		•
Stage 2	340	-		1 14		
Platoon blocked, %				•	4	*
Mov Cap-1 Maneuver	132	712		- 0	1223	160
Mov Cap-2 Maneuver	132	1/16	-	•	-	
Stage 1	598	1				170
Stage 2	340	(100)			-	:=:
						. No
Approach	WB	Tr'S	NB		SB	
HCM Control Delay, s	18.7	THE R	0		2.3	
HCM LOS	С					
ALC: UNITED TO SEE						
Minor Lane/Major Mvn	nt	NBT	MRDI	NBLn1	SBL	SBT
	int	INDI	MON	406	1223	-
Capacity (veh/h) HCM Lane V/C Ratio			0.5	0.359		
HCM Control Delay (s	1			18.7	8.6	
HCM Lane LOS	1			-	Α	-
HCM 95th %tile Q(veh	1	180	-	4.4	0.6	
HOW SOUL WINE COLVER	7			1.0	0.0	

	•	<b>→</b>	+	4	<b>/</b>	4	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	6
Lane Configurations		र्स	1→		M		
Traffic Volume (vph)	17	181	88	64	90	35	
Future Volume (vph)	17	181	88	64	90	35	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt			0.943		0.962		
Flt Protected		0.996			0.965		
Satd. Flow (prot)	0	1874	1792	0	1746	0	
Flt Permitted		0.996			0.965		
Satd. Flow (perm)	0	1874	1792	0	1746	0	
Link Speed (mph)		25	25		25		
Link Distance (ft)	LV My	560	633	10. 1	717	- Marie	100
Travel Time (s)		15.3	17.3		19.6		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%	
Adj. Flow (vph)	19	203	99	72	101	39	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	222	171	0	140	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		12		
Link Offset(ft)	77 V = 1	0	0	11-11	0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		- 11	1,11	19.5			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	W. T		9	15	9	
Sign Control		Free	Free		Stop		
Intersection Summary	11 11		14-5-4	- FT	H		
71	Other						
Control Type: Unsignalized			1 Au	1111			
Intersection Capacity Utilizati	ion 36.1%			IC	CU Level	of Service	Α
Analysis Period (min) 15	9 30		11-7		3 3		

Intersection	, Aust			Se 18	uli,	510
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	La for to	4	4		Y	
Traffic Vol, veh/h	17	181	88	64	90	35
Future Vol, veh/h	17	181	88	64	90	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	1100		0.05	
Storage Length		-	-	-	0	-
Veh in Median Storage	# -	0	0		0	
Grade, %	, u -	0	0		0	_
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	1	0	0	1	1
Mymt Flow	19	203	99	72	101	39
MANTELIOM	13	203	33	12	101	33
Major/Minor I	Major1		Major2		Minor2	
Conflicting Flow All	171	0	((€)	0	376	135
Stage 1	-	100	7.0	-	135	
Stage 2		-	221	_	241	
Critical Hdwy	4.11		- 14	-	6.41	6.21
Critical Hdwy Stg 1	-			7-	5.41	-
Critical Hdwy Stg 2	N <sub>3</sub>				5.41	
Follow-up Hdwy	2.209		-	-	3.509	3.309
Pot Cap-1 Maneuver	1412	3,34			627	917
Stage 1	-	-	0,41	-	894	-
Stage 2		19			801	
Platoon blocked, %		ž.	12	_		
Mov Cap-1 Maneuver	1412	12. 12	1/4	78	618	917
Mov Cap-2 Maneuver	1712			•	618	-
Stage 1					881	
Stage 2	-	-			801	- 1
Staye Z		تنوق	TACK.	-	001	
		****				
Approach	EB	ines.	WB	10.07	SB	
HCM Control Delay, s	0.7		0	THE	11.7	
HCM LOS					В	
		115				
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1412	-			680
HCM Lane V/C Ratio		0.014		17	- 10	0.207
HCM Control Delay (s)		7.6	0	1. <del>1</del>		11.7
HCM Lane LOS		Α.	A	100		В
HCM 95th %tile Q(veh)	1	0				0.8
LICIVI SOUL MILE GIVELL	1 ~	U		- T		0.0

	-	7	1	-	1	1
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1>			सी	W	
Traffic Volume (vph)	90	72	28	62	35	21
Future Volume (vph)	90	72	28	62	35	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.940				0.949	
Flt Protected				0.985	0.970	
Satd. Flow (prot)	1768	0	0	1872	1749	0
Flt Permitted				0.985	0.970	
Satd. Flow (perm)	1768	0	0	1872	1749	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	1479			1123	1279	
Travel Time (s)	40.3			30.6	34.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	106	85	33	73	41	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	191	0	0	106	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0		400	0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane		73117	71.0	3 - 11 -		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15	1 TO 1	15	9
Sign Control	Free			Free	Stop	
Intersection Summary	HER			100	V = 1	
	Other					
Control Type: Unsignalized	(1 to 2)	, "I SØ1				
Intersection Capacity Utilizat	tion 27.3%			IC	CU Level o	of Service A
Analysis Period (min) 15	True -					

Intersection	1	Way it	100	N/VIII	A NEW	
Int Delay, s/veh	2.6					
		EDD	MAPL	MOT	MDI	MDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽			र्	¥	
Traffic Vol, veh/h	90	72	28	62	35	21
Future Vol, veh/h	90	72	28	62	35	21
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None	-	None
Storage Length	-	(*)	100		0	-
Veh in Median Storage,		-		0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	106	85	33	73	41	25
Major/Minor W	nined		Major2	1 7 1	Minor1	-7-
	ajor1					149
Conflicting Flow All	0	0	191	0	288	
Stage 1	*	-	-	14 H	149	
Stage 2	V.	-	-	•	139	-
Critical Hdwy			4.1		6.4	6.2
Critical Hdwy Stg 1	W.	•		•	5.4	
Critical Hdwy Stg 2	4.50	(2)		-	5.4	-
Follow-up Hdwy	(( <del>+</del> )	(*)	2.2		3.5	3.3
Pot Cap-1 Maneuver	100		1395	360	707	903
Stage 1	:(¥)	-	: * ·	(₩(	884	
Stage 2	-	- 100	243	-	893	1 1 -
Platoon blocked, %	(E	ě				
Mov Cap-1 Maneuver	150		1395		689	903
Mov Cap-2 Maneuver	11.0	1. <del>7</del> 1		3	689	-
Stage 1	100	5 8			862	
Stage 2	:(₩:	(j <del>e</del> )	5 <del>-</del>	:=:	893	-
			Ret .		1,51	
Angranda	EB		WB		NB	
Approach	_	2	_	_		
HCM Control Delay, s	0		2.4	11.18.2	10.2	
HCM LOS					В	
المراجع المراجع		1,1				111
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		756		III (		
HCM Lane V/C Ratio		0.087	-		0.024	-
HCM Control Delay (s)		10.2	FI.		7.6	0
HCM Lane LOS		В	_	100	Α	A
HCM 95th %tile Q(veh)		0.3			0.1	
TOM JOH JULIE Q(VEII)		0.0			0.1	

	<b>-</b>	1	1	•	4	1
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1₃			4	*\p#	
Traffic Volume (vph)	29	94	28	33	59	31
Future Volume (vph)	29	94	28	33	59	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.897		115		0.954	
Flt Protected				0.978	0.968	
Satd. Flow (prot)	1704	0	0	1858	1737	0
Flt Permitted				0.978	0.968	
Satd. Flow (perm)	1704	0	0	1858	1737	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	750			780	615	
Travel Time (s)	20.5			21.3	16.8	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	1%	1%
Adj. Flow (vph)	34	111	33	39	69	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	145	0	0	72	105	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Stop	Stop	
Intersection Summary	FILE OF		5101	12.11		
The state of the s	Other					
Control Type: Unsignalized			4-53		" Y - 1	HET
Intersection Capacity Utiliza	tion 25.8%			I	CU Level	of Service A
Analysis Period (min) 15						

Intersection					San Cal	Jevin	
Intersection Delay, s/veh	7.7						
Intersection LOS	Α				- 14 0 5		
IIIOIOOOIOII EOO							
Manager	EBT	EBR	WBL	WBT	NBL	NBR	
Movement		EDIX	VVDL	₩ĐĪ	NOL	NON	
Lane Configurations	<b>1</b> → 29	94	28	33	59	31	
Traffic Vol, veh/h	29	94	28	33	59	31	
Future Vol, veh/h Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
		0.00	0.63	0.00	1	1	
Heavy Vehicles, %	0 <b>34</b>	111	33	39	69	36	No. No.
Mvmt Flow Number of Lanes		0	0	1	1	0	
Number of Lanes	1	U				U	
Approach	EB	TO THE	WB		NB		100
Opposing Approach	WB		EB				
Opposing Lanes	1 5 0 19		1	Y 14	0	1	
Conflicting Approach Left			NB		EB		
Conflicting Lanes Left	0		1		1	252	100
Conflicting Approach Right	NB				WB		
Conflicting Lanes Right	1		0		1		
HCM Control Delay	7.4		7.8		7.9		
HCM LOS	Α		Α	9-17-2	Α		
Lane		NBLn1	EBLn1	WBLn1	THE PERSON NAMED IN	8 15 X	
Vol Left, %		66%	0%	46%			
Vol Thru, %		0%	24%	54%			
Vol Right, %		34%	76%	0%			
Sign Control	14 1	Stop	Stop	Stop			-1
Traffic Vol by Lane		90	123	61			
LT Vol		59	0	28		1 - 1	
Through Vol		0	29	33			
RT Vol	. 213	31	94	0			
Lane Flow Rate		106	145	72			
Geometry Grp		1	1	1			
Degree of Util (X)		0.124	0.148	0.086			
Departure Headway (Hd)	4.00	4.213	3.682	4.29	أاعرك		
Convergence, Y/N		Yes	Yes	Yes			
Cap		841	959	825			
Service Time		2.29	1.761	2.368			
HCM Lane V/C Ratio		0.126	0.151	0.087		100	
HCM Control Delay		7.9	7.4	7.8			
HCM Lane LOS		Α	Α	A			
HCM 95th-tile Q		0.4	0.5	0.3			

	*	*	1	†	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	NA.		ሻ	<b>*</b>	4	7
Traffic Volume (vph)	22	15	26	373	250	26
Future Volume (vph)	22	15	26	373	250	26
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)	0	0	100			100
Storage Lanes	1	0	1			1111
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946					0.850
Flt Protected	0.971		0.950	17.53	լ հղ	No. of
Satd. Flow (prot)	1576	0	1630	1716	1716	1458
Flt Permitted	0.971		0.950			
Satd. Flow (perm)	1576	0	1630	1716	1716	1458
Link Speed (mph)	30		100	45	45	VIII X
Link Distance (ft)	1495			875	917	
Travel Time (s)	34.0		1-215	13.3	13.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	16	28	405	272	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	28	405	272	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0		120	0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane		100	100	200		
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15		7.0	9
Sign Control	Stop			Free	Free	
Intersection Summary	## <b>#</b>				IS III	
	Other					
Control Type: Unsignalized		1-1	- 76			
Intersection Capacity Utilizat	tion 31.3%			IC	U Level	of Service A
Analysis Period (min) 15	11500					40.00

Intersection	4 (4)	112	115		13	- W a	
Int Delay, s/veh	1						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	NA.	CUIT	T	<b>†</b>	1	7	
Traffic Vol, veh/h	22	15	26	373	250	26	THE RESERVE TO STATE OF THE PARTY OF THE PAR
Future Vol, veh/h	22	15	26	373	250	26	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	Clop	None	1100			None	THE RESERVE OF THE PARTY OF THE
Storage Length	0		100	-	-	100	
Veh in Median Storage	-			0	0	The second	and the state of t
Grade, %	0			0	0		
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	
Mymt Flow	24	16	28	405	272	28	
La servicia attenda	With the same		V DE SOU		Anta-O		
The second secon	Minor2		Major1		/lajor2		
Conflicting Flow All	733	272	300	0	: <b>=</b> 0	0	
Stage 1	272	-		I UII)	-	-	
Stage 2	461	-	4.40			_	
Critical Hdwy	6.42	6.22	4.12	100			
Critical Hdwy Stg 1	5.42		-	3.00	: <b>*</b> :	_	
Critical Hdwy Stg 2	5.42	-	- 0.40	-	-		المحالية فالمراش الخراسة والمراجع والمراجع المراجع والمراجع والمرا
Follow-up Hdwy				30#0	) <b>*</b> :	-	
Pot Cap-1 Maneuver	388	767	1261		- "	-	
Stage 1	774		-	1/21	100	(*)	
Stage 2	635		-	18			
Platoon blocked, %	070	707	4004		i i		
Mov Cap-1 Maneuver	379	767	1261	1,72	N IS	•	
Mov Cap-2 Maneuver	379	*		U.E.	887	1.51	
Stage 1	757					7.0	
Stage 2	635	=	-	1041	(. <del></del> .		
Approach	EB		NB		SB		A COLUMN TO A COLU
HCM Control Delay, s	13.2		0.5	11	0		
HCM LOS	В						
Minor Lane/Major Mvn	nt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)		1261					
HCM Lane V/C Ratio		0.022	-	0.084		(( <del>-</del>	
HCM Control Delay (s)	)	7.9		40.0			
HCM Lane LOS		A	2	_	2	J(=)	
HCM 95th %tile Q(veh	)	0.1	100		, v.	-	Anna and the state of the later
TOTAL COM TOTAL CONTRACT	7	0.1		0.0			

# **Bailey Meadows Subdivision**

Traffic Impact Analysis
Sandy, Oregon

Date:

June 20, 2019

Prepared for:

Cody Bjugan, Allied Homes & Development

Prepared by:

Jessica Hijar

Todd Mobley, PE



RENEWS: 12 51 2020



EXHIBIT 1
Z0004-20-CP
(Allied Homes & Development)
Page 83 of 174



# **Table of Contents**

Executive Summary	1
Project Description	2
Introduction	2
Location Description	2
Site Trips	5
Trip Generation	
Trip Distribution	6
Traffic Volumes	8
Existing Conditions	8
Background Conditions	8
Buildout Conditions	
Safety Analysis	11
Crash History Review	11
Warrant Analysis	11
Operational Analysis	13
Delay & Capacity Analysis	13
Conclusions	14
Appendix	
11DDCIICUA	



# **Table of Figures**

Figure 1: Study Intersection Configurations	
Figure 2: Site Trip Distribution & Assignment	7
Figure 3: Morning Peak Hour Traffic Volumes - All Analysis Scenarios	9
Figure 4: Evening Peak Hour Traffic Volumes - All Analysis Scenarios	10
Table of Tables	
Table 1: Vicinity Roadway Descriptions	3
Table 2: Vicinity Intersection Descriptions	3
Table 3: Trip Generation Summary	5
Table 4: Trip Rate Comparison	5
Table 5: Crash Analysis Summary	11
Table 6: Intersection Capacity Analysis Summary	



# **Executive Summary**

- 1. A 100-lot single family detached swelling unit subdivision is proposed for the following tax lots in Sandy, Oregon: 24E23 800, 801, 802, 803, and 804.
- 2. Access to the project is planned via an existing right-of-way street stub on Melissa Avenue that was created to provide access to the subject site as part of the adjoining Nicholas Glen No. 2 subdivision.
- 3. The proposed subdivision is calculated to generate 74 trips during the morning peak hour, 99 trips during the evening peak hour, and 944 trips each weekday.
- 4. Based on a review of the most recent five years of crash history, no significant safety issues or trends are evident at the study intersections.
- 5. Due to insufficient major and minor street volumes, preliminary traffic signal warrants were not met at the study intersections under all analysis scenarios.
- 6. Left-turn lane warrants were analyzed for the intersection of Melissa Avenue at Dubarko Road and not met under any analysis scenario.
- 7. All study intersections, including the intersection of Melissa Avenue at Dubarko Road, are currently operating within the City's performance standards and are projected to continue operating acceptably through year 2022, with or without the addition of site trips from the proposed development.



### **Project Description**

### Introduction

The proposed development will include the construction of a 100-lot subdivision to be located on tax lots 24E23 800, 801, 802, 803, and 804 in Sandy, Oregon. The site is currently within the City of Sandy Urban Growth Boundary, the city limits, and is zoned Single Family Residential (SFR), which allows the subdivision as proposed. The project will be built in three phases, with the expected completion year of 2022.

This report includes traffic counts and a full operational analysis at the intersections listed below. This scope was developed based on City of Sandy's Traffic Impact Analysis (TIA) requirements and was approxed by Replinger and Associates, the City's consulting transportation engineer. Coordination of the scope of work with the Oregon Department of Transportation (ODOT) was not necessary since no intersections on the state highway are affected.

- 1. SE 362<sup>nd</sup> Drive at Dubarko Road,
- 2. Ruben Lane at Dubarko Road,
- 3. Dubarko Road at Melissa Avenue, and
- 4. Dubarko Road at Bluff Road.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of supporting the existing uses as well as the proposed subdivision and to determine if mitigation is necessary. Detailed information on traffic counts, trip generation calculations, safety analyses, and level-of-service calculations is included in the appendix to this report.

# Location Description

The subject site is located south of Rachel Drive and west of Ponder Lane in Sandy, Oregon. Although roadway stubs will be provided within the site for future roadway connections, access to the project is planned via an existing right-of-way street stub on Melissa Avenue that was created to provide access to the subject site as part of the adjoining Nicholas Glen No. 2 subdivision.

Access to the subdivision cannot be provided via SE Ponder Lane in the southeast corner of the site since the existing right-of-way along SE Ponder Lane does not allow for two directions of travel and the current configuration of SE Ponder Lane at Highway 211 cannot support additional vehicle trips. There is not sufficient right-of-way available to realign Ponder Lane at its intersection with Highway 211. It is expected that additional access will be available to the east of the site as other properties develop.

Vicinity Streets

Five roadways have been identified in the traffic study scope. Table 1 provides a description of each of the roadways.

Z0004-20-CP

(Allied Homes & Development)
Page 87 of 174

151 TE 3

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Classification	Speed (MPH)	Curbs	Sidewalks	Bicycle Lanes
SE 362 <sup>nd</sup> Drive	City of Sandy	Rural Minor Arterial	35 mph posted	Partial	Partial	Partial
Ruben Lane	City of Sandy	Collector	25 mph posted	Yes	Partial	Yes
Dubarko Road	City of Sandy	Minor Arterial	25 mph posted	Yes	Yes	Partial
Melissa Avenue	City of Sandy	Local Road	25 mph statutory	Yes	Yes	No
Bluff Road	City of Sandy	Minor Arterial	25 mph posted	Partial	Partial	Partial

### Study Intersections

fev to

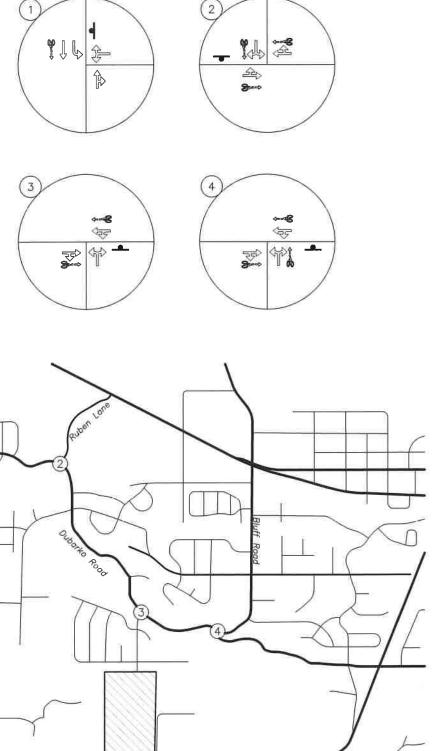
Four nearby intersections were identified in discussions with City staff that are expected to be impacted by the proposed project. Table 2 below provides a summary of each of the study intersections.

Table 2: Vicinity Intersection Descriptions

Number	Intersection	Geometry	Traffic Control	Stopped Approaches
1	SE 362 <sup>od</sup> Drive at Dubarko Road	Three-Legged	Two-Way Stop Controlled	Westbound
2	Ruben Lane at Dubarko Road	Three-Legged	Two-Way Stop Controlled	Southbound
3	Dubakro Road at Melissa Avenue	Three-Legged	Two-Way Stop Controlled	Northbound
4	Dubarko Road at Bluff Rod	Three-Legged	All-Way Stop Controlled	All

The figure on the following page shows the site vicinity and the study intersection configurations.

# LEGEND STUDY INTERSECTION (EXISTING) STOP SIGN BIKE LANE PROJECT SITE ARTERIAL ROADWAY COLLECTOR ROADWAY LOCAL ROADWAY





EXFIGURE 1

Z0004-20-CP

(Allied Homes & Develophysnt)

Page 89 of 174

SE 362nd Drive



### Site Trips

### Trip Generation

To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*<sup>1</sup> were used. Data from land use codes 210, *Single-Family Detached Housing*, was used to estimate the proposed development's trip generation based on the number of dwelling units.

The trip generation calculations show that the proposed subdivision is projected to generate 74 morning peak hour trips, 99 evening peak hour trips, and 944 average weekday trips. The trip generation estimates are summarized in Table 3 below and detailed trip generation calculations are included as an attachment to this report.

Table 3: Trip Generation Summary

Land Use Code	et	Morning Peak Hour			Evening Peak Hour			Weekday
	Size	In	Out	Total	In	Out	Total	Total
210 – Single-Family Detached Housing	100 units	19	55	74	62	37	99	944

### **Custom Trip Rates**

Based on traffic counts collected at the existing intersection of Melissa Avenue at Dubarko Road and 24-hour counts collected along Melissa Avenue, a localized trip rate was derived for the existing subdivision that accesses Dubarko Road via Melissa Avenue. The custom trip rate was calculated to be 0.49 trips per unit during the morning peak hour, 0.63 trips per unit during the evening peak hour, and 6.90 trips per unit during each weekday. A comparison of the ITE trip rates and the trip rates based on localized data is provided in the following table.

Table 4: Trip Rate Comparison

Data	Morning Trip Rate	Evening Trip Rate	Weekday Trip Rate
ITE	0.74 trips/unit	0.99 trips/unit	9.44 trips/unit
Local Data	0.49 trips/unit	0.63 trips/unit	6.90 trips/unit

Since the localized data shows lower trip rates during all analysis periods, it can be expected that the proposed subdivision will yield site trips at a similar rate. Although this lower trip generation rate was not used for analysis, it should be noted that the trip generation based on ITE rates represents a conservative, worst-case at analysis.

<sup>&</sup>lt;sup>1</sup> Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017.



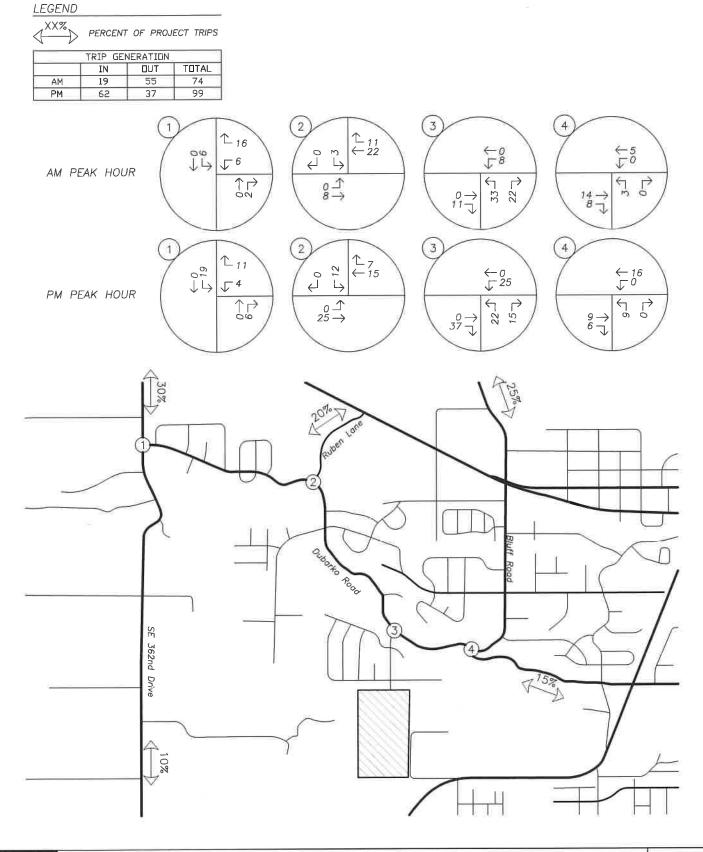
### **Trip Distribution**

The directional distribution of site trips to and from the proposed development was calculated based on travel patterns of trips to and from the existing neighborhood that is served by Melissa Avenue. In addition, the locations of likely trip destinations, locations of major transportation facilities in the site vicinity, and existing travel patterns at the study intersections.

The following trip distribution was estimated and used for analysis:

- Approximately 30 percent of site trips will travel to/from the north along SE 362<sup>nd</sup> Drive;
- Approximately 25 percent of site trips will travel to/from the north along Bluff Road;
- Approximately 20 percent of site trips will travel to/from the north on Ruben Lane;
- Approximately 15 percent of site trips will travel to/from the east along Dubarko Road; and
- Approximately 10 percent of site trips will travel to/from the south along SE 362nd Drive.

Figure 2 on page 7 shows the distribution and assignment of site trips for the proposed development.



le

SITE TRIP DISTRIBUTION & ASSIGNMENT Proposed Development Plan — Site Trips AM & PM Peak Hours

EXFIRE1 20004-20-CP (Allied Homes & Development)



# **Traffic Volumes**

### Existing Conditions

Traffic counts were conducted at the intersection of Melissa Avenue at Dubarko Road on Thursday, April 25th, 2019 from 7:00 AM to 9:00 AM, and from 4:00 PM to 6:00 PM. Traffic counts were conducted at all other study intersections on Wednesday, May 22th, 2019 from 4:00 PM to 6:00 PM, and on Thursday, May 23th, 2019 from 7:00 AM to 9:00 AM. Each intersection's respective morning and evening peak hours were used for analysis.

### **Background Conditions**

In order to calculate the future traffic volumes on local streets, an exponential growth rate of two percent per year for an assumed period of three years was applied to the measured existing traffic volumes to approximate year 2022 background conditions.

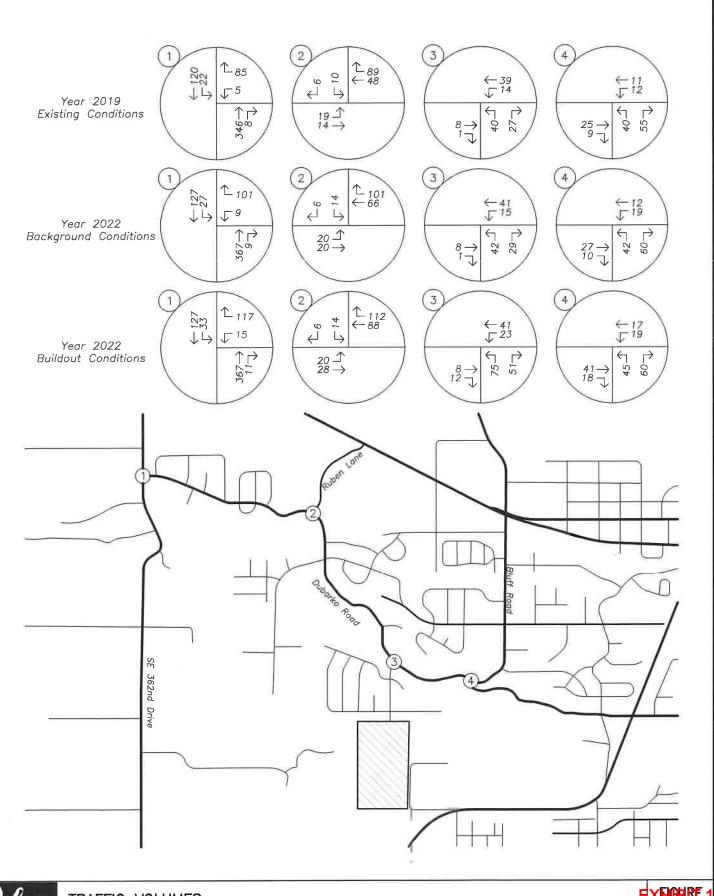
### In-Process Trips

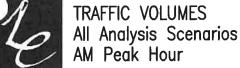
In-process trips associated with previously approved developments were added to the background volumes in order to represent future traffic volumes at the study intersections prior to the approval of the subject development. Trips associated with the approved 138-unit Sandy Heights Apartments were added to the study intersections.

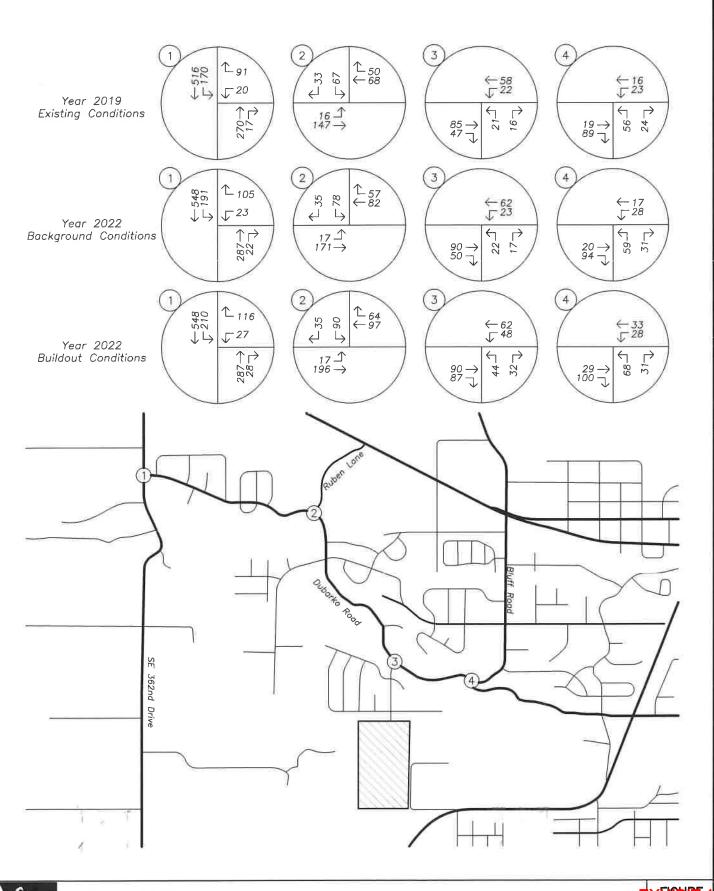
### **Buildout Conditions**

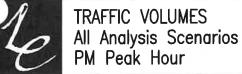
Trips to be generated by the proposed development, as described earlier within the *Site Trips* section, were added to the projected year 2022 background traffic volumes to obtain the expected year 2022 buildout volumes.

Figure 3 on page 9 shows the existing, year 2022 background, and year 2022 buildout traffic volumes for the morning peak hour. Figure 4 on page 10 shows the existing, year 2022 background, and year 2022 buildout traffic volumes for the evening peak hour.













# Safety Analysis

### Crash History Review

Using data obtained from the ODOT's Crash Analysis and Reporting Unit, a review of the most recent available five years of crash history (January 2012 to December 2016) at the study intersections was performed. The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for the intersection. Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak hour represents approximately 10 percent of the annual average daily traffic (AADT) at the intersection. Crash rates in excess of 1.0 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

Table 5: Crash Analysis Summary

Intersection	Crash Type		Crash Severity	- Total	AADT	Crash
	Turn	Sideswipe	PDO	Total	AADI	Rate
Dubarko Road at SE 362nd Drive	0	1	1	1	10,840	0.05
Dubarko Road at Melissa Avenue	2	0	2	2	2,490	0.44

The calculated crash rates at the intersections of Dubarko Road at SE 362<sup>nd</sup> Drive and at Melissa Avenue are not indicative of safety deficiencies or design flaws. No mitigation is recommended.

No reported crashes were found at the intersections of Dubarko Road at Ruben Lane and Dubarko Road at Bluff Road during the analysis period. Accordingly, no safety concerns were identified at these study intersections.

# Warrant Analysis

### Traffic Signal Warrants

Traffic signal warrants were examined for all study intersections based on the methodologies in the Manual on Uniform Traffic Control Devices<sup>2</sup> (MUTCD). Warrant 1, Eight Hour Vehicular Volumes, was used from the MUTCD. Warrants were evaluated based on the common assumption that traffic counted during the evening peak hour represents ten percent of the AADT. Volumes were used for the year 2022 buildout conditions. Traffic signal warrants were not met at any of the study intersections due to low major and mimor street.

<sup>&</sup>lt;sup>2</sup> Federal Highway Administration (FTA), America Traffic Safety Services Association (ATSSA), Institute of Transportation Engineers (ITE), American Association of State Highway and Transportation Officials (AASHTO), Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 Edition, 2010.



traffic volumes. Detailed information on the traffic signal warrant analysis is included in the attached appendix.

### Left-Turn Lane Warrants

Left-turn lane warrants were examined for the westbound left-turn lane at the intersection of Melissa Avenue at Dubarko Road. A left-turn refuge is primarily a safety consideration for the major-street approach, removing left-turning vehicles from the through traffic stream. Warrants were based on the methodology outlined in the National Cooperative Highway Research Program (NCHRP) Report Number 4573. These turn-lane warrants were evaluated based on the number of left-turning vehicles, the number of advancing and opposing vehicles, and the roadway travel speed.

Left-turn lanes were not warranted during any of the analysis scenarios. No new left-turn lanes are recommended.

<sup>&</sup>lt;sup>3</sup> Bonneson, James A. and Michael D. Fontaine, NCHRP Report 457: An Engineering Study Guide for Evaluating Intersection Improvements, Transportation Research Board, 2001.



## **Operational Analysis**

## Delay & Capacity Analysis

A capacity and delay analysis was conducted for the study intersection per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual*<sup>4</sup> (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

The City of Sandy's Transportation System Plan states that both signalized and unsignalized intersections are required to operate at LOS D or better.

Based on the results of the operational analysis, shown in Table 6, the study intersections are currently operating acceptably and are projected to continue operating acceptably through the 2022 buildout year of the site. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 6: Intersection Capacity Analysis Summary

在工作技术的记录出,只是一些"特别"	Morn	ing Peak	Hour	Evening Peak Hou				
	Delay	LOS	V/C	Delay	LOS	V/C		
SE 362 <sup>nd</sup> Drive at Dubarko Road								
Existing Conditions	12	В	0.17	16	C	0.27		
Year 2022 Background Conditions	13	В	0.22	18	C	0.34		
Year 2022 Buildout Conditions	13	В	0.27	21	C	0.40		
Ruben Lane at Dubarko Road								
Existing Conditions	9	A	0.02	11	В	0.15		
Year 2022 Background Conditions	10	A	0.03	11	В	0.18		
Year 2022 Buildout Conditions	10	A	0.03	12	В	0.21		
Dubarko Road at Melissa Avenue								
Existing Conditions	9	A	0.09	10	A	0.05		
Year 2022 Background Conditions	9	Α	0.09	10	$\mathbf{A}$	0.06		
Year 2022 Buildout Conditions	10	A	0.17	11	В	0.12		
Dubarko Road at Bluff Road								
Existing Conditions	8	A	0.15	8	A	0.13		
Year 2022 Background Conditions	8	A	0.16	8	A	0.147		
Year 2022 Buildout Conditions	8	Α	0.17	8	Α	0.16		

<sup>&</sup>lt;sup>4</sup> Transportation Research Board, Highway Capacity Manual, 6th Edition, 2016.



## **Conclusions**

Based on a review of the most recent five years of crash history, no significant safety issues or trends are evident at the study intersections.

Due to insufficient major and minor street volumes, traffic signal warrants were not met at the study intersections under all analysis scenarios.

Left-turn lane warrants were analyzed for the intersection of Melissa Avenue at Dubarko Road and not estmiated to be met under any analysis scenario.

All study intersections, including the intersection of Melissa Avenue and Dubarko Road are currently operating within the City's perfomance standards and are projected to continue operating acceptably through year 2022, with or without the addition of site trips from the proposed development.

6

## **Appendix**



## TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing

Land Use Code: 210

Setting/Location General Urban/Suburban

Variable: Dwelling Units

Variable Value: 100

### **AM PEAK HOUR**

Trip Rate: 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	19	55	74

### PM PEAK HOUR

Trip Rate: 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	62	37	99

### **WEEKDAY**

Trip Rate: 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	472	472	944

### **SATURDAY**

Trip Rate: 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	477	477	954

Source: Trip Generation Manual, Tenth Edition

### Page 1

# All Traffic Data Services, Inc. alltrafficdata.net

Melissa Ave S-O Dubarko Rd

Start	25-Apr-19									
Time	Thu	NB	SB							Total
12:00 AM		2	5							7
01:00		1	1							2
02:00		1 7	0 2							•
03:00		7	2							9
04:00		20	1							21
05:00		30	5							38
06:00		57	11							68
07:00		67	15							82
08:00		37	17							54
09:00		30	17							47
10:00		25	18							43
11:00		23	22							45
12:00 PM		35	25							60
01:00		35 16	24							40
02:00		29	46							75
03:00		29 35	58							93
04:00		44	64							108
05:00		30	54							84
06:00		32	74							106
07:00		28	40							68
08:00			36							52
09:00		0	30							39
10:00		5 5	12							17
11:00		16 9 5 0	4							
Total		579	581							1160
Percent		49.9%	50.1%							1100
AM Peak		07:00	11:00	San .	-	36	-	: <b>=</b> 0	*	07:00
Vol.	-	67	22	_		-			Ē	82
PM Peak		16:00	18:00	22V	20 20		5 min	==1	· · ·	16:00
Vol.	125 124	44	74		2	_	-	-	*	108
Grand					~					
Total		579	581							1160
Percent		49.9%	50.1%							
. 0.00111		.0.070	551.70							
ADT	АГ	OT 11,874	AADT	11,874						

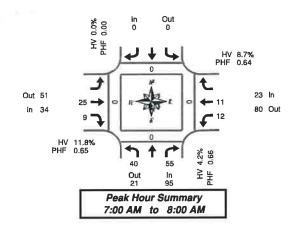


Clay Carney (503) 833-2740

## **Dubarko Rd & Bluff Rd**

Thursday, May 23, 2019 7:00 AM to 9:00 AM

#### 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start		orthbound Jubarko Rd		Southboi Dubarko			ound f Rd			Westbou Bluff R		Interval		Pedes Cros	strians swalk	
Time	L	R	Bikes		Bikes	T	R	Bikes	T	T	Bikes	Total	North	South	East	West
7:00 AM	3	4	0		0	2	1	0	0	11	0	11	0	0	0	0
7:05 AM	1	: 8	0		1 0	2	0	0	1	0	0	12	0	0	0	0
7:10 AM	3	7	0		0	5	1	0	2		0	19	0	0	0	0
7:15 AM	8	: 6	0		0	4	0	0	0	1	0	19	0	0	0	0
7:20 AM	2	: 7	: 0		0	0	0	0	1	1	0	11	0	0	0	0
7:25 AM	6	7	0		0	3	2	0	4	2	0	24	0	0	0	0
7:30 AM	3	: 2	0		0	6	1	0	1	0	0	13	0	0	0	0
7:35 AM	7	1 3	0		0	1	0	0	1	1 1	1 0	7	0	0	0	0
7:40 AM	3	1 1	0		0	1	1	0	1	1	0	8	0	0	0	0
7:45 AM	1	2	0		0	0	2	0	1	0	0	6	0	0	0	0
7:50 AM	5	: 6	0		0	1	0	0	0	3	: 0	15	0	0	0	0
7:55 AM	4	2	0	1 1	0	0	1	0	0	0	: 0	7	0	0	0	0
8:00 AM	2	1	0		0	1	2	0	2	0	0	8	0	0	0	0
8:05 AM	2	1 1	0		0	0	1	0	0	0	: 0	4	0	0	0	0
8:10 AM	1	5	0 1		0	2	0	0	1	2 1	1 0	11	0	0	0	0
8:15 AM	2	7	0		0	0	0	0	2	1.1	1 0	12	0	0	0	0
8:20 AM	3	2	0		0	3	0	0	1	0	0	9	0	0	0	0
8:25 AM	3	5	0 1		0	1	3	0	1	0	0	13	0	0	0	0
8:30 AM	0	5	0		0	0	2	0	1	0	0	8	0	0	0	0
8:35 AM	3	: 0	0		0	0	2	0	0	0	0	5	0	0	0	0
8:40 AM	3	2	0		0	0	2	0	0	1	0	8	0	0	0	0
8:45 AM	1 1	1	0		0	1	1	0	3	t.	. 0	8	0	0	0	0
8:50 AM	0	1	: 0		0	0	1	0	1	0	: 0	3	0	0	Q	0
8:55 AM	1 1	0	0		0	0	2	0	0	0	0	3	0	0	0	0
Total Survey	61	85	0		0	33	25	0	24	16	0	244	0	0	0	0

#### 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start			ibound irko Rd		hbound arko Ad		<b>tbound</b> uff Rd			Westb Bluff		Interval			itrians swalk	
Time	L	1	R	Bikes	 Bikes	T	A	Bikes	L	T	Bikes	Total	North	South	East	West
7:00 AM	7		19	0	0	9	2	0	3	2	0	42	0	0	0	0
7:15 AM	16		20	0	0	7	2	0	5	4	0	54	0	0	. 0	0
7:30 AM	7		6	0	0	8	2	0	3	2	0	28	0	0	0	0
7:45 AM	10		10	0	. 0	1 1	3	0	1	3	0	28	0	0	0	0
8:00 AM	5		7	0	0	3	3	0	3	2	0	23	0	0	0	0
8:15 AM	8		14	0	0	4	3	0	4	1 1	! 0	34	0	0	0	0
8:30 AM	6		7	0	0	1 0	6	0	1	1	: 0	21	0	0	0	0
8:45 AM	2		2	. 0	1 0	1	4	0	4	1 1	. 0	14	0	0	0	0
Total Survey	61		85	0	0	33	25	0	24	16	0	244	0	0	0	0

#### Peak Hour Summary 7:00 AM to 8:00 AM

Ву	Northbo Dubarko					n <b>bound</b> irko Rd				oound If Rd			Total			
Approach	In Out : T	otal : Bil	ces	In	Out	Total	Bikes	In	Out	Total	Bikes	ln	Out	Total	Bikes	
Volume	95 21	16	0	0	0	0	0	34	51	85	0	23	80	103	0	152
%HV	4.2%				0	0%			11	8%			В	7%		6.6%
PHF	0.66				0	.00			0	65			0	64		0.70

	Cross	swalk	
North	South	East	Wes
0	0	۵	0

By Movement			bound rko Ad				rko Rd				ound f Rd		Westbound Bluff Rd				Total
Movement	E		B	Total			Sec.	Total		T	R	Total	L	T		Total	
Volume	40		55	:95	F	Janean .		:0	erzeni.	25	9	34	12	11		23	152
%HV	2.5%	NA	5.5%	:4.2%	NA	NA.	: NA	10.0%	NA	12.0%	11.1%	11.8%	8.3%	9.1%	NA	8.7%	6.6%
PHF	0.63		0.65	:0.66				10.00		0.57	0.75	0.65	0.50	0.69		0.64	0.70

## Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	20000000000		rihbo barko			Southbound Dubarko Rd			oound f Rd	morrowood		Interval		
Time	L			R	Bikes		Bikes	T	B	Bikes	L	T	Bikes	Total
7:00 AM	40			55	: 0	 	1 0	25	9	1 0	12	(11 )	0	152
7:15 AM	38			43	: 0	 	0	19	10	0	12	11	. 0	133
7:30 AM	30			37	: 0		0	16	11	0	11	8	: 0	113
7:45 AM	29			38	: 0		0	8	15	0	9	7	0	106
PIOD AM	04	*****		20	. 0	 	. 0	. 8	16	0	12	5	0	92

2. 2.			Pedes	
	West	East	South	North
	0	0	0	0
EXH	0	0	0	0
	0	0	0	0
$h \cap \Lambda A^{-1}$	07	0	0	0
JUU4-		0	0	0

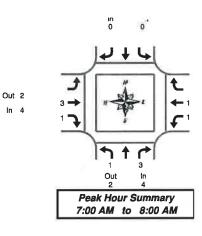


Clay Carney (503) 833-2740

## **Dubarko Rd & Bluff Rd**

Thursday, May 23, 2019 7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start		orthbound ubarko Rd		Southbo Dubarko			oound If Rd	alloguerro		Westbou Bluff Ro		Interval
Time	L. I	l R	Total	1 1	Total	T	R	Total	L	T	Total	Total
7:00 AM	0	. 0	. 0		0	0	0	0	0	1.1.1		1
7:05 AM	0 :	1 1	1 1		0	1 0	0	0	. 1	0	1 1	2
7:10 AM	0 :	: 0	0		0	1	0	1	0	0 1	0	1
7:15 AM	1 :	: 0	1 1		0.	1 1	0	1 1	0	0	0	2
7:20 AM	0 :	: 0	0		0	0	0	0	0	0	0	0
7:25 AM	0	. 0	: 0		0	0	0	0	0	0	0	0
7:30 AM	0	0	0		0	1	0	1	0	0	0	1
7:35 AM	0	1 1	1 1		0	0	0	0	0	0	. 0	1
7:40 AM	0	. 0	0	1 1	0	0	1	1	0	0	: 0	1
7:45 AM	0	0	0		0	0	0	0	0	0	: 0	0
7:50 AM	0 ;	1	1		0	3 0	0	. 0	0	0	: 0	1
7:55 AM	0	0	0		0	0	0	0	0	0	: 0	0
8:00 AM	0	0	0		0	0	0	0	0	0	9	0
8:05 AM	0	. 0	0		0	0	0	0	0	0	0	0
8:10 AM	0	1 1	1 1		0	0	0	0	0	0	0	1
8:15 AM	1	. 0	1		0	1 0	0	0	0	0	1 0	1
8:20 AM	0	. 0	0		0	1 1	0	1	0	0	0	1
8:25 AM	0	1 1	11		0	0	0	0	0	0	0	1
8:30 AM	0 :	1.1	1 1		0	3 0	0	0	0	0	0	1
8:35 AM	0 :	: 0	0		0	0	0	0	0	0	. 0	0
8:40 AM	0 :	: 0	: 0		. 0	0	0	0	0	0	: 0	0
8:45 AM	0 :	: 0	0		. 0	0	0	0	0	0	0	0
8:50 AM	0	: 0	: 0		. 0	0	0	0	0	0	. 0	0
8:55 AM	0 :	: 0	. 0		0	0	0	0	0	0	0	0
Total Survey	2	6	8		0	4	1	5	1	1	2	15

## Heavy Vehicle 15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start		Northbou Dubarko I				rko Rd				oound If Rd			Westb Bluf	oound I Rd	Interval
Time	L		1	Total	 		Total		T	R	Total	L	T	: Total	Total
7:00 AM	0		10.0	1		Common Co	0		1	0	1	1	1	2	4
7:15 AM	1 1		3	1			0		1	0	1	0	0	. 0	2
7:30 AM	0	1		1	 		0		1	11	2	0	0	. 0	3
7:45 AM	0 1		1	1			0		0	0	0	0	0	. 0	1
8:00 AM	0 :			1			0		0	. 0	0	0	0	0	1
8:15 AM	1 1		1	2			0	]	1	0	11	0	0	: 0	3
8:30 AM	0		1	1	 		0		0	0	0	0	0	: 0	1
8:45 AM	0 :		0	0			0		0	0	0	0	0	0	0
Total Survey	2		5	8			0		4	1	5	1	1	2	15

## Heavy Vehicle Peak Hour Summary

7:00 AM to 8:00 AM

Ву	Northbound Dubarko Rd	Southbound Dubarko Rd	Eastbound Bluff Rd	Westbound Bluff Rd	Total
Approach	In Out Total	In Out Total	In Out Total	In Out Total	
Volume	4 2 6	0 0 0	4 2 6	2 6 8	10
PHF	0.50	0.00	0.50	0.25	0.50

Ву		North	ko Rd			Southb Dubark			1,000,000	ound f Rd			Westbo Bluff F	727	Total
Movement	L		R	Total				Total	Ť	R	Total	L	T	Total	
Volume	1		3	4	·/	accord.	aran da	0	3	1	1 4	1	1	2	10
PHF	0.25		0.75	0.50			1	0.00	0.38	0.25	0.50	0.25	0.25	0.25	0.50

#### Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start		North Duba			uthbou ubarko f				ound f Rd	2000000000		Westbo Bluff F		Interval
Time	L		F	Total		T	otal	T	R	Total	L	T	Total	Total
7:00 AM	1		3	 4	 		0	3	1	4	. 1	1.1	2	10
7:15 AM	1		3	4			0	2	1	3	0	0	: 0	7
7:30 AM	1		4	5			0	2	1	3	0	0	0	8
7:45 AM	1		4	5		- 8	0	1	0	1	0	0	. 0	6
B:00 AM	1		3	4			0	1	0	1 1	0	0	: 0	5

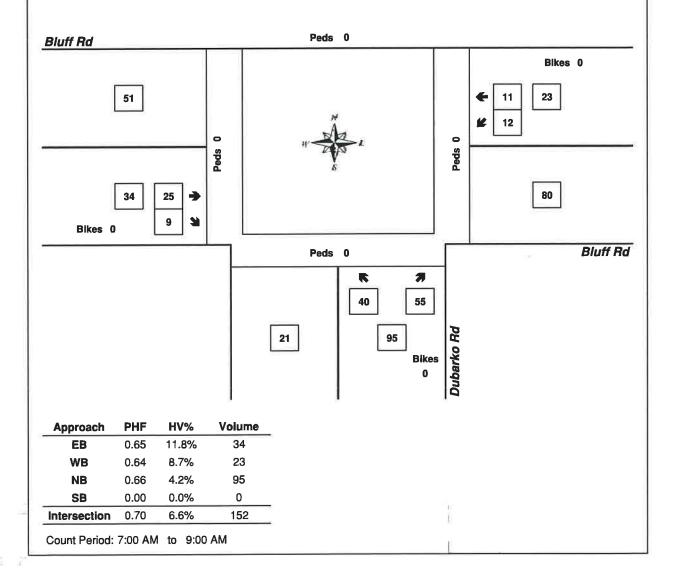
## **Peak Hour Summary**



Dubarko Rd & Bluff Rd

7:00 AM to 8:00 AM Thursday, May 23, 2019

Bikes



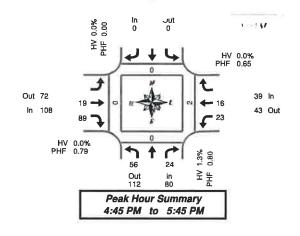


Clay Carney (503) 833-2740

## **Dubarko Rd & Bluff Rd**

Wednesday, May 22, 2019 4:00 PM to 6:00 PM

#### 5-Minute Interval Summary 4:00 PM to 6:00 PM



interval Start			hbound arko Rd		South! Dubar			ound f Rd			Westbox Bluff R		Interval			strians swalk	
Time	L		: R	Bikes		Bikes	T	R	Bikes	L	T	Bikes	Total	North	South	East	West
4:00 PM	4		. 0	: 0		0	4	7	0	5	0	0	20	0	0	0	0
4:05 PM	2		: 0	: 0		. 0	1 1	4	0	3	3	0	13	0	0	0	0
4:10 PM	7		1 1	: 0		: 0	1 1	4	0	2	0	0	15	0	0	0	0
4:15 PM	5		1 1	0		: 0	2	7	0	1	1	0	17	0	0	0	0
4:20 PM	3	1	: 0	0		1 0	0	5	0	2	3	0	13	0	0	0	0
4:20 PM 4:25 PM	7		2	0		0	3	8	0	3	0	0	23	0	0	0	0
4:30 PM	6		: 2	1 0		0	0	6	0	1	0	0	15	0	0	0	0
4:35 PM	2		2	0	1 1	0	3	9	0	1	0	0	17	0	0	0	0
4:40 PM	7	1	3	0		0	2	7	0	1	0	0	20	0	0	0	0
4:45 PM	7		: 0	0		0	0	10	0	3	0	: 0	20	0	0	0	0
4:50 PM	8		4	0		0	2	5	0	1	0	. 0	20	0	0	0	0
4:55 PM	3		1	0		0	0	6	0	0	1	0	11	0	0	0	0
5:00 PM	4		3	0		0	1	5	0	3	2	0	18	0	0	0	0
5:05 PM	6		1 1	1 1		0	3	8	0	1	2	0	21	0	0	1	0
5:10 PM	1		. 0	0		0	4	9	0	1	0	0	15	0	0	0	0
5:15 PM	3		0	0		. 0		9	0		2	0	16	0	0	0	0
5:20 PM	7		: 4	0		; 0	3	6	0	1	3	0	24	0	0	0	0
5:25 PM	1		2	0	1 1	. 0	0	8	0	3	11	0	15	0	0	0	0
5:30 PM	5	1	2	0		0	1	6	0	5		0	20	0	0	0	0
5:35 PM	3	1	: 0	0		: 0	2	9	0	2	3	0	19	0	0	0	0
5:40 PM	8		7	: 0		: 0	2	8	0	2	1	0	28	0	0	1	0
5:45 PM	7		1 1	: 0		0	0	3	0	0	1	0	12	0	0	0	0
5:50 PM	6		2	: 0		0		6	0	1	0	. 0	16	0	0	0	0
5:55 PM	3		0	0		: 0	1	2	0	1	2	0	9	0	0	0	0
Total Survey	115		38	1		0	37	157	0	44	26	0	417	0	0	2	0

#### 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start			hbou arko					bound rko Ad			ound f Rd				bound ff Rd	Interval		1000000	strians swalk	
Time	_ L	1		۹	Bikes			Bikes		T	R	Bikes	L	T	Bikes	Total	North	South	East	West
4:00 PM	13			1	0	1472/030	5000.00	0	lious.	6	15	0	10	3	: 0	48	0	0 .	0	0
4:15 PM	15	1		3	0			0	I	5	20	0	6	4	. 0	53	. 0	0	0	0
4:30 PM	15	1		7	0			0	1	5	22	0	3	0	: 0	52	0	: 0	0	0
4:45 PM	18	1		5	0			0		2	21	0	4	1.1	. 0	51	0	0	0	0
5:00 PM	11			4	1	2100		0		8	22	0	5	4	. 0	54	0	0	1	0
5:15 PM	111	1		5	. 0			0	I	4	23	0	5	6	. 0	55	0	0	0	0
5:30 PM	16	1		9	0			. 0		5	23	0	9	5	0	67	0	0	- 1	0
5:45 PM	16			3	0			. 0		2	11	0	2	3	0	37	0	. 0	0	0
Total Survey	115		3	8	1			0		37	157	0	44	26	0	417	0	0	2	0

#### Peak Hour Summary 4:45 PM to 5:45 PM

Ву					ound o Rd					rko Rd				bound ff Rd				<b>bound</b> ff Rd		Total
Approach	In	Т	Out	Т	Total	Bikes	ln		Out	: Total	Bikes	ln	Oul	Total	Bikes	ln	Out	Total	Bikes	
Volume	80	1	112	1	192	- 1	0	T	0	1 0	: 0	108	72	180	0	39	43	82	0	227
%HV			1	39	Va .				0	0%			0.	0%			0.	0%		0.4%
PHF		•••	0	8	0				0	00			0	79			0.	65		0.85

	Pedes Cross		
North	South	East	West
0	0	2	0

Ву		100	bound irko Rd	i E			hbound arko Rd				ound f Rd				oound f Rd		Total
Movement	L I		. R	Total	T		1	Total		T	R	Total	L L	T		Total	
Volume	56		24	:80			1	0	-00	19	89	108	23	16		39	227
%HV	1.8%	NA	0.0%	:1.3%	NA	NA.	: NA	0.0%	NA	0.0%	0.0%	10.0%	0.0%	0.0%	NA I	0.0%	0.4%
PHF	0.78		0.67	0.80			1	0.00		0.59	0.86	0.79	0.58	0.67		0.65	0.85

#### Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start		rthbound barko Ad		Southb Dubark			r Rd			Westb		Interval
Time	L	R : 1	Bikes		Bikes	T	R	Bikes	L	T	Bikes	Total
4:00 PM	61	16	0		0	18	78	0	23	8	0	204
4:15 PM	59 1	19	1		0	20	85	0	18	9	. 0	210
4:30 PM	55	22	1		0	19	88	0	17	11 1	: 0	212
4:45 PM	56	24	1		0	19	89	0	23	16	0	227
5:00 PM	54	22	1		0	19	79	0	21	18	0	213

7 00 FI

·M

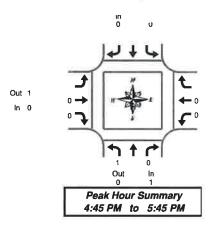


Clay Carney (503) 833-2740

## **Dubarko Rd & Bluff Rd**

Wednesday, May 22, 2019 4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM



Interval Start		orthbound ubarko Rd		Southb Dubari			bound ff Rd	********	- Control	Westbor Bluff P		Interval
Time	L	R	Total	····γ	Total	T	) A	Total	L	T	Total	Total
4:00 PM	0	: 0	1 0		0	2	0	2	0	0	0	2
4:05 PM	0 :	: 0	0		1 0	0	0	0	0	0	. 0	0
4:10 PM	0	: 0	: 0		0	0	0	0	0	0	. 0	0
4:15 PM	0	. 0	0		. 0	0	0	0	1	0	. 1	1
4:20 PM	0 :	: 0	: 0		0	0	0	0	0	0	. 0	0
4:25 PM	0	0	0		0	0	0	0	0	0	. 0	0
4:30 PM	0	: 0	0		0	0	0	0	1	0		1
4:35 PM	0 :	: 0	0		: 0	0	0	0	0	0	0	0
4:40 PM	0	. 0	0		0	0	0	0	0	0	1 0	0
4:45 PM	0	0	0		0	0	0	0	0	0	: 0	0
4:50 PM	0 :	0	0		0	0	0	0	0	0	: 0	0
4:55 PM	0 1	0	0		0	0	0	0	0	0	: 0	0
5:00 PM	0	. 0	0		0	0	0	0	0	0	: 0	0
5:05 PM	0	0	0		0 1	0	0	0	0	0	. 0	0
5:10 PM	0	0	0		0	0	0	0	0	0	: 0	0
5:15 PM	0	0	0		0	0	0	0	0	0	: 0	0
5:20 PM	0 1	. 0	0	1 1	3 O I	0	0	0	D	0	0	0
5:25 PM	0 :	. 0	0		0	0	0	0	0	0	. 0	0
5:30 PM	0 :	: 0	0	1 1	0	0	0	0	0	0	: 0	0
5:35 PM	0 :	: 0	0		3 0	0	0	0	0	0	0	0
5:40 PM	1	: 0	1 1		0	0	0	0	0	0	: 0	1
5:45 PM	0	. 0	: 0		0	0	0	0	0	0	0	0
5:50 PM	0 :	: 0	0		: 0	0	0	0	0	0	0	0
5:55 PM	0	: 0	: 0		0	0	0	0	0	0	0	0
Total Survey	1	0	1		0	2	0	2	2	0	2	5

## Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start			nbound rko Rd			Southt				bound ff Rd				bound ff Rd	Interval
Time	L		В	Total			To	al	T	- A	Total	L	T	Total	Total
4:00 PM	0	2007/00	0	0	100000	oursenik.	0	District.	2	0	2	. 0	0	0	2
4:15 PM	0		0	0			0		0	0	0	1	0	1 1	1
4:30 PM	0		. 0	0			. 0		0	0	0	11	0	11	1
4:45 PM	0		. 0	: 0		1	: 0		1 0	0	0	0	0	0	0
5:00 PM	0		. 0	: 0		- 1	. 0		0	0	0	0	0	0	0
5:15 PM	0		. 0	: 0		1	. 0	I	0	0	0	0	0	0	0
5:30 PM	1	8	: 0	1 1			: 0		0	0	0	0	0	0	1
5:45 PM	0		: 0	: 0			: 0		0	0	0	0	0	. 0	0
Total Survey	1		0	1			0		2	0	2	2	0	2	5

#### Heavy Vehicle Peak Hour Summary 4:45 PM to 5:45 PM

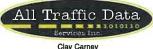
Ву			i <b>bound</b> irko Ad			nbound irko Rd			bound ff Rd			bound If Ad	Total
Approach	ln	Out	Total	ln	Out	Total	ln	Out	Total	In	Out	Total	
Volume	1	0	1 1	0	0	0	0	1	1	0	0	0	montoni
PHF	0.25			0.00			0.00			0.00			0.25

Ву		Northbour Dubarko F	27		7.7	uthbour barko R	077		oound If Rd			West	bound f Fld	Total
Movement	L	F	1	Total			Total	T	B	Total	L	T	Total	
Volume	1 :	. 0		1			. 0	. 0	0	0	0	0	0	1
PHF	0.25	0.0	10 :	0.25			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25

#### Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start			und Rd		thbound arko Rd		bound ff Rd	OLUMPI COMO		Westbo Bluff F		Interva
Time	L	-	R	: Total	Total	T	R	Total	L	T	Total	Total
4:00 PM	0		0	0	 1 0	2	0	2	2	0	2	4
4:15 PM	0		0	0	0	0	0	0	2	0	2	2
4:30 PM	0		0	0	0	0	0	0	1	0		1
4:45 PM	1		0	1 1	0	0	0	0	0	0 :	0	1
5:00 PM	4	 -	0	-		. 0	0	0	a	0		

## **Peak Hour Summary**

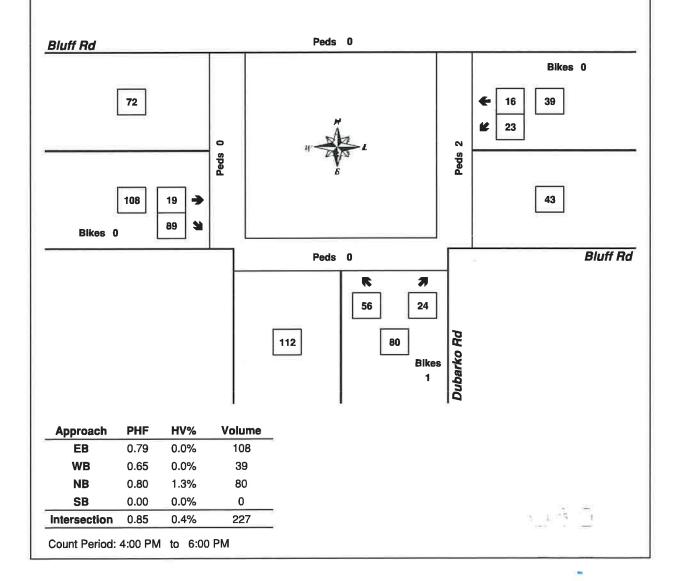


Clay Carney (503) 833-2740

## **Dubarko Rd & Bluff Rd**

4:45 PM to 5:45 PM Wednesday, May 22, 2019

Bikes



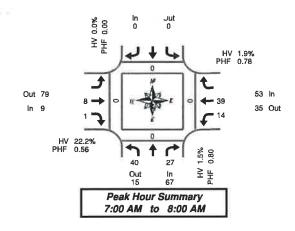


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

Thursday, April 25, 2019 7:00 AM to 9:00 AM

#### 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start		lorthbound Nelissa Ave		Southb Meilssa		Eastb Dubar				Westbo Dubarko		Interval	][		strians swalk	
Time	L	R	Bikes		Bikes	T	R	Bikes	L	T	Bikes	Total	North	South	East	West
7:00 AM	5 :	2	0		0	0	0	0	2	3	0	12	0	0	0	0
7:05 AM	4	: 6	: 0		0	0	0	0	2	4	0	16	0	0	0	0
7:10 AM	2	2	: 0		0	1	0	0		2	0	8	. 0	0	0	0
7:15 AM	4	1	: 0		1 0	0	0	0	0	4	0	9	0	0	0	0
7:20 AM	2	3	: 0		0	2	0	0	2	3	0	12	0	0	0	0
7:25 AM	2	3	: 0		. 0	0		0	0	6	0	12	0	0	0	0
7:30 AM	6	4	0	1	0	1	0	0	3	3	. 0	17	0	. 0	0	0
7:35 AM	0 :	0	1 0		0	1	0	0	1	3	0	.5	0	0	0	0
7:40 AM	2	1	0		0	1	0	0	0	4	0	8	0	0	0	0
7:45 AM	4		: 0		0	0	0	0	0	2	: 0	7	0	. 0	0	0
7:50 AM	6	1.	0		0	1	0	0	2	3	0	13	0	0	0	0
7:55 AM	3	3	0	1 1	0	1	0	0	1	2	0	10	0	0	0	0_
8:00 AM	3	0	0		0	0	0	0	0	1 1	0	4	0	0	0	0
8:05 AM	4	0	0		0	1	0	0	1	2	. 0	8	0	0	0	0
B:10 AM	3	1	0		0	0	11	0	0	2 1	1 0	7	0	0	0	0
8:15 AM	1	0	0		0	1 1	1	0	1	3	: 0	7	0	0	0	0
8:20 AM	1	: 3	0		0	3	1	0	1	4	: 0	13	0	0	0	0
8:25 AM	3	2	0		0	2	0	0	1	4 1	: 0	12	0	0	0	0
8:30 AM	3 :	3	: 0		1 0	5	0	0	0	2	0	13	0	0	0	0
8:35 AM	2 :	: 1	0		: 0	4	1	0	0	1 1	: 0	9	0	0	0	0
8:40 AM	0	: 2	: 0		1 0	4	1	0	1	3	0	11	0	0	0	. 0
8:45 AM	0 :	2	. 0		0	5	1	0	0	5	. 0	13	0	0	0	1 0
8:50 AM	0 :	1	: 0		0	2	2	0	1	2	0	8	0	0	0	0
8:55 AM	2 :	: 0	: 0		0	0	0	0	3	3	. 0	8	0	0	0	0
Total Survey	62	42	0		0	35	9	0	23	71	0	242	0	0	0	0

## 15-Minute Interval Summary

#### 7:00 AM to 9:00 AM

Start			sa Ave			Melissa				rko Rd				rko Rd	Interval	Ш
Time	L		R	Bikes			Bike		T	R	Bikes	_	T	Bikes	Total	_11
7:00 AM	-11	ionani.	10	0	recessor?		. 0		1	0	0	5	9	0	36	31
7:15 AM	8		7	. 0			! 0	J	2	1	0	2	13	1 0	33	.11
7:30 AM	8		5	. 0		3	1 0	Ι	3	0	0	4	10	. 0	30	.l I
7:45 AM	13		5	: 0		100	. 0	1	2	0	0	3	7	: 0	30	П
8:00 AM	10		1 1	. 0		I	. 0		1 1	1	0	1	5	. 0	19	
8:15 AM	5		5	: 0			. 0		6	2	0	3	11	0	32	
8:30 AM	5		: 6	: 0			: 0	I	13	2	0	1	6	. 0	33	_1 [
8:45 AM	2		3	: 0			0		7	3	0	4	10	. 0	29	_11
Total Survey	62		42	0			0		35	9	0	23	71	0	242	

North	Cross South		West
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

#### Peak Hour Summary 7:00 AM to 8:00 AM

Ву			bound a Ave				bound sa Ave				bound rko Rd				bound rko Rd		Total
Approach	ln	Out	Total	Bikes	ln	Out	Total	Bikes	ln	Out	Total	Bikes	ln	Out	Total	Bikes	
Volume	67	15	82	0	0	0	0	0	9	79	88	0	53	35	88	0	129
%HV		1.	5%			0.	0%			22	2%			1	9%		3.1%
PHF		0.	80			0	00			0	.56			0	.78		0.79

	Pedes		
North	Cross South	swalk East	West
0	0	0	. 0

Ву			bound a Ave				hbound sa Ave				ko Rd		centents	100	bound rko Rd		Total
Movement	L		R	Total			1	Total	1	Ť	R	[Total	L	T		Total	
Volume	40		27	:67			1	:0	10000000	8	1_1_	19	14	39		153	129
%HV	2.5%	NA	0.0%	:1.5%	NA	. NA	: NA	:0.0%	NA	12.5%	#####	22 2%	71%	0.0%	NA	1.9%	3.1%
PHF	0.77		0.68	:0.80			1	:0.00		0.67	0.25	0.56	0.70	0.75		0.78	0.79

#### Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start		orlhbound elissa Ave		thbound issa Ave		ound ko Rd				<b>bound</b> rko Rd	Interval
Time	L	R	Bikes	Bikes	Ī	R	Bikes	L	IT	Bikes	Total
7:00 AM	40 :	1 27	: 0	 0	8	1	0	14	i 39	i 0	129
7:15 AM	39	18	0	0	8	2	0	10	35	1 0	112
7:30 AM	36	16	0		12	3	0	11	33	0	111
7:45 AM	33	17	0	0	22	5	0	8	29	: 0	114
8:00 AM	22	15	0	 0	27	8	0	9	1 32	1 1 0	113

	Pedes Cross		29
North	South	East	West
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0		0	n

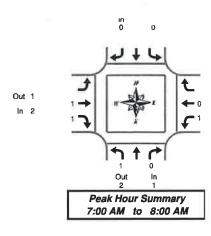


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

Thursday, April 25, 2019 7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start		orthbound lellssa Ave		Southbo Melissa			ound ko Rd			Westbou Dubarko		Interval
Time	L	i R	Total		Total	T	R	Total	L	T	Total	Total
7:00 AM	1.1	. 0	1 1		0	0	0	0	. 1	0		2
7:05 AM	0 :	: 0	0		0	0	0	0	0	0	0	0
7:10 AM	0 1	: 0	0		0	0	0	0	0	0	0	0
7:15 AM	0	. 0	0		1 0	0	0	0	0	0	0	0
7:20 AM	0	: 0	0		0	0	0	0	0	0	0	0
7:25 AM	0	0	0		1 0	0	1	1 1	0	0	0	1
7:30 AM	0	: 0	0		0	0	0	0	0	0	0	0
7:35 AM	0 :	: 0	0		0	0	0	0	0	0	0	0
7:40 AM	0	: 0	0		0	0	0	0	0	0	0	0
7:45 AM	0	0	0		0	0	0	0	0	0	0	0
7:50 AM	0	0	0		0	0	0	0	0	0	0	0
7:55 AM	0	0	0		1 0		0	1	0	0	0	1
8:00 AM	0	0	0		0	0	0	0	0	0	0	0
8:05 AM	0	. 0	0		0	0	0	0	0	0	0	. 0
8:10 AM	1 1	0	1 1	1 1	0	1 0	0	0	0	0	0	1
B:15 AM		0	1 T		0	1 0	0	0	1	0	1	2
8:20 AM	0 :	1	1 1 T		0	0	0	0	0	0	0	1
8:25 AM	0 :	: 0	0		0	0	0	0	0	0	0	0
8:30 AM	0	1 1	1 1		0	0	0	0	0	0	0	1
8:35 AM	0 :	: 0	0		0	0	0	0	0	0	0	0
8:40 AM	0 :	: 0	. 0		0	0	0	0	0	0	0	0
8:45 AM	0 :	. 0	0		0	0	0	0	0	0	0	0
8:50 AM	0 1	0	0		0	0	0	0	0	0	0	0
8:55 AM	0 :	: 0	: 0		0	0	0	0	0	0	0	0
Total Survey	3	2	5		0	1	1	2	2	0	2	9

## Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start			bound sa Ave			bound sa Ave			oound rko Rd			Westb Dubar	ound ko Rd	Interval
Time	L		R	Total	 		Total	T	R	Total	Ł	T	Total	Total
7:00 AM	1		0	1 1	 		0	0	0	0	. 1	0	1 1	2
7:15 AM	0		: 0	. 0			0	] 0	1	1	0	0	0	1
7:30 AM	0		. 0	0			0	0	0	0	0	0	. 0	0
7:45 AM	0		. 0	: 0			0	1 1	0	1	0	0	. 0	1
8:00 AM	1		. 0	1 1			0	0	0	0	0	0	0	1
8:15 AM	1		1 1	2	 		0	0	0	0	1	0	1	3
B:30 AM	0		1 1	11			0	1 0	0	0	0	0	0	1
8:45 AM	0	8	: 0	: 0			0	0	0	0	0	0	0	0
Total Survey	3		2	5			0	1	1	2	2	0	2	9

#### Heavy Vehicle Peak Hour Summary 7:00 AM to 8:00 AM

 By Approach
 Northbound Melissa Ave
 Southbound Melissa Ave
 Eastbound Dubarko Rd
 Westbound Dubarko Rd
 Total

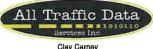
 Volume
 In Out 1 Total
 In Out 1 To

Ву		Northbound Melissa Ave		7	Southboun Melissa Ave			oound ko Rd				bound rka Rd	Total
Movement	L	i A	Total			Total	I	R	Total	L	T	Total	
Volume	1 1	. 0	1 1			0	1 1	1	2	1	0	1 1	4
PHF	0.25	: 0.00	0.25			0.00	0.25	0.25	0.50	0.25	0.00	0.25	0.50

#### Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start			thbo			Southt Meliss			bound rko Rd		buseos ta	Westbo Dubarko		Interval
Time	L	1		R	Total	1 1	Total	T	R	Total	L	T	Total	Total
7:00 AM	1		4	0	1 1	1 1	1 0	1.1	1 1	2	11	0	1 1	4
7:15 AM	1	· · · · · ·		0	1		0	1	1	2	0	0	: 0	3
7:30 AM	2			1	3		0	1 1	0	1	1	0	1 1	5
7:45 AM	2			2	4		. 0	1	0	1 1	1	0	1 1	6
8:00 AM	2		-	2	4		0	0	0	0	1	0	1 1	5

## **Peak Hour Summary**

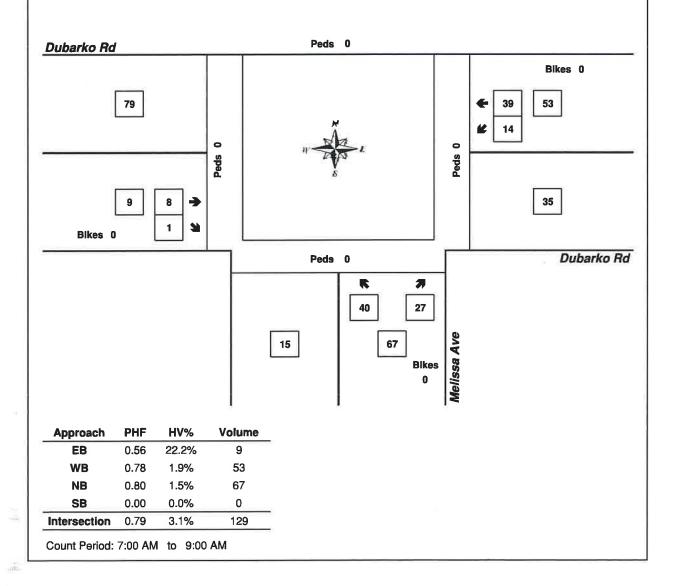


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

7:00 AM to 8:00 AM Thursday, April 25, 2019

Blkes 0



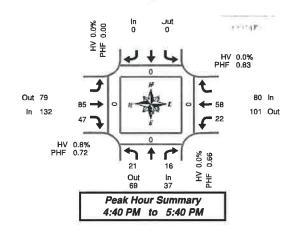


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

Thursday, April 25, 2019 4:00 PM to 6:00 PM

#### 5-Minute Interval Summary 4:00 PM to 6:00 PM



Interval Start		Northb Meliss					sa Ave				ound to Rd			West! Dubar	ko Rd	Interval			strians swalk	
Time	L		R	Bike	s		1	Bikes		T	R	Bikes	L.	T	Bikes	Total	North	South	East	West
4:00 PM	1		3	: 0				0		12	4	0	3	6	0	29	0	0	0	0
4:05 PM	0		2	: 0			1	0		4	2	0	0	3	0	11	0	0	0	0
4:10 PM	4		2	. 0				0		3	2	0	0	. 7	0	18	0	0	0	1
4:15 PM	2		2	: 0				0		5	4	. 0	2	2	0	17	0	1	0	0
4:20 PM	2		2	: 0				0		7	1	0	0	1	0	13	0	0	0	0
4:25 PM	3		2	: 0				0		5	2	0	0	5	0	17	0	0	0	0
4:30 PM	0		1	: 0				0		7	4	0	2	4	0	18	0	0	0	0
4:35 PM	1		0	0				0		8	2	0	3	5	. 0	19	0	0	0	0
4:40 PM	1		2	0				0		5	7	0	5	6	0	26	0	0	0	0
4:45 PM	5		2	0				0		4	5	0	0	4	0	20	0	0	0	0
4:50 PM	2		1	0				0		7	8	0	3	6	. 0	27	0	0	.0	0
4:55 PM	2		2	0				0		7	5	0	0	5	0	21	0	0	0	0
5:00 PM	0		0	0				0		14	5	0		1 1	0	21	0	0	0	0
5:05 PM	1		0	. 0				0		9	1	0	0	5	. 0	16	0	0	0	0
5:10 PM	2		1	0			1	0		5	3	0	3	7	0	21	0	0	0	0
5:15 PM	0			0				0		4	1	0	. 1	3	0	10	0	0	0	0
5:20 PM	3		3	: 0			:	0		10	4	0	3	4	0	27	0	0	0	0
5:25 PM	-1	127123	1	. 0				0		4	2	0	1	5	0	14	0	0	0	0
5:30 PM	2		1	. 0		1		0		7	3	0	3	7	0	23	0	0	0	0
5:35 PM	2		2	: 0				0		9	3	0	2	5	0	23	0	0	0	0
5:40 PM	3		0	: 0				0		3	6	0	0	1	0	13	0	0	0	0
5:45 PM	1		1	: 0				. 0		8	2	0	4	5	0	21	0	0	0	1
5:50 PM	3		0	. 0				0		5	2	0	0	5	0	15	0	0	0	0
5:55 PM	2		0	. 0	1			0		9	4	0	0	2	0	17	0	0	0	1
Total Survey	43		31	0				0	1	61	82	0	36	104	0	457	0	1	0	3

## 15-Minute Interval Summary

#### 4:00 PM to 6:00 PM

Interval Start		Melissa A			elissa Av			ko Rd			Dubark		Interval
Time	L		R	Bikes	 	Bikes	T	R	Bikes	L	T	Bikes	Total
4:00 PM	5		7	0		0	19	- 8	0	3	16	0	58
4:15 PM	7		6	0		0	17	7	0	2	8	0	47
4:30 PM	2		3	0		0	20	13	0	10	15 1	: 0	63
4:45 PM	9		5	0		0	18	18	0	3	15	0	68
5:00 PM	3	· · · · · · · · · · · · · · · · · · ·	1	0		0	28	9	0	4	13	0	58
5:15 PM	4		5	0		0	18	7	0	5	12	0	51
5:30 PM	7		3	. 0		0	19	12	0	5	13	0	59
5:45 PM	6		1	0		0	22	8	0	4	12	0	53
Total Survey	43		31	0		0	161	82	0	36	104	0	457

	Cross	walk	
North	South	East	West
0	0	0	1
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
0	1	0	3
		_	

#### Peak Hour Summary 4:40 PM to 5:40 PM

Ву			North Melis	boun sa Av	_		Sout						bound rko Rd				bound rko Rd		Total
Approach	- In	T	Out	: Tota	l : Bike:	In	Oul	Т	Total	Bikes	In	Out	Total	Bikes	ln	Out	Total	Bikes	
Volume	37		69	106	0	0	0		0	0	132	79	211	0	80	101	181	. 0	249
%HV	******		0	0%			 0	.09	'n			0.	8%	5000000		0	0%		0.4%
PHF	201107.		0	.66			 C	.00	y			0	72			0	83		0.85

	Pedes Cross		
North	South	East	West
0	0	0	0

Ву		0.000	sa Ave			1000	ithbo		}			ound rko Rd				bound rko Rd		Total
Movement	L		B	Total	1	7			Total		T	R	Total	L	T		Total	
Volume	21		: 16	:37			- 1		:0	E-content	85	47	1132	22	58		80	249
%HV	0.0%	NA	0.09	.0.0%	NA	: N/		NA	0.0%	NA	1.2%	0.0%	10.8%	0.0%	0.0%	NA	0.0%	0.4%
PHF	0.58		: 0.80	0.66	1	I			0.00		0.71	0.59	0.72	0.69	0.85		0.83	0.85

#### Rolling Hour Summary 4:00 PM to 6:00 PM

" PM to 5:00

Interval Start		Northb Meliss			 outhbou Ielissa Av			oound ko Rd			Westbo Dubarko		Interval
Time	L		R	Bikes		Bikes	T	R	Bikes	L	T	Bikes	Total
4:00 PM	23		21	: 0	 	: 0	74	46	.0	18	54	0	236
4:15 PM	21		15	0		0	83	47	0	19	51	: 0	236
4:30 PM	18		14	: 0		0	84	47	0	22	55	: 0	240
4:45 PM	23		14	0		0	83	46	0	17	53	: 0	236
5:00 PM	20		10	0	 	0	87	36	0	18	50 :	: 0	221

	324V.32		Pedes Cross	
	West	East	South !	North 3
	1	0	1	0
<b>EXHIBIT 1</b>	0	0	1	0
	0	0	0	0
0004-20-CP	07	0	0	0 :
JUU4-2U-CF	2	0	0 :	0

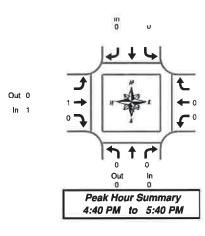


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

Thursday, April 25, 2019 4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM



Interval Start		orthbound elissa Ave		Southbou Melissa A		Eastb Dubar	ko Rd			Westbou Dubarko		Interval
Time	L	R	Total		Total	T	R	Total	L	T	Total	Total
4:00 PM	0 :	. 0	0		0	0	11	11	0	1.1.	1	2
4:05 PM	0 :	; 0	0		. 0	0	0	0	0	1.1	1 1	1
4:10 PM	1	0	1		0	0	0	0	0	0	0	1
4:15 PM	0 :	: 0	0		0	0	0	0	0	0	. 0	0
4:20 PM	0 :	: 0	0	1	0	0	0	0	0	0	1 0	0
4:25 PM	0	: 0	0		1 0	. 0	0	0	0	0	0	0
4:30 PM	0	. 0	0	1	0	0	0	0	0	0	0	0
4:35 PM	0	. 0	0		0	0	0	0	0	0	: 0	0
4:40 PM	0	0	0		0	0	0	0	0	0	: 0	0
4:45 PM	0	. 0	0		0	1 0	0	0	0	0	. 0	0
4:50 PM	0	0	0		. 0	0	0	0	0	0	. 0	0
4:55 PM	0	. 0	0		0	0	0	0	0	0	0	0
5:00 PM	0	: 0	0		1 0	0	0	0	0	0	1 0	0
5:05 PM	0	. 0	0		0	] 0	0	0	0	0	0	0
5:10 PM	0	. 0	0		0	) 0	0	0	0	0	0	0
5:15 PM	0	: 0	0		0	] 1	0	11	0	0	0	1
5:20 PM	0	: 0	0		0	0	0	0	0	0	1 0	0
5:25 PM	0	. 0	0		0	0	0	0	0	0	. 0	0
5:30 PM	0	: 0	. 0		0	0	0	0	0	0	0	0
5:35 PM	0	: 0	0		0	0	0	0	0	0	0	0
5:40 PM	0 :	: 0	0		0	0	0	0	0	0	1 0	0
5:45 PM	0	0	0		0	0	0	0	0	0	. 0	0
5:50 PM	0	0	0		0	0	0	0	0	0	1 0	0
5:55 PM	0 :	: 0	0		0	0	0	G	0	0	0	0
Total Survey	1	0	1		0	1	1	2	0	2	2	5

#### Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start			bound sa Ave			ithbound lissa Ave			oound rko Rd				bound rko Rd	Interval
Time	L		B	Total	10	17	otal	T	R.	Total	L		Total	Total
4:00 PM	1	OASS	0	1	oc.movi i innov	A AVENUE OF	0	0	1	1.1.	0	2	2	4
4:15 PM	0	1	0	0			0	0	0	0	0	0	0	0
4:30 PM	0		. 0	0			0	0	0	0	0	0	0	0
4:45 PM	0		0	0			0	0	0	0	0	0	. 0	0
5:00 PM	0	1	. 0	0			0	0	0	0	0	0	: 0	0
5:15 PM	0		. 0	0			0	11	0	1	0	0	1 0	1
5:30 PM	0		: 0	: 0	1		0	0	0	0	0	0	0	0
5:45 PM	0	:	: 0	0			0	0	0	0	0	0	0	0
Total Survey	1		0	1			0	1	1	2	0	2	2	5

#### Heavy Vehicle Peak Hour Summary 4:40 PM to 5:40 PM

Ву			bound sa Ave			nbound sa Ave			bound rko Ad			ibound irko Rd	Total
Approach	In	Out	Total	ln	Oul	: Total	In	Out	Total	ln	Out	Total	
Volume	0	0	0	0	0	0		. 0	40.00	0	1 1	1	1
PHF	0.00		7107077755	0.00			0.25			0.00			0.25

Ву		North! Meliss			 uthbou elissa A			rko Rd				oound ko Rd	Total
Movement	L i		R	Total		Total	T	R	Total	L	T	Total	
Volume	0		0	0		. 0	1	0	11	0	0	0	1
PHF	0.00	8	0.00	0.00		: 0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.25

#### Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start		hboun ssa Av		1	South! Meliss			bound rko Rd			Westbou Dubarko		Interval
Time	L	 ; R	- 1	Total		Total	Ť	R	Total	L	) T ;	Total	Total
4:00 PM	. 1	 . 0		1		0	0	1	1 1	0	1 2	2	4
4:15 PM	0	: 0		0		0	0	0	0	0	0	0	0
4:30 PM	0	. 0		0		0	1	0	1	0	0	ō	1
4:45 PM	0	0		0		0	1 1	0	1	0	0	0	1
5:00 PM	0	 0		0		0		0	1 1	٥	0 !	: 0	1

## **Peak Hour Summary**

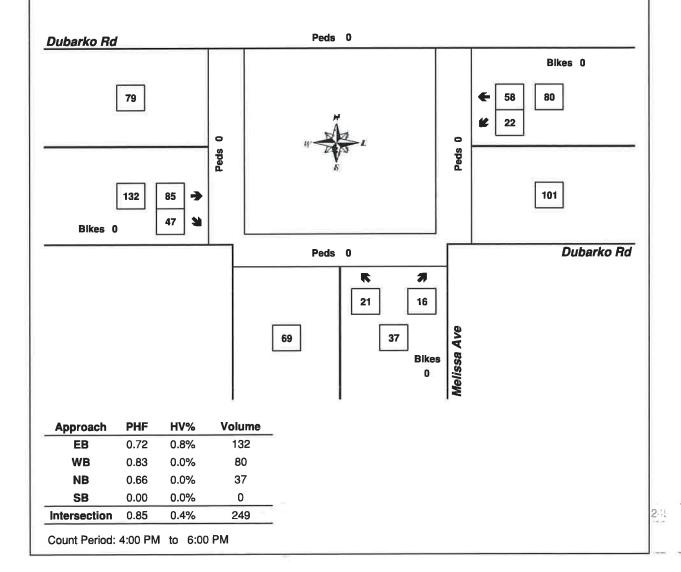


Clay Carney (503) 833-2740

## Melissa Ave & Dubarko Rd

4:40 PM to 5:40 PM Thursday, April 25, 2019

Bikes



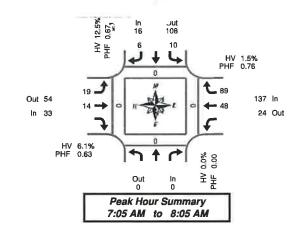


Clay Carney (503) 833-2740

## Ruben Ln & Dubarko Rd

Thursday, May 23, 2019 7:00 AM to 9:00 AM

#### 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start	Northbou Ruben L			outhbound Ruben Ln			Eastbo Dubarko		West! Dubar	ko Rd		Interval		Pede: Cros	swalk	
Time		Bikes	L :	R	Bikes	L	T	Bikes	T	R	Bikes	Total	North	South	East	West
7:00 AM		. 0	2	. 0	. 0	1	0	0	4	8	0	15	0	0	1	0
7:05 AM		0	0 :	. 0	0	0	1	0	5	9	0	15	0	0	0	0
7:10 AM		0	1 1	0	0	1	2	0	4	8	0	16	0	0	0	0
7:10 AM 7:15 AM		: 0	1	0	0	1	0	0	7	12	0	21	0	0	0	0
7:20 AM		0	3	0	0	2	1	0	3	6	0	15	0	. 0	0	0
7:20 AM 7:25 AM		0	0	1 1	0	2	1 1	0	4	6	0	14	0	0	0	0
7:30 AM		0	0	. 0	0	0	1	0	2	8	0	11	0	0	0	0
7:35 AM		: 0	1	4	0	3	3	0	2	5	0	18	0	0	0	0
7:40 AM		0	0 :	0	: 0	1	1 1	0	3	8	0	13	0	0	0	0
7:45 AM		: 0	0	0	0	4	11	0	4	4	0	13	0	. 0	0	0
7:50 AM		: 0	1	0	0	2	2	0	4	9	0	18	0	0	0	0
7:55 AM		. 0	1	0	0	1	0	0	4	10	0	16	0	: 0	0	0
MA 00:8		0	2	1 1	0	2	1	0	6	4	0	16	0	0	0	0
8:05 AM		0	2	1	0	1	2	0	0	5	0	11	0	. 0	0	0
8:10 AM		0	3	0	0	2	0	1 0	1	3	0	9	0	0	0	0
8:15 AM		0	0	0	: 0	3	4	1 0	4	2	0	13	0	0	0	0
8:15 AM 8:20 AM		0	0 :	0	. 0	0	2	0	- 5	8	0	15	0	0	0	0
8:25 AM		: 0	0	. 0	0	3	2	0	2	5	0	12	0	0	0	0
8:30 AM		1 0	2	: 0	0	0	4	0	3	5	0	14	0	0	0	0
8:35 AM		: 0	1 1	. 1	1 0	2	1	0	1	4	0	10	0	0	0	0
8:40 AM		: 0	2	: 0	. 0	1	2	0	3	5	0	13	0	. 0	0	0
8:45 AM		. 0	3	2	0	2	2	1 0	2	4	0	15	0	0	0	0
8:50 AM	1 1	: 0	1	0	0	4	3	0	3	5	0	16	0	0	0	0
8:55 AM		0	2	1 1	0	1 0	3	0	2	5	0	14	0	0	0	0
Total Survey		0	28	- 11	0	39	39	0	78	148	0	343	0	0	1	0

#### 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval			bound			South					bound			ound	,				strians	
Start	I	Rub	on Ln			Rube	en Ln			Duba	rko Rd	I	Dubai	ko Rd		Interval			swalk	
Time	500150000			Bikes	L		R	Bikes	L	1	Bikes		T	R	Bikes	Total	North	South	East	West
7:00 AM	auge	-		0	3		0	0	2	3	0		13	25	. 0	46	0	0	- 1	0
7:15 AM				0	4		1	. 0	5	2	0	1	14	24	: 0	50	0	0	0	0
7:30 AM	1			0	1		4	0	4	5	0	1	7	21	0	42	0	0	0	0
7:45 AM	1			0	2		0	0	7	3	0	I	12	23	. 0	47	0	0	0	0
8:00 AM				0	7		2	0	5	3	0		7	12	. 0	36	. 0	0	0	0
8:15 AM	T			. 0	0	:	0	0	6	8	0		11	15	: 0	40	0	0	0	0
8:30 AM	1			. 0	5		1	0	3	7	0		7	14	: 0	37	0	0	0	0
8:45 AM				0	6		3	0	7	8	0		7	14	; 0	45	0	0	0	0
Total Survey				0	28		11	0	39	39	0		78	148	0	343	0	0	1	0

#### Peak Hour Summary 7:05 AM to 8:05 AM

Ву				bound an Ln					bound en Ln				ibound arko Rd			West Duba		Total	
Approach	ln	Т	Out	Total	Bikes	ln	T	Out	Total	Bikes	ln	Out	Tota	Bikes	ln	Out	Total	Bikes	
Volume	0	1	0	0	0	16	1	108	124	0	33	54	87	0	137	24	161	. 0	186
%HV	*******		0.	0%				12	5%			6	.1%			1.	5%		3.2%
PHF			0.	00				0.	67			(	.63			0	76		0.89

	Pedes	trians	
	Cross	swalk	
North	South	East	West
. 0	0	0	0

Ву			<b>bound</b> en Ln				bound en Ln			Eastb Dubar	CONTRACTOR OF				ko Rd		Total
Movement				:Total	L :		R	Total	L	T		Total		T	R	Total	
Volume				0	10 :		6	16	19	14	in cross	133		48	89	137	186
%HV	NA	NA.	: NA	10.0%	20.0%	NA	0.0%	12.5%	0.0%	14.3%	NA	6.1%	NA	2.1%	1.1%	1.5%	3.2%
PHF	*******			10.00	0.50		0.30	0.67	0.59	0.70		0.63		0.75	0.77	0.76	0.89

#### Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	Northbou Ruben I			Southb Rube		1		Eastbou Dubarko		Westt Dubar	ko Ad		Interval
Time		Bikes	L		R	Bikes	L	T	Bikes	T	R	Bikes	Total
7:00 AM	1 1	: 0	10	- 1	- 5	0	18	13	101	46	93	: 0	185
7:15 AM		0	14		7	0	21	13	1 0	40	80	0	175
7:30 AM		0	10		6	0	22	19	0	37	71	. 0	165
7:45 AM		0	14		3	0	21	21	3 0	37	64	: 0	160
8:00 AM		0	18		6	0	21	26	10	32	55	0	158

EXHIBIT 1

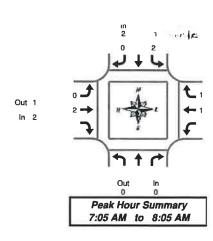


Clay Carney (503) 833-2740

## Ruben Ln & Dubarko Rd

Thursday, May 23, 2019 7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start	<b>Northbo</b> u Ruben l			outhbound Ruben Ln	000000000		Eastbou Dubarko			<b>bound</b> rko Rd		Interval
Time	1	Total	L:	R	Total	L	T	Total	} T	R	Total	Total
7:00 AM		. 0	0	0	0	. 0	ō	0	0	1	11	1
7:05 AM		: 0	0 ;	0	: 0	0	0	0	0	1	1	1
7:10 AM		0	1 1	0	1 1	0	0	0	0	0	0	1
7:15 AM		0	0	0	1 0	0	0	0	1 1	0	1	1
7:20 AM		0	1 ;	0	1	0	0	0	0	0	0	1
7:25 AM		0	0	: 0	0	0	1	1	0	0	0	
7:30 AM		: 0	0 :	: 0	0	0	0	0	0	0	0	0
7:35 AM		0	0	; 0	0	0	1	1 1	0	0	0	1
7:40 AM		0	0	0	0	0	0	0	0	0	0	0
7:45 AM		0	0 :	: 0	: 0	0	0	0	0	0	: 0	0
7:50 AM		0	0 !	. 0	0	0	0	0	0	0	. 0	0
7:55 AM		0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0 [	0	0	0	0	0	0	0	0	0
8:05 AM		. 0	0	. 0	0	0	0	0	0	. 0	0	0
8:10 AM		1 0	0 ;	1 0	0	0	0	0	0	0	0	0
8:15 AM		0	0	. 0	0	0	0	0	0	1	1	1
8:20 AM		0	0	1 0	0	0	0	0	0	0	0	0
8:25 AM		. 0	0	: 0	0	0	0	0	0	0	0	0
8:30 AM		0	0	1 0	0	0	0	0	0	0	0	0
8:35 AM		. 0	0	: 0	0	0	0	0	0	0	0	0
8:40 AM		0	0 :	: 0	: 0	0	0	0	0	0	0	0
B:45 AM		. 0	0	. 0	0	0	0	0	0	0	0	0
8:50 AM		0	0	0	0	0	0	0	1	0	1 1	1
8:55 AM		0	0	0	0	0	0	0	0	1	1	1
Total Survey		0	2	0	2	0	2	2	2	4	6	10

## Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	Northi Rube			outhbound Ruben Ln			Eastbe Dubark			bound rko Rd		Interval
Time	1	Total	L	R	Total	L	T	Total	1	R :	Total	Total
7:00 AM		0	1	0	1	0	0	0	. 0	2	2	3
7:15 AM		. 0	1	. 0	1	. 0	1	1 1	11	0	. 1	3
7:30 AM		. 0	0	. 0	0	0	1	1	0	0	0	1
7:45 AM		. 0	0	. 0	0	0	0	0	0	0	0	0
8:00 AM		: 0	0 :	. 0	0	0	0	0	0	0	0	0
8:15 AM		: 0	0	: 0	0	0	0	0	0	1	1	1
8:30 AM		. 0	0	: 0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	4	1	2	2
Total Survey		0	2	0	2	0	2	2	2	4	6	10

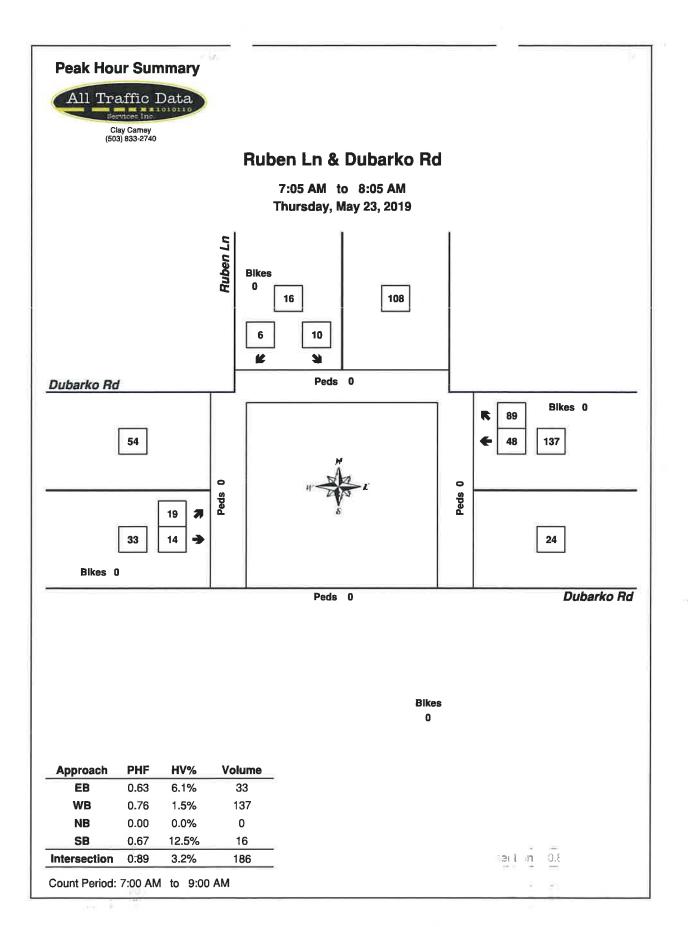
## Heavy Vehicle Peak Hour Summary 7:05 AM to 8:05 AM

7.03 AIN	10 0.03 AM				
Ву	Northbound Ruben Ln	Southbound Ruben Ln	Eastbound Dubarko Rd	Westbound Dubarko Rd	Total
Approach	In Out Total	In : Out : Total	In Out   Total	In Out Total	
Volume	0 0 0	2 1 3	2 1 3	2 4 6	6
PHF	0.00	0.25	0.25	0.25	0.50

By Movement	Northb Rube			Southbound Ruben Ln			Eastbou Dubarko			bound rko Rd		Total
		Total	L:	i A	Total	L	} ⊤ }	Total	Ť	R	Total	
Volume		: 0	2	. o	2	0	2	2		11	2	6
PHF		0.00	0.25	0.00	0.25	0.00	0.25	0.25	0.25	0.25	0.25	0.50

## Heavy Vehicle Rolling Hour Summary

7:00 AM	to 9:00 AM	1									7.	00 A	7.
Interval Start	Northbo Ruben			outhbound Ruben Ln			Eastbo Dubark				bound rko Rd		Interval
Time		Total	L	Ř	Total	L	Ť	Total		Ť	R	Total	Total
7:00 AM		: O	2	0	2	0	2	2	10	1	2	3	7
7:15 AM		0	1	. 0	. 1	0	2	2		1	: 0	1	4
7:30 AM		0	0	. 0	0	0	1	1		0	1	1	2
7:45 AM		. 0	0	. 0	0	0	0	0		0	1	1	1
0.00 414				**************************************	1 A					4		100	



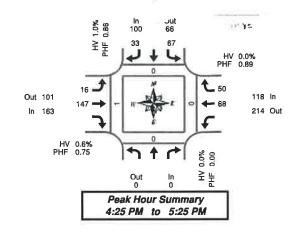


Clay Carney (503) 833-2740

## Ruben Ln & Dubarko Rd

Wednesday, May 22, 2019 4:00 PM to 6:00 PM

#### 5-Minute Interval Summary 4:00 PM to 6:00 PM



4:30 PM 4:35 PM 4:40 PM 4:45 PM 4:50 PM 4:50 PM 5:00 PM 5:05 PM 5:10 PM 5:10 PM 5:20 PM 5:20 PM 5:30 PM 5:30 PM 5:38 PM 5:38 PM 5:40 PM	Northbou Ruben l			Southbound Ruben Ln			Eastbou Dubarko		<b>Wesib</b> Dubar			Interval		Cros	strians swalk	
Time	1 1	Bikes	LI	i R	Bikes	L	T }	Bikes	T	R	Bikes	Total	North	South	East	West
4:00 PM		: 0	3 :		0	1	6	0	6	2	0	19	0	0	0	0
4:05 PM		: 0	5 :	: 0	. 0	1	7	0	3	4	0	20	0	0	0	0
4:10 PM		. 0	8	1 2	0		11	0	5	4	0	31	. 0	0	0	1 1
4:15 PM		0	10	2	1 0	1	4	0	4	4	0	25	0	0	0	0
4:20 PM		: 0	9 :	1 0	0	0	13	0	4	2	0	28	0	0	0	0
4:25 PM		0	5	3	0	1	16	0	5	5	0	35	0	. 0	0	0
4:30 PM		0	6	1 2	0	0	15	0	7	6	0	36	0	. 0	0	1
4:35 PM		0	3	2	0	0	5	0	4	3	0	17	0	0	0	0
4:40 PM		1 0	5	5	0	2	13	0	7	6	0	38	0	0	0	0
		0	6	4	0	3	6	0	2	- 1	0	22	0	0	0	0
		0	5	1	. 0	1	7	0	7	5	0	26	0	. 0	0	0
4:55 PM		0	5	4	0	0	9	0	9	3	0	30	0	: 0	0	0
5:00 PM		0	8	2	0	0	16	0	3	5	0	34	0	. 0	0	0
5:05 PM		. 0	7	3	0	2	17	0	7	4	0	40	0	0	0	0
5:10 PM		0	6	1 1	0	3	16	0	2	3	0	31	0	0	0	0
5:15 PM		0	6	3	0	1	13	0	8	5	0	36	0	0	0	
5:20 PM		0	5 :	3	0	3	14	0	7	4	0	36 23	0	0	0	0
5:25 PM		0	4	1 5	0	. 1	10	0	2	1	0	23	1	0	0	0
5:30 PM		0	2	2	1 0	1	14	0	7	4	0	30	0	0	0	0
5:35 PM		. 0	6 :	: 1	0	0	6	0	4	3	0	20	0	0	0	0
5:40 PM		. 0	3 :	2	0	0	7	0	6	-11	0	29	0	0	0	0
5:45 PM		. 0	8	1 1	0	0	13	0	7	2	0	31	0	0	0	0
5:50 PM		0	6	3	0	2	12	0	5	3	0	31	0	0	0	0
5:55 PM		0	5	: 0	0	2	19	0	3	2	0	31	1	0	0	0
Total Survey		0	136	52	0	26	269	0	124	92	0	699	2	0	0	2

## 15-Minute Interval Summary

#### 4:00 PM to 6:00 PM

Interval Start	Northb Ruber		S	Ruben Ln			Dubar			arko Rd		Interval
Time		Bikes	L	R	Bikes	L	T	Bikes	T	i R	Bikes	Total
4:00 PM		. 0	16	3	0	3	24	0	14	1 10	: 0	70
4:15 PM		: 0	24	3 5	0	2	33	0	13	1 11	: 0	88
4:30 PM		: 0	14	9	0	2	33	0	18	1 15	: 0	91
4:45 PM		: 0	16	9	0	4	22	0	18	9	9	78
5:00 PM		. 0	21	6	: 0	5	49	0	12	1 12	: 0	105
5:15 PM		: 0	15	1 11	. 0	5	37	0	1 17	10	: 0	95
5:30 PM		: 0	11 :	5	0	1	27	0	17	18	0	79
5:45 PM	1 1	: 0	19 :	4	1 0	4	44	0	1 15	7	: 0	93
Total Survey		0	136	52	0	26	269	0	124	92	0	699

	Pedes Cross		
North	South	East	West
0	0	0	1
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
1	0	0	0
2	0	0	2

#### Peak Hour Summary 4:25 PM to 5:25 PM

Ву			North Rub	iboui en Li					hbo	und Ln				rko Rd				bound rko Rd		Total
Approach	In	T	Out	То	al	Bikes	ln	Out		Total	Bikes	ln	Out	Total	Bikes	ln	Out	Total	Bikes	
Volume	0	-	0			0	100	66	1	166	0	163	101	264	0	118	214	332	0	381
%HV		•	0	0%				2272	.0%	0			0.	6%			0.	0%		0.5%
PHF		•••	0	.00	••••			1	0.86				0.	75			0.	89		0.89

	Pedes	trians	
	Cross	walk	
North	South	East	West
0	0	0	1

Ву			<b>bound</b> en Ln				bound en Ln			Eastb Dubar	ko Rd			West! Dubar	ko Rd		Total
Movement				:Total	1	************	R	Total	L	T		Total		T	R	:Total	
Volume				:0	67	-0.00000000	33	100	16	147	2	163		68	50	1118	381
%HV	NA	NA	. NA	:0.0%	0.0% :	NA	3.0%	11.0%	6.3%	0.0%	NA	0.6%	NA	0.0%	0.0%	0.0%	0.5%
PHF	-		1	10.00	0.80		0.75	0.86	0.57	0.75		0.75		0.89	0.83	0.89	0.89

#### Rolling Hour Summary 4:00 PM to 6:00 PM

20 + 11 to 6:0

Interval Start		orthbour Ruben Lr				uthbo uben			messar	Eastbou Dubarko			ko Rd	47	Interval
Time			Bikes	L			R	Bikes	L	T	Bikes	T	R	Bikes	Total
4:00 PM	3	- 8	‡ 0	.70	1		26	0	11	112	0	63	45	0	327
4:15 PM			0	75	1		29	0	13	137	0	61	47	0	362
4:30 PM			. 0	66	1	- 1	35	0	16	141	0	65	46	. 0	369
4:45 PM			0	63			31	0	15	135	0	64	49	0	357
5:00 PM			: 0	66	1		26	0	15	157	0	61	47	: 0	372

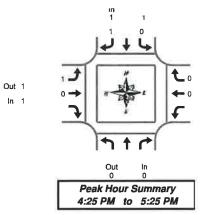
			Pedes Cross	
	West	East	South	North
	2	0	0	0
EXHIBIT 1	1	0	0	0
	1	0	0	-1-
0004-20-CP	07	0	0	1
0004-20-CP	0	0	0	2



Clay Carney (503) 833-2740

## Ruben Ln & Dubarko Rd

Wednesday, May 22, 2019 4:00 PM to 6:00 PM



## Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start	Northbo Ruben			uthbound Ruben Ln			Eastbou Dubarko		Westi Dubai			Interval
Time		Total	1	i R	Total	L	T	Total	T	R	Total	Total
4:00 PM		. 0	0	1 1	1 1	0	0	0	0	0	0	1
4:05 PM		0	0	: 0	0	0	0	0	0	0	0	0
4:10 PM		1 0	0	: 0	0	0	0	0	0	0	0	0
4:15 PM		: 0	1	: 0	1	0	0	0	0	0	0	1
4:20 PM		: 0	0	: 0	0	0	0	0	0	0	0	0
4:25 PM		0	0	. 0	0	0	0	0	0	0	0	0
4:30 PM		0	0	: 0	0	0	0	0	0	0	. 0	0
4:35 PM		. 0	0 :	1	1	0	0	0	0	0	0	1
4:40 PM		0	0	. 0	0	0	0	0	0	0	0	0
4:45 PM		0	0	0	0	0	0	0	0	0	0	0
4:50 PM		0	0	1 0	0	1	0	1	0	0	0	
4:55 PM		0	0 [	0	0	0	0	0	0	0	: 0	0
5:00 PM		0	0	0	0	0	0	0	0	0	0	0
5:05 PM		0	0	0	0	0	0	0	0	0	: 0	0
5:10 PM		0	0	. 0	0	0	0	0	0	0	: 0	0
5:15 PM		0	0	0	0	0	0	0	0	0	0	0
5:20 PM		. 0	0	: 0	0	0	0	0	0	0	0	0
5:25 PM		0	0 :	: 0	0	0	1	1 9	0	0	. 0	1
5:30 PM		0	0 :	1 0	0	0	0	0	0	0	0	0
5:35 PM		: 0	0 :	1 0	0	0	0	0	0	0	0	0
5:40 PM		0	0	0	0	0	0	0	1 0	- 1	1	1
5:45 PM		0	0	. 0	0	0	0	0	0	0	. 0	0
5:50 PM		0	0	: 0	0	0	2	2	0	0	0	2
5:55 PM	1 1	: 0	0	0	0	0	0	0	0	0	0	0
Total Survey		0	1	2	3	1	3	4	0	1	1	8

## Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start	Northbou Ruben L			outhbound Ruben Ln	-		Eastb Dubar			bound rko Ad		Interval
Time		Total		. B	Total	L	T	Total	T	R	Total	Total
4:00 PM		0	0		1 1	0	0	0	. 0	0	0	stormal store.
4:15 PM		. 0		0	1 1	0	0	0	0	0	0	1
4:30 PM		0	0 :	1.1	11	0	0	0	0	0	0	1
4:45 PM		0	0 ;	: 0	. 0	1	0		0	0	0	1
5:00 PM		. 0	0 1	: 0	] 0	0	0	0	0	0	0	0
5:15 PM		. 0	0	. 0	0	0		1	. 0	0	0	
5:30 PM	- I	. 0	0 :	: 0	: 0	0	0	0	0	1	1	1
5:45 PM		. 0	0	: 0	: 0	0	2	2	0	0	0	2
Total Survey		0	1	2	3	1	3	4	0	1	1	8

#### Heavy Vehicle Peak Hour Summary 4:25 PM to 5:25 PM

Ву			nbound en Ln			ibound en Ln			bound rko Rd			bound rko Ad	Total
Approach	In	Out	Total	ln	Out	Total	ln	Out	} Total	In	Out	Total	1930
Volume	0	0	0	1	1	2	1	1 1	1 2	0	0	0	2
PHF	0.00	•	~	0.25		*************	0.25			0.00			0.50

Ву	100000000000000000000000000000000000000	bound en Ln		 en Ln			Control	oound ko Rd		11.00	ko Rd		Total
Movement	1	: To	ital L	 : R	Total	L	T		Total	 T	R	Total	
Volume			0 0	1	1	1	0		1	 0	0	0	2
PHF		. 0.	00.00	0.25	0.25	0.25	0.00		0.25	0.00	0.00	0.00	0.50

#### Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start	Northbour Ruben Lr		eversus er	Southb Ruben				Eastbou Dubarko			bound rko Rd		Interval
Time		Total	L		R	Total	L	T	Total	T	R	Total	Total
4:00 PM	1 1	1 0			2	3		0	1.1.	0	0	0	4
4:15 PM		0	1		1	2	1	0	1 1	. 0	0	0	3
4:30 PM		0	0 :		1	1	1	1	2	0	0	0	3
4:45 PM		0	0		0	0	1	1	2	0	1	1	3
5:00 PM		: 0	0		0	0	0	3	3	0	1	1	4

### **Peak Hour Summary** All Traffic Data Clay Carney (503) 833-2740 Ruben Ln & Dubarko Rd 4:25 PM to 5:25 PM Wednesday, May 22, 2019 Ruben Ln **Bikes** 0 100 66 67 33 K 3 Peds 0 Dubarko Rd Bikes 0 50 68 118 101 Peds Peds 16 163 214 147 Blkes 0 Dubarko Rd Peds 0 Blkes **Approach PHF** HV% Volume EB 0.75 0.6% 163 **WB** 0.89 0.0% 118 NB 0.00 0.0% 0 SB 0.86 1.0% 100 Intersection 0.89 0.5% 381 Count Period: 4:00 PM to 6:00 PM

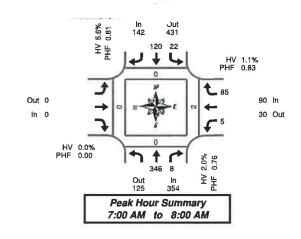


Clay Carney (503) 833-2740

## SE 362nd Ave & Dubarko Rd

Thursday, May 23, 2019 7:00 AM to 9:00 AM

#### 5-Minute Interval Summary 7:00 AM to 9:00 AM



Interval Start	North SE 362	Value from CVV	T		Se 362		Eastbo Dubark	o Rd		Westbound Dubarko Rd		Interval		Pedes Cross	walk	
Time	T	R	Bikes	L	: T	Bikes		Bikes	L	R	Bikes	Total	North	South	East	West
7:00 AM	33	0	0	0	10	0		0	. 1	11	0	55	0	0	0	0
7:05 AM	: 50	1	0	1	7 1	; 0		0	0	8	: 0	67	0	0	0	0
7:10 AM	32	0	0	3	9 :	: 0		0	1	6	0	51	0	0	0	0
7:15 AM	34	0	0	3	6 1	0		0	0	9	0	52	0	0	1	0
7:20 AM	32	1	: 0	4	1 13	1 0		0	0	6	0	56	0	0	0	0
7:25 AM	25	1	: 0	10	12 1	1 0		0	0	9	. 0	48	0	0	1	0
7:30 AM	21	0	0	2	12	0		0	1	7	0	43	0	0	0	. 0
7:35 AM	24	1	: 0	4	8	1 0		0	0	7	0	44	0	0	0	0
7:40 AM	34	0	0	1	8	0		0	2	4	0	49	0	0	0	0
7:45 AM	26	2	: 0	1	17	0		0	0	5	0	51	0	0	0	0
7:50 AM	17	2	0	2	11	0		0	0	10	. 0	42	0	0	0	0
7:55 AM	18	0	0	0	7 1	0		0	0	3	: 0	28	0	0	0	0
8:00 AM	26	0	0	4	7 1	0		0	1	8	: 0	46	0	0	0	0
B:05 AM	27	2	0	2	15	0		0	1	4	: 0	51	0	0	1	0
8:10 AM	33	0	. 0		6	0		0	1	0	. 0	41	0	0	0	0
8:15 AM	24	2	0	4	16	0		0	0	3	0	49	0	0	0	0
8:20 AM	29	0	0	4	6	0		0		6	0	46	0	0	0	0
8:25 AM	33	1	: 0	3	7	0		0	0	4	0	48	0	0	0	0
8:30 AM	21	2	0	3	11 1	0		0	0	6	0	43	0	0	0	0
8:35 AM	24	2	: 0	2	1 15 1	1 0		0	0	6	0	49	0	0	0	0
8:40 AM	21	2	. 0	1	12	. 0		0	1	2	0	39	0	0	0	0
8:45 AM	21	2	0	5	16	0		0	1	7	0	52	0	0	0	0
8:50 AM	26	2	: 0	5	16	0		0	0	3	0	52	0	0	0	0
8:55 AM	16	1	: 0	1	18	; 0		0	1	5	0	42	0	0	0	0
Total Survey	647	24	0	57	265	0		0	12	139	0	1,144	0	0	3	0

## 15-Minute Interval Summary

#### 7:00 AM to 9:00 AM

Interval Start			ound nd Ave			Southbo SE 362n				oound rko Rd			Westbound Dubarko Rd		Interval		Pedes Cros	strians swalk	_
Time	T		B	Bikes	E	T	Bikes				Bikes	L	i R	Bikes	Total	North	i South	East	T
7:00 AM	- 11	5	- 1	0	- 4	26	0	Personal Property Communication Communicatio	18333333	2000000	0	2	25	: 0	173	0	: 0	0	I
7:15 AM	9		2	0	8	31	0				0	0	24	: 0	156	0	: 0	2	I
7:30 AM	79	9	1	0	7	28	0			J	0	3	18	: 0	136	0	: 0	0	Ι
7:45 AM	6	i i	4	0	3	35	0			1	0	0	18	0	121	0	: 0	0	Ī
8:00 AM	81	6	2	. 0	7	28	. 0				0	3	12	; 0	138	0	0	<b>1</b> 33	1
8:15 AM	86	6	3	0	. 11	29	0		P		0	1	13	: 0	143	0	: 0	0	I
8:30 AM	66	6	6	. 0	6	38	. 0			V	0	1	14	0	131	0	0	0	Ī
8:45 AM	63	3	5	0	11	50	. 0			1	0	2	15	0	146	0	0	0	1
Total	64	7	24	0	57	265	0				0	12	139	0	1,144	0	0	3	

#### Peak Hour Summary 7:00 AM to 8:00 AM

Ву			i <b>bound</b> 2nd Ave				hbound 2nd Ave				oound rko Ad				bound rko Rd		Total
Approach	In	Out	: Total	Bikes	In	Out	Total	Bikes	łп	Out	Total	Bikes	In	Out	Total	Bikes	
Valume	354	125	: 479	0	142	431	573	0	0	0	0	0	90	30	120	0	586
%HV		2	0%			5.6%				0.1	0%			1.	1%		2.7%
PHF		0	76			5.6% 0.81				0.	00			0	83		0.85

	Pedes	trians	
	Cross	walk	
North	South	East	West
0	0	2	0

Ву		North				South SE 362					rko Rd				bound rko Rd		Total
Movement		Т	R	:Total	L	Т	033700123	Total	1	i.c	}	Total	L	CHO.	R	Total	
Valume	LANSAN.	346	8	:354	22	120		:142	2		1	{O	5		85	90	586
%HV	NA	2.0%	0.0%	:2.0%	13.6%	4.2%	NA	5.6%	NA.	NA	NA.	0.0%	0.0%	NA	1.2%	1.1%	2.7%
PHF		0.75	0.50	0.76	0.55	0.81		0.81	1	1		0.00	0.42		0.85	0.83	0.85

#### Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	Northb SE 362		unione i			nbound 2nd Ave	Eastbound Dubarko Rd		Westbound Dubarko Rd	Interval
Time	T :	R	: Bikes	L	T	; Bikes	Bikes	L	R Bikes	Total
7:00 AM	346	8	: 0	22	120	. 0	0	5	85 0	586
7:15 AM	317	9	0	25	122	1 10	0	6	72 0	551
7:30 AM	312	10	: 0	28	120	. 0	0	7	61 : 0	538
7:45 AM	299	15	0	27	130	: 0	0	5	57 0	533
8:00 AM	301	16	: 0	35	145	; ; 0	1 1 0	7	54 0	558



Clay Carney (503) 833-2740

## SE 362nd Ave & Dubarko Rd

Thursday, May 23, 2019 7:00 AM to 9:00 AM

Out 0

In 0

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	North SE 362	nd Ave			South SE 362		Eastbo Dubark			<b>/estbound</b> ubarko Ad		Interva
Time	! Т	R	Total	L	T	Total		Total	L	R	Total	Total
7:00 AM	. 0	0	: 0	0	0	0		0	0	0	0	0
7:05 AM	2	0	1 2	0	0	0		0	0	0	0	2
7:10 AM		0	1	0	0	0		0	0	0	0	1
7:15 AM	1 1	0	1 1	0	0	0		0	0	. 0	0	1
7:20 AM	1	0	1 1	1	0	1		0	0		1 1	3
7:25 AM	0	0	: 0	0	0	0		0	0	0	0	0
7:30 AM	0	0	. 0	1	2	3		0	0	. 0	0	3
7:35 AM		0	1	1	0	1		0	0	0	0	2
7:40 AM	: 0	0	: 0	0	0	0		0	0	. 0	0	0
7:45 AM	1	0	1 1	0.	2	2		0	0	. 0	0	3
7:50 AM	0	0	: 0	0	1	1		0	0.	0	0	1
7:55 AM	. 0	0	: 0	0	0	0		0	0	0	0	0
8:00 AM	0	0	. 0	0	1	1		0	0	0	0	1
8:05 AM	1	0	1 1	0	0	0		0	0	0	0	1
8:10 AM	. 0	0	. 0	0	0	0		0	0	1 0	0	0
8:15 AM	3	1	4	0	1	1	1	0	0	1 0	0	5
8:20 AM	0	0	. 0	0	0	; 0		0	0	0	0	0
8:25 AM	0	0	: 0	0	2	2		0	0	1 1	1	3
8:30 AM	. 0	0	: 0	0	0	. 0		0	0	. 0	0	0
8:35 AM	0	0	: 0	0	2	2		0	0	0	0	2
8:40 AM	1	0	1 1	0	0	. 0		0	0	0	0	1 .
8:45 AM		0	1	0	0	0		0	0	0	0	1
8:50 AM	1 1	0	1 1	0	1	1		0	0	0	0	2
8:55 AM	6	0	: 6	0	1	1		0	0	1 1	1	8
Total Survey	20	1	21	3	13	16		0	0	3	3	40

## Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start		bound 2nd Ave				i <b>bound</b> 2nd Ave		t <b>bound</b> arko Rd		Westbound Dubarko Rd	Interval
Time	. T	R	Total	L	T	Total	7.5	Tota	L	R T	otal Total
7:00 AM	3	0	3	0	0	. 0		0	0	0	0 3
7:15 AM	2	0	2	1	0	1 1		0	0	1 1	1 4
7:30 AM	1 1	0	1 1	2	2	1 4		] 0	0	1 0 1	0 5
7:45 AM	1	. 0	11	0	3	3		0	0	0	0 4
8:00 AM	1	. 0	1 1	0	1 1	1 1	1	0	0	0	0 2
8:15 AM	: 3	1 1	4	0	3	3		0	0	1 1 1	1 8
8:30 AM	1 1	0	1 1	0	2	2	1	0	0	. 0	0 3
8:45 AM	. 8	0	: 8	0	2	2		0	0	1	1 11
Total Survey	20	1	21	3	13	16		0	0	3	3 40

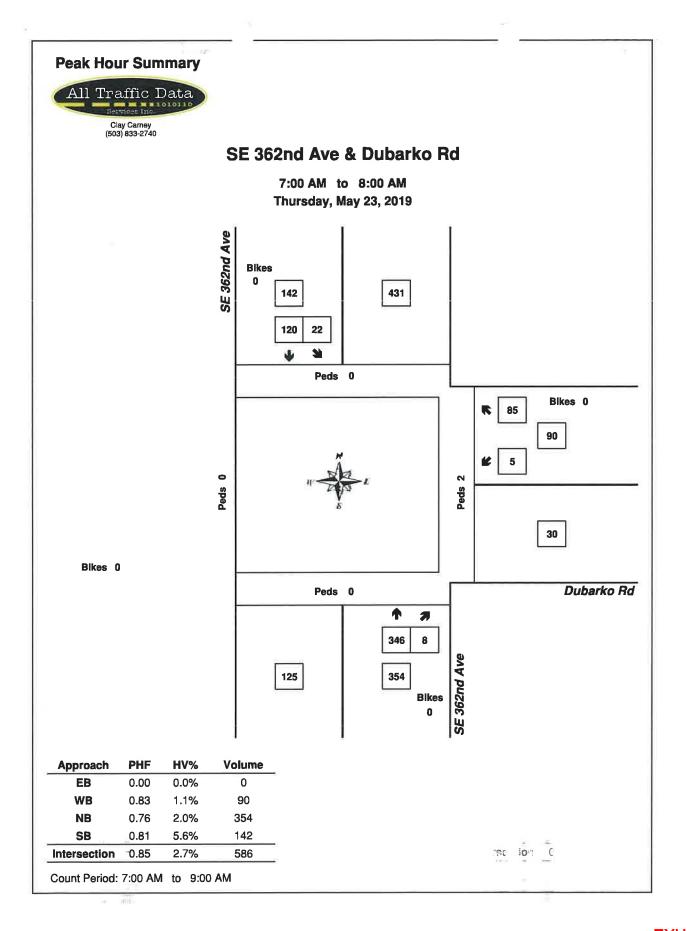
## Heavy Vehicle Peak Hour Summary 7:00 AM to 8:00 AM

Ву			bound 2nd Ave			hbound 2nd Ave			bound rko Ad			<b>bound</b> rko Rd	Total
Approach	In	Out	Total	ln	Oul	Total	In	Out	Total	ln	Out	Total	1
Volume	7	5	12	8	8	16	0	0	0	1	3	4	16
PHF	0.44	******		0.50	*******	***************************************	0.00			0.25			0.67

Ву		North SE 362	nd Ave			The second second	bound 2nd Av		 oound rko Rd				bound rko Rd		Total
Movement		T	R	Total	L	T		Total		Total	L		B	Total	
Volume		7	0	7	3	- 5		8		0	0	William .	1	1	16
PHF	200	0.44	0.00	0.44	0.38	0.42		0.50		0.00	0.00		0.25	0.25	0.67

## Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	1	Northi SE 362	ound				thboun 62nd A		Eastb Dubarl			Westbou Dubarko	\$1377 II.	Interval
Time		T	R	Total	L	T		Total	1	Tolal	L	1	R   Total	Total
7:00 AM		7	0	: 7	3	5	4	8		0	0		1 1	16
7:15 AM		5	0	5	3	6	7	9		0	0		1 1	15
7:30 AM		6	1	7	2	9		11		0	0		1 1	19
7:45 AM		6	1	7	0	9		9		0	0		1 1	17
NA OO-R		12	1	14	0	. 8	-	. 8		0	0		2 2	24



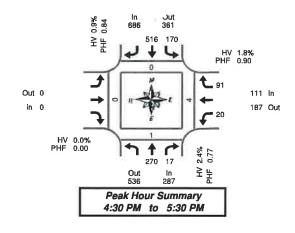


Clay Carney (503) 833-2740

## SE 362nd Ave & Dubarko Rd

Wednesday, May 22, 2019 4:00 PM to 6:00 PM

#### 5-Minute Interval Summary 4:00 PM to 6:00 PM



Interval Start	Northb SE 362		re			n <b>bound</b> 2nd Ave		ound rko Rd			estbound barko Rd		Interval			strians swalk	
Time	T	R	Bikes	L	T	Bikes		Bike	s L	1	R	Bikes	Total	North	South	East	West
4:00 PM	25	0	0	11	35	0		0	1 1	1	6	0	78	1 1	- 0	3	0
4:05 PM	: 21	2	. 0	7	36	0		0	1		5	0	72	0	0	0	0
4:10 PM	19	2	0	В	36	0		0	1 1		6	0	72	0	0	0	0
4:15 PM	: 26	3	: 0	8	: 32	1 0		0	0		4	0	73	0	0	1	0
4:20 PM	22	1	: 0	14	45	1 0		0	3		4	0	89	0	0	0	0
4:25 PM	21	2	0	15	34	0		0	0		5	0	77	0	0	0	0
4:30 PM	: 19	2	: 0	18	30	. 0		0	1		8	0	78	0	0	2	0
4:35 PM	27	0	0	9	42	0		0	0		9	: 0	87	0	0	0	0
4:40 PM	17	3	0	12	33	. 0		0	2		9	. 0	76	0	0	0	0
4:45 PM	28	0	0	7	46	0		0	1	1	6	. 0	88	0	. 0	0	0
4:50 PM	28	2	0	14	33	; ; 0		0	3		7	0	87	0	0	0	0
4:55 PM	30	2	. 0	10	51	0		0	4	1	3	1 0	100	0	0	0	0
5:00 PM	30	1	; 0	15	42	0		0	3		1 11	: 0	102	0	0	0	0
5:05 PM	21	4	. 0	16	45			. 0	0		7	0	93	0	0	0	0
5:10 PM	21	1	0	20	49	. 0		0	2		1 6	1 0	99	0	0	0	0
5:15 PM	16	1	: 0	14	60	0		0	1		7	0	99	0	0	0	0
5:20 PM	17	1	0	19	42	. 0		0	2		12	0	93	0	1	0	0
5:25 PM	16	0	. 0	16	43	. 0		0	1 1	1	- 6	0	82	0	0	2	0
5:30 PM	19	0	: 0	16	24	0		0	2		4	0	65	0	0	0	0
5:35 PM	16	1	. 0	12	33	. 0		0	2		7	0	71	0	0	0	0
5:40 PM	26	0	0	9	39	0		0	1		6	. 0	81	0	0	0	0
5:45 PM	18	2	: 0	13	36	. 0		0	2	4	5	: 0	76	0	0	0	0
5:50 PM	19	2	: 0	17	43	. 0	VZ-VZ-(25116)	0	1.1.		1 7	0	89	0	0	0	0
5:55 PM	17	3	: 0	17	29	0		0	1		7	0	74	0	0	0	0
Total Survey	519	35	0	317	938	0		0	35		157	0	2,001	1	1	8	0

#### 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start		North SE 362	hound and Ave			Southb SE 362n			Eastbou Dubarko			<b>bound</b> rko Rd		interval			strians swalk	
Time		1	H	Bikes	L	T :	Bikes			Bikes	L	R	Bikes	Total	North	South	East	West
4:00 PM	emson!	65	4	0	26	107	. 0			0	3	 17	0	222	1	0	3	0
4:15 PM		69	6	: 0	37	111	0			0	3	13	0	239	0	0	1	0
4:30 PM		63	5	: 0	39	105	0			0	3	26	0	241	0	0	2	0
4:45 PM		86	4	. 0	31	130	0	623,000		0	8	16	0	275	0	0	0	0
5:00 PM		72	6	. 0	51	136	0			0	5	 24	0	294	0	0	0	0
5:15 PM		49	2	0	49	145	: 0			0	4	25	0	274	0	1.1	2	0
5:30 PM		61	1	0	37	96	. 0			0	5	17	0	217	0	0	0	0
5:45 PM		54	7	0	47	108	0			0	4	19	0	239	0	0	0	0
Total Survey		519	35	0	317	938	0			0	35	157	0	2,001	1	1	8	0

#### Peak Hour Summary 4:30 PM to 5:30 PM

Ву	Northbound SE 362nd Ave	Southbound SE 362nd Ave	Eastbound Dubarko Rd	Westbound Dubarko Rd	Total
Approach	In Out Total Bikes	In Out Total Bikes	In Out Total Bikes	In Out Total Bikes	
Volume	287 536 823 0	686 361 1,047 0	0 0 0 0	111 187 298 0	1,084
%HV	2.4%	0.9%	0.0%	1.8%	1.4%
PHF	0.77	0.84	0.00	0.90	0.92

	Total		Cross	swalk	
es		North	South	East	West
	1,084	0	1	4	0
	1.4%				
	0.92				

Pedestrians

By		North SE 362	bound nd Ave			A STATE OF THE STATE OF	bound 2nd Ave			- Park 100 000	oound rko Rd				bound rko Rd		Total
Movement		T	R	Total	L	Т		Total	1			Total	L		R	!Total	
Volume		270	17	287	170	516	illarını.	686				0	20		91	1111	1,084
%HV	NA	2.6%	0.0%	2.4%	1.2%	0.8%	. NA	0.9%	NA	NA	NA	0.0%	5.0%	NA	1.1%	1.8%	1.4%
PHF		0.77	0.61	0.77	0.80	0.84		0.84				0.00	0.50		0.88	0.90	0.92

#### Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start			nd Av				nbound 2nd Ave	Eastbound Dubarko Rd	Weslbound Dubarko Rd	Interval
Time	**********	T	R	Bikes	L	Т	; Bikes	Bikes	L R Bikes	Total
4:00 PM		283	19	: 0	133	453	0	0 1	17 72 0	977
4:15 PM		290	21	. 0	158	482	0	0	19 79 0	1.049
4:30 PM		270	17	. 0	170	516	0	0	20 91 0	1,084
4:45 PM		268	13	: 0	168	507	. 0	0	22 82 0	1,060
5:00 PM		236	16	0	184	485	. 0		18 1 85 1 0	1.024

	Pedes	trians swalk	50
North	South	East	West
1.	0	6	0
0	0	3	0
0		4	0
0	1111	2	0

0 0 3 0 EXHIBIT 1 0 1 2 0Z0004-20-CP

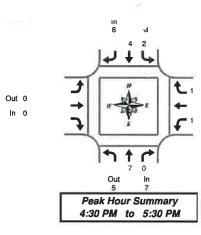


Clay Carney (503) 833-2740

## SE 362nd Ave & Dubarko Rd

Wednesday, May 22, 2019 4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM



Interval Start	Northi SE 362	bound and Ave	le contract	2004131525	SE 362		Eastbou Dubarko		W.	Interval		
Time	( T	R	Total	L	T	Total		Total	L	B	Total	Total
4:00 PM	. 2	0	2	0	1 1	1 1		0	0	0	0	3
4:05 PM	. 0	0	. 0	0	0	0		0	0	1	1	1
4:10 PM	2	0	2	0	1	11		0	0	[ 0	0	3
4:15 PM	1	0	: 1	0	1	1		0	0	0	0	2
4:20 PM	0	0	0	0	1 1	1		0	0	0	0	1
4:25 PM	0	0	: 0	0	0	0		0	0	0	0	0
4:30 PM	0	0	. 0	0	3	3		0	0	0	0	3
4:35 PM	1	0	1	0	0	0		0	0	1 0	0	1
4:40 PM	0	0	0	1	0	1		0	1	. 0	1	2
4:45 PM	: 0	0	0	0	0	0		0	0	: 0	0	0
4:50 PM	0	0	0	0	0	Ö		0	0	. 0	0	0
4:55 PM	0	0	0	0	1	1		0	0	0	0	1
5:00 PM	0	0	0	0	0	0		0	0	0	0	0
5:05 PM	2	0	2	0	0	0		0	0	0	0	2
5:10 PM	0	0	0	0	0	0		0	0	0	0	0
5:15 PM	1	0	1	0	0	0		0	0	0	0	1
5:20 PM	1	0		0	0	0 1		0	0 1	1	1	2
5:25 PM	. 2	0	2	1	0			0	0	0	0	3
5:30 PM	1 1	0	1 1	0	1	1		0	0 1	0	0	2
5:35 PM	. 0	0	0	0	0 :	0		0	0	0	0	0
5:40 PM	. 0	0	0	0	0	0		0	0	0	0	0
5:45 PM	0	0	. 0	0	0	0	300	0	0	0	0	0
5:50 PM	0	0	0	1	0	1		0	0	0	0	1
5:55 PM	1	0	1	0	1	1		0	0	0	0	2
Total Survey	14	0	14	3	10	13		0	1	2	3	30

#### Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start		North SE 362	bound Ind Ave				hbound 2nd Ave			ound ko Rd			Interval				
Time		! T	R	Total	L	T		Total				Total	L		R	Total	Total
4:00 PM		4	0	4	0	2		2		name.	restaures	0	0	enance.	. 1	1 1	7
4:15 PM		F.i.	0	1	0	2	1	2	}			0	0		0	0	3
4:30 PM		1	0	1	1	3		4			8	0	1		0	1 1	6
4:45 PM		0	0	0	0	1		1				0	0		0	0	1
5:00 PM		2	0	2	0	0		0				0	0		0	0	2
5:15 PM	T	4	0	4	1	0		. 1				0	0		1	1 1	6
5:30 PM		1 1	0	1	0	. 1	1	1				0	0		0	0	2
5:45 PM	-	1	0	1	1	1		2		0.000	2001(00)	0	0		0	0	3
Total Survey		14	0	14	3	10		13				0	1		2	3	30

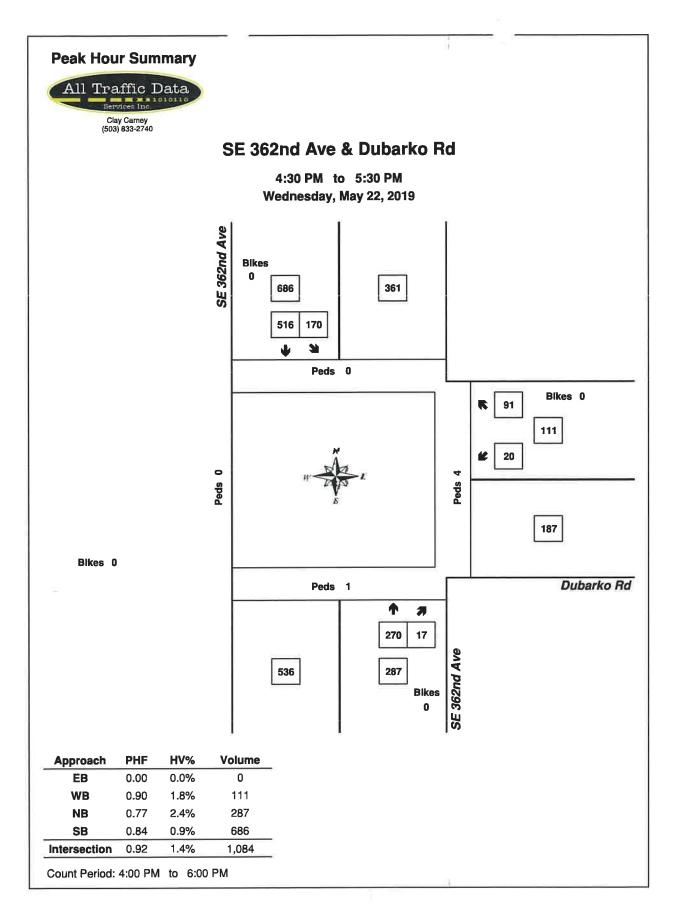
## Heavy Vehicle Peak Hour Summary 4:30 PM to 5:30 PM

Ву	Northbound SE 362nd Ave	Southbound SE 362nd Ave	Eastbound Dubarko Rd	Westbound Dubarko Rd	Total
Approach	In Out Total	In Out Total	In Out Total	In Out Total	
Volume	7 5 12	6 8 14	0 0 0	2 2 4	15
PHF	0.44	0.38	0.00	0.50	0.63

By Movement		ibound 2nd Ave				nbound 2nd Ave		2577.72	bound arko Rd		Westbound Dubarko Rd				
	! T	R	Total	L	Ť	Tot	al		Total	L	R	Total			
Volume	1 7	. 0	1 7	2	4	6			0	11	- 1	2	15		
PHF	: 0.44	: 0.00	: 0.44	0.50	0.33	0.3	8	1	0.00	0.25	0.25	0.50	0.63		

#### Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start	North SE 362	bound 2nd Ave				hbound 2nd Ave	Eastbour Dubarko F		V	Interval		
Time	Ť	Ř	: Total	L	Ť	Total		Tolai	L	Ř	Total	Total
4:00 PM	6	0	6	1	8	9	4 1	0	1	1 1	2	17
4:15 PM	4	0	4	1	6	7		0	1	0	1 1	12
4:30 PM	7	0	7	2	4	6		0	1	1 1	2	15
4:45 PM	7	. 0	7	-1	2	3		0	0	: 1	1	11
5:00 PM	. я	0	8	2	: 2	4		0	0		1	13



## OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

CHITTE

CITY OF SANDY, CLACKAMAS COUNTY

362ND DR at DUBARKO RD, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016 of 1 Crash records shown.

S	D M																			
SER# P	RJS	W DATE	CLASS	CITY STREET		INT-TYPE					SPCL USE									
INVEST E A	AUIC	YAC C	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH	TRLR QTY	MOVE			A	S				
RD DPT E L	LGNH	R TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL	OWNER	FROM	PRTC	INJ	G	E LICN	S PED			
UNLOC? D C	CSVL	K LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V# TYPE	TO	P# TYPE	SVRTY	E	X RES	LOC	ERROR	ACT EVENT	CAUSE
00737 N N	N N	02/27/2015	17	DUBARKO RD	INTER	3-LEG	N	N	UNK	S-1STOP	01 NONE 0	STRGHT								29
NONE		FR	0	362ND DR	E		STOP SIGN	N	WET	SS-0	PRVTE	E -W							000	00
N N		12P 45 23 57.42	-122 17		06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	M UNK OR<2	5	026	000	29
			27.9								02 NONE 0 PRVTE	STOP E -W							011	00
											PSNGR CAR	- <b>··</b>	01 DRVR	NONE	22 1	M OR-Y		000	000	00

**EXHIBIT 1** 

Page: 1

CITY OF SANDY, CLACKAMAS COUNTY

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION - ARTMF
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

362ND DR at DUBARKO RD, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

PERMI

Page: 2

EXHIBIT 1

Z0004-20-CP

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

DUBARKO RD at BLUFF RD, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

TRANS

\* CPASE \*

S D M

CITY OF SANDY, CLACKAMAS COUNTY

SER# P R J S W DATE CLASS CITY STREET INT-TYPE SPCL USE

INVEST E A U I C O DAY DIST FIRST STREET RD CHAR (MEDIAN) INT-REL OFFRD WTHR CRASH TRLR QTY

INVEST E A U I C O DAY DIST FIRST STREET RD CHAR (MEDIAN) INT-REL OFFRD WTHR CRASH TRLR QTY MOVE A S

RD DPT E L G N H R TIME FROM SECOND STREET DIRECT LEGS TRAF- RNDBT SURF COLL OWNER FROM PRTC INJ G E LICNS PED

UNLOC? D C S V L K LAT LONG LRS LOCTN (#LANES) CONTL DRVWY LIGHT SVRTY V# TYPE TO P# TYPE SVRTY E X RES LOC ERROR ACT EVENT CAUSE

EXHIBIT 1 Z0004-20-CP

Page: 1

CITY OF SANDY, CLACKAMAS COUNTY

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIXISION

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

DUBARKO RD at BLUFF RD, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

DINIST

Page: 2

EXHIBIT 1

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

""ON-SY" "

RTATIC

CITY OF SANDY, CLACKAMAS COUNTY

DUBARKO RD at MELISSA AVE, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

1 - 2 of 2 Crash records shown.

S	D M																			
SER# P	R J S W	DATE	CLASS	CITY STREET		INT-TYPE					SPCL USE									
INVEST E	AUICO	DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH	TRLR QTY	MOVE			A	S				
RD DPT E	LGNHR	TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL	OWNER	FROM	PRTC	INJ	G	E LICNS	PED			
UNLOC? D	CSVLK	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V# TYPE	TO	P# TYPE	SVRTY	E	X RES	LOC	ERROR	ACT EVENT	CAUSE
00557 N	N N	02/07/2014	16	DUBARKO RD	INTER	3-LEG	N	N	SNOW	ANGL-STP	01 NONE 0	TURN-L							124	08
NONE		FR	0	MELISSA AVE	S		STOP SIGN	N	ICE	TURN	PRVTE	SE-S							000 124	00
N N		3P 45 23	-122 16		06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	59 M	OR-Y OR<25		002	017	08
		30.2562959	36.081048								02 NONE 0 PRVTE	STOP S -N							011	00
											PSNGR CAR		01 DRVR	NONE	57 F	OR-Y OR<25		000	000	00
01045 N	N N	03/26/2015	16	DUBARKO RD	INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT								02
NONE		TH	0	MELISSA AVE	CN		STOP SIGN	N	DRY	TURN	PRVTE	NW-SE							000	00
N N		8A 45 23 30.26			04	0		N	DAWN	PDO	PSNGR CAR		01 DRVR	NONE	23 F	OR-Y OR<25		000	000	00
			36.08								02 NONE 0	TURN-L								
											PRVTE	s -NW							015	00
											PSNGR CAR		01 DRVR	NONE	00 F	UNK		028	000	02

CITY OF SANDY, CLACKAMAS COUNTY

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

DURARKO RD at MELISSA AVE, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

ELOPH

Page: 2

EXHIBIT 1

CDS380 05/12/2019 OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

DUBARKO RD at RUBEN LN, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

URP\*

CITY OF SANDY, CLACKAMAS COUNTY

	S	D M																		
SER#	P	R J S W DATE	CLASS	CITY STREET		INT-TYPE					SPCL USE									
INVEST	E A	U I C O DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH	TRLR QTY	MOVE			A	S				
RD DPT	ΕI	G N H R TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL	OWNER	FROM	PRTC	INJ	G	E LICNS	PED			
IINI OC2	D (	S W T W TAT	LONG	T.P.C	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V# TYPE	TO	P# TYPE	SVRTY	E	X RES	LOC	ERROR	ACT EVENT	CAUSE

**EXHIBIT 1** 

CDS380= 05/12/2019 380

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

NOTTAT

-amING

CITY OF SANDY, CLACKAMAS COUNTY

URBAN NON-SYSTEM CRASH LISTING DUBARKO RD at RUBEN LN, City of Sandy, Clackamas County, 01/01/2012 to 12/31/2016

**EXHIBIT 1** 

Page: 2

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Morning Peak Hour

Major Street:

SE 362nd Drive

Minor Street:

Dubarko Road

Number of Lanes:

1

Number of Lanes:

1

PM Peak

Hour Volumes:

538

PM Peak

Hour Volumes:

103

### Warrant Used:

\_\_\_\_X\_\_\_10

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:			n Major St. h approaches)	ADT on Minor St. (higher-volume approach)		
WARRANT 1, CONDITION A		100%	70%	100%	70%	
Major St.	Minor St.	<u>Warrants</u>	<u>Warrants</u>	<b>Warrants</b>	<u>Warrants</u>	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CC	NDITION B					
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume	9		
Major Street	5,380	8,850	
Minor Street*	1,030	2,650	No
Condition B: Interruption of Continuous	Traffic		
Major Street	5,380	13,300	
Minor Street*	1,030	1,350	No
Combination Warrant			
Major Street	5,380	10,640	
Minor Street*	1,030	2,120	No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 135 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Morning Peak Hour

Ruben Lane

Number of Lanes:

**Dubarko Road** 

Number of Lanes:

1

PM Peak

Major Street:

PM Peak

Minor Street:

Hour Volumes:

248

Hour Volumes:

19

### Warrant Used:

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:			Major St. n approaches)	ADT on Minor St. (higher-volume approach)		
WARRANT 1, CONDITION A		100%	70%	100%	70%	
Major St.	Minor St.	<u>Warrants</u>	<b>Warrants</b>	<b>Warrants</b>	<u>Warrants</u>	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CO	ONDITION B					
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume	•		
Major Street	2,480	8,850	
Minor Street*	190	2,650	No
Condition B: Interruption of Continuous	Traffic		
Major Street	2,480	13,300	
Minor Street*	190	1,350	No
Combination Warrant			
Major Street	2,480	10,640	
Minor Street*	190	2,120	No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

**EXHIBIT 1** 

Z0004-20-CP (Allied Homes & Development)

Page 136 of 174

9 480

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Morning Peak Hour

Major Street:

**Dubarko Road** 

Minor Street:

Melissa Avenue

Number of Lanes:

1

Number of Lanes:

Hour Volumes:

PM Peak

Hour Volumes:

84

PM Peak

113

Warrant Used:

\_\_\_\_\_1

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on	Major St.	ADT on Minor St. (higher-volume approach)		
		(total of both	approaches)			
WARRANT 1, CONDITION A		100%	70%	100%	70%	
<u>Major St.</u>	Minor St.	<b>Warrants</b>	<b>Warrants</b>	<u>Warrants</u>	Warrants	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CO	ONDITION B					
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume	9		
Major Street	840	8,850	
Minor Street*	1,130	2,650	No
Condition B: Interruption of Continuous	Traffic		
Major Street	840	13,300	
Minor Street*	1,130	1,350	No
Combination Warrant			
Major Street	840	10,640	
Minor Street*	1,130	2,120	No

\* Minor street right-turning traffic volumes reduced by 25%.

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 137 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Morning Peak Hour

Major Street:

**Dubarko Road** 

Minor Street:

Bluff Road

Number of Lanes:

1

Number of Lanes:

....

PM Peak

Hour Volumes:

164

PM Peak

Hour Volumes:

36

Warrant Used:

X 100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving		ADT on	Major St.	ADT on Minor St.		
Traffic on Each Approach:		(total of both	n approaches)	(higher-volume approach)		
WARRANT 1, CO	ONDITION A	100%	70%	100%	70%	
Major St.	Minor St.	<u>Warrants</u>	Warrants	<u>Warrants</u>	<u>Warrants</u>	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CO	ONDITION B					
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	ls Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	1,640	8,850	
Minor Street*	360	2,650	No
Condition B: Interruption of Continuous T	raffic		
Major Street	1,640	13,300	
Minor Street*	360	1,350	No
Combination Warrant			
Major Street	1,640	10,640	
Minor Street*	360	2,120	No

40

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 138 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Evening Peak Hour

Major Street:

SE 362nd Drive

Minor Street:

Dubarko Road

Number of Lanes:

1

Number of Lanes:

Hour Volumes:

1

PM Peak

Hour Volumes:

1073

PM Peak

114

Warrant Used:

\_\_\_\_X

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving  Traffic on Each Approach:			n Major St. h approaches)	ADT on Minor St. (higher-volume approach)		
Tame on Each Approach		(1010) 01 001	дрргодолос)	(g		
WARRANT 1, CONDITION A		100%	70%	100%	70%	
Major St.	Minor St.	<u>Warrants</u>	<u>Warrants</u>	Warrants	Warrants	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CO	ONDITION B					
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume	•		
Major Street	10,730	8,850	
Minor Street*	1,140	2,650	No
Condition B: Interruption of Continuous	Traffic		
Major Street	10,730	13,300	
Minor Street*	1,140	1,350	No
Combination Warrant			
□ Major Street	10,730	10,640	Ş
Minor Street*	1,140	2,120	<sup>™</sup> No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 139 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Evening Peak Hour

Major Street:

**Dubarko Road** 

Minor Street:

Ruben Lane

Number of Lanes:

1

Number of Lanes:

Hour Volumes:

PM Peak

374 Hour Volumes:

PM Peak

116

Warrant Used:

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:			Major St. approaches)	ADT on Minor St. (higher-volume approach)		
WARRANT 1, CONDITION A		100%	70%	100%	70%	
Major St.	Minor St.	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	
1	1	8,850	6,200	2,650	1,850	
2 or more	1	10,600	7,400	2,650	1,850	
2 or more	2 or more	10,600	7,400	3,550	2,500	
1	2 or more	8,850	6,200	3,550	2,500	
WARRANT 1, CC	NDITION B	2				
1	1	13,300	9,300	1,350	950	
2 or more	1	15,900	11,100	1,350	950	
2 or more	2 or more	15,900	11,100	1,750	1,250	
1	2 or more	13,300	9,300	1,750	1,250	

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	3,740	8,850	
Minor Street*	1,160	2,650	No
Condition B: Interruption of Continuous 1	raffic		
Major Street	3,740	13,300	
Minor Street*	1,160	1,350	No."
Combination Warrant			
Major-Street	3,740	10,640	or 'irnat
Minor Street*	1,160	2,120	No≅

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

**EXHIBIT 1** Z0004-20-CP (Allied Homes & Development) Page 140 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Evening Peak Hour

Major Street:

**Dubarko Road** 

Minor Street:

Melissa Avenue

Number of Lanes:

Hour Volumes:

1

287

Number of Lanes:

1

PM Peak

PM Peak

Hour Volumes:

68

Warrant Used:

\_\_\_\_\_1

100 percent of standard warrants used

\_\_70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

	f Lanes for Moving Each Approach:		n Major St. h approaches)		Minor St. ne approach)
WARRANT 1, CC	NDITION A	100%	70%	100%	70%
Major St.	Minor St.	Warrants	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CC	NDITION B				
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular	Volume		
Major Street	2,870	8,850	
Minor Street*	680	2,650	No
Condition B: Interruption of Conti	inuous Traffic		
Major Street	2,870	13,300	
Minor Street*	680	1,350	No
Combination Warrant			
Major Street	2,870	10,640	
Minor Street*	680	2,120	No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 141 of 174

Project:

18197 - Ponder Subdivision

Date:

6/20/2019

Scenario:

Year 2021 Buildout Conditions - Evening Peak Hour

Major Street:

**Dubarko Road** 

Minor Street:

**Bluff Road** 

Number of Lanes:

Hour Volumes:

Number of Lanes:

Hour Volumes:

PM Peak

220

PM Peak

61

1

Warrant Used:

100 percent of standard warrants used

70 percent of standard warrants used due to 85th percentile speed in excess

of 40 mph or isolated community with population less than 10,000.

	f Lanes for Moving n Each Approach:		Major St. h approaches)		Minor St. ne approach)
WARRANT 1, CC	NDITION A	100%	70%	100%	70%
Major St.	Minor St.	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CC	NDITION B				
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volu	ıme		
Major Street	2,200	8,850	
Minor Street*	610	2,650	No
Condition B: Interruption of Continuo	us Traffic		
Major Street	2,200	13,300	
Minor Street*	610	1,350	No
Combination Warrant			
Major Street	2,200	10,640	
Minor Street*	610	2,120	No

<sup>\*</sup> Minor street right-turning traffic volumes reduced by 25%.

**EXHIBIT 1** Z0004-20-CP

(Allied Homes & Development)

Page 142 of 174

### **Left-Turn Lane Warrant Analysis**



18197 - Ponder Subdivision

Intersection:

Melissa Avenue at Dubarko Road

Date:

6/20/2019

Scenario:

2021 Buildout AM

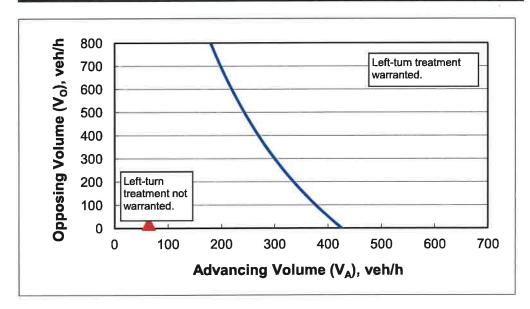
### 2-lane roadway (English)

### INPUT

Variable	Value
85 <sup>th</sup> percentile speed, mph:	25
Left-turns in advancing volume (V <sub>A</sub> ), veh/hr:	23
Advancing volume (V <sub>A</sub> ), veh/h:	64
Opposing volume (V <sub>O</sub> ), veh/h:	20

### **OUTPUT**

Variable	Value
Limiting advancing volume (V <sub>A</sub> ), veh/h:	415
Guidance for determining the need for a major-road left-turn bay	<b>/</b> :
Left-turn treatment NOT warranted.	



#### CALIBRATION CONSTANTS (2-Lane Roadway)

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

### **Left-Turn Lane Warrant Analysis**



18197 - Ponder Subdivision

Intersection:

Melissa Avenue at Dubarko Road

Date:

6/20/2019

Scenario:

2021 Buildout PM

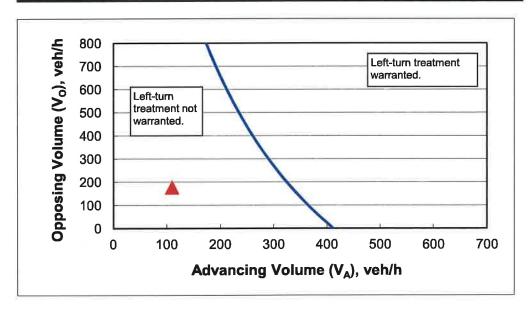
### 2-lane roadway (English)

### **INPUT**

Variable	Value
85 <sup>th</sup> percentile speed, mph:	25
Left-turns in advancing volume (V <sub>A</sub> ), veh/hr:	48
Advancing volume (V <sub>A</sub> ), veh/h:	110
Opposing volume (V <sub>O</sub> ), veh/h:	177

### **OUTPUT**

Variable	Value
Limiting advancing volume (V <sub>A</sub> ), veh/h:	333
Guidance for determining the need for a major-road left-turn bay	<b>/</b> :
Left-turn treatment NOT warranted.	



#### CALIBRATION CONSTANTS (2-Lane Roadway)

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	١ 5.0
Average time for left-turn vehicle to clear the advancing lane, s:	٠ 1.9

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 144 of 174

Intersection	3, 7					
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	N/F		1>		*	<b></b>
Traffic Vol, veh/h	5	85	346	8	22	120
Future Vol, veh/h	5	85	346	8	22	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	115	-
Veh in Median Storage			0	1-1	H.	0
Grade, %	0		0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	2	2	6	6
Mymt Flow	6	100	407	9	26	141
Mataghttage	Whomas		Maland		Maine	= , =
	Minor1		Major1		Major2	0
Conflicting Flow All	605	412	0	0	416	0
Stage 1	412	-	-		*	*
Stage 2	193	- 0.04	-		4.40	(#)
Critical Hdwy	6.41	6.21	-	-	4.16	-
Critical Hdwy Stg 1	5.41			•	-	
Critical Hdwy Stg 2	5.41	2 200	-		0.054	•
Follow-up Hdwy	3.509		-		2.254	
Pot Cap-1 Maneuver	462	642	-		1122	
Stage 1	671	-	_			
Stage 2	842		-		(*)	
Platoon blocked, %	454	0.40			4400	
Mov Cap-1 Maneuver	451	642	•	-	1122	-
Mov Cap-2 Maneuver	451		•		•	
Stage 1	671		1.00		1.7	
Stage 2	822	_	), <b>=</b> )		•	
Approach	WB		NB		SB	
HCM Control Delay, s	11.9		0		1.3	
HCM LOS	В					
Minor Lane/Major Myn	nt	NBT	NRRI	NBLn1	SBL	SBT
Capacity (veh/h)		-	TADIN	627	1122	ODI
HCM Lane V/C Ratio		(%	- 2	0.169		
HCM Control Delay (s	1			11.9	8.3	-
HCM Lane LOS	)		-	В	6.5 A	
HCM 95th %tile Q(veh	d	-		0.6	0.1	
		-		U.U	0.1	
700	-					

Intersection				16	(diji	
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1	ALL DE	W	2.162
Traffic Vol, veh/h	19	14	48	89	10	6
Future Vol, veh/h	19	14	48	89	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-			None
Storage Length		-		740110	0	-
Veh in Median Storage		0	0	1 12	0	-
Grade, %	, 17 -	0	0	1/2	0	
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	6	2	2	13	13
Mvmt Flow	21	16	54	100	11	7
MALE LIOM	21	10	04	100	- 11	
Major/Minor N	Major1	1	Vlajor2	1 2 3	Winor2	LE A
Conflicting Flow All	154	0	¥	0	162	104
Stage 1					104	
Stage 2	-		-	-	58	
Critical Hdwy	4.16		-	1 70	6.53	6.33
Critical Hdwy Stg 1	-			-	5.53	-
Critical Hdwy Stg 2				-1-1-	5.53	
Follow-up Hdwy	2.254		<del>-</del>	-	3.617	
Pot Cap-1 Maneuver	1402	-	10 2		804	922
Stage 1	-	_	_	-	893	-
Stage 2				1 12	937	
Platoon blocked, %	_	2	-	-	501	
Mov Cap-1 Maneuver	1402				792	922
		-	-	-	792	-
Mov Cap-2 Maneuver					893	1.5
Stage 1	•					
Stage 2		*		•	923	N <del>a</del> i
Approach	EB		WB		SB	
HCM Control Delay, s	4.4		0	- 5	9.4	
HCM LOS					Α	
Minor Lane/Major Mvm	ıt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1402	A DESCRIPTION OF THE PERSON OF	-	-	836
HCM Lane V/C Ratio		0.015	-		-	0.022
HCM Control Delay (s)		7.6	0	-		9.4
HCM Lane LOS		A	A	-		A
HCM 95th %tile Q(veh)		0	1		1.	0.1
TOW JOHN JULIE OR VEIL		U				V. 1

Intersection	11 5				The s	
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1}			4	¥	
Traffic Vol, veh/h	8	1	14	39	40	27
Future Vol, veh/h	8	1	14	39	40	27
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None			200	
Storage Length		-		-	0	-
Veh in Median Storage,	# 0	15		0	0	11
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	22	22	2	2	2	2
Mymt Flow	10	1	18	49	51	34
WITHER ION	10		10	10		
	ajor1		Vajor2	_	Minor1	
Conflicting Flow All	0	0	11	0	96	11
Stage 1					11	-
Stage 2	•	-		-	85	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	#	=	250	-	5.42	-
Critical Hdwy Stg 2			(#	-	5.42	
Follow-up Hdwy	*	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	2	1608		903	1070
Stage 1	2	#	-	_	1012	-
Stage 2	¥	5			938	
Platoon blocked, %	¥	-		-		
Mov Cap-1 Maneuver	-	-	1608		892	1070
Mov Cap-2 Maneuver	-	7.	-	-	892	-
Stage 1	-	+	1		1012	-
Stage 2		*		-	927	-
0.030 1						
No.	per sec		\$1818PP		Aim	
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.9		9.1	
HCM LOS					Α	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		956	-	IIII Y	1608	
HCM Lane V/C Ratio		0.089			0.011	-
HCM Control Delay (s)		9.1			7.3	0
HCM Lane LOS		A			Α	A
HCM 95th %tile Q(veh)		0.3			0	
HOIVI JOHN JOHNE CHACH)		0.0			J	

Intersection           Intersection LOS         7.6           Intersection LOS         A           Movement         EBT         EBR         WBL         WBT         NBL         NBR           Lane Configurations         1         ✓         ✓         Traffic Vol, veh/h         25         9         12         11         40         55           Future Vol, veh/h         25         9         12         11         40         55           Peak Hour Factor         0.70         0.70         0.70         0.70         0.70         0.70
Movement         EBT         EBR         WBL         WBT         NBL         NBR           Lane Configurations         1-         -
Movement         EBT         EBR         WBL         WBT         NBL         NBR           Lane Configurations         ♣         ♠         ♣
Lane Configurations       Image: Configuration of the
Lane Configurations       1       4       7         Traffic Vol, veh/h       25       9       12       11       40       55         Future Vol, veh/h       25       9       12       11       40       55
Traffic Vol, veh/h         25         9         12         11         40         55           Future Vol, veh/h         25         9         12         11         40         55
Traffic Vol, veh/h         25         9         12         11         40         55           Future Vol, veh/h         25         9         12         11         40         55
Future Vol, veh/h 25 9 12 11 40 55
I Carrigui I doloi 0.70 0.70 0.70 0.70 0.70
Heavy Vehicles, % 12 12 9 9 4 4
Mvmt Flow 36 13 17 16 57 79
Number of Lanes 1 0 0 1 1 0
Approach EB WB NB
Opposing Approach WB EB
Opposing Lanes 1 1 0
Conflicting Approach Left NB EB
Conflicting Lanes Left 0 1 1
Conflicting Approach Right NB WB
Conflicting Lanes Right 1 0 1
HCM Control Delay 7.5 7.7 7.6
HCM LOS A A A
TIOM 200
UDI -d FDI -d WDI -d
Lane NBLn1 EBLn1 WBLn1
Vol Left, % 42% 0% 52%
Vol Thru, % 0% 74% 48%
Vol Right, % 58% 26% 0%
Sign Control Stop Stop Stop
Traffic Vol by Lane 95 34 23
LT Vol 40 0 12
Through Vol 0 25 11
RT Vol 55 9 0
Lane Flow Rate 136 49 33
Geometry Grp 1 1 1
Degree of Util (X) 0.145 0.057 0.04
Degree of Util (X) 0.145 0.057 0.04 Departure Headway (Hd) 3.844 4.21 4.435
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes         Cap       927       844       801
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes         Cap       927       844       801         Service Time       1.892       2.267       2.495
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes         Cap       927       844       801         Service Time       1.892       2.267       2.495         HCM Lane V/C Ratio       0.147       0.058       0.041
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes         Cap       927       844       801         Service Time       1.892       2.267       2.495         HCM Lane V/C Ratio       0.147       0.058       0.041         HCM Control Delay       7.6       7.5       7.7
Degree of Util (X)       0.145       0.057       0.04         Departure Headway (Hd)       3.844       4.21       4.435         Convergence, Y/N       Yes       Yes       Yes         Cap       927       844       801         Service Time       1.892       2.267       2.495         HCM Lane V/C Ratio       0.147       0.058       0.041

Intersection			7			
Int Delay, s/veh	2.9					
		1AIP PS	K ( pro me	Of the same	mm!	OFT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	A		₽		7	<b>↑</b>
Traffic Vol, veh/h	20	91	270	17	170	516
Future Vol, veh/h	20	91	270	17	170	516
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None		None
Storage Length	0	-	-	-	115	-
Veh in Median Storage	e,# 0		0	•		0
Grade, %	0	-	0	-		0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	22	99	293	18	185	561
Major/Mines	Minord	N 20 1	Anined		Majora	
TOTAL PROPERTY OF THE PARTY OF	Minor1		Major1		Major2	
Conflicting Flow All	1233	303	0	0	312	0
Stage 1	303	-	-	-	-	•
Stage 2	930	-	•		-	•
Critical Hdwy	6.42	6.22			4.11	•
Critical Hdwy Stg 1	5.42	-			-	3.74
Critical Hdwy Stg 2	5.42		7.00		-	
Follow-up Hdwy	3.518				2.209	1.00
Pot Cap-1 Maneuver	195	737		(64)	1254	(*)
Stage 1	749	_	-	-	-	(=)
Stage 2	384	-		1		167
Platoon blocked, %			-	•		-
Mov Cap-1 Maneuver	166	737			1254	*
Mov Cap-2 Maneuver	166	-	(#)			.=:
Stage 1	749	-	100			5 <b>8</b> 45
Stage 2	327	-	( <b>)</b>			
Acceptable	WD		ND		CD	
Approach	WB	_	NB		SB	
HCM Control Delay, s			0		2.1	
HCM LOS	С					
Minor Lane/Major Mvr	nt	NBT	NBRI	NBLn1	SBL	SBT
Capacity (veh/h)	HAN-LI	-		455	1254	
HCM Lane V/C Ratio		-		0.265		
HCM Control Delay (s	)			15.7	8.4	
HCM Lane LOS	7			C	A	
HCM 95th %tile Q(veh	2)			1.1	0.5	11 848
LICINI SOUL WILLE (CIVEL	')		-	1.1	0.0	

Intersection	die	19,			Sec.	1,
Int Delay, s/veh	3.1					
		Som but non .	11000	LAUDED	001	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		र्ब	1>		A	
Traffic Vol, veh/h	16	147	68	50	67	33
Future Vol, veh/h	16	147	68	50	67	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	. 10	None	-	None		None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	,# -	0	0	100	0	-
Grade, %		0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	1	0	0	1	1
Mymt Flow	18	165	76	56	75	37
	Major1		Vlajor2		Minor2	
Conflicting Flow All	133	0	9=	0	305	104
Stage 1	- 4			140	104	
Stage 2	-		<b>(£</b>		201	-
Critical Hdwy	4.11	- 19			6.41	6.21
Critical Hdwy Stg 1				:::::::::::::::::::::::::::::::::::::::	5.41	-
Critical Hdwy Stg 2		-	(#1		5.41	
Follow-up Hdwy	2.209	-	:(⊛)	:: <del>*</del> :	3.509	3.309
Pot Cap-1 Maneuver	1458	1.	(4)	7.	689	953
Stage 1	-		700	923	923	_
Stage 2			, Và	16	835	
Platoon blocked, %			ě.	ı.		
Mov Cap-1 Maneuver	1458				679	953
Mov Cap-2 Maneuver	1700		172	1371	679	-
Stage 1				1180	923	
		•	•		823	
Stage 2	-			((€)	023	
Approach	EB		WB		SB	فيواز
HCM Control Delay, s	0.7		0		10.6	
HCM LOS					В	
	6	-	194192102	14157	(AID D	001
Minor Lane/Major Mvm	II.	EBL	EBT	WBT	WBK	SBLn1
Capacity (veh/h)		1458		1.00	•	750
HCM Lane V/C Ratio		0.012	-	S#	-	0.15
HCM Control Delay (s)		7.5	0	( <b>•</b> )	-	10.6
HCM Lane LOS		Α	Α	714	15	В
HCM 95th %tile Q(veh	)	0	7	72		0.5
•						

Intersection	Pt. 18		100			
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
		LDK	VVDL	_	NO.	NON
Lane Configurations	f∌ oc	47	00	4		16
Traffic Vol, veh/h	85	47	22	58	21	
Future Vol, veh/h	85	47	22	58	21	16
Conflicting Peds, #/hr	_ 0	_ 0	_ 0	_ 0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	1-	None	-	None
Storage Length	-	-	-	-	0	12
Veh in Median Storage	,# 0		1	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	0	0	0	0
Mymt Flow	100	55	26	68	25	19
WWW. LOW	100	00		00		
Major/Minor N	/lajor1	1	Major2		Minor1	
Conflicting Flow All	0	0	155	0	248	128
Stage 1		12	2	74	128	
Stage 2	8	¥	<u> </u>		120	-
Critical Hdwy	47 -	-	4.1		6.4	6.2
Critical Hdwy Stg 1	-	_	-	-	5.4	-
Critical Hdwy Stg 2	44-				5.4	-
			2.2		3.5	3.3
Follow-up Hdwy					745	927
Pot Cap-1 Maneuver		*	1438	-		
Stage 1	-	2	-		903	-
Stage 2	Ė	8	- 1	19	910	
Platoon blocked, %	÷	*		•		
Mov Cap-1 Maneuver		- 19	1438		731	927
Mov Cap-2 Maneuver	-	7	-	-	731	-
Stage 1		-	-		903	-
Stage 2		#	*		893	-
					أألي	
Approach	EB	15	WB		NB	-
	0		2.1		9.7	H-2
HCM Control Delay, s	U		2.1			
HCM LOS					Α	
Minor Lane/Major Mvm	t I	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	100	805			1438	
HCM Lane V/C Ratio		0.054			0.018	-
HCM Control Delay (s)		9.7			7.5	0
HCM Lane LOS		Α.		_	Α.5	A
HOW LANG LUS		A			A	М

0.2

0.1

HCM 95th %tile Q(veh)

Intersection						EU T	
Intersection Delay, s/veh	7.4						
Intersection LOS	Α						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>^}</b>			લી	NA.		
Traffic Vol, veh/h	19	89	23	16	56	24	
Future Vol, veh/h	19	89	23	16	56	24	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Heavy Vehicles, %	0	0	0	0	1	1	
Mvmt Flow	22	105	27	19	66	28	
Number of Lanes	1	0	0	1	1	0	
Approach	EB		WB		NB	4 12	
Opposing Approach	WB		EB				
Opposing Lanes	1		1		0		
Conflicting Approach Left			NB		EB		
Conflicting Lanes Left	0		1		1		
Conflicting Approach Right	NB				WB		
Conflicting Lanes Right	1		0		1		
HCM Control Delay	7.2		7.6		7.7		
HCM LOS	Α		Α		Α		
Lane	100	NBLn1	EBLn1	WBLn1			
Vol Left, %		70%	0%	59%			
Vol Thru, %		0%	18%	41%			
Vol Right, %		30%	82%	0%			
Sign Control		Stop	Stop	Stop			
Traffic Vol by Lane		80	108	39			
LT Vol		56	0	23			
Through Vol		0	19	16			
RT Vol		24	89	0			
Lane Flow Rate		94	127	46			
Geometry Grp		1	1	1			
Degree of Util (X)		0.109	0.127	0.055			
Departure Headway (Hd)		4.175	3.606	4.282			
Convergence, Y/N		Yes	Yes	Yes			
Cap		853	983	829			
Service Time		2.228	1.668	2.345			
HCM Lane V/C Ratio		0.11	0.129	0.055			
HCM Control Delay		7.7	7.2	7.6			
HCM Lane LOS		Α	Α	Α			
HCM 95th-tile Q		0.4	0.4	0.2			

Intersection			85.0	T I S		
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	14		1>		ሻ	1
Traffic Vol, veh/h	9	101	367	9	27	127
Future Vol, veh/h	9	101	367	9	27	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	His	None	-	None	-	None
Storage Length	0	-	-		115	-
Veh in Median Storage	,# 0	- 12	0	-		0
Grade, %	0	-	0		-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	2	2	6	6
Mvmt Flow	11	119	432	- 11	32	149
Major/Minor	Minor1		Vlajor1	-	Major2	
	650	437	0	0	442	0
Conflicting Flow All Stage 1	437	437	-	-	442	-
Stage 2	213	-		1001	121	÷
	6.41	6.21		/; <b>-</b> :	4.16	
Critical Hdwy	5.41	0.21			4.10	
Critical Hdwy Stg 1	5.41				2	•
Critical Hdwy Stg 2			•		2.254	
Follow-up Hdwy	3.509	3.309	-	-		-
Pot Cap-1 Maneuver	435	622	-		1097	•
Stage 1	653	-		(i)	()=:	:::::::::::::::::::::::::::::::::::::::
Stage 2	825	-	•	V#		
Platoon blocked, %	100	000	[ ***	-	4007	7*(
Mov Cap-1 Maneuver	422	622	14	112	1097	
Mov Cap-2 Maneuver	422	-	700	-	•	
Stage 1	653	-	1/5		(*)	
Stage 2	801	-			1.50 A	37.
Approach	WB		NB		SB	4,4
HCM Control Delay, s	12.7		0		1.5	
HCM LOS	В					
	# 1					
Miner Lane Brain Ch		NIDT	MDDI	AIDL - d	CDI	COT
Minor Lane/Major Mvm	11	NBT	NBRV	WBLn1	SBL	SBT
Capacity (veh/h)		+	-	599	1097	
HCM Lane V/C Ratio		-	-	0.216		•
HCM Control Delay (s)				12.7	8.4	
HCM Lane LOS		-	-	В	Α	2.5
HCM 95th %tile Q(veh	1			0.8	0.1	

Intersection	The same	1		5, 5	70	
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LDL			VVDI	W	ODIN
	20	4	<b>1</b> →	101	14	6
Traffic Vol, veh/h		20	66	101	14	6
Future Vol, veh/h	20	0	0	0	0	0
Conflicting Peds, #/hr						
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-		-	None	-	None
Storage Length	т -	-	-	_	0	7 (4)
Veh in Median Storage		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	6	2	2	13	13
Mvmt Flow	22	22	74	113	16	7
Major/Minor N	Major1	1	Major2		Minor2	
Conflicting Flow All	188	0	viajui z	0	198	131
					131	101
Stage 1		-	72		67	
Stage 2	4.40	-	1 6			
Critical Hdwy	4.16	-	1/2	•	6.53	6.33
Critical Hdwy Stg 1			2.50	0.0	5.53	-
Critical Hdwy Stg 2	-		199	:=:	5.53	
Follow-up Hdwy	2.254		100	(€		
Pot Cap-1 Maneuver	1362	-	*		766	890
Stage 1	-	2	-	/¥	869	-
Stage 2	-		- 6	N.	929	
Platoon blocked, %		-	E.	H		
Mov Cap-1 Maneuver	1362	7.	-		754	890
Mov Cap-2 Maneuver		-	-		754	-
Stage 1					869	
Stage 2		*			914	
45577555	per pa		No. com		100	
Approach	EB	ш,	WB		SB	
HCM Control Delay, s	3.8		0		9.7	
HCM LOS					Α	
Minor Lane/Major Mvm		EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1362	Transaction (1927)	- Control		790
HCM Lane V/C Ratio		0.016			-	0.028
HCM Control Delay (s)		7.7	0	-		9.7
HCM Lane LOS		Α.	A	-	-	9.1 A
HCM 95th %tile Q(veh)		0.1			-	0.1
HI BY MAIN WILL INVAN		11.1	-	-	-	U. I

Intersection				11	-	
Int Delay, s/veh	5.6					
		hinder has	MOL	VA/Phre	NE	MDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	Þ			4	¥	
Traffic Vol, veh/h	8	1	15	41	42	29
Future Vol, veh/h	8	1	15	41	42	29
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	1	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	<b>#</b> 0	17	760	0	0	
Grade, %	0	-		0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	22	22	2	2	2	2
Mvmt Flow	10	1	19	52	53	37
Material House	STATE OF		VI STORY		Mineral	
	ajor1	7.75.17	Major2		Minor1	
Conflicting Flow All	0	0	11	0	101	11
Stage 1		- 14	7.		11	
Stage 2	-		0,27	-	90	-
Critical Hdwy	¥ .		4.12	10	6.42	6.22
Critical Hdwy Stg 1		1.0	-	-	5.42	-
Critical Hdwy Stg 2		٠	-		5.42	
Follow-up Hdwy		( <del>*</del>	2.218	-	3.518	3.318
Pot Cap-1 Maneuver		) <del>+</del>	1608	-	898	1070
Stage 1	2	-		·	1012	-
Stage 2		16	-	1	934	
Platoon blocked, %		-		4		
Mov Cap-1 Maneuver		-	1608		887	1070
Mov Cap-2 Maneuver	T.		1000	-	887	-
			-	. i	1012	11.55
Stage 1					923	
Stage 2	*		:: <del> -</del> :		323	
Approach	EB		WB		NB	£5JL
HCM Control Delay, s	0	-	1.9		9.2	
HCM LOS					Α	
TIOM 200						
No. of the second secon		2000 III II	-	HILLEGER	2011/12/2017	1000000
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		954	1 10	-	1608	-
HCM Lane V/C Ratio		0.094	5₩	-	0.012	-
HCM Control Delay (s)		9.2			7.3	0
HCM Lane LOS		Α	-	L.	Α	Α
HCM 95th %tile Q(veh)		0.3	-	12	0	

Intersection			e e e e				Z 5360m
Intersection Delay, s/veh	7.6						
Intersection LOS	A						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	Þ			4	N.W.		
Traffic Vol, veh/h	27	10	19	12	42	60	
Future Vol, veh/h	27	10	19	12	42	60	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	
Heavy Vehicles, %	12	12	9	9	4	4	
Mvmt Flow	39	14	27	17	60	86	
Number of Lanes	1	0	0	1	1	0	
Approach	EB		WB	14,13	NB		
Opposing Approach	WB		EB				
Opposing Lanes	1		1		0		
Conflicting Approach Left			NB		EB		
Conflicting Lanes Left	0		1		1		
Conflicting Approach Right	NB				WB		
Conflicting Lanes Right	1		0		1		
HCM Control Delay	7.6		7.8		7.6		
HCM LOS	Α		Α		Α		
Lane		NBLn1	EBLn1	WBLn1			
Vol Left, %		41%	0%	61%			
Vol Thru, %		0%	73%	39%			
Vol Right, %		59%	27%	0%			
Sign Control		Stop	Stop	Stop			
Traffic Vol by Lane		102	37	31			
LT Vol		42	0	19			
Through Vol		0	27	12			
RT Vol		60	10	0			
Lane Flow Rate		146	53	44			
Geometry Grp		1	1	1			
Degree of Util (X)		0.156	0.062	0.055			
Departure Headway (Hd)		3.864	4.233	4.475			
Convergence, Y/N		Yes	Yes	Yes			
Сар		919	838	794			
Service Time		1.923	2.299	2.54			
HCM Lane V/C Ratio		0.159	0.063	0.055			
HCM Control Delay		7.6	7.6	7.8			
HCM Lane LOS		Α	Α	Α			
HCM 95th-tile Q		0.6	0.2	0.2			

Intersection					J. H	
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	7/	THE STATE OF THE S	7>	, tion	7	1
Traffic Vol, veh/h	23	105	287	22	191	548
Future Vol, veh/h	23	105	287	22	191	548
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Otop	None	-	None	-	
Storage Length	0	-	-	-	115	-
Veh in Median Storage		10	0		-	0
Grade, %	0		0	_	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	1	1
Mymt Flow	25	114	312	24	208	596
minute ion	20	, 17	012			300
	Minor1		Najor1		Major2	
Conflicting Flow All	1335	324	0	0	336	0
Stage 1	324	12	1=	1	(≥)	-
Stage 2	1011	-	121	-		-
Critical Hdwy	6.42	6.22	*		4.11	- 1-
Critical Hdwy Stg 1	5.42	-		٠		-
Critical Hdwy Stg 2	5.42			150		. 15
Follow-up Hdwy	3.518	3.318	95	-	2.209	-
Pot Cap-1 Maneuver	169	717		-	1229	1-1
Stage 1	733	-	794	0#	-	-
Stage 2	352	-		-	-	-
Platoon blocked, %			12	-		-
Mov Cap-1 Maneuver	140	717	18	**	1229	(-)
Mov Cap-2 Maneuver	140					9
Stage 1	733	1	-			
Stage 2	292			100		
23-						
4	1/2 400		1.00		-	
Approach	WB		NB		SB	
HCM Control Delay, s	18.1		0		2.2	4
HCM LOS	С					
Minor Lane/Major Mvn	nt.	NBT	NBRI	WBLn1	SBL	SBT
Capacity (veh/h)		- In Section	THE IN	412	1229	-
HCM Lane V/C Ratio		H	- 18	0.338		
HCM Control Delay (s)		_ =		18.1	8.5	
HCM Lane LOS		-	-	C	Α	
HCM 95th %tile Q(veh	\	17.0		1.5	0.6	

Intersection		- T		Hilly		
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	EDL	4	†	VVOIN	W	OUN
Traffic Vol, veh/h	17	H 171	82	57	78	35
Future Vol, veh/h	17	171	82	57	78	35
Conflicting Peds, #/hr	0	0	02	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	Stop -	None
Storage Length		NUILE		IAOHE	0	-
Veh in Median Storage	# -	0	0	-	0	
	, # -	0	0		0	-
Grade, %	89	89	89	89	89	89
Peak Hour Factor				09	1	1
Heavy Vehicles, %	1	1	0	_		39
Mvmt Flow	19	192	92	64	88	39
Major/Minor	Major1	1	Major2		Winor2	W.
Conflicting Flow All	156	0	7,01	0	354	124
Stage 1					124	
Stage 2		_	-	929	230	-
Critical Hdwy	4.11			12	6.41	6.21
Critical Hdwy Stg 1	-	_		-	5.41	-
Critical Hdwy Stg 2					5.41	- 2
Follow-up Hdwy	2.209	-	100		3.509	3.309
Pot Cap-1 Maneuver	1430				646	929
Stage 1	1400		7/24	70	904	-
Stage 2				100	811	
Platoon blocked, %				1/45	011	
Mov Cap-1 Maneuver	1430			72	636	929
Mov Cap-1 Maneuver		5			636	-
			). <del>5</del>	0.5	904	
Stage 1	-		(	•	799	-
Stage 2			, C. 195		199	
Approach	EB	2561	WB		SB	100
HCM Control Delay, s	0.7	-	0		11.2	
HCM LOS					В	
VIII 1 Wall 2 22	2	mm)	give give man	MOT	MOD	oni -4
Minor Lane/Major Myn	IL	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1430		12	-	705
HCM Lane V/C Ratio		0.013	-	-	-	0.18
HCM Control Delay (s)		7.6	0	1.		11.2
HCM Lane LOS		Α	Α	-	-	В
HCM 95th %tile Q(veh	)	0	-		-	0.7
HCM 95th %tile Q(veh	)	0	-	-	-	0.7

Intersection		.4.71		14 1	9.50			7-17-2		16 F.	,
Int Delay, s/veh	2.1										
Movement	EBT	EBR	WBL	WBT	NBL	NBR		70.			
Lane Configurations	1∌	LOIN	AADL	4	Ty/	MOIN					
Traffic Vol, veh/h	90	50	23	62	22	17					
Future Vol, veh/h	90	50	23	62	22	17					
Conflicting Peds, #/hr	0	0	0	02	0	0					
Sign Control	Free	Free	Free	Free	Stop	Stop					
RT Channelized	-		rice	None	Stop -						
Storage Length	-	HUIR	(a)	-	0	140116					
Veh in Median Storage,				0	0	ı i					
Grade, %	0		-	0	0	_					
Peak Hour Factor	85	85	85	85	85	85					
Heavy Vehicles, %	1	1	0	0	0	0					
Mymt Flow	106	59	27	73	26	20					
maint 10th	100	UU	L	10	20						
	lajor1		Major2		Winor1		111		A A Ball		N.
Conflicting Flow All	0	0	165	0	262	135					
Stage 1	₩.		=		135	-					
Stage 2	2	2	-	74	127	-					
Critical Hdwy		•	4.1	- 1/4	6.4	6.2					
Critical Hdwy Stg 1			•	16	5.4	9					
Critical Hdwy Stg 2				1.00	5.4	18					
Follow-up Hdwy	*	-	2.2	5€	3.5	3.3					
Pot Cap-1 Maneuver		-	1426		731	919					
Stage 1	-	¥	*	-	896	((*)					
Stage 2	-	-	-	590	904	-					
Platoon blocked, %	Ě	=	4.000	- 4	=10	0.10					
Mov Cap-1 Maneuver			1426	70	716	919				e e	
Mov Cap-2 Maneuver	-	7,			716	-					
Stage 1	-	#.			896						
Stage 2	-	77.	*	•	886	-					
Approach	EB		WB		NB				1 1		
HCM Control Delay, s	0	101	2		9.8						
HCM LOS					Α						
Minor Lane/Major Mymt		NBLn1	EBT	EBR	WBL	WBT	Sec. 1			021-01	
Capacity (veh/h)		792	-	-	1426	1,5					
HCM Lane V/C Ratio		0.058	# # # # # # # # # # # # # # # # # # #		0.019	-					
HCM Control Delay (s)		9.8		-	7.6	0					
HCM Lane LOS		9.0 A		-	Α.	A					
HCM 95th %tile Q(veh)		0.2			0.1	-					
TION SOUT YOUR CI(VEIT)		0.2			0.1						

Intersection							
Intersection Delay, s/veh	7.6						
Intersection LOS	Α.						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	-4
Lane Configurations	1>	LUIT	1100	र्स	*/*	11011	
Traffic Vol, veh/h	20	94	28	17	59	31	
Future Vol, veh/h	20	94	28	17	59	31	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Heavy Vehicles, %	0.00	0.00	0.00	0	1	1	
Mymt Flow	24	111	33	20	69	36	
Number of Lanes	1	0	0	1	1	0	
Approach	EB		WB		NB		
Opposing Approach	WB		EB				
Opposing Lanes	1		1		0		
Conflicting Approach Left			NB		EB		
Conflicting Lanes Left	0		1		1		
Conflicting Approach Right	NB		•		WB		
Conflicting Lanes Right	1		0		1		
HCM Control Delay	7.3		7.7		7.8		
HCM LOS	Α		Α		Α		
Lane		NBLn1	EBLn1	WBLn1			
Vol Left, %		66%	0%	62%			
Vol Thru, %		0%	18%	38%			
Vol Right, %		34%	82%				
Sign Control			02/0	0%			
Troffic Valley Lane		Stop	Stop	0% Stop			
Traffic Vol by Lane		Stop 90					
LT Vol			Stop	Stop 45 28			
		90 59 0	Stop 114 0 20	Stop 45			
LT Vol		90 59	Stop 114 0	Stop 45 28			
LT Vol Through Vol		90 59 0	Stop 114 0 20	Stop 45 28 17			
LT Vol Through Vol RT Vol		90 59 0 31	Stop 114 0 20 94 134	Stop 45 28 17			
LT Vol Through Vol RT Vol Lane Flow Rate		90 59 0 31 106	Stop 114 0 20 94 134	Stop 45 28 17 0 53			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		90 59 0 31 106	Stop 114 0 20 94 134	Stop 45 28 17 0 53			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		90 59 0 31 106 1 0.122 4.162 Yes	Stop 114 0 20 94 134 1 0.135 3.631 Yes	Stop 45 28 17 0 53 1 0.063 4.314 Yes			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		90 59 0 31 106 1 0.122 4.162 Yes 854	Stop 114 0 20 94 134 1 0.135 3.631 Yes 975	Stop 45 28 17 0 53 1 0.063 4.314 Yes 822			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		90 59 0 31 106 1 0.122 4.162 Yes 854 2.222	Stop 114 0 20 94 134 1 0.135 3.631 Yes 975 1.7	Stop 45 28 17 0 53 1 0.063 4.314 Yes 822 2.385			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		90 59 0 31 106 1 0.122 4.162 Yes 854 2.222 0.124	Stop 114 0 20 94 134 1 0.135 3.631 Yes 975 1.7 0.137	Stop 45 28 17 0 53 1 0.063 4.314 Yes 822 2.385 0.064			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		90 59 0 31 106 1 0.122 4.162 Yes 854 2.222 0.124 7.8	Stop 114 0 20 94 134 1 0.135 3.631 Yes 975 1.7 0.137 7.3	Stop 45 28 17 0 53 1 0.063 4.314 Yes 822 2.385 0.064 7.7			
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		90 59 0 31 106 1 0.122 4.162 Yes 854 2.222 0.124	Stop 114 0 20 94 134 1 0.135 3.631 Yes 975 1.7 0.137	Stop 45 28 17 0 53 1 0.063 4.314 Yes 822 2.385 0.064			

Intersection				å e	777	
Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	N/F		1>		ሻ	<b>^</b>
Traffic Vol, veh/h	15	117	367	11	33	127
Future Vol, veh/h	15	117	367	11	33	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None				None
Storage Length	0	-	-	-	115	-
Veh in Median Storage			0			0
Grade, %	0	-	0		_	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	2	2	6	6
Mymt Flow	18	138	432	13	39	149
	Minor1		vajor1		Major2	
Conflicting Flow All	665	438	0	0	445	0
Stage 1	438	-	_ •	-	-:*	•
Stage 2	227		-	-	- 44	:=:
Critical Hdwy	6.41	6.21	•	-	4.16	
Critical Hdwy Stg 1	5.41	-	-		•	-
Critical Hdwy Stg 2	5.41	•	•			
Follow-up Hdwy	3.509			-	2.254	(20)
Pot Cap-1 Maneuver	427	621		-	1094	
Stage 1	653	-	0.00	U <b>≒</b>	/\ <del>#</del>	**
Stage 2	813	-	-	₹#	0.00	
Platoon blocked, %				5(4)		**
Mov Cap-1 Maneuver	412	621		14	1094	
Mov Cap-2 Maneuver	412	-	ŀ.			•
Stage 1	653	-	15	0.0		
Stage 2	784	-			S#1	:•:
Approach	WB		NB		SB	7
HCM Control Delay, s	13.3		0		1.7	
HCM LOS	В		•		- "	
Minor Lane/Major Mvm	nf	NBT	NRRV	WBLn1	SBL	SBT
Capacity (veh/h)			TAI-JIM	587	1094	-
HCM Lane V/C Ratio		- 3		0.265		•
HCM Control Delay (s)				13.3	8.4	
HCM Lane LOS				13.3 B	Α	
HCM 95th %tile Q(veh	١	-		1.1	0.1	
HOW SOUL WILL CALABI	)	•	-	l. I	0.1	-

Intersection		Take;	) y			
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	Manda-A-A	4	1>		W	Section 1. Control
Traffic Vol, veh/h	20	28	88	112	14	6
Future Vol, veh/h	20	28	88	112	14	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	-	-	NONE	0	110110
Veh in Median Storage	# -	0	0		0	
Grade, %	,# -	0	0		0	-
	89	89	89	89	89	89
Peak Hour Factor						
Heavy Vehicles, %	6	6	2	2	13	13
Mvmt Flow	22	31	99	126	16	7
Major/Minor N	Najor1		/lajor2		Vinor2	
Conflicting Flow All	225	0	along beautions	0	238	162
Stage 1	-			Ĭ.	162	102
Stage 2				-	76	-
Critical Hdwy	4.16				6.53	6.33
Critical Hdwy Stg 1	4.10	1122			5.53	0.00
			70.0		5.53	
Critical Hdwy Stg 2	-	-	•	•		0.447
	2.254	-	•		3.617	
Pot Cap-1 Maneuver	1320	•		-	727	855
Stage 1	-	-	(6)	-	841	-
Stage 2	•				920	-
Platoon blocked, %		-	( <b>-</b>	300		
Mov Cap-1 Maneuver	1320	-		2#1	715	855
Mov Cap-2 Maneuver	-	-	-	-	715	-
Stage 1	7.00	13	T I (e)		841	
Stage 2		-			904	
Commence Co	-		10.00		- 05	
Approach	EB		WB		SB	
HCM Control Delay, s	3.2		0		9.9	
HCM LOS					Α	
Minor Lane/Major Mvm	t	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1320		-	-	752
HCM Lane V/C Ratio		0.017	-			0.03
HCM Control Delay (s)		7.8	0			9.9
HCM Lane LOS		Α.	A			3.5 A
HCM 95th %tile Q(veh)		0.1	Α.			0.1
HOW BOUT WITH CE (VEII)		U. I		•		U. I

Intersection						rie I
Int Delay, s/veh	6.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	f)	The state of the s	1100	4	W	
Traffic Vol, veh/h	8	12	23	41	75	51
Future Vol, veh/h	8	12	23	41	75	51
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	(*)	0	0	
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	22	22	2	2	2	2
Mymt Flow	10	15	29	52	95	65
17.1.00				-	Vilan and	
	ajor1		Major2		Winor1	- 10
Conflicting Flow All	0	0	25	0	128	18
Stage 1				-	18	•
Stage 2	¥.	-	(/8)	-	110	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	÷	-		-	5.42	-
Critical Hdwy Stg 2			1 7	-	5.42	- 1
Follow-up Hdwy	7.	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver			1589	-	866	1061
Stage 1	•	.(#)	\\ <b>=</b>	-	1005	7-
Stage 2	*	(#)	:•:		915	-
Platoon blocked, %	2			: <u>₩</u>		
Mov Cap-1 Maneuver	2	7.0	1589	76	850	1061
Mov Cap-2 Maneuver	•	-	14	-	850	-
Stage 1			#	-	1005	-
Stage 2					898	
National water	pro-		(sin		NE	
Approach	EB		WB		NB	ساله
HCM Control Delay, s	0		2.6		9.7	
HCM LOS					Α	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		924		-	1589	
HCM Lane V/C Ratio		0.173		-	0.018	
HCM Control Delay (s)		9.7	-	1	7.3	0
HCM Lane LOS		A		-	A	A
HCM 95th %tile Q(veh)		0.6	1 1	-	0.1	- 1
		5.5			-	

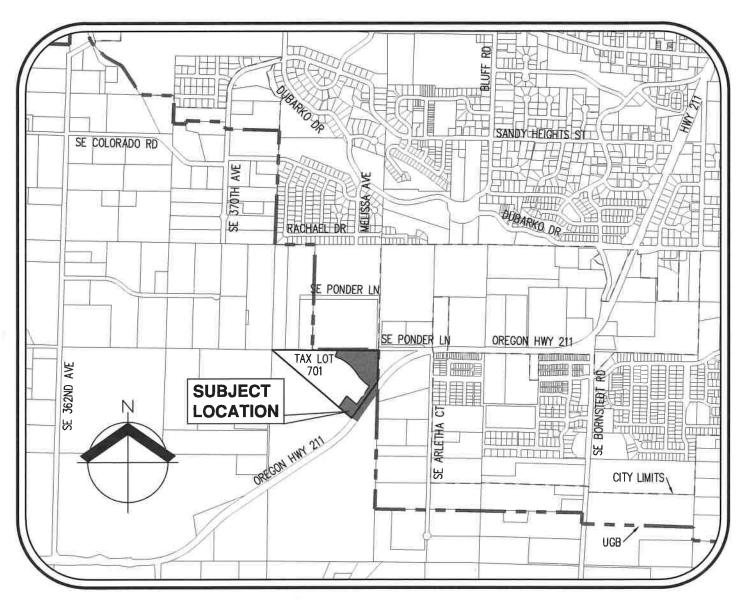
Intersection Delay, s/veh   Intersection LOS	( <del>-</del>						
Movement	Intersection	15.00		-W 19-3	4		
Movement	Intersection Delay, s/veh	7.8					
Lane Configurations		Α					
Lane Configurations							
Lane Configurations	Movement	EBT	EBR	WBI	WBT	NBL	NBR
Traffic Vol, veh/h Future Veh/h Future Vol, veh/			I MANUAL AND ADDRESS OF THE PARTY OF THE PAR				COLUMN TO
Future Vol, veh/h Peak Hour Factor 0.70 0.70 0.70 0.70 0.70 0.70 0.70 0.7			18	10			60
Peak Hour Factor         0.70							
Heavy Vehicles, %							
Mvmt Flow         59         26         27         24         64         86           Number of Lanes         1         0         0         1         1         0           Approach         EB         WB         NB         NB           Opposing Approach         WB         EB         Conflicting Approach Left         NB         EB           Conflicting Approach Left         NB         EB         Conflicting Approach Right         NB         WB           Conflicting Lanes Left         0         1         1         1         Conflicting Approach Right         NB         WB         WB           Conflicting Lanes Right         1         0         1         HCM Control Conflicting Lanes Right         1         0         1         HCM Conflicting Lanes Right         1         0         1         1         1         1         1         1         1         1         2         2         7.8         7.8         7.8         7.8         7.8         7.8         7.8         7.8         7.8							
Number of Lanes         1         0         0         1         1         0           Approach         EB         WB         NB           Opposing Approach         WB         EB           Opposing Lanes         1         1         0           Conflicting Approach Left         NB         EB           Conflicting Lanes Left         0         1         1           Conflicting Lanes Right         1         0         1           HCM Control Delay         7.8         7.9         7.8           HCM LOS         A         A         A           A         A         A         A           A         A         A         A           A         A         A         A           Bernard         NBLn1         EBLn1         WBLn1           WB         Conflicting Approach Right         NB         WB           Conflicting Lanes Right         1         0         1           HCM Control Delay         7.8         7.9         7.8           HCM Lone         MBLn1         WB         WB           Vol Right         Seption         Stop         Stop         Stop         Stop							
Approach         EB         WB         NB           Opposing Approach         WB         EB         Opposing Lanes         1         1         0         Conflicting Approach Left         NB         EB         Conflicting Lanes Left         0         1         <							
Opposing Approach         WB         EB           Opposing Lanes         1         1         0           Conflicting Approach Left         NB         EB           Conflicting Lanes Left         0         1         1           Conflicting Approach Right         NB         WB           Conflicting Lanes Right         1         0         1           HCM Control Delay         7.8         7.9         7.8           HCM LOS         A         A         A           Lane         NBLn1         EBLn1         WBLn1           Vol Left, %         43%         0%         53%           Vol Thru, %         0%         69%         47%           Vol Right, %         57%         31%         0%           Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1			U				U
Opposing Lanes         1         1         0           Conflicting Approach Left         NB         EB           Conflicting Lanes Left         0         1         1           Conflicting Approach Right         NB         WB           Conflicting Lanes Right         1         0         1           HCM Control Delay         7.8         7.9         7.8           HCM LOS         A         A         A           Lane         NBLn1         EBLn1         WBLn1           Vol Left, %         43%         0%         53%           Vol Thru, %         0%         69%         47%           Vol Right, %         57%         31%         0%           Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1           Degree of Util (X)         0.164 <t< td=""><td>Approach</td><td></td><td></td><td></td><td></td><td>NB</td><td></td></t<>	Approach					NB	
Conflicting Approach Left Conflicting Lanes Left Conflicting Approach Right Conflicting Approach Right Conflicting Approach Right NB WB Conflicting Lanes Right 1 0 1 HCM Control Delay 7.8 7.9 7.8 HCM LOS A A A A A  Lane NBLn1 EBLn1 WBLn1 VOI Left, % 43% 0% 53% VOI Thru, % 0% 69% 47% VOI Right, % 57% 31% 0% Sign Control Stop Stop Stop Traffic Vol by Lane LT Vol Lane Flow Rate 105 60 18 0 Lane Flow Rate 150 B4 51 Geometry Grp 1 1 1 Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Yes Yes Yes Cap 897 838 Service Time 2.024 2.302 2.572 HCM Lane V/C Ratio HCM Lane LOS A A A							
Conflicting Lanes Left 0 1 1 1 Conflicting Approach Right NB WB Conflicting Lanes Right 1 0 1 HCM Control Delay 7.8 7.9 7.8 HCM LOS A A A A A  Lane NBLn1 EBLn1 WBLn1 Vol Left, % 43% 0% 53% Vol Thru, % 0% 69% 47% Vol Right, % 57% 31% 0% Sign Control Stop Stop Stop Traffic Vol by Lane 105 59 36 LT Vol 45 0 19 Through Vol 60 18 0 Lane Flow Rate 150 84 51 Geometry Grp 1 1 1 Degree of Util (X) 0.164 0.099 0.064 Departure Headway (Hd) 3.944 4.224 4.488 Convergence, Y/N Yes Yes Yes Cap 897 838 788 Service Time 2.024 2.302 2.572 HCM Lane V/C Ratio 0.167 0.1 0.065 HCM Control Delay 7.8 7.8 7.9 HCM Lane LOS A A A	Opposing Lanes	1					
Conflicting Approach Right NB UB Conflicting Lanes Right 1 0 1 HCM Control Delay 7.8 7.9 7.8 HCM LOS A A A A  Lane NBLn1 EBLn1 WBLn1  Vol Left, % 43% 0% 53% Vol Thru, % 0% 69% 47% Vol Right, % 57% 31% 0% Sign Control Stop Stop Stop Traffic Vol by Lane 105 59 36 LT Vol 45 0 19 Through Vol 0 41 17 RT Vol 60 18 0 Lane Flow Rate 150 84 51 Geometry Grp 1 1 1 Degree of Util (X) 0.164 0.099 0.064 Departure Headway (Hd) 3.944 4.224 4.488 Convergence, Y/N Yes Yes Yes Cap 897 838 788 Service Time 2.024 2.302 2.572 HCM Lane V/C Ratio 0.167 0.1 0.065 HCM Control Delay 7.8 7.8 7.9 HCM Lane LOS A A							
Conflicting Lanes Right 1 0 1 HCM Control Delay 7.8 7.9 7.8 HCM LOS A A A A     A A A A A A A A A A A A A A				- 1			
HCM Control Delay   7.8   7.9   7.8     HCM LOS   A						WB	
Lane							
Lane         NBLn1         EBLn1         WBLn1           Vol Left, %         43%         0%         53%           Vol Thru, %         0%         69%         47%           Vol Right, %         57%         31%         0%           Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1           Degree of Util (X)         0.164         0.099         0.064           Departure Headway (Hd)         3.944         4.224         4.488           Convergence, Y/N         Yes         Yes         Yes           Cap         897         838         788           Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.8         7.9							
Vol Left, %       43%       0%       53%         Vol Thru, %       0%       69%       47%         Vol Right, %       57%       31%       0%         Sign Control       Stop       Stop       Stop         Traffic Vol by Lane       105       59       36         LT Vol       45       0       19         Through Vol       0       41       17         RT Vol       60       18       0         Lane Flow Rate       150       84       51         Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	HCM LOS	Α		Α		Α	
Vol Left, %       43%       0%       53%         Vol Thru, %       0%       69%       47%         Vol Right, %       57%       31%       0%         Sign Control       Stop       Stop       Stop         Traffic Vol by Lane       105       59       36         LT Vol       45       0       19         Through Vol       0       41       17         RT Vol       60       18       0         Lane Flow Rate       150       84       51         Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A							
Vol Left, %       43%       0%       53%         Vol Thru, %       0%       69%       47%         Vol Right, %       57%       31%       0%         Sign Control       Stop       Stop       Stop         Traffic Vol by Lane       105       59       36         LT Vol       45       0       19         Through Vol       0       41       17         RT Vol       60       18       0         Lane Flow Rate       150       84       51         Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	Lane		NBLn1	EBLn1	WBLn1	L.F.I	
Vol Right, %         57%         31%         0%           Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1           Degree of Util (X)         0.164         0.099         0.064           Departure Headway (Hd)         3.944         4.224         4.488           Convergence, Y/N         Yes         Yes         Yes           Cap         897         838         788           Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.8         7.9           HCM Lane LOS         A         A         A	Vol Left, %		43%	0%	53%		
Vol Right, %         57%         31%         0%           Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1           Degree of Util (X)         0.164         0.099         0.064           Departure Headway (Hd)         3.944         4.224         4.488           Convergence, Y/N         Yes         Yes         Yes           Cap         897         838         788           Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.8         7.9           HCM Lane LOS         A         A         A	Vol Thru, %		0%	69%	47%		
Sign Control         Stop         Stop         Stop           Traffic Vol by Lane         105         59         36           LT Vol         45         0         19           Through Vol         0         41         17           RT Vol         60         18         0           Lane Flow Rate         150         84         51           Geometry Grp         1         1         1           Degree of Util (X)         0.164         0.099         0.064           Departure Headway (Hd)         3.944         4.224         4.488           Convergence, Y/N         Yes         Yes         Yes           Cap         897         838         788           Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.8         7.9           HCM Lane LOS         A         A         A			57%	31%	0%		
Traffic Vol by Lane       105       59       36         LT Vol       45       0       19         Through Vol       0       41       17         RT Vol       60       18       0         Lane Flow Rate       150       84       51         Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A			Stop	Stop	Stop		
LT Vol       45       0       19         Through Vol       0       41       17         RT Vol       60       18       0         Lane Flow Rate       150       84       51         Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	Traffic Vol by Lane						
Through Vol 0 41 17  RT Vol 60 18 0  Lane Flow Rate 150 84 51  Geometry Grp 1 1 1  Degree of Util (X) 0.164 0.099 0.064  Departure Headway (Hd) 3.944 4.224 4.488  Convergence, Y/N Yes Yes Yes  Cap 897 838 788  Service Time 2.024 2.302 2.572  HCM Lane V/C Ratio 0.167 0.1 0.065  HCM Control Delay 7.8 7.8 7.9  HCM Lane LOS A A A	LT Vol		45	0	19		
RT Vol 60 18 0 Lane Flow Rate 150 84 51 Geometry Grp 1 1 1 1 Degree of Util (X) 0.164 0.099 0.064 Departure Headway (Hd) 3.944 4.224 4.488 Convergence, Y/N Yes Yes Yes Cap 897 838 788 Service Time 2.024 2.302 2.572 HCM Lane V/C Ratio 0.167 0.1 0.065 HCM Control Delay 7.8 7.8 7.9 HCM Lane LOS A A A	Through Vol		0	41	17		
Geometry Grp       1       1       1         Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	RT Vol		60	18	0		
Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	Lane Flow Rate		150	84	51		
Degree of Util (X)       0.164       0.099       0.064         Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A	Geometry Grp		1	- 1	1		
Departure Headway (Hd)       3.944       4.224       4.488         Convergence, Y/N       Yes       Yes       Yes         Cap       897       838       788         Service Time       2.024       2.302       2.572         HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.9         HCM Lane LOS       A       A       A			0.164	0.099	0.064		
Convergence, Y/N         Yes         Yes         Yes           Cap         897         838         788           Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.9           HCM Lane LOS         A         A         A				4.224	4.488		
Cap     897     838     788       Service Time     2.024     2.302     2.572       HCM Lane V/C Ratio     0.167     0.1     0.065       HCM Control Delay     7.8     7.9       HCM Lane LOS     A     A     A							
Service Time         2.024         2.302         2.572           HCM Lane V/C Ratio         0.167         0.1         0.065           HCM Control Delay         7.8         7.8         7.9           HCM Lane LOS         A         A         A				838	788		
HCM Lane V/C Ratio       0.167       0.1       0.065         HCM Control Delay       7.8       7.8       7.9         HCM Lane LOS       A       A       A							
HCM Control Delay 7.8 7.9 HCM Lane LOS A A A							
HCM Lane LOS A A A	p to the second part of the second						
	HCM 95th-tile Q		0.6	0.3	0.2		

Intersection		V - I				
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		\$	A CONTRACTOR	7	1
Traffic Vol, veh/h	27	116	287	28	210	548
Future Vol, veh/h	27	116	287	28	210	548
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0		-	-	115	-
Veh in Median Storage			0			0
Grade, %	0	-	0		-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	1	1
Mymt Flow	29	126	312	30	228	596
WWW.	23	120	012	JU	LLU	000
Major/Minor	Minor1		/lajor1		Major2	
Conflicting Flow All	1379	327	0	0	342	0
Stage 1	327		1 35	-		
Stage 2	1052	-		-		
Critical Hdwy	6.42	6.22			4.11	
Critical Hdwy Stg 1	5.42	-	22	-	140	( <b>a</b> )
Critical Hdwy Stg 2	5.42			-	- 4	12
Follow-up Hdwy		3.318			2.209	
Pot Cap-1 Maneuver	159	714	11 1/5:	-	1223	-
Stage 1	731	-	0.7	88		
Stage 2	336			1.0		1.00
Platoon blocked, %				3(#1		:=:
Mov Cap-1 Maneuver	129	714	3-	7=	1223	1=1
Mov Cap-2 Maneuver	129		-	924		-
Stage 1	731		74	72	1 12	/#1
Stage 2	273	-			7.5	
Olage Z	210		- 1/2		(4)	
Approach	WB		NB		SB	
Approach HCM Control Delay, s	WB 20.5		NB 0		SB 2.4	
HCM Control Delay, s	20.5					
HCM Control Delay, s HCM LOS	20.5 C	MOT	0	WDL - 4	2.4	CDT
HCM Control Delay, s HCM LOS Minor Lane/Major Mvn	20.5 C	NBT	0 NBRV	VBLn1	2.4 SBL	SBT
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h)	20.5 C	NBT	0 NBRV	385	2.4 SBL 1223	:=!
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	20.5 C		NBRV	385 0.404	2.4 SBL 1223 0.187	-
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	20.5 C		NBRV	385 0.404 20.5	2.4 SBL 1223 0.187 8.6	•
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	20.5 C		NBRV	385 0.404	2.4 SBL 1223 0.187	-

Intersection	100					1
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	(leader) lead.	4	^}	1000 days 100	74	
Traffic Vol, veh/h	17	196	97	64	90	35
Future Vol, veh/h	17	196	97	64	90	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	1100			None	-	None
Storage Length		-	-	-	0	-
Veh in Median Storage	# -	0	0		0	
Grade, %	, m	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	1	0	0	1	1
Mvmt Flow	19	220	109	72	101	39
MINITE FIOW	19	220	109	12	101	39
Major/Minor I	Vlajor1	- 1	Major2		Minor2	WE
Conflicting Flow All	181	0		0	403	145
Stage 1	-		( ·		145	-
Stage 2	-	:0+1			258	-
Critical Hdwy	4.11	-		-	6.41	6.21
Critical Hdwy Stg 1	_	: E		-	5.41	-
Critical Hdwy Stg 2			0.3	-	5.41	
Follow-up Hdwy	2.209		-		3.509	3.309
Pot Cap-1 Maneuver	1400			-	605	905
Stage 1	-		174	-	885	-
Stage 2		-				
			( <del>*</del>		101	-
Platoon blocked, %	4400	( <b></b> )	(*)		EOG	905
Mov Cap-1 Maneuver	1400		(2)	-	596	
Mov Cap-2 Maneuver		(1 <u>41</u> )	-	•	596	-
Stage 1	-				885	
Stage 2	•	1.5			775	•
Approach	EB		WB		SB	
HCM Control Delay, s	0.6		0	11/1	11.9	
HCM LOS	0.0				В	
TIOM LOC						
Minor Lane/Major Mvm	it	EBL	EBT	WBT	WBR.	SBLn1
Capacity (veh/h)		1400	12		-	659
HCM Lane V/C Ratio		0.014	-	-	-	0.213
<b>HCM Control Delay (s)</b>		7.6	0			11.9
HCM Lane LOS		Α	Α	-	-	В
HCM 95th %tile Q(veh)		0		-		0.8
•						

Intersection				4, 5			THE REPORT OF THE PROPERTY AND ADDRESS.
Int Delay, s/veh	3.3						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	Ĵ⇒			4	M		
Traffic Vol, veh/h	90	87	48	62	44	32	
Future Vol, veh/h	90	87	48	62	44	32	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	1 1	None		None		None	
Storage Length	175	U. <del>s.</del> i	17	-	0		
Veh in Median Storage,	# 0		1	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	85	85	85	85	85	85	
Heavy Vehicles, %	1	1	0	0	0	0	
Mvmt Flow	106	102	56	73	52	38	
Main Minns	mined		Anin 1		diment.		
	ajor1		Major2		/linor1	457	
Conflicting Flow All	0	0	208	0	343	157	
Stage 1		_ C _ J=	•		157		
Stage 2	-		- 4.4	-	186	-	
Critical Hdwy	-	-	4.1	•	6.4	6.2	
Critical Hdwy Stg 1	-	_	-		5.4		
Critical Hdwy Stg 2				-	5.4	-	
Follow-up Hdwy	-	-	2.2	-	3.5	3.3	
Pot Cap-1 Maneuver	-	-	1375	-	657	894	
Stage 1	U.B.	-	•	_	876	-	
Stage 2	1.5		-	-	851	•	
Platoon blocked, %	(*	(#1	1000	: <del>*</del> :		001	
Mov Cap-1 Maneuver	7.00		1375	-	629	894	
Mov Cap-2 Maneuver	36	() <u>24</u> 5	3≅5	S#5	629		
Stage 1	-	-	-	_	876	•	
Stage 2					815		
Approach	EB		WB		NB	1	
HCM Control Delay, s	0		3.4		10.7		
HCM LOS			• • • • • • • • • • • • • • • • • • • •		В		
Minor Lang/Major Mount		NBLn1	EBT	EBR	WBL	WBT	
Minor Lane/Major Mymt							
Capacity (veh/h)		719			1375	-	
HCM Lane V/C Ratio		0.124	1125	-	0.041	-	
HCM Control Delay (s)		10.7			7.7	0	
HCM Lane LOS		В	(37)	_	A	Α	
HCM 95th %tile Q(veh)		0.4		-	0.1	-	

F. D. Company						
Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	Α					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ĵ»			ની	Y	
Traffic Vol, veh/h	29	100	28	33	68	31
Future Vol, veh/h	29	100	28	33	68	31
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	1	1
Mvmt Flow	34	118	33	39	80	36
Number of Lanes	1	0	0	1	1	0
Approach	EB	S. J	WB		NB	
Opposing Approach	WB		EB		1000000	
Opposing Lanes	1		1		0	
Conflicting Approach Left	•		NB		EB	
Conflicting Lanes Left	0		1		1	
Conflicting Approach Right	NB		1		WB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.5		7.8		8	
HCM LOS	A		A		A	
TIOM LOO					-	
ISSUE TO THE PARTY OF THE PARTY		NIDI ad	EDI v4	WBLn1		- 1
Lane	A.,	NBLn1	EBLn1			
Vol Left, %		69%	0%	46%		
Vol Thru, %		0%	22%	54%		
Vol Right, %		31%	78%	0%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		99	129	61		
LT Vol		68	0	28		
Through Vol		0	29	33		
RT Vol		31	100	0		
Lane Flow Rate		116	152	72		
Geometry Grp		1	1	1		
Degree of Util (X)		0.137	0.156	0.086		
Departure Headway (Hd)		4.249	3.695	4.316		
Convergence, Y/N		Yes	Yes	Yes		
Сар		833	955	819		
Service Time		2.33	1.78	2.401		
HCM Lane V/C Ratio		0.139	0.159	0.088		
110110 1 15 1				7.0		
HCM Control Delay		8	7.5	7.8		
HCM Control Delay HCM Lane LOS		8 A	7.5 A	7.8 A		



# **VICINITY MAP**

NOT TO SCALE

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development) Page 169 of 174



#### AKS ENGINEERING & FORESTRY, LLC 12965 SW Herman Road, Suite 100, Tualatin, OR 97062 P: (503) 563-6151 | www.aks-eng.com

AKS Job #7107

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

#### **EXHIBIT A**

Legal Description

A tract of land, and a portion of right-of-way, located in the Northeast One-Quarter of Section 23, Township 2 South, Range 4 East, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of Parcel 1 of Partition Plat 2018-030, Clackamas County Plat Records; thence along the north line of Document Number 93-28438, Clackamas County Deed Records, South 89°52'25" East 823.67 feet to the Point of Beginning; thence continuing along said north line, South 89°52'25" East 495.53 feet to the northeast corner of said deed; thence along the east line of said deed and the southerly extension thereof, South 01°24'04" West 532.91 feet to the southeasterly right-of-way line of Woodburn-Sandy Highway (40.00 feet from centerline); thence along said southeasterly right-of-way line, South 35°02'39" West 438.40 feet; thence leaving said southeasterly right-of-way line, North 54°57'21" West 80.00 feet to the northwesterly right-of-way line of Woodburn-Sandy Highway (40.00 feet from centerline), also being the southwesterly corner of said deed; thence along the southwesterly line of said deed, North 49°21'56" West 200.96 feet; thence leaving said southwesterly line, North 35°02'39" East 150.72 feet; thence South 49°21'56" East 160.76 feet to a line which is parallel with and 40.00 feet northwesterly of, when measured at right angles to, said northwesterly right-of-way line; thence along said parallel line, North 35°02'39" East 295.25 feet; thence leaving said parallel line, North 54°57'21" West 25.00 feet; thence along a curve to the right with a Radius of 533.00 feet, a Delta of 23°05'54", a Length of 214.88 feet, and a Chord of North 43°24'23" West 213.42 feet; thence along a curve to the left with a Radius of 467.00 feet, a Delta of 41°16'55", a Length of 336.48 feet, and a Chord of North 52°29'54" West 329.25 feet to a point of non-tangency (Radial Bearing of South 16°51'38" West); thence North 23°37'27" East 93.53 feet to the Point of Beginning.

The above described tract of land contains 5.29 acres, more or less.

1/7/2020

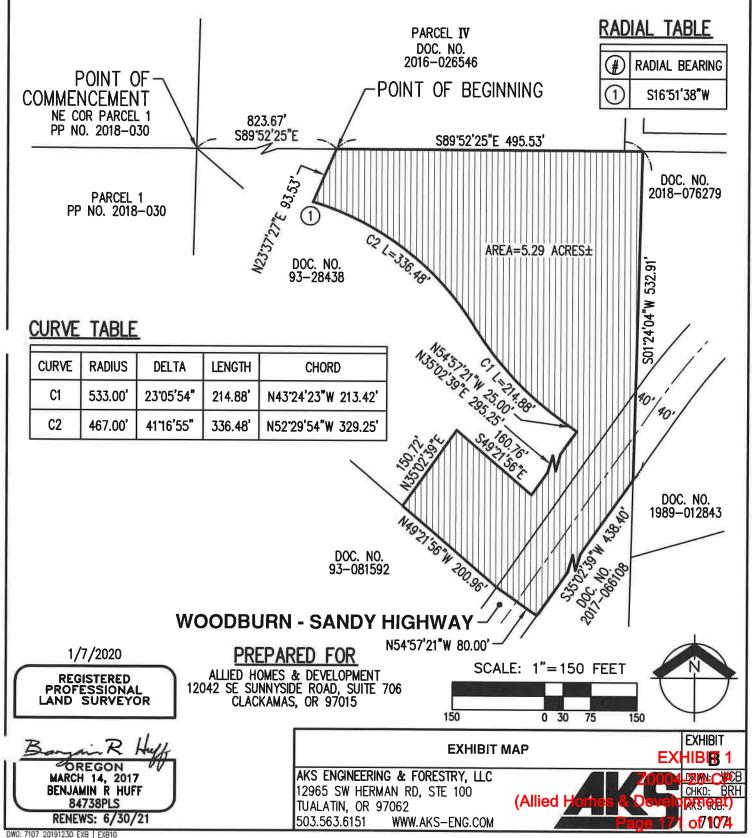
REGISTERED PROFESSIONAL LAND SURVEYOR

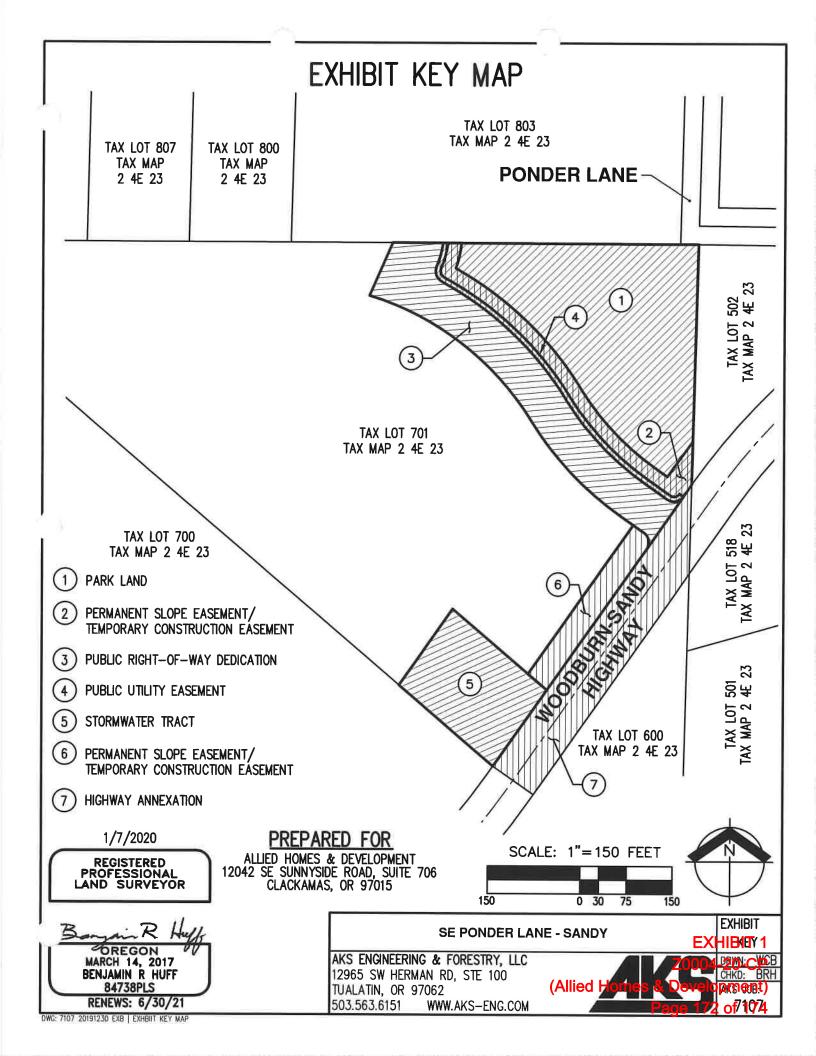
> MARCH 14, 2017 BENJAMIN R HUFF 84738PLS

RENEWS: 6/30/21

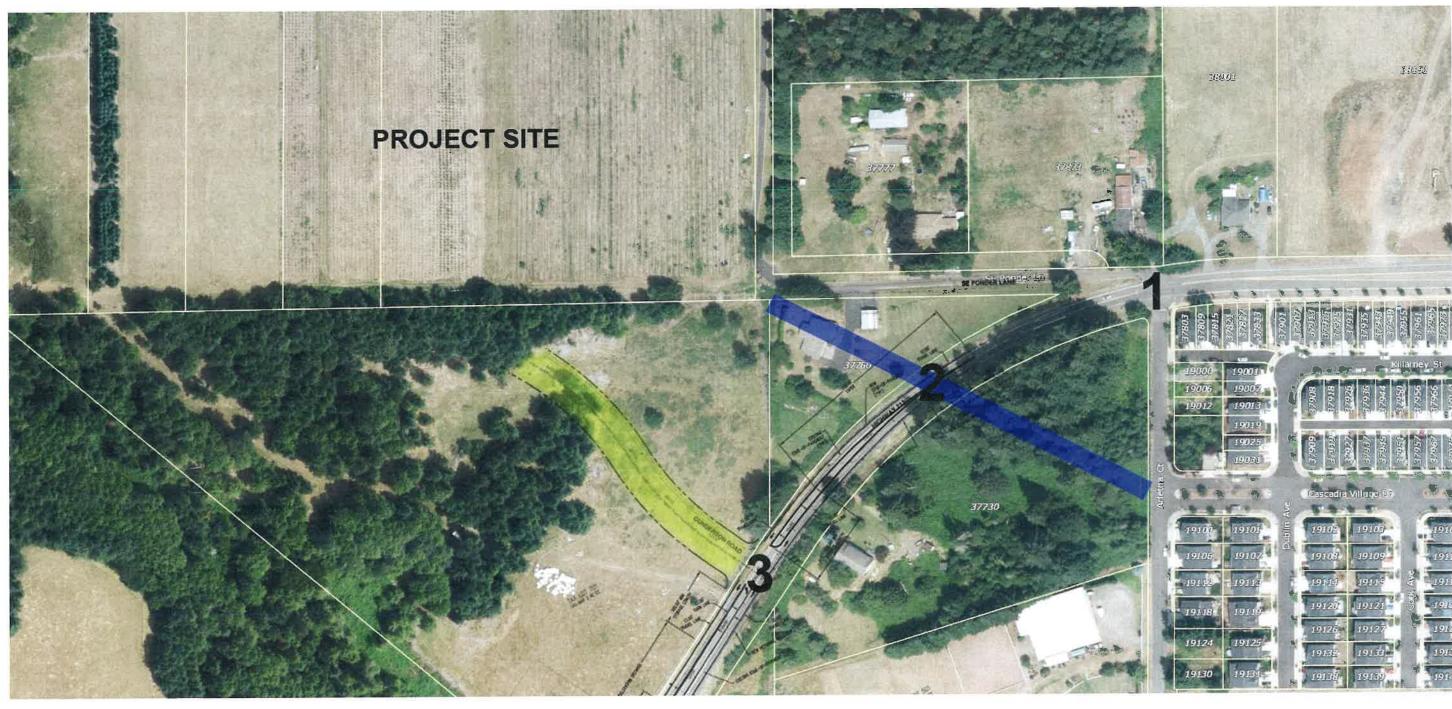
## EXHIBIT B

A TRACT OF LAND, AND A PORTION OF RIGHT-OF-WAY, LOCATED IN THE NORTHEAST 1/4 OF SECTION 23, TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, CLACKAMAS COUNTY, OREGON

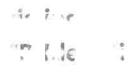








- 1. Existing Intersection Location
- 2. TSP-Identified Alignment
- 3. Proposed Alignment







### 1. Existing Intersection Location



- Intersection not usable for new development given available width, very flat skew angle of approach, and topography.
- Rebuilding a new street and intersection in this location would involve properties that are not under control of the applicant or the City of Sandy

# 3. Proposed Alignment



- Location is far enough south to have adequate sight distance looking back to the north toward the curve. Excellent sight lines looking south.
- Superelevation is minimal due to location south of curve.

# 2. TSP-Identified Alignment

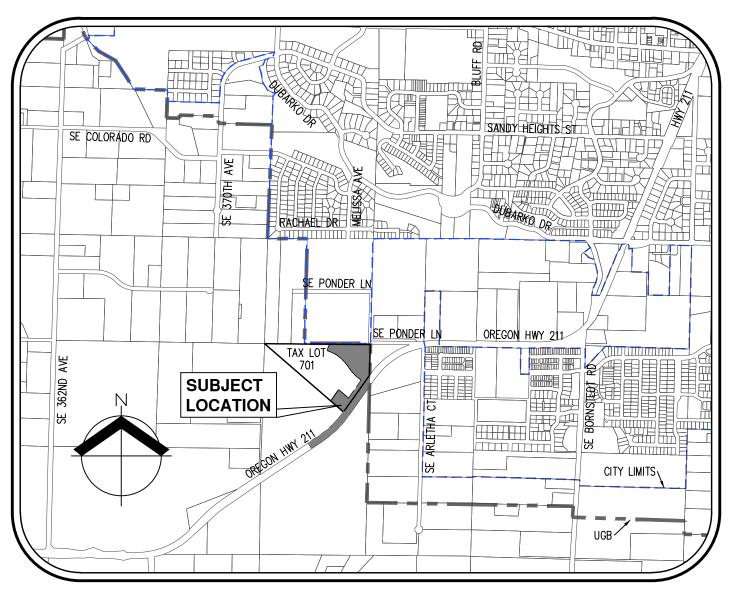


- Sight distance limited by horizontal and vertical curves in both directions. Sight distance is particularly poor for the future south leg, which would connect to Cascadia Village Drive.
- Superelevation (banking of the roadway around the curve) is very steep and makes this location problematic for an intersection due to difficult turning and crossing movements across the steep curve.

orth trowvan

EXHIBIT 1 Z0004-20-CP (Allied Homes & Development)

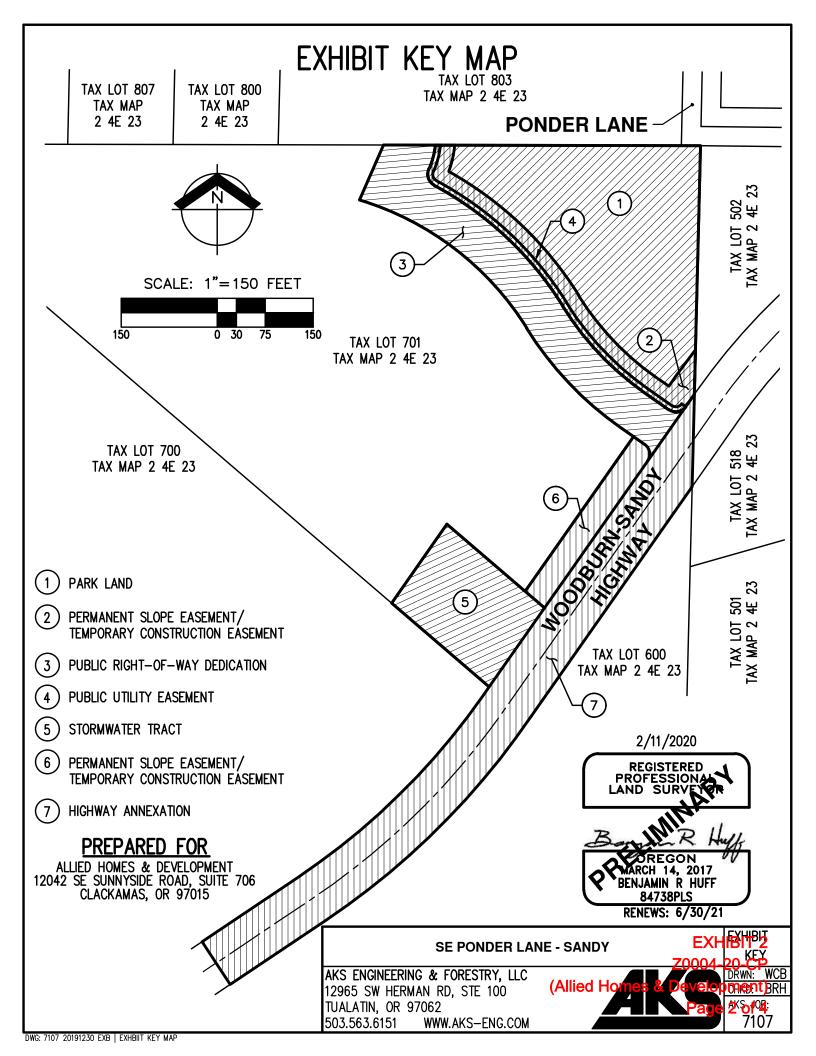
ett to var



# **VICINITY MAP**

NOT TO SCALE

EXHIBIT 2 Z0004-20-CP (Allied Homes & Development) Page 1 of 4





### **AKS ENGINEERING & FORESTRY, LLC**

12965 SW Herman Road, Suite 100, Tualatin, OR 97062 P: (503) 563-6151 | www.aks-eng.com

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

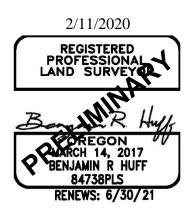
#### EXHIBIT A

#### **Annexation Description**

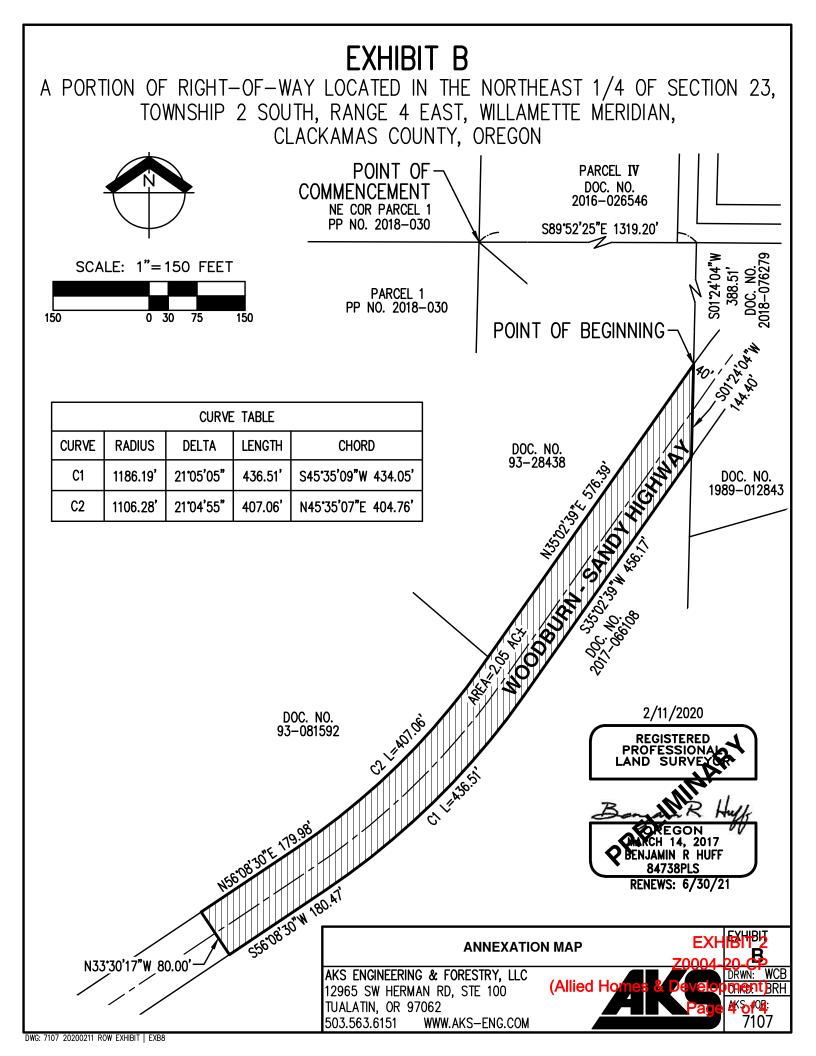
A portion of right-of-way located in the Northeast One-Quarter of Section 23, Township 2 South, Range 4 East, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

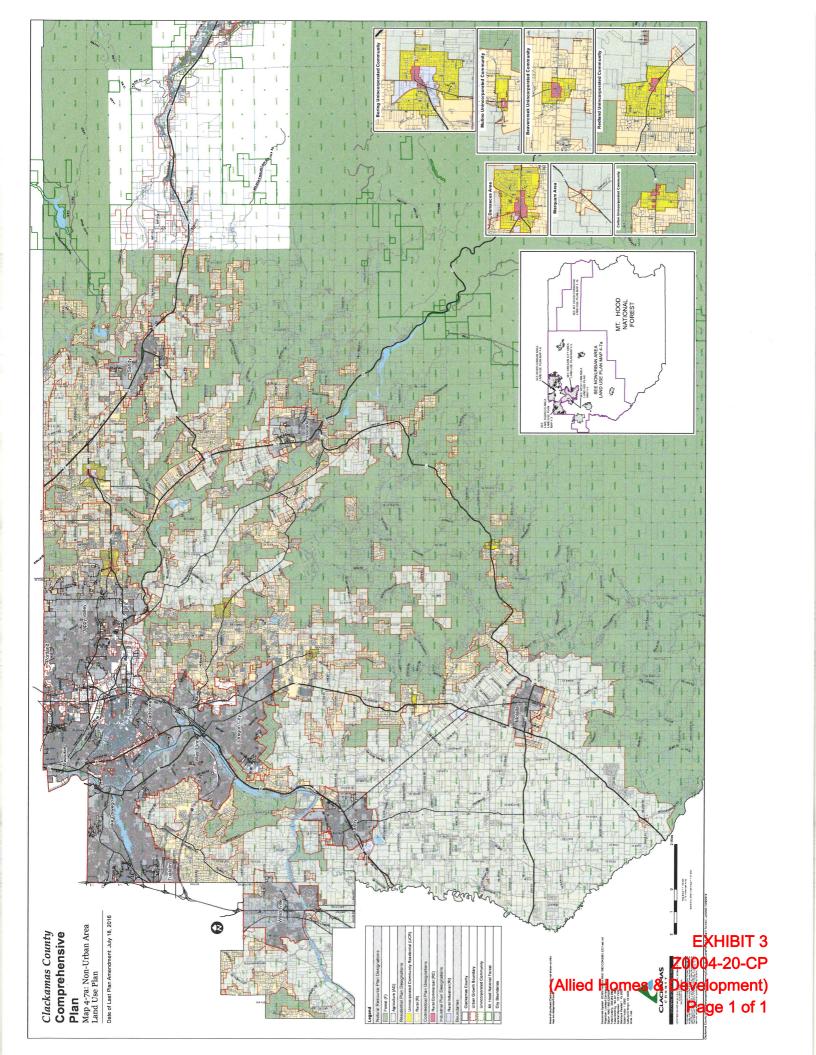
Commencing at the northeast corner of Parcel 1 of Partition Plat 2018-030, Clackamas County Plat Records; thence along the north line of Document Number 93-28438, Clackamas County Deed Records, South 89°52'25" East 1319.20 feet to the northeast corner of said deed; thence along the east line of said deed, South 01°24'04" West 388.51 feet to the northwesterly right-ofway of Woodburn-Sandy Highway (40.00 feet from centerline) and the Point of Beginning; thence along the southerly extension of said east line, South 01°24'04" West 144.40 feet to the southeasterly right-of-way line of Woodburn-Sandy Highway (40.00 feet from centerline); thence along said southeasterly right-of-way line, South 35°02'39" West 456.17 feet; thence along a curve to the Left with a Radius of 1186.19 feet, a Delta of 21°05'05", a Length of 436.51 feet, and a Chord of South 45°35'09" West 434.05 feet; thence South 56°08'30" West 180.47 feet; thence leaving said southeasterly right-of-way line, North 33°30'17" West 80.00 feet to said northwesterly right-of-way line; thence along said northwesterly right-of-way line, North 56°08'30" East 179.98 feet; thence along a curve to the Left with a Radius of 1106.28 feet, a Delta of 21°04'55", a Length of 407.06 feet, and a Chord of N45°35'07" East 404.76 feet; thence North 35°02'39" East 576.39 feet to the Point of Beginning.

The above described tract of land contains 2.05 acres, more or less.



AKS Job #7107





# **CLACKAMAS** county July 2017 Legend Sandy Rin Mile 21 2/s/4e12 Mile 22 2s4e25 Sounds Tomos City of Sandy Fer HII 2s4e26 Bull Frog Reservoir 2s4e2 Clackamas County GIS | P:\DTD\Planning\UGMA\SandyUGMA.mxd | JonMcD | 7/20/2017 **EXHIBIT 4** Z0004-20-CP (Allied Homes & Development) Page 1 of 1

# SANDY

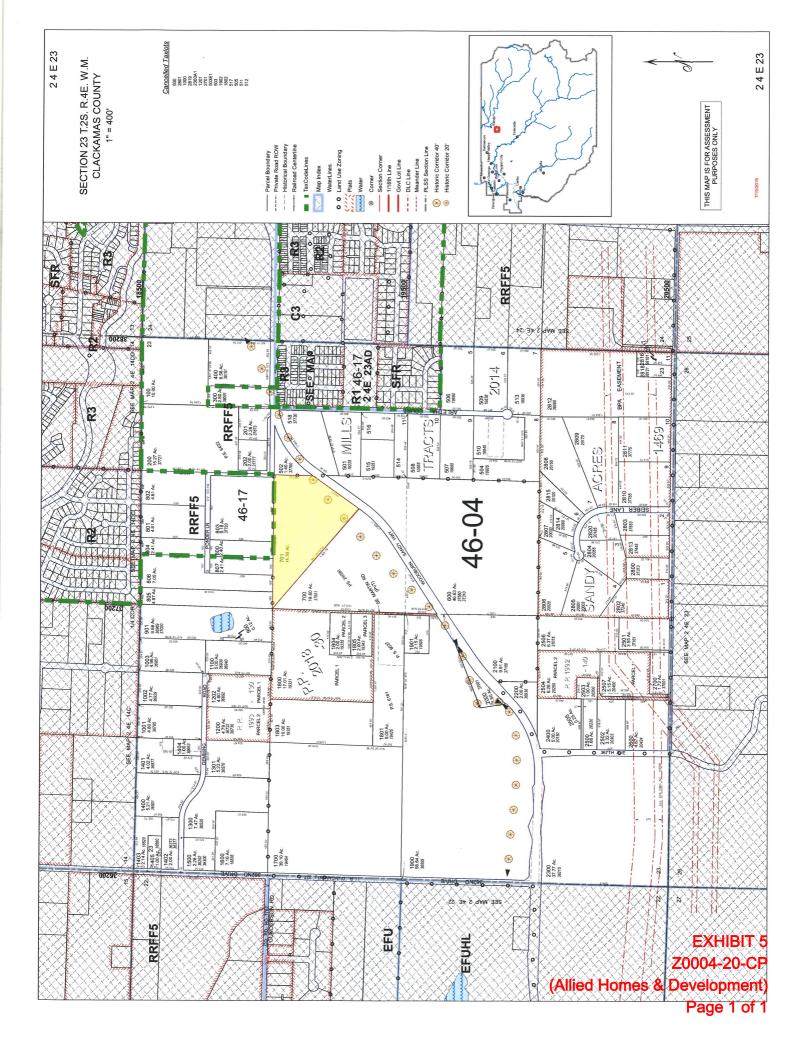
# Management Area Urban Growth

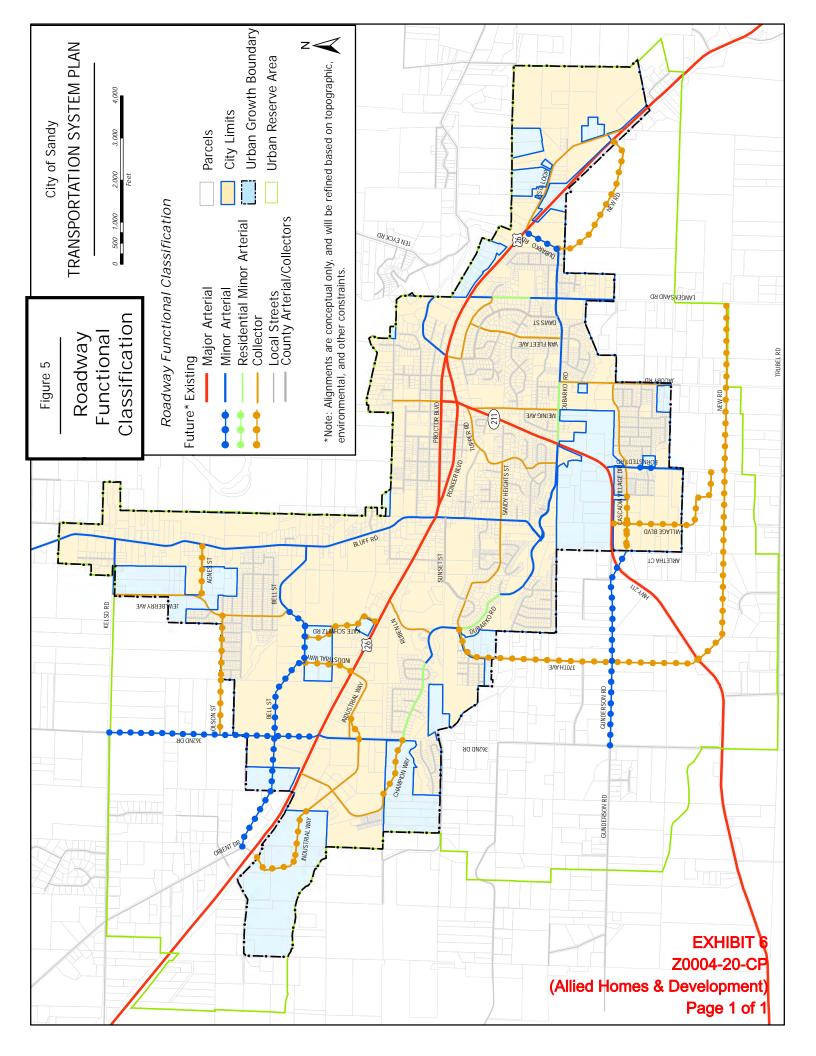
Urban Reserve Area (URA) Management Area(UGMA) Urban Growth Area(UGA) Urban Growth Boundary Urban Growth City of Sandy

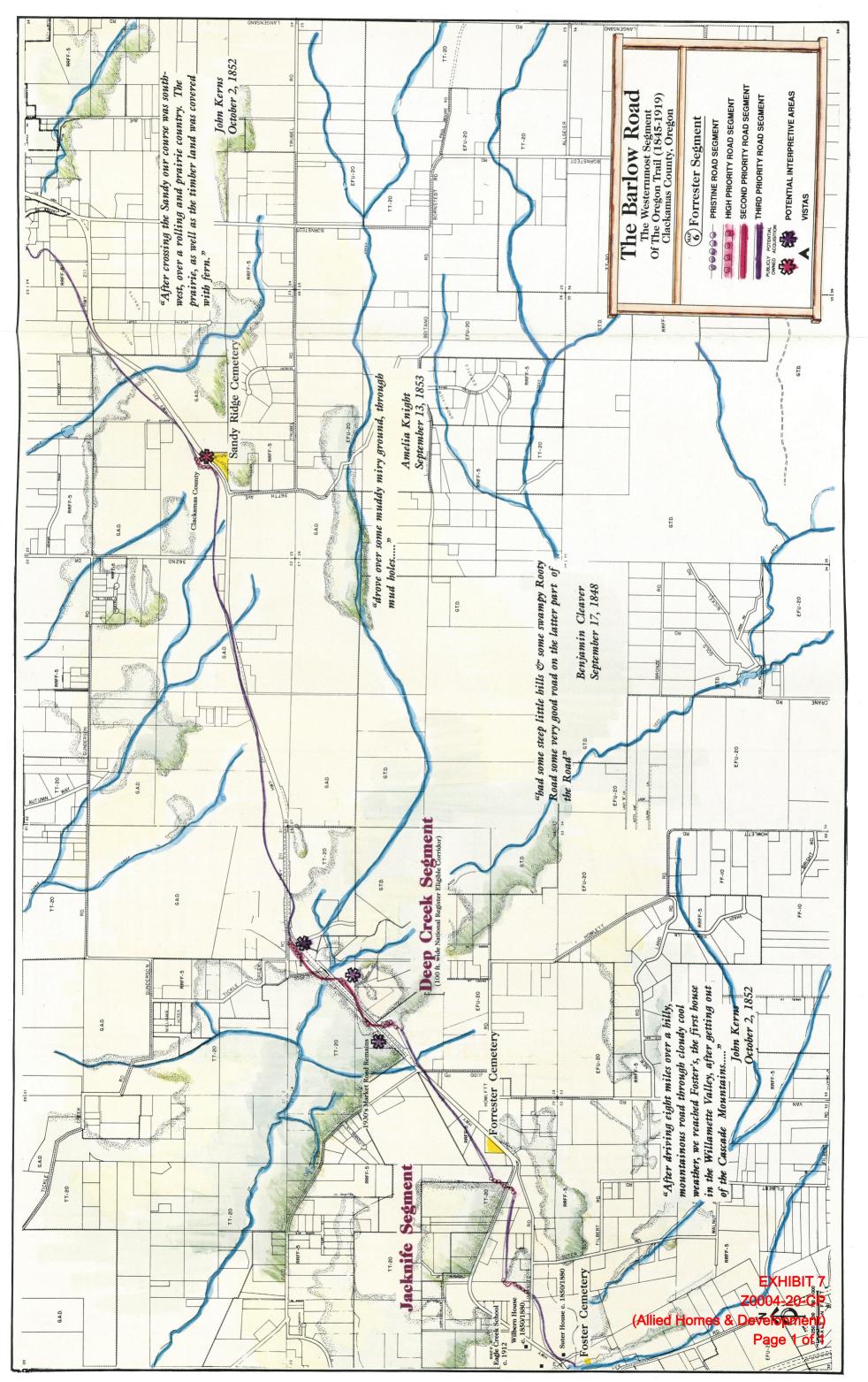


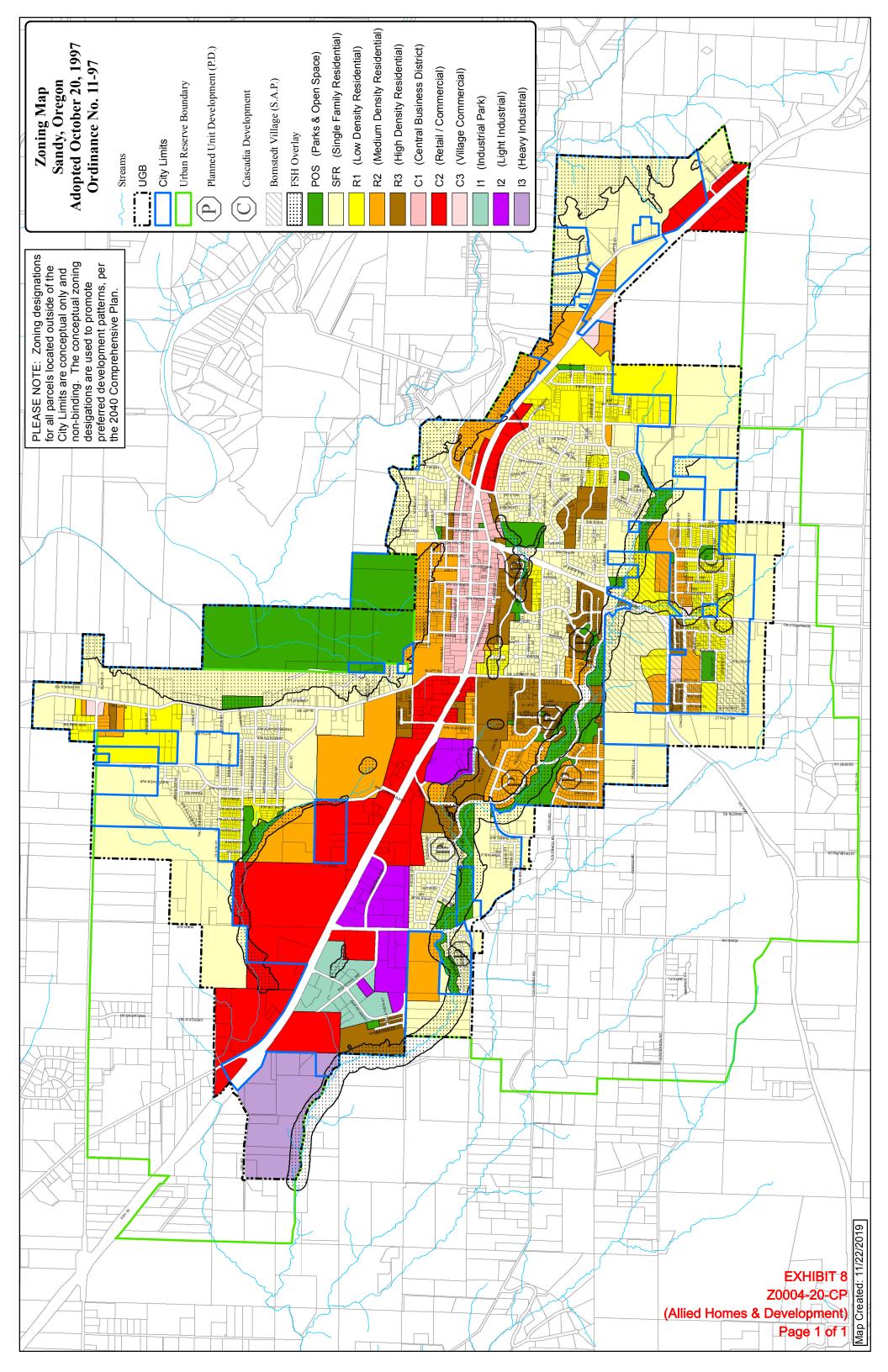


GEOGRAPHIC INFORMATION SYST











#### **MINUTES**

Planning Commission Meeting
Thursday, January 23, 2020 City Hall- Council
Chambers, 39250 Pioneer Blvd., Sandy,
Oregon 97055 6:30 PM

**COMMISSIONERS PRESENT:** Don Carlton, Commissioner, Ron Lesowski, Commissioner, Hollis MacLean-Wenzel,

Commissioner, Jerry Crosby, Commissioner, John Logan, Commissioner, Chris Mayton,

Commissioner, and Todd Mobley, Commissioner

**COMMISSIONERS ABSENT:** 

**STAFF PRESENT:** Kelly O'Neill, Development Services Director and Emily Meharg, Associate Planner,

David Doughman, City Attorney

#### **MEDIA PRESENT:**

#### 1. Roll Call

#### 2. Select Chair and Vice Chair

**Motion**: To select Commissioner Crosby as the chair for 2020.

Moved By: Commissioner Carlton

Seconded By: Commissioner MacLean-Wenzel

Yes votes: All Ayes No votes: None Abstentions: None The motion passed.

To select vice chair for 2020.

5 voted for Commissioner Carlton (Carlton, Lesowski, Crosby, Logan, and Mayton)

2 voted for Commissioner MacLean-Wenzel (MacLean-Wenzel and Mobley)

Motion: To select Commissioner Carlton as the vice chair for 2020.

Moved By: Commissioner Logan Seconded By: Commissioner Mayton

Yes votes: All Ayes No votes: None Abstention: None The motion passed.

EXHIBIT 9
Z0004-20-CP
(Allied Homes & Development)
Page 1 of 9
Page 1 of 9

#### 3. Approval of Minutes

3.1. Approval of Minutes - December 3, 2019

Motion: To approve minutes for December 3, 2019

Moved By: Commissioner Carlton Seconded By: Commissioner Logan

Yes votes: All Ayes No votes: None Abstentions: None The motion passed.

3.2. Approval of Minutes - December 17, 2019

**Motion**: To approve minutes for December 17, 2019

Moved By: Commissioner Mayton

Seconded By: Commissioner Maclean-Wenzel

Yes votes: Lesowski, MacLean-Wenzel, Crosby, Logan, and Mayton

No votes: None

Abstentions: Mobley and Carlton

The motion passed.

# 4. Requests From the Floor - Citizen Communication on Non- Agenda Items None

#### 5. OLD BUSINESS

5.1. 19-023 SUB/VAR/TREE Bailey Meadows Subdivision

Staff Report - 0217

Chairman Crosby opened the public hearing on File No. 19-023 SUB/VAR/TREE at 6:46 p.m. Crosby called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. No challenges were made, and no declarations were made by the Planning Commissioners.

Commissioner Mobley recused himself as the applicant's transportation engineer.

Commissioner Carlton stated that he viewed the December 17 Planning Commission hearing video and reviewed the packet since he was not at the

EXHIBIT 9

Z0004-20-CP

(Allied Homes & Development)

December 17 hearing.

City Attorney Doughman explained the applicant's request to have the record remain open. They are treating tonight's hearing as the first evidentiary hearing. After tonight's meeting, there will be a 7-day period where anyone can submit testimony into the record. This will be followed by a second 7-day period for anyone to submit testimony in response to anything submitted in the first 7 days (new issues cannot be raised). Usually there's a third 7-day period solely for the applicant but, given the time frame, the applicant is waiving the right to final argument. The Planning Commission will reconvene on February 11, 2020 to deliberate amongst themselves with staff, but no additional public or applicant testimony will be heard.

#### **Staff Report:**

Since the publication of the report, there are 4 new exhibits that were provided to Planning Commission. Development Services Director Kelly O'Neill Jr. summarized the staff report and addressed the background, factual information, and presented a brief slide show.

Attorney Doughman provided additional information regarding PC's ability to change conditions.

#### **Applicant Testimony:**

Mike Robinson 1211 SW 5th Ave, Suite 1900 Portland, OR 97204

Attorney Robinson introduced the applicant's team and provided a brief background of the applicant's request. He stated they are looking for solutions through the UGB expansion to provide parkland and Gunderson Road. Robinson addressed the neighbors stating the applicant understands the concerns and commits to doing their best to minimize disruption and to get the UGB expansion to occur for parkland and Gunderson Road. Robinson cited Oregon statutes related to needed housing. Robinson also explained the application is a limited land use application, so the applicant only needs to adhere to what's in the code, not the TSP. For needed housing, cities can only apply clear and objective criteria. Robinson responded to issues raised in the previous hearing, many of which are subjective or are not in the subdivision approval criteria. Robinson explained that the traffic analysis was reviewed by multiple professionals and found to be sound. Robinson made a formal request that the Planning Commission close the public hearing but keep the record open for the two 7-day periods as explained by Attorney Doughman. The applicant will extend the 120-clock by 14 days.

EXHIBIT 9 Z0004-20-CP

(Allied Homes & Development)

Chris Goodell

AKS Engineering and Forestry

12965 SW Herman Road, Suite 100

Tualatin, OR 97062

Goodell talked about specifics of the subdivision, including circulation and infrastructure. Mr. Goodell presented a brief slideshow.

#### **Proponent Testimony:**

None

#### **Opponent Testimony:**

Makoto Lane 37828 Rachael Drive Sandy, OR 97055

Concerned about traffic. Applicant's attorney alluded to litigation against the City, which is not indicative of a good neighbor. The traffic study appears to be partial to the developer. If a kid gets hit on Melissa Avenue, do the parents sue the City because they allowed it? 30th house tied to Gunderson Road doesn't work because developer will just continue to develop beyond that. Applicant needs to get UGB expansion approved and construct Gunderson Road before any houses are constructed. Mr. Lane does not want motor vehicle access to Melissa Avenue and doesn't understand why the TSP can be ignored.

Erin Findlay 37616 Rachael Drive Sandy, OR 97055

In support of UGB expansion. Safety is the number one priority. Requests a 4 way stop at Melissa Avenue and Rachael Drive. Wants to know participation in UGB expansion at County level.

Kathleen Walker 15920 Bluff Road Sandy, OR 97055

Thanked the applicant for working with City, ODOT, and Clackamas County. 900 pages is a lot to review. Concerned about the applicant's plan being in so many pieces, which makes it difficult to see how everything's connected and what the actual proposal is. Gunderson Road and the UGB expansion need to get done or the subdivision should not be approved. Parkland should also be conditioned for approval. Applicant's submittal only includes half a road for Gunderson Road; it's not clear what they are actually proposing. There should

Z0004-20-CP
(Allied Homes & Development)
Page 4 of 9
Page 4 of 9

be bike lanes and curb and sidewalk on at least one side of Gunderson Road.

Carol Cohen 37537 Rachael Drive Sandy, OR 97055

900 pages is a lot to review. Is Gunderson Road going to happen? Lots of confusion. Parkland should be dedicated prior to occupancy. Gunderson Road should be completed before building permits are issued to provide access for construction vehicles.

Kelly Whitlock 17975 422nd Avenue Sandy, OR 97055 Who pays for the park and who pays for Gunderson Road?

Gigi Duncan 18275 Rachael Drive Sandy, OR 97055

City has a vision and a higher responsibility. We've learned from Nicolas Glen that one street in and out of a subdivision doesn't work and that there should have been a park. Bailey Meadows is not affordable housing. Safety should be the ultimate litmus test. House Bill 2001 - Oregon working on up-zoning to create denser, greener, and more affordable housing.

Laura Kvamme 37438 Rachael Drive Sandy, OR 97055

Melissa Avenue already carries too much traffic. Curious about elevation that parallels Rachael Drive and how drainage will work. Can't allow any new development; already exceeding capacity on Melissa Avenue. How will student buses navigate? Wants to see a clear plan.

Brad Robison 37412 Rachael Drive Sandy, OR 97055

Just because you can do something doesn't mean you should. Afraid that if Gunderson Road doesn't go through, the applicant will still be able to build the subdivision. Subdivision needs to be thought out and impact on existing neighbors needs to be considered, not just profit.

**Neutral Testimony** 

EXHIBIT 9
Z0004-20-CP
(Allied Homes & Development)
Page 5 of 9
Page 5 of

Makoto Lane
37828 Rachael Drive
Sandy, OR 97055
He stated he wants to advocate for keep the hearing open.

#### **Staff Recap:**

Development Services Director O'Neill stated that some items will be addressed later and the City Attorney will need to address ORS provisions. O'Neill clarified that needed housing is related to growth projected in a 20-year planning horizon, not affordable housing. O'Neill reiterated that the proposed lots meet the 7,500 square foot lot requirement in the applicable zoning district. A 4-way stop could be considered and evaluated. Gunderson Road is proposed at a 24-foot-wide asphalt section (two 12 foot travel lanes). The 30 house limit can be changed by the Planning Commission. Each house will pay SDCs for parks, which will eventually be used to develop the park. The City will be paying for a significant portion of Gunderson Road and the Highway 211 improvements. Staff can't support closing off Melissa Avenue to vehicles because that would go against the TSP and the development code. All Oregon cities will need to update their code to allow duplexes anywhere a single-family home is allowed.

City Attorney Doughman will put together a public memo to the Planning Commission that responds to some legal issues raised. There's an increasingly magnified focus on housing regulations, including clear and objective standards and needed housing. If the applicant is right and there are laws that entitle them to build a subdivision and take all access from Melissa Avenue, then the consequence could be a neighborhood with 100 new homes taking sole access from Melissa Avenue. The City is working to get a second access. Doughman stated there is risk in denying the application. The City would not be liable for exceeding ADT standard because it qualifies for discretionary immunity. The Planning Commission has a choice to continue the hearing in its entirety to February 11, 2020 or the Commission can close the hearing but keep the record open for written testimony. Doughman prefers closing the hearing and keeping the written record open.

Commissioner Carlton asked about the variance that would be required in relation to having houses face the park. Does that variance need to be addressed now? O'Neill stated the code diagram could be subjective, but the Planning Commission could pose a condition that the houses along the park must face the park. Doughman doesn't think the park has to be surrounded by streets and houses on all sides of the park. The Planning Commission can condition that if the UGB expansion occurs and the park is dedicated then the

icated then the EXHIBIT 9
Z0004-20-CP
(Allied Homes & Development)
Page 6 of 9
Page 6 of 9

houses would have to face the parkland.

#### **Applicant Rebuttal:**

Attorney Robinson stated they're glad the public came out and he didn't mean to threaten to sue the City. Their intent is to comply with the law and find a way to get this done. Robinson doesn't think the park would be subject to code standards because it's part of the UGB expansion. Robinson wants to keep the written record open. Needed housing is not just affordable housing. City traffic engineer Replinger's comments reach the same conclusion as the applicant's traffic engineer. Robinson cited Patterson vs. City of Bend case law stating the TSP doesn't have to be adhered to if specific standards are not in the municipal code. The applicant accepts condition G.1. The need for the 30th house is so there's enough generation of revenue to get Gunderson Road started. Gunderson Road will be 30 percent cheaper if they construct it than if the City does. The applicant is trying to get parkland as part of the UGB expansion. They will address drainage in a written response. They will try to provide more information on the Gunderson Road proposal.

O'Neill stated the Clackamas County staff person for UGB expansion is Glen Hamburg. O'Neill will testify on behalf of the applicant and neighbors in support of the UGB expansion for Gunderson Road and the parkland.

#### Discussion:

The Planning Commission decided to close the public hearing. Commissioner Crosby gave the Planning Commission members one final chance to ask the applicant questions as the hearing will be closed.

**Motion**: Motion to close the public hearing at 9:15 p.m.

Moved By: Commissioner Carlton Seconded By: Commissioner Mayton

Yes votes: Carlton, Lesowski, Maclean-Wenzel, Crosby, Logan, and Mayton

No votes: None Abstentions: None

The motion passed at 9:15 p.m.

**Motion**: Keep the public record open for 7 days (ends January 30, 2020 at 5 pm, anyone can submit written evidence), followed by a 7 day response period (ends February 6, 2020 at 5pm, responses to issues brought up during first 7 days, but no new issues). Applicant waives right of rebuttal.

Moved By: Commissioner Lesowski

Seconded By: Commissioner Maclean-Wenzel

EXHIBIT 9
Z0004-20-CP
(Allied Homes & Development)
Page 7 of 9
Page 7 of 9

Yes votes: All Ayes No votes: None Abstentions: None

The motion passed at 9:17 p.m.

#### 6. Items from Commission and Staff

O'Neill went over upcoming meetings. The March date will be the 30th, not the 23rd. City Council goal setting was last week. They have a new planning goal related to economic development. New associate planner Shelley starts on February 10. Commissioner Crosby asked when a quorum is established, before or after recusal. City Attorney Doughman will need to look into it. Crosby requested a taller microphone for the public podium. Lesowski asked about a newspaper article that alluded to making adjustments to Sandy Style. O'Neill stated that staff will be evaluating small code modifications to Sandy Style in 2020. Mobley asked about the status of the TSP update. O'Neill stated he would provide a TSP update at a future meeting.

#### 7. Adjourn

Motion: To adjourn

Moved By: Commissioner Lesowski Seconded By: Commissioner Logan

Yes votes: All Ayes No votes: None Abstentions: None The motion passed.

Chairman Crosby adjourned the meeting at 9:35 p.m.

Chair Iarry Crashy

Chair, Jerry Crosby



Planning Director, Kelly O'Neill Jr



#### Hamburg, Glen

From: Chris Goodell <chrisg@aks-eng.com>
Sent: Friday, January 24, 2020 3:26 PM
To: Hamburg, Glen; Marie Holladay
Cc: Robinson, Michael C.; Kelly O'Neill Jr.

Subject: RE: Annexation/Comp Plan & Zone Map Amendment Application

Glen:

That's a good question. We thought quite a bit about the appropriate plan designation/zone for the future Gunderson Road/ROW and I think it was the City that landed on giving it the same zone as the abutting land to the north. (I'm not 100% positive on that.) I don't think we ever asked about a separate designation for the park. I think it could end up being POS. Kelly may want to comment on that...

Thanks,

# Chris Goodell, AICP, LEED<sup>AP</sup> - Associate AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | <u>www.aks-eng.com</u> | <u>chrisg@aks-eng.com</u>

From: Hamburg, Glen < GHamburg@clackamas.us>

Sent: Friday, January 24, 2020 2:58 PM

To: Marie Holladay <holladaym@aks-eng.com>

Cc: Robinson, Michael C. <MRobinson@schwabe.com>; Chris Goodell <chrisg@aks-eng.com>; Kelly O'Neill Jr.

<koneill@ci.sandy.or.us>

Subject: RE: Annexation/Comp Plan & Zone Map Amendment Application

EXTERNAL EMAIL: This email originated from outside of AKS Engineering & Forestry. Do not click links or open attachments unless you recognize the sender and know the content is safe.

HI Marie,

Terrific - thank you.

To be sure, is this application proposing to *only* annex (and change the Plan designation and zone of) the same 5.4± acres proposed in the separate concurrent application to be included in the UGB? Also, is there any particular reason the park land area is being zoned for residential use, as opposed to Parks and Open Space?

1

Enjoy your weekend,

#### Glen Hamburg

Planner II
Clackamas County Planning & Zoning
150 Beavercreek Rd
Oregon City, OR 97045
Tel: 503.742.4523
General Schedule: Tuesday-Friday, 7am-5:30pm

EXHIBIT 10 Z0004-20-CP (Allied Homes & Development) Page 1 of 2



The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your <u>feedback</u>. We appreciate your comments and will use them to evaluate and improve the quality of our public service.

From: Marie Holladay [mailto:holladaym@aks-eng.com]

Sent: Friday, January 24, 2020 2:41 PM

To: Hamburg, Glen < GHamburg@clackamas.us >

Cc: Robinson, Michael C. <MRobinson@schwabe.com>; Chris Goodell <chrisg@aks-eng.com>

Subject: Annexation/Comp Plan & Zone Map Amendment Application

Hi Glen,

Attached you will find the annexation/comp plan/zone map amendment application that was submitted to the City of Sandy on 1/7/2020. Please let me know if you need any additional information.

Thank you,

Marie Holladay



#### **AKS ENGINEERING & FORESTRY, LLC**

12965 SW Herman Road, Suite 100 | Tualatin, OR 97062
P: 503.563.6151 Ext. 270 | <a href="mailto:www.aks-eng.com">www.aks-eng.com</a> | <a href="mailto:holladaym@aks-eng.com">holladaym@aks-eng.com</a> Offices in: Bend, OR | Keizer, OR | Tualatin, OR | Vancouver, WA

NOTICE: This communication may contain privileged or other confidential information. If you have received it in error, please advise the sender by reply e-mail and immediately delete the message and any attachments without copying or disclosing the contents. AKS Engineering and Forestry shall not be liable for any changes made to the electronic data transferred. Distribution of electronic data to others is prohibited without the express written consent of AKS Engineering and Forestry.

<u>Spam Email</u> Phishing Email

#### Hamburg, Glen

From: Sent: To: Subject: Attachments:	Robinson, Michael C. <mrobinson@schwabe.com> Monday, February 3, 2020 7:26 AM Hamburg, Glen; Hughes, Jennifer FW: Letter of Support - File No. 20-002 UGB Support of Proposed Bailey Meadows UGB Expansion 2_2_20.docx</mrobinson@schwabe.com>	
From: Kelly O'Neill Jr. <koneill@ci.sandy.or.us> Sent: Sunday, February 2, 2020 9:08 AM To: Robinson, Michael C. <mrobinson@schwabe.com>; Cody Bjugan <cody@investpdx.com> Cc: David Doughman <david@gov-law.com> Subject: Fwd: Letter of Support - File No. 20-002 UGB</david@gov-law.com></cody@investpdx.com></mrobinson@schwabe.com></koneill@ci.sandy.or.us>		
Support letter for the UGB amendment is attached.		
From: Paul Savage <paul.savage@comcast.net> Date: Sat, Feb 1, 2020, 10:47 PM Subject: Letter of Support - File No. 20-002 UGB To: <koneill@ci.sandy.or.us> Cc: Paul Savage <paul.savage@comcast.net>  Please find attached a letter in support of the Allied Homes and Development proposed 5.29 acre UGB expansion that is an agenda item for February 11, 2020 Planning Commission meeting.</paul.savage@comcast.net></koneill@ci.sandy.or.us></paul.savage@comcast.net>		
Thank you,		
Paul Savage		
37506 Rachael Drive		
Sandy, OR 97055		
This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject or public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.		

EXHIBIT 11 Z0004-20-CP (Allied Homes & Development) Page 1 of 3 NOTICE: This email may contain material that is confidential, privileged and/or attorney work product for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

Spam Email
Phishing Email

City of Sandy Planning Division/Commission Sandy, OR

Date: Feb 2, 2020

Re: UGB Expansion - File No. 20-002 Gunderson Road and Park

I understand one agenda item for the February 11, 2020 Sandy Planning Commission meeting is the Allied Homes and Development proposal to expand the Sandy UGB by approximately 5.29 acres for the purpose of Gunderson road improvements/expansion from HWY 211 into their proposed 100 home Bailey Meadows subdivision plus reserve land for a public park.

I would like to acknowledge my full support of the proposed UGB expansion. This is something that should have been included in the original UGB expansion at this location. The 5.29 acre UGB expansion will help accommodate the additional traffic from the subdivision's 200-250 additional automobiles to help comply with the City of Sandy TSP. The allocation of future acreage for a neighborhood park is also very much needed and appreciated.

Thank you,

Paul Savage 37506 Rachael Drive Sandy, OR 97055

#### Hamburg, Glen

From: Kelly O'Neill Jr. <koneill@ci.sandy.or.us>
Sent: Tuesday, February 4, 2020 10:56 AM
To: Chris Goodell; Hughes, Jennifer

**Cc:** Hamburg, Glen; Robinson, Michael C.; David Doughman **Subject:** Re: County's Questions (So Far) on UGB Expansion Application

Attachments: 01-24-2020 Questions for Z0004-20-CP (CG+TM)MCR COMMENTS ON UGB

QUESTIONS (1).docx

Glen and all,

Attached are the responses from the applicant and the Sandy staff regarding the questions that were raised by Glen on January 24.

This should assist in answering questions from the public, Commissioners, and others.

Thanks -Kelly

On Fri, Jan 31, 2020 at 1:41 PM Kelly O'Neill Jr. < koneill@ci.sandy.or.us > wrote: Thank you Chris! I will work on this today and Monday and hope to have it back to the group by Tuesday when we also publish the UGB staff report.

On Fri, Jan 31, 2020 at 1:32 PM Chris Goodell < chrisg@aks-eng.com > wrote:

Kelly:

Sorry this is a little later than you had requested. Here you go.

If you have any questions, please let me know.

Thanks,

Chris Goodell, AICP, LEED<sup>AP</sup> - Associate

AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Kelly O'Neill Jr. <koneill@ci.sandy.or.us>

**Sent:** Friday, January 31, 2020 8:47 AM **To:** Chris Goodell <<u>chrisg@aks-eng.com</u>>

EXHIBIT 12 Z0004-20-CP (Allied Homes & Development) Page 1 of 10 Cc: Hamburg, Glen < GHamburg@clackamas.us >; Robinson, Michael C. < MRobinson@schwabe.com > **Subject:** Re: County's Questions (So Far) on UGB Expansion Application

Thanks Chris. I look forward to seeing the document.

On Thu, Jan 30, 2020 at 4:05 PM Chris Goodell < chrisg@aks-eng.com > wrote:

Thanks Kelly.

I have taken an initial first stab at answers to these questions and forwarded to Mike and Todd Mobley for refinement.

Once I have their input, I will forward this to you.

Thanks again.

Chris Goodell, AICP, LEED<sup>AP</sup> - Associate

AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Kelly O'Neill Jr. <koneill@ci.sandy.or.us> Sent: Thursday, January 30, 2020 11:47 AM To: Hamburg, Glen < GHamburg@clackamas.us>

Cc: Robinson, Michael C. <MRobinson@schwabe.com>; Chris Goodell <chrisg@aks-eng.com>

Subject: Re: County's Questions (So Far) on UGB Expansion Application

EXTERNAL EMAIL: This email originated from outside of AKS Engineering & Forestry. Do not click links or open attachments unless you recognize the sender and know

Chris - if you send me responses to some of these by noon tomorrow I can work on the document for some time tomorrow afternoon

**EXHIBIT 12** 

Z0004-20-CP

Hello All,
In anticipation of this afternoon's teleconference, I've typed up some questions that we at the County have so far on the UGB Expansion Application with File No. Z0004-20-CP.
Regards,
Glen Hamburg
Planner II
Clackamas County Planning & Zoning
150 Beavercreek Rd
Oregon City, OR 97045
Tel: 503.742.4523
General Schedule: Tuesday-Friday, 7am-5:30pm
The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your feedback. We appreciate your comments and will use them to evaluate and improve the quality of our public service.
This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.
FXHIRIT 12

**Development Services Director** 

City of Sandy

**Development Services Department** 

39250 Pioneer Blvd

Sandy, OR 97055

(503) 489-2163

koneill@ci.sandy.or.us

This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

Kelly O'Neill Jr.
Development Services Director

City of Sandy Development Services Department 39250 Pioneer Blvd Sandy, OR 97055 (503) 489-2163 koneill@ci.sandy.or.us

Kelly O'Neill Jr.

**Development Services Director** 

City of Sandy Development Services Department 39250 Pioneer Blvd Sandy, OR 97055 (503) 489-2163 koneill@ci.sandy.or.us

EXHIBIT 12 Z0004-20-CP (Allied Homes & Development) Page 4 of 10

#### County Staff's Questions for Z0004-20-CP

January 24, 2020

Applicant responses = black italic text City responses = red italic text

#### A. Status of subdivision application and is conditions of approval

1. Has 19-023 SUB/VAR/TREE been approved?

No. A hearing with the City Planning Commission was held on January 23, 2020. At the end of the hearing, the public hearing was closed, but the record was held open for two one-week periods. The Planning Commission is slated to meet again on February 11, 2020 for deliberation and to make a decision on the application.

2. How does Clackamas County obtain a copy of minutes from the hearings on this application?

Please contact City staff members Emily Meharg or Kelly O'Neil Jr. for this information. The Planning Commission minutes from the first hearing (December 17, 2019) regarding Bailey Meadows is located on the City website here:

https://sandy.civicweb.net/Portal/MeetingInformation.aspx?Org=Cal&Id=233
The minutes from the January 23, 2020 Planning Commission meeting are still being written.
City staff will forward the draft minutes for January 23, 2020 when they are finished.

3. The application for Z0004-20-CP states that a condition of 19-023's approval is "anticipated" to "cause submittal of" an application for an amendment to the City's UGB. Will this anticipated condition on 19-023 require actual *approval* of the UGB amendment proposed in this application, or will the condition only require that an application be submitted?

An application for an amendment to the UGB was submitted by the applicant to the City on January 9, 2020.

4. Can the subdivision proposed in 19-023 be platted and built without the UGB expansion proposed in Z0004-20-CP?

The applicant has submitted this UGB application in order to work cooperatively with the City and the neighbors to the proposed subdivision but as explained in the applicant's subdivision materials, including oral and written testimony provided to the Sandy Planning Commission, the extension of Gunderson Road and the provision of park and is not legally required of the applicant in order for the City to approve the subdivision. Nevertheless, because Gunderson Road is shown on the City's acknowledged TSP(although its intersection with the state highway cannot be achieved and the applicant and the City have agreed on a new alignment), the applicant is seeking to implement the TSP by expanding the UGB in the City's acknowledged Urban Reserve Area("URA"). Further, Proposed condition of approval A1. For the subdivision does not require the UGB amendment in order for the subdivision to proceed but neither the road extension nor the park land dedication can be constructed without the UGB extension.

B. Details on UGB expansion area

**EXHIBIT 12** 

The "Exhibit Key Map" included with Z0004-20-CP identifies how portions of the expansion area may be used (e.g., for park land, for a stormwater tract).

1. What is the size of each of these constituent areas?

The applicant provided this information on January 24, 2020.

#### C. UGB/City enclaves

1. Does the City of Sandy have any rule/policy prohibiting the creation of jurisdictional enclaves (i.e., "islands" or "donut holes")? Are there any City rules/policies prohibiting an enclave of land not within a UGB but surrounded entirely by UGB lands? Are there any City rules/policies prohibiting an enclave of land under the jurisdiction of the County but surrounded entirely by lands incorporated in to the City?

We are unaware of any such rule/policy. That said, it is not desirable from a practical perspective. The City annexation criteria has a preference to not have islands, cherry stems, or shoestring annexations (see Section 17.78.00 (C.) of the Sandy Development Code. However, there is no prohibition against these sorts of annexation. Also, please keep in mind the subject application being reviewed by Clackamas County is a UGB expansion, not an annexation application.

2. If there are no such rules/policies, why should the area proposed for park land in the "Exhibit Key Map" not be left outside of the City's UGB?

The park will be a City park that should be in the City. Typically, parkland owned by a city inside a UGB, but outside city jurisdictional lines is limited to passive recreation (i.e. trails and open space) as it is not urbanized land. The parkland being proposed with this UGB application would be active recreation (i.e. playgrounds, maybe facilities necessitating sanitary sewer and water) and therefor must be annexed into City limits. Even if the County zoning for this property would allow an active recreation park the City of Sandy desires to have control over the development process for the parkland and therefore wants jurisdiction.

3. If there *are* such rules/policies prohibiting jurisdictional enclaves, why couldn't the proposed intersection be moved slightly south to avoid creating an enclave if the park land is left outside of the City's UGB?

It does not seem like this accomplishes anything other than creating a slightly larger enclave.

#### D. Road need and location

1. The application for 19-023, including a November 25, 2019, letter from Michael C. Robinson, represents that the Gunderson Rd connection to Hwy 211 is not needed to serve the expected traffic demand created by the 100-lot subdivision in 19-023, and that traffic created by the subdivision can be adequately served with only an extension of Melissa Ave (and an emergency vehicle access to the highway at Ponder Ln).

Is this still the case? Is the Gunderson Rd highway connection *needed* to meet the proposed subdivision's traffic demands?

The applicant's statement goes to the initial issue of whether the subdivision application can be approved by the City without the extension of Gunderson road outside of the City's UGB but the UGB approval is not needed to approve the subdivision application. However, as explained above, the UGB expansion is needed to extend Gunderson Road to the state highway in order to implement the City's acknowledged TSP and the UGB expansion would leave an area outside of the UGB, so the applicant included that area within the UGB expansion in order to provide park land to the City. As the Sandy Planning Director stated, there are no areas nearby within the UGB in which to provide additional parkland to serve this subdivision and other existing subdivisions within the City. The two issues-what is required for approval of the subdivision and the expansion of the UGB-are separate issues.

2. The June 20, 2019, TIA from Lancaster Engineering states that "it is expected that additional access [to Hwy 211] will be available to the east of the [proposed 100-lot subdivision] as other properties develop". Indeed, the subdivision plans show that a connection to the east is anticipated, and the subdivision's proposed street layout would provide for the extension(s).
Moreover, Mr. Robinson's November 25 letter quotes Lancaster Engineering as saying that, as an alternative to the proposed Gunderson Rd connection to Hwy 211, "a future street connection serving the area north of Highway 211 could be established to the east [of the proposed subdivision], in the location of Arletha Court or Village Boulevard."

Is this still the case? If not, what studies and determinations were made since these statements that areas east of the proposed subdivision and north of the highway (e.g., on Tax Lot 24E23-00300 already within City limits, or on Tax Lots 24E23-00400 or 24E24B-02800 already within the UGB) were no longer possible?

This was the applicant's response to issues raised by City staff about a second vehicular connection to the proposed subdivision but does not detract from the need for the UGB expansion to implement the City's TSP.

3. Other than the Ponder Ln intersection and the proposed Gunderson Rd intersection, what other locations *within the UGB* were considered for a road connection to the north side of the highway, and why are those locations not feasible?

When the existing Transportation System Plan (TSP) was created in December 2011 the road alignment for Gunderson Road was conceptually located on the map. Current city staff believes the location of Gunderson Road was not fully evaluated for alignment potential. If it would have been fully evaluated the evaluation would have shown the conceptual location was not possible due to sight distance, and other factors. Fast forward to 2017. In 2017 when the UGB expansion was adopted staff at that time assumed the conceptual location of Gunderson Road in the TSP had been evaluated during the 2011 TSP process. In hindsight we would have included Tax Lot 701 in the UGB expansion and this UGB process the applicant has undertaken would not be necessary. However, in talking with DLCD they had no concerns that this was missed during the 2017 UGB expansion. C'est la vie.

4. Other than the Ponder Ln intersection and the proposed Gunderson Rd intersection, what other locations *outside* of the UGB were considered for a road connection to the highway, and why are those locations not feasible?

Alignments further to the northeast would not meet City standards for minimum curve radii for arterial roadways and ODOT requirements for perpendicular access. Also, connecting to 2004-20-CP

extending Cascadia Village Drive northwest of Highway 211 as Gunderson Road as prescribed in the TSP would not be possible. Alignments further to the southwest have natural resource constraints and are further away from the existing UGB/City. A road alignment to the southwest would be of diminished utility in serving urban transportation demands from the City of Sandy.

5. Other than the cost to the developer of acquiring property for right-of-way from properties to the east, which the connectivity plans for the 100-lot subdivision already anticipate, why couldn't the 100-lot subdivision be served with a connection to the highway further east on the north side of Hwy 211 in an area already within the UGB?

This would not match the City's TSP, which shows the general location where the connection is desired.

6. Why is it necessary to include a section of an existing State highway in the UGB expansion?

This was included to accommodate improvements along the highway for a turn lane and to provide a connection to the stormwater management facility. BTW, the City of Sandy is in negotiations with ODOT for a jurisdictional transfer of HWY 211 from downtown Sandy to just west of Gunderson Road.

7. Where are the proposed right-of-way dedication and construction easements in relation to the historic Barlow Road? How will the historic Barlow Road be disturbed with the planned road construction?

The County Assessor's map indicates the alignment of the historic Barlow Road. It is similar to the Hwy 211 alignment. There will be road construction activities in a portion of the area shown on the Assessor's map where the Barlow Road is indicated.

#### E. Park land

1. The City's Planning Commission calculates that 1.29 acres of park land is, according to City rules, due to be dedicated for a 100-lot subdivision. What demonstrates the need for approximately 2.38 acres off additional park land?

This is the amount of land that remains after right-of-way is dedicated for the Gunderson Road extension. The City's position on park land dedication is that a fee in lieu should be accepted rather than require dedication in future subdivisions. However, the City, its residents and the City's Trails and Parks Advisory Board, would all like to see a public park in this area. This area for park land dedication will go beyond serving this subdivision and will accommodate demands for future subdivisions in the URA when the UGB is expanded.

2. The proposed park land is not identified in the City's Parks Master Plan. Why is a park needed here, at this particular location? What facilities with the park include?

The Parks Master Plan identifies a park in the Nicolas Glen subdivision immediately north of the proposed subdivision in File No. 19-023 SUB/VAR/TREE; however, for reasons unbeknownst to current City staff that park development never occurred. Since that park was never dedicated nor developed the Parks and Trails Advisory Board would like parkland in the general vicinity of Bailey Meadows. The City of Sandy is currently in the process of a Parks Master Plan revision.

Z0004-20-CP

(we hired ESA) and my guess is the additional parkland as proposed will be needed based on the results and analysis completed by ESA.

- 3. Why can't needed park land be provided within the City's existing UGB? *The identified location in the UGB expansion is preferred.* 
  - 4. Why can't park land, presumably serving adjacent development, be located *within those adjacent developments*?

There are no developments adjacent to Bailey Meadows currently being proposed.

5. Why aren't Knollwood Park, Hamilton Ridge Playground, Barlow Ridge Park, and the Bornstedt Park & Splashpad sufficient to serve the area's residents?

Our Parks and Trails Advisory Board doesn't believe these other parks you have identified are sufficient. Knollwood, Hamilton Ridge, and Barlow are all small parks that serve existing neighborhoods. These are small parks. Bornstedt Park is across Highway 211 and does not serve children in Nicolas Glen or the proposed Bailey Meadows, unless you are arriving by vehicle to play at the splashpad. The residents of Nicolas Glen and we assume the future residents of Bailey Meadows will want a park they can safely walk to.

6. Why is a new park in the area not located nearer to existing development, rather than at the edge of the UGB and along the highway?

This is the area proposed for parkland at this time.

7. If the areas is to be a park, why isn't the City's Comprehensive Plan Map being amended to designate this park land area as "Parks and Open Space"? Why will the area instead be dedicated "Low Density Residential"?

It will most likely be Parks and Open Space (POS). This will be a staff recommendation to our hearing bodies. In our telephone conversation, Kelly indicated that the park would likely be designated Parks and Open Space (POS).

8. Lancaster Engineering determined that the proposed park will be a "passive-use neighborhood park that will be used primarily by the residents in the area" and that "trips to and from the park will be primarily pedestrian and bicycle trips and no separate parking lot is planned."

How did Lancaster Engineering make this determination, given that the park is not in the Parks Master Plan and that, according to the applicant, how the park will be developed will be determined at some undefined point in the future?

Also given that the park will be nearly twice as large as what City rules require for a 100-lot subdivision, and given that it will be located at a new highway intersection and across the highway from existing development, how is the applicant certain the park will not need/have a parking lot?

Two-acre parks are considered neighborhood parks that are intended to serve a ½ mile around it. Visitors generally arrive by walking or bicycles. Parking is not a typical feature for neighborhood parks. Other parks within the City of Sandy that are larger and more active use, such as the Sandy Bluff Park & Dog Park, Cascadia Park, and Bornstedt Park & Splashpad, do not have parking lots. The only park in the City with off-street parking is Meinig Memorial Park, which is a regional facility and served large events and festivals.

**EXHIBIT 12** 

9. Is dedication of park land to the City a condition of the subdivision's approval? If not, what assurances are there that the acreage will actually be used for a park, and not for additional housing or other development?

If zoned POS, housing will not be a permitted use. Additionally, A condition of approval requests that the applicant attempt to provide park land dedication through the UGB expansion application.

#### F. Stormwater tract area

1. What will the stormwater tract area shown in the "Exhibit Key Map" contain? What types and sizes of facilities will it have?

The stormwater facility will be in the form of a pond that provides detention and water quality treatment. It will be vegetated with native species and will have inlet and outlet structures, typical of these features. Stormwater facilities within the City of Sandy follow the City of Portland Stormwater Management Manual (SWMM) standards. The stormwater facility will have to follow the provisions of the SWMM.

2. What development will the stormwater tract serve?

The stormwater facility will serve Gunderson Road extension and any necessary additional paving along Hwy 211.

3. Is the stormwater tract necessary to serve the development proposed in 19-023?

No.

4. Why couldn't the proposed stormwater tract be located within the City's existing UGB?

Existing topography prevents this. The applicant is proposing the stormwater facility at the low point for gravity purposes.

5. What other sites have been evaluated for the siting of these facilities, and why are those other sites not appropriate?

Due topography, this is the only location that can accommodate the Gunderson Road and Hwy 211 improvements. Again, the applicant has to place this facility at the low point for gravity purposes.

6. Where are proposed stormwater facilities in relation to the historic Barlow Road crossing the property?

Based on the County Assessor's map, the stormwater facility is planned between the Barlow Road corridor and Hwy 211.

## Hamburg, Glen

From: Kelly O'Neill Jr. <koneill@ci.sandy.or.us>
Sent: Friday, February 7, 2020 9:23 AM

To: Hamburg, Glen

**Cc:** Chris Goodell; Robinson, Michael C.; David Doughman; Hughes, Jennifer

**Subject:** Re: County's Questions (So Far) on UGB Expansion Application

- 1. The proposed connection to the highway outside the current UGB is *not* needed for the 100-lot subdivision. Rather, that subdivision is approvable by the City even without this connection, and the working assumption is that the connection will not be conditioned on it (or the park or the stormwater facilities) actually being built. Indeed, because the submitted traffic study shows that the subdivision does not need this connection, it may not be possible to condition the subdivision's approval on the construction of the off-site improvements. The City of Sandy TSP states that local roads do not typically accommodate more than 800 to 1,000 ADT. Mike Robinson has stated that because the 800 to 1,000 ADT standard uses the word 'typically' it is subjective and not clear and objective. He has also stated that since the 800 to 1,000 is not incorporated in our municipal code we can not use this standard in the land use decision. If you review his testimony in the Bailey Meadows packet (I will publish on the City website on February 10) he elaborates in great detail on this. Sandy community members disagree with his evaluation and find that Gunderson is a needed street...this is the main issue/disagreement about this subdivision. The City's stance is that Gunderson Road is a needed street and is consistent with the TSP.
- 2. The findings of the June 2020 traffic study are still considered valid by the applicant. Again, the study found that, rather than locating the highway connection where shown in the TSP, a highway connection could be provided at at least two other locations already within the UGB to serve both the 100-lot subdivision and other planned/zoned residential areas inside the current UGB. I think at this point the most viable location for connecting to Highway 211 is where the applicant has proposed. This location meets sight visibility on the highway and the property owner is a willing seller (no need for eminent domain).
- 3. There is no reason a park could not be located in the plat of the proposed subdivision or on adjacent/nearby properties that are already within the UGB. This is a statement the applicant needs to evaluate and answer.
- 4. A park in the proposed location is not identified in the City's adopted Parks Master Plan. In fact, in a separate application before the City for annexation of the proposed UGB expansion area, the applicant states, "According to the Sandy Parks Master Plan adopted May 15, 1997, there is not a conceptual location for a park on or near the subject site." The Parks & Trails Advisory Board holds that a park is needed. Our Parks Master Plan is extremely outdated and was completed when the population was around 5,000 people (less than half of the current population). The surrounding community has voiced they want a park. This is the City's attempt to satisfy all groups and provide a park. There is no evidence that a park is not needed either.
- 5. While last week the City verbally expressed on the phone the *possibility* of zoning the proposed park space as Parks and Open Space (POS), the actual application pending with the City for annexation and amendment of the Comprehensive Plan Map and Zoning Map requests the entire UGB expansion area for residential development instead, with two different zoning designations Low Density Residential (LDR) and Single Family Residential (SFR). Even if a different application were to be submitted (and publically noticed) in or the park area POS, it sounds like the remainder of the UGB expansion area (approximately three acres) would still be zoned for residential development. There is no proposed new zoning map included with the copy of

annexation/Map amendment application that I received, so I'm not able to see which portions of the UGB expansion area are currently being sought for LDR zoning and which for SFR zoning. Rest assured the development agreement will guarantee that the land, if annexed, is only used for the purposes related to Gunderson Road and Highway 211, stormwater for Gunderson Road and Highway 211, and a park.

- 6. No Goal 10 analysis has been conducted for three acres of additional residential land in the UGB. It will be residential zoned land that has limitations on use per the development agreement and criterion the City will set in the annexation approval.
- 7. There is no existing agreement with all owners of the subject lot of record for the proposed park land to be dedicated to the City, and the City has no plans for when/how the park land will be developed/constructed. The statement on the existing agreement for parkland will need to be answered by the applicant. The City hired ESA to complete a new Parks Master Plan and as such this land will be evaluated as part of that process.
- 8. Road and other construction will occur on the historic Barlow Road. This is not something we evaluate at the City of Sandy.

On Fri, Jan 31, 2020 at 2:55 PM Hamburg, Glen < GHamburg@clackamas.us > wrote:

Hi again,

Here are eight facts, as I understand them based on what has been submitted so far, including the details provided today, that should be considered before the City finalizes any responses to my earlier questions or their staff report. Do let me know if I have any of these facts wrong.

- 1. The proposed connection to the highway outside the current UGB is *not* needed for the 100-lot subdivision. Rather, that subdivision is approvable by the City even without this connection, and the working assumption is that the connection will not be conditioned on it (or the park or the stormwater facilities) actually being built. Indeed, because the submitted traffic study shows that the subdivision does not need this connection, it may not be possible to condition the subdivision's approval on the construction of the off-site improvements.
- 2. The findings of the June 2020 traffic study are still considered valid by the applicant. Again, the study found that, rather than locating the highway connection where shown in the TSP, a highway connection could be provided at at least two other locations already within the UGB to serve both the 100-lot subdivision and other planned/zoned residential areas inside the current UGB.
- 3. There is no reason a park could not be located in the plat of the proposed subdivision or on adjacent/nearby properties that are already within the UGB.
- 4. A park in the proposed location is not identified in the City's adopted Parks Master Plan. In fact, in a sexhibit 13 application before the City for annexation of the proposed UGB expansion area, the applicant states, "Azootiqs 2010P

(Allied Homes & Development)

Sandy Parks Master Plan adopted May 15, 1997, there is not a conceptual location for a park on or near the subject site."

- 5. While last week the City verbally expressed on the phone the *possibility* of zoning the proposed park space as Parks and Open Space (POS), the actual application pending with the City for annexation and amendment of the Comprehensive Plan Map and Zoning Map requests the entire UGB expansion area for residential development instead, with two different zoning designations Low Density Residential (LDR) and Single Family Residential (SFR). Even if a different application were to be submitted (and publically noticed) in order to zone the park area POS, it sounds like the remainder of the UGB expansion area (approximately three acres) would still be zoned for residential development. There is no proposed new zoning map included with the copy of annexation/Map amendment application that I received, so I'm not able to see which portions of the UGB expansion area are currently being sought for LDR zoning and which for SFR zoning.
- 6. No Goal 10 analysis has been conducted for three acres of additional residential land in the UGB.
- 7. There is no existing agreement with all owners of the subject lot of record for the proposed park land to be dedicated to the City, and the City has no plans for when/how the park land will be developed/constructed.
- 8. Road and other construction will occur on the historic Barlow Road.

Finally, I'll note that I spoke with Jennifer Donnelly a couple days ago. I certainly don't want to speak for her or DLCD, but I understood her to say that having a road outside a UGB drawn in the TSP would not be sufficient justification to incorporate that road in to the UGB. You would still need to show that the planned road section (and park space and stormwater facilities) that you want to bring in to the UGB are actually needed to meet current growth projections. In other words, just putting a line on the TSP outside the UGB – particularly a line that even this applicant has acknowledged is more conceptual and still moveable – doesn't grant the opportunity to move the UGB to include it at any time.

#### Glen Hamburg

Senior Planner

Clackamas County Planning & Zoning

150 Beavercreek Rd

Oregon City, OR 97045

Tel: 503.742.4523

General Schedule: Tuesday-Friday, 7am-5:30pm

EXHIBIT 13 Z0004-20-CP (Allied Homes & Development) Page 3 of 9



The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your <u>feedback</u>. We appreciate your comments and will use them to evaluate and improve the quality of our public service.

From: Hamburg, Glen

Sent: Friday, January 31, 2020 1:51 PM

To: 'Kelly O'Neill Jr.' < koneill@ci.sandy.or.us >; Chris Goodell < chrisg@aks-eng.com >

Cc: Robinson, Michael C. < MRobinson@schwabe.com >; David Doughman < David@gov-law.com >

Subject: RE: County's Questions (So Far) on UGB Expansion Application

Thank you, Everyone. I'll make sure these and any additional information provided next week are included with the file.

Regards,

## **Glen Hamburg**

Senior Planner

Clackamas County Planning & Zoning

150 Beavercreek Rd

Oregon City, OR 97045

Tel: 503.742.4523

General Schedule: Tuesday-Friday, 7am-5:30pm



The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your <u>feedback</u>. We appreciate your comments and will use them to evaluate and improve the quality of our public service.

From: Kelly O'Neill Jr. [mailto:koneill@ci.sandy.or.us]

**Sent:** Friday, January 31, 2020 1:41 PM **To:** Chris Goodell < <a href="mailto:chrisg@aks-eng.com">chrisg@aks-eng.com</a>>

**Cc:** Hamburg, Glen < <u>GHamburg@clackamas.us</u>>; Robinson, Michael C. < <u>MRobinson@schwabe.com</u>>; David Doughman

<David@gov-law.com>

Subject: Re: County's Questions (So Far) on UGB Expansion Application

Thank you Chris! I will work on this today and Monday and hope to have it back to the group by Tuesday when we also publish the UGB staff report.

On Fri, Jan 31, 2020 at 1:32 PM Chris Goodell < chrisg@aks-eng.com > wrote:

Kelly:

Sorry this is a little later than you had requested. Here you go.

If you have any questions, please let me know.

Thanks,

Chris Goodell, AICP, LEEDAP - Associate

AKS ENGINEERING & FORESTRY, LLC

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

EXHIBIT 13 Z0004-20-CP (Allied Homes & Development) Page 5 of 9 From: Kelly O'Neill Jr. < koneill@ci.sandy.or.us >

**Sent:** Friday, January 31, 2020 8:47 AM **To:** Chris Goodell <chrisg@aks-eng.com>

Cc: Hamburg, Glen < GHamburg@clackamas.us >; Robinson, Michael C. < MRobinson@schwabe.com >

Subject: Re: County's Questions (So Far) on UGB Expansion Application

Thanks Chris. I look forward to seeing the document.

On Thu, Jan 30, 2020 at 4:05 PM Chris Goodell <a href="mailto:chrisg@aks-eng.com">chrisg@aks-eng.com</a> wrote:

Thanks Kelly.

I have taken an initial first stab at answers to these questions and forwarded to Mike and Todd Mobley for refinement.

Once I have their input, I will forward this to you.

Thanks again.

Chris Goodell, AICP, LEED<sup>AP</sup> - Associate

**AKS ENGINEERING & FORESTRY, LLC** 

P: 503.563.6151 | F: 503.563.6152 | www.aks-eng.com | chrisg@aks-eng.com

From: Kelly O'Neill Jr. < koneill@ci.sandy.or.us > Sent: Thursday, January 30, 2020 11:47 AM
To: Hamburg, Glen < GHamburg@clackamas.us >

Cc: Robinson, Michael C. < MRobinson@schwabe.com >; Chris Goodell < chrisg@aks-eng.com >

**Subject:** Re: County's Questions (So Far) on UGB Expansion Application

EXTERNAL EMAIL: This email originated from outside of AKS Engineering & Forestry. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Chris - if you send me responses to some of these by noon tomorrow I can work on the document time tomorrow afternoon

Z0004-20-CP

On Fri, Jan 24, 2020, 12:15 PM Hamburg, Glen < GHamburg@clackamas.us > wrote:
Hello All,
In anticipation of this afternoon's teleconference, I've typed up some questions that we at the County have so far on the UGB Expansion Application with File No. Z0004-20-CP.
Regards,
Glen Hamburg
Planner II
Clackamas County Planning & Zoning
150 Beavercreek Rd
Oregon City, OR 97045
Tel: 503.742.4523
General Schedule: Tuesday-Friday, 7am-5:30pm
The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your feedback. We appreciate your comments and will use them to evaluate and improve the quality of our public service.
This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

Kelly O'Neill Jr.	
Development Services Director	
City of Sandy	
Development Services Department	
39250 Pioneer Blvd	
Sandy, OR 97055	
(503) 489-2163	
koneill@ci.sandy.or.us	
This e-mail is a public record of the City of Sandy and is subject to the State of Oreg subject to public disclosure under the Oregon Public Records Law. This e-mail, inclu of the intended recipient(s) and may contain confidential and privileged information. or distribution is prohibited. If you are not the intended recipient, please send a reply and destroy all copies of the original message.	uding any attachments, is for the sole use Any unauthorized review, use, disclosure,
Kelly O'Neill Jr.	
Development Services Director	
City of Sandy	
Development Services Department	
39250 Pioneer Blvd	
Sandy, OR 97055 (503) 480 2163	EXHIBIT 13
(503) 489-2163	Z0004-20-CP
koneill@ci.sandy.or.us	(Allied Homes & Development)

Page 8 of 9

This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

Kelly O'Neill Jr.
Development Services Director

City of Sandy Development Services Department 39250 Pioneer Blvd Sandy, OR 97055 (503) 489-2163 koneill@ci.sandy.or.us

This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

Spam Email
Phishing Email

## Hamburg, Glen

From: christine.stevenson@state.or.us

Sent: Tuesday, February 11, 2020 12:51 PM

To: Hamburg, Glen

**Subject:** WN2020-0097 Response to Local Case File #Z0004-20-CP

Attachments: Wetland Land Use Notice.pdf; Wetland Land Use Notice Response.pdf

We have completed our review of the Wetland Land Use Notification that was prepared for Development Allied Homes and - Richard, Lawrence, Sherrene Pullen and TenEyck The WLUN form was submitted to the Department for review/response and given the file number WN2020-0097

The results and conclusions from that review are explained in the attached pdf documents. If the attached documents are illegible or difficult to open, you may contact the Department and request paper copies. Otherwise, please review the attachments carefully and direct any questions or comments to Jurisdiction Coordinator, Chris Stevenson at 503-986-5246 or christine.stevenson@dsl.state.or.us. Thank you for your interest in the project.

Additional resources that may be helpful: DSL Coordinator List

## R/F Fee Schedule

Aquatic Resource Management Program Oregon Department of State Lands 775 Summer St. NE, Ste. 100 Salem, OR 97301-1279 Fax: (503) 378-4844

Spam Email
Phishing Email

www.oregon.gov/dsl

# OREGON DEPARTMENT OF STATE LANDS

# **Wetland Land Use Notice Response**

# Response Page

Department of State Lands (DSL) WN#\*

WN2020-0097

## **Responsible Jurisdiction**

Staff ContactJurisdiction TypeMunicipalityGlen HamburgCountyClackamas

Local case file #CountyZ0004-20-CPClackamas

## **Activity Location**

TownshipRangeSectionQQ sectionTax Lot(s)02S04E23701

Street Address Address Line 2

Otty State / Province / Region

Postal / Zip Code Country

Clackamas

**Latitude Longitude** 45.384610 -123.27733

# Wetland/Waterway/Other Water Features



- ▼ There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property

# Your Activity



It appears that the proposed project may impact wetlands and may require a State permit.

EXHIBIT 14 Z0004-20-CP (Allied Homes & Development) Page 2 of 3 ✓ An onsite inspection by a qualified wetland consultant is recommended prior to site development to
determine if the site has wetlands or other waters that may be regulated. The determination or delineation
report should be submitted to DSL for review and approval. Approved maps will have a DSL stamp with
approval date and expiration date.

# Applicable Oregon Removal-Fill Permit Requirement(s)



A state permit is required for 50 cubic yards or more of fill removal or other ground alteration in wetlands, below ordinary high water of waterways, within other waters of the state, or below highest measured tide.

# **Closing Information**



#### **Additional Comments**

Based on a review of the available information, there are jurisdictional waters and potentially, associated wetlands onsite. A wetland delineation is recommended if any removal and/or fill activities are planned within 200 ft of the western property boundary. The report should be submitted to DSL for review and concurrence.

This is a preliminary jurisdictional determination and is advisory only.

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

✓ A Federal permit may be required by The Army Corps of Engineers: (503)808-4373

#### **Contact Information**

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements
  please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The
  current list is found at: http://www.oregon.gov/dsl/ww/pages/wwstaff.aspx
- The current Removal-Fill permit and/or Wetland Delineation report fee schedule is found at: https://www.oregon.gov/dsl/WW/Documents/Removal-FillFees.pdf

#### **Response Date**

2/11/2020

Response by:

Response Phone:

Chris Stevenson

503-986-5246



## **Department of Land Conservation and Development**

Metro Regional Solutions Center 1600 SW Fourth Avenue, Suite 109 Portland, OR 97201 www.oregon.gov/LCD

13 February 2020

Kelly O'Neill, Development Services Director City of Sandy 39250 Pioneer Blvd Sandy, OR 97055 koneill@ci.sandy.or.us

sent via email

RE: Local File No.20-002 UGB Expansion/PAPA 002-20

Dear Kelly,

On 29 October 2019 the department had a conference call with the City and the applicant for the UGB road expansion to discuss the process. The discussion balanced the process of a goal exception vs. an urban growth boundary expansion for a public facility in an urban reserve. It was decided in that conversation that an urban growth boundary expansion would be a better option than a goal exception. The UGB expansion would be specific to a public facility; a road way and a park. We also discussed in November and again in January that the findings would need to address the following:

#### **EVALUATION:**

#### 660-024-0040 Land Need

(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.

## 660-024-0050 Land Inventory and Response to Deficiency

(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.

## <u>660-024-0065</u> Establishment of Study Area to Evaluate Land for Inclusion in the UGB

(3) When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site characteristics may be found in only a small number of locations, the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the preliminary study area may be limited to the control of the control of the preliminary study area may be limited to the control of t

Z0004-20-CP

(Allied Homes & Development)

those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:

(a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular industrial use.

(b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks, schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.

<u>660-024-0067</u> Evaluation of Land in the Study Area for Inclusion in the UGB; Priorities

The staff report does not adequately address the above criteria required for an UGB expansion for a public facility in an urban reserve, the department recommends adding to the finding for the City Council staff report to address the above criteria. Specifically, a more detailed analysis of the site specific roadway and park needs is warranted, with discussion of the reasons this particular site is best suited to meet public facility needs and why an additional .75 acres is needed. Goal 14: Urbanization section of the staff report speaks to the zoning of the proposed property, it appears that the recommendation is for Single Family Residential (SFR) and not Parks and Open Space (POS) with the recommended condition that only public facilities can be built on the proposed road area. The department recommends zoning the entire expansion area POS, this will ensure that the development is consistent with the arguments supporting UGB expansion.

Please let me know if you have any questions. Please include this letter in the record for the City Council hearing on the 2 March 2020.

Respectfully,

Jennifer Donnelly Regional Representative

cc: Gordon Howard, DLCD
Kevin Young, DLCD
Jennifer Hughes, Clackamas County Planning Director
Glen Hamburg, Planner Clackamas County



February 20, 2020

Michael C. Robinson

Admitted in Oregon T: 503-796-3756 C: 503-407-2578 mrobinson@schwabe.com

#### VIA E-MAIL

Mr. Glen Hamburg, Planner II Clackamas County Department of Transportation and Development Planning and Zoning Division 150 Beavercreek Road, Room 225 Oregon City, OR 97045

RE: Clackamas County File No. Z0004-20-CP; Joint Submittal to City of Sandy and Clackamas County by Allied Homes & Development to Expand the City of Sandy Urban Growth Boundary Within the Acknowledged City of Sandy Urban Reserve Area by 6.42 Acres, Including 4.37 Acres for Tax Lot 701 and 2.05 Acres for Oregon Highway 211

Dear Mr. Hamburg:

This office represents Allied Homes & Development (the "Applicant"). Thank you for providing your questions and the opportunity for the Applicant to answer them. This letter responds to the questions that you have asked the Applicant to answer regarding satisfaction of the approval criteria for this Urban Growth Boundary ("UGB") amendment.

The principal issue before the County Planning Commission and the Board of Commissioners does not concern residential lands or other types of specific land uses but rather two needed public facilities which cannot be accommodated within the existing UGB and which are proposed to be located within the acknowledged Urban Reserve Area (the "URA"). Much of the focus on the County analysis is based on the assumption that the Applicant proposes residential uses in the amended UGB; this is incorrect and is not proposed by the Applicant or the City. The sole purpose of the UGB amendment is to work cooperatively with the City and its citizens to provide two needed public facilities notwithstanding that the Applicant is not obligated to provide them in its subdivision. The Applicant hopes the County staff, the County Planning Commission and the County Board of Commissioners will understand the significance of this approach to resolving this land use issue. Furthermore, the area proposed for the UGB amendment is in the acknowledged Urban Reserve Area; it has already been committed for first priority UGB expansions and notwithstanding that it may be in farm use now, it's status as an acknowledged URA means that it is not intended to be farm use in the future but rather is intended to accommodate future urban needs identified by the City of Sandy.

Please place this letter before the Clackamas County Planning Commission prior to its initial evidentiary hearing on March 9, 2020 and before the Clackamas County Board of

EXHIBIT 16 Z0004-20-CP

Commissioners at its evidentiary hearing on March 18, 2020 and in the official Clackamas County Planning and Zoning Division file for this Application.

## 1. What the UGB Amendment application requests.

The Applicant submitted the UGB Application to expand the City of Sandy (the "City") UGB by 6.42 acres, all within the URA. The UGB amendment will allow the extension of Gunderson Road, a Minor Arterial Street shown on the City's acknowledged Transportation System Plan (the "TSP") to connect the proposed Bailey Meadows Subdivision (the "Subdivision") with Oregon Highway 211 and to provide an area for a public park where such area cannot be provided in the proposed Bailey Meadows Subdivision.

The UGB amendment is not proposed to accommodate additional residential land inside the UGB; therefore, Statewide Planning Goal ("Goal") 10, "Housing," is not relevant to this Application and a Goal 10 analysis is not required.

The City Planning Commission recommended approval of the UGB Amendment following the conclusion of its initial evidentiary hearing on February 11, 2020. The Sandy City Council will consider the UGB amendment at its public hearing on March 2, 2020.

## 2. Why the UGB amendment is necessary.

The UGB amendment is within the City's acknowledged URA. Urban Reserve Areas are the first priority for expansion of the UGB. OAR 660-024-0067(2)(a)(A) Statewide Planning Goal (the "Goal") 14, "Urbanization," "Land Need," Subsection (2) provides that a change to a UGB shall be based on the following, including "demonstrated need for \*\*\* streets and roads \*\*\* parks or open space, or any combination of the need categories in this subsection (2)." Goal 10 also provides that "prior to expanding an Urban Growth Boundary, local government shall demonstrate that needs cannot reasonably be accommodated on land already inside the Urban Growth Boundary."

The UGB Amendment application explains why the amendment is necessary to accommodate Gunderson Road, a City Minor Arterial Street and a public park. **Exhibit 1** is Page 10 of the January 6, 2020 Traffic Impact Analysis (the "TIA") from Mr. Todd Mobley of LancasterMobley explaining that the City's acknowledged TSP shows the intersection of Gunderson Road with Oregon Highway 211 on a curve which, as Mr. Mobley explains, "however, upon closer investigation and the engineering analysis, it was determined that the alignment shown in the TSP was not feasible for construction of an intersection with Highway 211, primarily due to poor sight distance and need for a perpendicular intersection, and a very steep super-elevated roadway section."

Additionally, Mr. Mobley explained the need for the UGB expansion for Gunderson Road:

EXHIBIT 16 Z0004-20-CP (Allied Homes & Development) Page 2 of 34

"The nearest suitable intersection location was found to be farther to the southwest, at the location currently proposed for a UGB amendment. From this location, it is far enough from the horizontal and vertical curves to the northeast to have adequate sight distance and far enough southwest of the curve to not be in a super-elevated roadway section. However, this alignment is outside of the current UGB of the City of Sandy, as shown in Figure 5. As such, a UGB amendment is proposed to accommodate the road extension." (Id.)

Because the City has determined a need for Gunderson Road in its TSP and while the Applicant does not believe it is necessary to serve the Subdivision, because the City does, the Applicant agreed to submit the UGB Expansion application to provide the establishment of Gunderson Road within the URA through this UGB amendment at a location acceptable to the City and the Oregon Department of Transportation ("ODOT"). ODOT has signed the Application form consenting to its 2.05 acres in the Oregon Highway 211 right-of-way to be included in the UGB Application.

The second need for the UGB amendment is for a public park. While the Applicant has told the City that it cannot provide the public park within its subdivision and the City does not have the lawful authority to require the public park, the Applicant and the City have agreed to seek this UGB amendment to provide for a public park location. The public park location is proposed to be in the "donut hole" that would otherwise be left between the UGB expansion for Gunderson Road and the existing UGB.

As explained in more detail below, both public facility needs, allowed by Goal 10, are proposed based on determinative geography; in other words, Gunderson Road cannot be located elsewhere in order to meet standards necessary to connect it to Oregon Highway 211 and the public park cannot be located within the existing UGB in the area proposed to serve the proposed Bailey Meadows Subdivision and the existing Nicholas Glen Subdivision (**Exhibit 2**; email from City Planning Directory Kelly O'Neill dated February 7, 2020). The remainder of this letter addresses the remaining questions.

3. Response to eight facts contained in Mr. Hamburg's January 31, 2020 email.

This section responds to Mr. Hamburg's January 31, 2020 facts.

"1. The proposed connection to the highway outside the current UGB is not needed for the 100-lot subdivision. Rather, that subdivision is approvable by the City even without this connection, and the working assumption is that the connection will not be conditioned on it (or the park or the stormwater facilities) actually being built. Indeed, because the submitted traffic study shows that the subdivision does not need this connection, it may not be possible to condition the subdivision's approval on the construction of the off-site improvements."

EXHIBIT 16 Z0004-20-CP (Allied Homes & Development) Page 3 of 34

Applicant's Response: It is true that the extension of Gunderson Road outside of the current UGB is not needed for the proposed 100-lot Bailey Meadows Subdivision from the Applicant's viewpoint. However, the City believes the road extension is necessary and that fact is undisputable because Gunderson Road is part of the City's acknowledged TSP. The TSP, unfortunately, shows Gunderson Road connecting to Oregon Highway 211 in a location that ODOT cannot approve. This UGB amendment, in part, provides an expansion of the UGB within the acknowledged URA in order to allow the road to be constructed and intersect with Oregon Highway 211. The fact that the subdivision does not generate the need for the road does not mean it is not needed and Goal 10 clearly allows UGB expansions for public facilities including roads and streets.

"2. The findings of the June 2020 [sic] traffic study are still considered valid by the applicant. Again, the study found that, rather than locating the highway connection where shown in the TSP, a highway connection could be provided at at least two other locations already within the UGB to serve both the 100-lot subdivision and other planned/zoned residential areas inside the current UGB."

**Applicant's Response:** This fact ignores the January 6, 2020 TIA in **Exhibit 2**. Notwithstanding the Applicant's June, 2019 TIA for the Subdivision application, this fact is incorrect that the Gunderson Road intersection could be provided in at least two other locations.

"3. There is no reason a park could not be located in the plat of the proposed subdivision or on adjacent/nearby properties that are already within the UGB."

Applicant's Response: The park cannot be located in the plat of the proposed the Subdivision nor on adjacent or nearby properties that are already within the UGB for several reasons. First, the Applicant is not obligated to provide a park land dedication within a subdivision under relevant law but wishes to cooperate with the City to provide the needed park. Notwithstanding the Applicant's argument regarding the park site as it applied to the subdivision application, the City's Parks and Trails Advisory Board believes that a park is necessary in this area, as do the residents of the Nicholas Glen Subdivision. Second, Mr. O'Neill's email demonstrates that there is no availability for a park within developed subdivisions and a park cannot be developed in areas that have not been proposed for development. Locating the park in the "donut hole" within the acknowledged URA that would be created by the expansion for Gunderson Road, which must be located in the proposed location in order to appropriately intersect with Oregon Highway 211, is an appropriate use of the land for a public park.

"4. A park in the proposed location is not identified in the City's adopted Parks Master Plan. In fact, in a separate application before the City for annexation of the proposed UGB expansion area, the applicant states, 'According to the Sandy Parks Master Plan adopted May 15, 1997, there is not a conceptual location for a park on or near the subject site."

Applicant's Response: Notwithstanding the Applicant's argument about the need for a park on its property, testimony before the City Planning Commission by residents of the Nicholas GENHIBIT 16

Z0004-20-CP

Subdivision and the City's Parks and Trails Advisory Board demonstrates the need for a park in this area. Mr. O'Neill's email explains why a park location is not otherwise possible within the existing UGB.

"5. While last week the City verbally expressed on the phone the possibility of zoning the proposed park space as Parks and Open Space (POS), the actual application pending with the City for annexation and amendment of the Comprehensive Plan Map and Zoning Map requests the entire UGB expansion area for residential development instead, with two different zoning designations Low Density Residential (LDR) and Single Family Residential (SFR). Even if a different application were to be submitted (and publically noticed) in order to zone the park area POS, it sounds like the remainder of the UGB expansion area (approximately three acres) would still be zoned for residential development. There is no proposed new zoning map included with the copy of annexation/Map amendment application that I received, so I'm not able to see which portions of the UGB expansion area are currently being sought for LDR zoning and which for SFR zoning."

Applicant's Response: This is an issue that is appropriately addressed by conditions of approval by both the City and the County and is not an impediment to the UGB Amendment Application. The City can condition the UGB expansion on non-residential use of the expanded UGB. The County can also do so. The record must reflect the Applicant's representation that none of the UGB area requested for an expansion shall be used for residential development; only for the two public purposes that the UGB expansion will accommodate. This is fully consistent with Goal 10's provision that these types of public uses are permissible. Further, the Applicant has submitted a separate concurrent Comprehensive Plan map and zoning map amendment and annexation application to the City that will zone the expanded UGB area subject to appropriate conditions of approval so that it may only be used for these two public purposes.

"6. No Goal 10 analysis has been conducted for three acres of additional residential land in the UGB."

**Applicant's Response:** A Goal 10 analysis is not required where the Applicant is not proposing additional residential land.

"7. There is no existing agreement with all owners of the subject lot of record for the proposed park land to be dedicated to the City, and the City has no plans for when/how the park land will be developed/constructed."

**Applicant's Response:** The owner of Tax Lot 701, which will include the area proposed for the public park, has consented to the UGB Amendment application, so the statement that there is "no existing agreement with all owners of the subject lot of record" is incorrect.

## "8. Road and other construction will occur on the historic Barlow Road.

Applicant's Response: The historic Barlow Road is noted in Clackamas County Comprehensive Plan Chapter 9, "Open Space, Parks and Historic Sites," Policy 2.0. The Barlow Road Historic Corridor is subject to the Clackamas County Zoning and Development Ordinance (the "ZDO") provisions governing the corridor (Historic Corridor "HC") zoning district. However, nothing in the Plan prohibits a road from crossing the historic Barlow Road or the HC zoning district. If that were the case, road connections would be prohibited throughout the County. Indeed, your fact states only that the road will cross the historic Barlow Road but it does not say that it is prohibited. However, once the property is within the UGB, it will not be subject to either the County Plan or to ZDO Chapter 707.

## 4. Response to Administrative Rule questions.

## A. OAR 660-024-0050(4).

**Exhibit 3** is OAR 660-024-0050(4). First, the County can find that the need for the Gunderson Road extension and the public park are based on evidence in the record. The evidence supporting Gunderson Road is based on the January 6, 2020 Traffic Impact Analysis prepared by LancasterMobley. The need for the public park is based on the email from Mr. O'Neill.

OAR 660-024-0050(1) requires an inventory when a local government seeks to amend a UGB. However, the inventory principally addresses residential and employment land, neither of which is proposed for this Application. Therefore, the County can find that OAR 660-024-0050 is either irrelevant to the Application because it proposes a UGB for a public street and public park or, if it is relevant, that the record submitted by the Applicant is sufficient to satisfy the administrative rule.

The evidence demonstrates that the need for the two public facilities cannot be accommodated within the UGB for the reasons explained in this letter.

#### B. OAR 660-024-0050(6).

**Exhibit 4** is OAR 660-024-0050(6). The City proposes appropriate zones to allow the public street and the public park with the conditions of approval that neither may be used for residential land.

The City's Public Open Space ("POS") zoning district allows parks as a permitted use outright. Sandy Development Code ("SDC") 17.32.10.A.1. The City's Single-Family Residential ("SFR") zoning district allows "Minor Public Facilities" as a permitted use outright. SDC 17.34.10.B.7. SDC 17.10.30 defines "Minor Public Facilities" to include "new or extended public streets." Finally, SDC 17.12.32 (for Type III applications) and 17.12.40 (for Type IV applications) allow the City Planning Commission and the City Council to impose conditions of approval on the decision. It is feasible to impose conditions of approval as required by the

Z0004-20-CP

(Allied Homes & Development)

Page 6 of 34

County on the City map amendments and permitting applications for the Gunderson Road extension and the public park. This is sufficient to satisfy OAR 660-024-0050(6). The Applicant's representations made in this letter are binding on the Applicant and the Applicant proposes that the County impose this condition of approval on its decision approving the UGB amendment.

#### C. OAR 660-024-0065.

Because OAR 660-024-0065(1) references OAR 660-024-0050(4), which is concerned with residential and employment land, the County need not require compliance with OAR 660-024-0065. However, if the County deems that this administrative rule is applicable, then the "Preliminary Study Area" under OAR 660-024-0065(1) is the area analyzed in the LancasterMobley January 6, 2020 Traffic Impact Analysis. For these same reasons, OAR 660-024-0065(3) does not apply because that section is related to expansion of the UGB to accommodate an industrial use. OAR 660-024-0065(4) is in applicable because it addresses land conditions not found on this site. Finally, the County can find that OAR 660-024-0065(5), (6) and (7) are inapplicable because they relate to residential and employment land needs.

The County can find that OAR 660-024-0065(8) is irrelevant to this Application based on the specific locational needs of the two public facilities.

## D. Goal 5, "Natural Resources, Scenic and Historic Areas, and Open Spaces."

The County asked how the Application is consistent with Goal 5 because this site includes the Historic Barlow Trail. However, the County has not identified the category of Historic Barlow Trail, or what means it wishes the City and the Applicant to take to preserve or address the location of the Historic Barlow Trail. The Applicant has suggested a condition of approval. Also, as noted above, this City's acknowledged Plan contains a Policy addressing the Historic Barlow Trail:

"Goal 5 is satisfied by inventorying the required resources. The administrative rule implementing the Goal 5, OAR Chapter 660, Division 16 is satisfied by the County's Comprehensive Plan."

No amendment to a designated Goal 5 resource is proposed by this Application; therefore, consistent with the application of Goal 5 and its implementing administrative rule, the issue of properly addressing Barlow Road becomes a matter of the City's zoning and permitting actions once the property is inside the UGB. The Applicant commits to and will accept a condition of approval requiring it to coordinate with the County on Barlow Road when it submits and application to construct and permit Gunderson Road.

**Exhibit 5** is OAR 660-024-0065. The City's Comprehensive Plan (the "Plan") Goal 5, "Historic and Cultural Resource Protection Policies," Policy 25, acknowledges the Barlow Road Historic Corridor Background Report and Management Plan prepared by

EXHIBIT 16

Z0004-20-CP

(Allied Homes & Development)

Page 7 of 34

Clackamas County. The Applicant requests that the County impose a condition of approval on its decision approving the UGB amendment requiring:

"The Applicant shall consider the Barlow Road Historic Corridor and to minimize impact by the extension of Gunderson Road."

The County can find that the appropriate way to address the Historic Barlow Trail is through a condition of approval in the City's annexation and concurrent Comprehensive Plan map and zoning map amendment for the Gunderson Road extension.

#### E. Goal 8, "Recreational Needs."

Goal 8 is satisfied by the evidence in this record because the City has found it needs part of the UGB for park needs. Goal 8, "Recreation Planning." The remainder of Goal 8 addresses destination resorts, which are not applicable to this application.

## F. Goal 10, "Housing."

The County's assumption that the 6.42 acre UGB expansion is for housing is incorrect. The Applicant has never proposed housing for this area. The Application for the expansion of the UGB is solely for the accommodation of the public road and the public park. Additionally, the UGB Amendment application is not intended to serve the subdivision. The Applicant has explained on numerous occasions that the two are not linked except by virtue of the fact that the Applicant has submitted the Bailey Meadows Subdivision Application to the City. The County can find that Goal 10 is not implicated by this application.

#### G. Goal 14, "Urbanization."

The County can find that it is not possible to connect Gunderson Road within the UGB for the reasons explained in the January 6, 2020 LancasterMobley memorandum. Additionally, the City's evidence is that the proposed location for the public park is appropriate and by locating the park in the "donut hole" created by the expansion of the UGB to accommodate Gunderson Road, that is an appropriate future use serving the existing and future residential areas within the existing UGB.

Finally, the County can find that it is uncommon for parks to be designed prior to their establishment. However, while the proposed UGB area for the public park is slightly larger than what would be required in the event the Applicant were willing to or required to dedicate to the public park area, that does not mean that the City's evidence regarding the need for the public park in this location should be disregarded. Further, if the UGB is not expanded to include the area for the public park, then the County will leave a "donut hole" within the acknowledged URA and eventually the URA will accommodate a UGB expansion for this area.

EXHIBIT 16 Z0004-20-CP (Allied Homes & Development) Page 8 of 34

#### 5. Conclusion.

The evidence in the record before the Planning Commission and the Board of Commissioners demonstrates that the relevant approval criteria for the UGB amendment are satisfied. The Applicant respectfully requests that the County address each public facility separately and although the Planning Commission can recommend approval of, and the Board of Commissioners can approve the UGB amendment to accommodate both the public road and the public park, the County has the authority to approve one and not the other use based on the evidence before it if it finds that action appropriate.

As noted at the beginning of this letter, this UGB amendment is for the purpose of fulfilling identified public needs by the City of Sandy that cannot be accommodated in the existing UGB and addresses issues raised by City staff and the neighbors. The Applicant is not obligated to submit this UGB Amendment application but did so in order to work with the City and its citizens to address these two issues. The evidence in the record is sufficient for the County to approve this UGB Amendment application. The Applicant hopes that the County acknowledges the valuable purpose that this UGB amendment application serves and will approve the application.

Very truly yours,

Michael C. Robinson

Muhiel Chall

MCR:jmhi Enclosures

Cc Ms. Jennifer Hughes (via email) (w/enclosures)

Mr. Kelly O'Neill (via email) (w/enclosures)

Mr. David Doughman (via email) (w/enclosures)

Mr. Cody Bjugan (via email) (w/enclosures)

Mr. Monty Hurley (via email) (w/enclosures)

Mr. Chris Goodell (via email) (w/enclosures)

Ms. Marie Holladay (via email) (w/enclosures)

Mr. Todd Mobley (via email) (w/enclosures)

Mr. Vu Nguyen (via email) (w/enclosures)

Mr. Rand Waltz (via email) (w/enclosures)

Mr. Daniel Stumpf (via email) (w/enclosures)

PDX\133569\245146\MCR\27365343.1

# **EXHIBIT LIST**

Exhibit 1	LancasterMobley January 6, 2020 Traffic Impact Analysis
Exhibit 2	Sandy Planning Director February 7, 2020 email
Exhibit 3	OAR 660-024-0050(4)
Exhibit 4	OAR 660-024-0050(6)
Exhibit 5	OAR 660-024-0065

# **EXHIBIT C**

# **Technical Memorandum**

To: Cody Bjugan, Allied Homes & Development

From: Jessica Hijar

Date: January 6, 2020

Subject: UGB Amendment & Gunderson Road Connection

Traffic Impact Analysis, Addendum #1



321 SW 4th Ave., Suite 400 Portland, OR 97204 phone: 503.248.0313 fax: 503.248.9251 lancasterengineering.com

This memorandum is written as an addendum to the Bailey Meadows Subdivision Traffic Impact Analysis prepared by Lancaster Engineering dated June 20, 2019. Specifically, analysis is provided regarding the potential new roadway connection to Highway 211. The current planning effort includes a connection of Gunderson Road to Highway 211 as considered in the City of Sandy's Transportation System Plan (TSP).

In addition, this memorandum addresses the Transportation Planning Rule and associated approval criteria relative to the proposed Urban Growth Boundary (UGB) amendment, comprehensive plan and zone map amendments, and annexation applications. All of these are necessary to accommodate a connection of Gunderson Road to Highway 211.

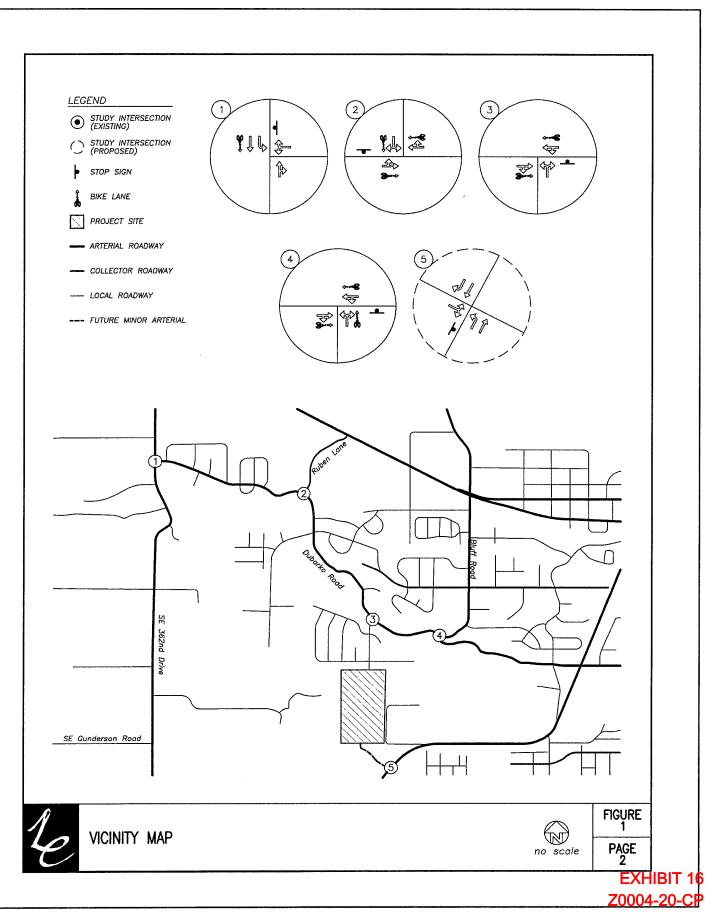
#### **Future Roadway Connection**

The planned connection of Gunderson Road to Highway 211 will provide an additional route into and out of the Bailey Meadows subdivision as well as the existing neighborhood to the north. This will reduce reliance on Melissa Avenue, which will provide access to the Bailey Meadows subdivision via Dubarko Road. The planned intersection of Gunderson Road at Highway 211 will be a three-legged intersection that is stop-controlled for the SE Gunderson Road approach. Future development on the south side of Highway 211 could extend the street to the east, to eventually connect with Cascadia Village Drive, as shown in the TSP. The existing characteristics of the subject roadways are shown in Table 1. The existing and future intersection configurations are shown in Figure 1 on page two.

Table 1: Vicinity Roadway Characteristics

Gunderson Road (planned)	City of Sandy	Future Minor Arterial	Not Posted	Partial	Partial	Yes
Highway 211	ODOT	District Highway	45-55 mph posted	No	No	Partial
Street Name	Jurisdiction	Classification	Speed (MPH)	<u>., </u>	Sidewalks	

EXHIBIT 16 Z0004-20-CF



(Allied Homes & Development)

Exhibit 1 Page 1280 34340



#### **Trip Distribution**

The Gunderson connection to Highway 211 is expected to serve trips to and from the Bailey Meadows subdivision, as well as trips from the existing neighborhood north of Bailey Meadows, which currently uses only Melissa Avenue. Based on travel time studies, it is not expected that traffic from outside the immediate area (such as residents in Bornstedt Village or Cascadia Village) would use the new Gunderson Road connection as a bypass route. Those trips would have to use Gunderson Road, three different streets within Bailey Meadows, Melissa Avenue, and Dubarko Road. This would be a very circuitous route and would not be faster that existing travel routes serving these neighborhoods.

#### Bailey Meadows Trips

The overall directional distribution of site trips to and from Bailey Meadows was based on the the original TIS, but trip routing was modified to reflect the new street connection.

#### To & From the East

It is expected that the 15 percent of site trips in the TIS previously assigned to Dubarko Road to the east will all use the new Gunderson Road connection. Turning left onto Highway 211 at the new intersection will have significantly lower delay than turning left or crossing Highway 211 at Dubarko Road.

Contribution: 15% via Gunderson

#### To & From the South

A total of 10 percent of the trips are expected to be to and from the south, and all these trips will use the Gunderson Road connection to Highway 211, since that will be a much more direct route.

Contribution: 10% via Gunderson

#### To & From the West

Trips to and from the west (30%) were assigned primarily to 362<sup>nd</sup> Avenue, as this is the quickest route to shopping destinations as well as Highway 26 west of Sandy. Travel time studies show that the route using Dubarko Road to 362<sup>nd</sup> Avenue is identical in time to the route using Highway 211 to 362<sup>nd</sup> Avenue. Therefore, the 30% was split evenly via Melissa Avenue to the north and Gunderson Road to the south.

Contribution: 15% via Gunderson

The total percentage of site trips using Gunderson Road is 40 percent, or 378 of the site's 944 trips per day.



#### Rerouted Existing Trips

Since 40 percent of the Bailey Meadows trips are expected to use the Gunderson Road connection to Highway 211, it is expected that a similar, although slightly lower percentage of the existing neighborhood traffic would also use Gunderson. Since the existing neighborhood is north of the project site, the use of Gunderson could decrease from 40 percent to approximately 30 percent. As shown in the TIS, the existing traffic volume on Melissa Avenue was measured to be 1160 vehicles per day.

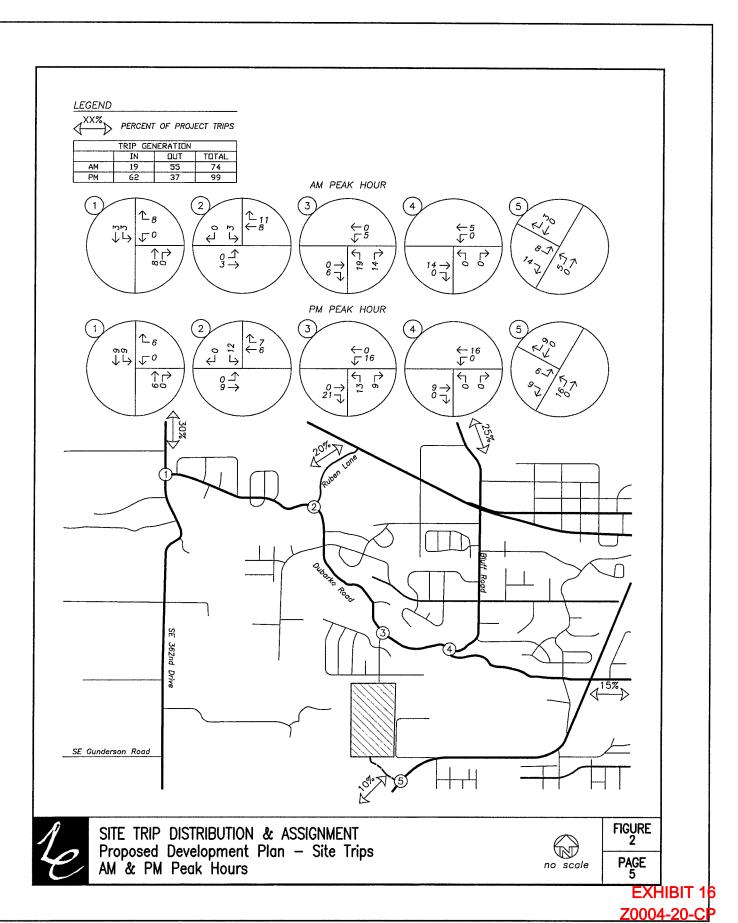
In total, 30 percent of the existing 1160 average daily traffic (ADT) on Melissa Avenue would reroute via Gunderson Road, or 348 trips per day.

In summary, the table below shows the total daily traffic volumes to the north (via Melissa Avenue) and to the south (via Gunderson Road) with the future street connection in place.

Table 2: Trip Distribution Summary

	Daily Traffic Volumes		
	Melissa Avenue	Gunderson Road	
Existing neighborhood traffic	1160	0	
Existing neighborhood traffic w/ Gunderson	812	348	
Bailey Meadows site trips with Gunderson	566	378	
Total Daily Volume with Gunderson	n 1378	726	

The updated trip distribution and assignment during the morning and evening peak hours are shown in Figure 2 on page five.



(Allied Homes & Development)



#### **Traffic Volumes**

#### **Existing Conditions**

Twenty-four-hour speed data was collected on Highway 211 near the intersection with Ponder Lane on December 4th, 2018. The morning and evening peak hours of traffic occurred between 7:00 AM and 8:00 AM and between 4:00 PM and 5:00 PM, respectively.

Since Highway 211 is under the jurisdiction of ODOT, highway traffic volumes were seasonally adjusted to reflect the 30th highest hour per methodologies in ODOT's Analysis Procedures Manual (APM). Based on the commuter seasonal trend in ODOT's 2018 Seasonal Trend Table, a seasonal factor of 1.122 was calculated and applied to through volumes on Highway 211.

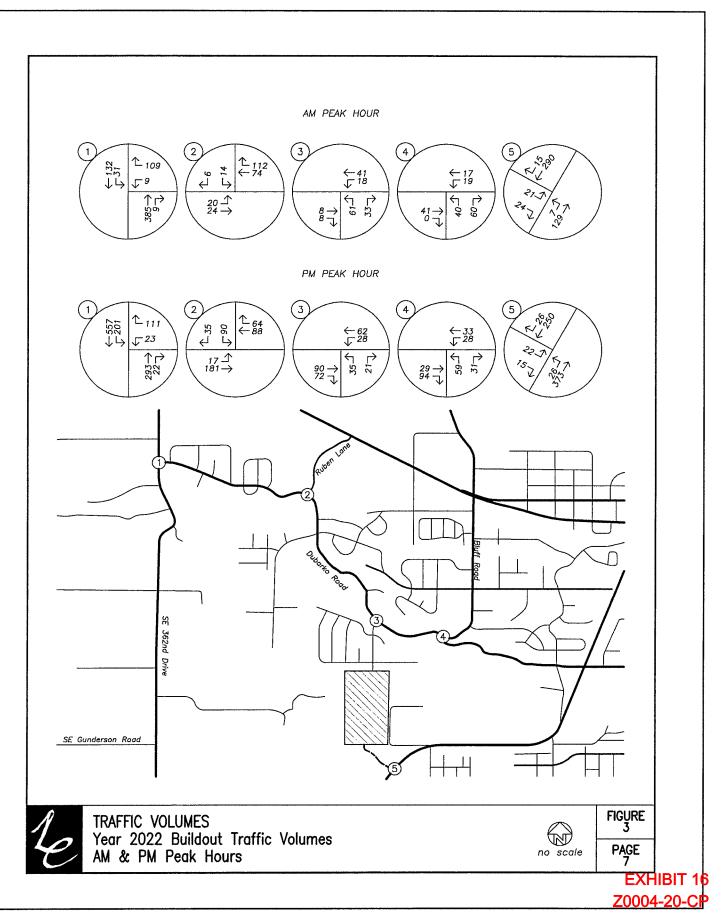
#### **Buildout Conditions**

A compounded growth rate of two percent per year was used to estimate growth on all streets under the City of Sandy jurisdiction as described within the TIS. Growth rates for traffic volumes on Highway 211 were derived using ODOT's 2037 Future Volume Tables in accordance with the APM. Using data corresponding to mileposts 3.75 and 5.07, a linear growth rate of 2.8 percent was calculated and applied to through volumes on the highway. Traffic volumes were projected over a period of four years in order to estimate the year 2022 buildout traffic volumes (traffic count data was collected in 2018).

The year 2022 buildout scenario was updated to include a redistribution of existing trips that are likely to use the new Highway 211 roadway connection. Finally, site trips generated by the Bailey Meadows subdivision, discussed previously within the Trip Distribution section, were added to the projected year 2022 volumes in order to obtain the year 2022 buildout traffic volumes.

The year 2022 buildout traffic volumes are shown in Figure 3 on page seven.

EXHIBIT 16 Z0004-20-CP



(Allied Homes & Development)

Exhibit 1 Page 1730f 34340

Page 7 of 13



#### **Preliminary Traffic Signal Warrants**

Preliminary traffic signal warrants were examined for all study intersections based on methodologies in the Manual on Uniform Traffic Control Devices¹ (MUTCD) and the Analysis Procedures Manual. Warrant 1, Eight Hour Vehicular Volumes, was used from the MUTCD. Warrants were evaluated based on the common assumption that traffic counted during the evening peak hour represents ten percent of the AADT and that the eighth-highest hour is 5.6 percent of the daily traffic. Volumes were used for the evening peak hour under the year 2022 buildout scenario.

For the intersection under ODOT jurisdiction, the APM dictates that minor-street right turns are only used if the volume exceeds 85 percent of the lane capacity, and even then, only the increment of volume in excess of 85 percent can be used. In this case, none of the right turns can be used for the purpose of the signal warrant analysis.

Due to insufficient minor street volumes, traffic signal warrants are not met at the intersection of SE Gunderson Road at Highway 211 under year 2022 buildout scenario.

## Left-Turn Lane Warrants

Left-turn lane warrants were examined at the planned intersection of Highway 211 at SE Gunderson Road. A left-turn refuge is primarily a safety consideration for the major-street approach, removing left-turning vehicles from the through traffic stream.

Warrants were examined based on the design curves developed by the Texas Transportation Institute, as adopted by the APM. This methodology evaluates the need for a left-turn lane based on the number of left-turning vehicles, the number of travel lanes, the number of advancing and opposing vehicles, and the roadway travel speed.

A left-turn lane is warranted at the intersection of SE Gunderson Road at Highway 211 under the year 2022 buildout scenario and it is recommended that a left-turn lane be constructed as part of the intersection improvements.

<sup>&</sup>lt;sup>1</sup> Federal Highway Administration (FTA), American Traffic Safety Services Association (ATSSA), Institute of Transportation Engineers (ITE), American Association of State Highway and Transportation Officials (AASHTO), Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 Edition, 2010



### **Operational Analysis**

A capacity analysis was conducted for the study intersection per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual*<sup>2</sup> (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

The City of Sandy's TSP states that both signalized and unsignalized intersections are required to operate at LOS D or better.

The applicable minimum operational standards for ODOT facilities are established under the Oregon Highway Plan and are based on the classification of the roadway and its v/c ratio. District highways located outside the Urban Growth Boundary and within an unincorporated community has a peak hour v/c ratio target of 0.80.

Table 3: Intersection Capacity Analysis Summary

	Morning Peak Hour			Evening Peak Hour		
	Delay	LOS	V/C	Delay	Los	V/C
SE 362 <sup>nd</sup> Drive at Dubarko Road			<del></del>			
Year 2022 Buildout Conditions	13	В	0.24	19	С	0.36
Ruben Lane at Dubarko Road						
Year 2022 Buildout Conditions	10	Α	0.03	12	В	0.21
Dubarko Road at Melissa Avenue			arene wegen er ster			
Year 2022 Buildout Conditions	9	A	0.13	10	В	0.09
Dubarko Road at Bluff Road						
Year 2022 Buildout Conditions	8	Α	0.16	8	Α	0.15
Highway 211 at SE Gunderson Road						
Year 2022 Buildout Conditions	11	В	0.08	13	В	0.08

All intersections are projected to operate within the City of Sandy and ODOT's operational standards under all analysis scenarios.

<sup>&</sup>lt;sup>2</sup> Transportation Research Board, Highway Capacity Manual, 6th Edition, 2016.



#### Intersection Location

The City of Sandy TSP shows a planning-level depiction of the Gunderson Road extension that was outside of the UGB at the time the TSP was adopted but is within the current UGB. This is shown below in Figure 4.

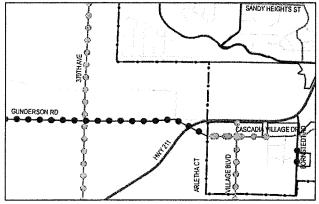


Figure 4: Alignment from Sandy TSP

However, upon closer investigation and engineering analysis, it was determined that the alignment shown on the TSP was not feasible for construction of an intersection with Highway 211, primarily due to poor sight distance, the need for a perpendicular intersection, and a very steep superelevated roadway section.

Looking to the northeast from the TSP-identified location, sight distance is limited by both horizontal and vertical curves on Highway 211. In addition, sight distance from the future fourth leg of the intersection would be particularly poor. At

the TSP-identified location, the highway was designed for moving traffic, not for accommodation of an intersection. Due to the high design speed and the horizontal curve, superelevation (the banking of the roadway around the curve) is very steep.

This facilitates through traffic on the highway, but makes an intersection at this location problematic, due to difficult turning and crossing movements across the steep curve.

## Need for UGB Expansion

The nearest suitable intersection location was found to be farther to the southwest, at the location currently proposed for a UGB amendment. From this location, it is far enough from the horizontal and vertical curves to the northeast to have adequate sight distance and far enough southwest of the curve to not be in a

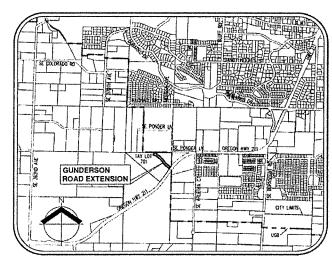


Figure 5: Planned Alignment



superelevated roadway section. However, this alignment is outside of the current UGB of the City of Sandy, as shown in Figure 5. As such, a UGB amendment is proposed to accommodate the road extension.

With the proposed UGB amendment, there will be a triangle-shaped remnant piece of property that will also be brought into the UGB. This remnant is approximately 2.38 acres in size and is proposed to be dedicated as a public neighborhood park. This will be a small, passive-use neighborhood park that will be used primarily by the residents in the area. Trips to and from the park will be primarily pedestrian and bicycle trips and no separate parking lot is planned.

### Oregon Administrative Rules

The proposed UGB amendment, comprehensive plan and zone map amendments, and annexation applications trigger the need to address the Transportation Planning Rule (TPR) and associated criteria from the Oregon Administrative Rules. These are addressed below.

#### OAR 660-012-0060 Transportation Planning Rule

The primary purpose of the TPR is to account for the potential transportation impacts associated with any amendments to adopted plans and land use regulations. The TPR is quoted in *italics* below, with a response immediately following each section.

- 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 UGB amendment, comprehensive plan and zone map amendment, and annexation will not change the functional classification of any transportation facilities. In fact, it will implement planned roadway connections in the TSP.

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

Response: The standards that implement the functional classification system are contained in the TSP and will not change as part of this proposal.

(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;
- (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
- (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:

The proposed UGB amendment and associated plan amendments will facilitate the Gunderson Road connection and will not result in developable property that will increase trip generation. In fact, by facilitating an important street connection it is implementing the City of Sandy TSP, will improve connectivity for the neighborhood, and will improve performance of the surrounding transportation system. The proposal will not result in a significant effect as defined by the TPR and no mitigations are necessary.

## OAR 660-024-0065 Establishment of Study Area to Evaluate Land for Inclusion in the UGB

This section of the OAR is specific to UGB expansions and speaks to public facilities (such as transportation facilities) that require specific site characteristics. The OAR is quoted in *italies* below, with a response immediately following each section.

- 3. When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site characteristics may be found in only a small number of locations, the preliminary study area may be limited to those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:
  - (a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular industrial use.

Response: In OAR 660-009-0005(11), "Site Characteristics" are defined by visibility, proximity to a particular transportation facility, and major transportation routes. In this case, the "site" for the UGB amendment is very narrowly defined and the location between the subdivision and Highway 211 is dictated by engineering standards that must be satisfied for a safe and efficient intersection location.

(b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks, schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.

EXHIBIT 16 <u>Z0004-20-CP</u>



Response:

Since the primary purpose of the proposed UGB amendment is to accommodate the extension of Gunderson Road to Highway 211, it is by definition a "public facility". Site characteristics such as topography are what have dictated the need for the intersection in the location as proposed. Additionally, the applicant is providing area for a neighborhood park, a minor public facility.

## **Summary & Conclusions**

The proposed UGB amendment, comprehensive plan and zone map amendments, and annexation will implement the City of Sandy TSP and result in improved operation at the study area roadways and intersections. The connection will improve conditions for the existing neighborhood to the north of the Bailey Meadows subdivision by providing another means of vehicular access to the area.

## County Staff's Questions for Z0004-20-CP

January 24, 2020

Applicant responses = black italic text City responses = red italic text

## A. Status of subdivision application and is conditions of approval

1. Has 19-023 SUB/VAR/TREE been approved?

No. A hearing with the City Planning Commission was held on January 23, 2020. At the end of the hearing, the public hearing was closed, but the record was held open for two one-week periods. The Planning Commission is slated to meet again on February 11, 2020 for deliberation and to make a decision on the application.

2. How does Clackamas County obtain a copy of minutes from the hearings on this application?

Please contact City staff members Emily Meharg or Kelly O'Neil Jr. for this information. The Planning Commission minutes from the first hearing (December 17, 2019) regarding Bailey Meadows is located on the City website here:

https://sandy.civicweb.net/Portal/MeetingInformation.aspx?Org=Cal&Id=233

The minutes from the January 23, 2020 Planning Commission meeting are still being written. City staff will forward the draft minutes for January 23, 2020 when they are finished.

3. The application for Z0004-20-CP states that a condition of 19-023's approval is "anticipated" to "cause submittal of" an application for an amendment to the City's UGB. Will this anticipated condition on 19-023 require actual *approval* of the UGB amendment proposed in this application, or will the condition only require that an application be submitted?

An application for an amendment to the UGB was submitted by the applicant to the City on January 9, 2020.

4. Can the subdivision proposed in 19-023 be platted and built without the UGB expansion proposed in Z0004-20-CP?

The applicant has submitted this UGB application in order to work cooperatively with the City and the neighbors to the proposed subdivision but as explained in the applicant's subdivision materials, including oral and written testimony provided to the Sandy Planning Commission, the extension of Gunderson Road and the provision of park and is not legally required of the applicant in order for the City to approve the subdivision. Nevertheless, because Gunderson Road is shown on the City's acknowledged TSP(although its intersection with the state highway cannot be achieved and the applicant and the City have agreed on a new alignment), the applicant is seeking to implement the TSP by expanding the UGB in the City's acknowledged Urban Reserve Area("URA"). Further, Proposed condition of approval A1. For the subdivision does not require the UGB amendment in order for the subdivision to proceed but neither the road extension nor the park land dedication can be constructed without the UGB extension.

B. Details on UGB expansion area

EXHIBIT 16

Z0004-20-CP
1 | Page e

(Allied Homes & Development)

Page 24 of 34

Exhibit 2

Page 1 of 6

The "Exhibit Key Map" included with Z0004-20-CP identifies how portions of the expansion area may be used (e.g., for park land, for a stormwater tract).

1. What is the size of each of these constituent areas?

The applicant provided this information on January 24, 2020.

## C. UGB/City enclaves

1. Does the City of Sandy have any rule/policy prohibiting the creation of jurisdictional enclaves (i.e., "islands" or "donut holes")? Are there any City rules/policies prohibiting an enclave of land not within a UGB but surrounded entirely by UGB lands? Are there any City rules/policies prohibiting an enclave of land under the jurisdiction of the County but surrounded entirely by lands incorporated in to the City?

We are unaware of any such rule/policy. That said, it is not desirable from a practical perspective. The City annexation criteria has a preference to not have islands, cherry stems, or shoestring annexations (see Section 17.78.00 (C.) of the Sandy Development Code. However, there is no prohibition against these sorts of annexation. Also, please keep in mind the subject application being reviewed by Clackamas County is a UGB expansion, not an annexation application.

2. If there are no such rules/policies, why should the area proposed for park land in the "Exhibit Key Map" not be left outside of the City's UGB?

The park will be a City park that should be in the City. Typically, parkland owned by a city inside a UGB, but outside city jurisdictional lines is limited to passive recreation (i.e. trails and open space) as it is not urbanized land. The parkland being proposed with this UGB application would be active recreation (i.e. playgrounds, maybe facilities necessitating sanitary sewer and water) and therefor must be annexed into City limits. Even if the County zoning for this property would allow an active recreation park the City of Sandy desires to have control over the development process for the parkland and therefore wants jurisdiction.

3. If there *are* such rules/policies prohibiting jurisdictional enclaves, why couldn't the proposed intersection be moved slightly south to avoid creating an enclave if the park land is left outside of the City's UGB?

It does not seem like this accomplishes anything other than creating a slightly larger enclave.

#### D. Road need and location

1. The application for 19-023, including a November 25, 2019, letter from Michael C. Robinson, represents that the Gunderson Rd connection to Hwy 211 is not needed to serve the expected traffic demand created by the 100-lot subdivision in 19-023, and that traffic created by the subdivision can be adequately served with only an extension of Melissa Ave (and an emergency vehicle access to the highway at Ponder Ln).

Is this still the case? Is the Gunderson Rd highway connection *needed* to meet the proposed subdivision's traffic demands?

EXHIBIT 16

Z0004-20-CP
2 | Page e
(Allied Homes & Development)

Page 25 of 34
Exhibit 2

Page 2 of 6

The applicant's statement goes to the initial issue of whether the subdivision application can be approved by the City without the extension of Gunderson road outside of the City's UGB but the UGB approval is not needed to approve the subdivision application. However, as explained above, the UGB expansion is needed to extend Gunderson Road to the state highway in order to implement the City's acknowledged TSP and the UGB expansion would leave an area outside of the UGB, so the applicant included that area within the UGB expansion in order to provide park land to the City. As the Sandy Planning Director stated, there are no areas nearby within the UGB in which to provide additional parkland to serve this subdivision and other existing subdivisions within the City. The two issues-what is required for approval of the subdivision and the expansion of the UGB-are separate issues.

2. The June 20, 2019, TIA from Lancaster Engineering states that "it is expected that additional access [to Hwy 211] will be available to the east of the [proposed 100-lot subdivision] as other properties develop". Indeed, the subdivision plans show that a connection to the east is anticipated, and the subdivision's proposed street layout would provide for the extension(s).

Moreover, Mr. Robinson's November 25 letter quotes Lancaster Engineering as saying that, as an alternative to the proposed Gunderson Rd connection to Hwy 211, "a future street connection serving the area north of Highway 211 could be established to the east [of the proposed subdivision], in the location of Arletha Court or Village Boulevard."

Is this still the case? If not, what studies and determinations were made since these statements that areas east of the proposed subdivision and north of the highway (e.g., on Tax Lot 24E23-00300 already within City limits, or on Tax Lots 24E23-00400 or 24E24B-02800 already within the UGB) were no longer possible?

This was the applicant's response to issues raised by City staff about a second vehicular connection to the proposed subdivision but does not detract from the need for the UGB expansion to implement the City's TSP.

3. Other than the Ponder Ln intersection and the proposed Gunderson Rd intersection, what other locations within the UGB were considered for a road connection to the north side of the highway, and why are those locations not feasible?

When the existing Transportation System Plan (TSP) was created in December 2011 the road alignment for Gunderson Road was conceptually located on the map. Current city staff believes the location of Gunderson Road was not fully evaluated for alignment potential. If it would have been fully evaluated the evaluation would have shown the conceptual location was not possible due to sight distance, and other factors. Fast forward to 2017. In 2017 when the UGB expansion was adopted staff at that time assumed the conceptual location of Gunderson Road in the TSP had been evaluated during the 2011 TSP process. In hindsight we would have included Tax Lot 701 in the UGB expansion and this UGB process the applicant has undertaken would not be necessary. However, in talking with DLCD they had no concerns that this was missed during the 2017 UGB expansion. C'est la vie.

4. Other than the Ponder Ln intersection and the proposed Gunderson Rd intersection, what other locations *outside* of the UGB were considered for a road connection to the highway, and why are those locations not feasible?

Alignments further to the northeast would not meet City standards for minimum curve radii for arterial roadways and ODOT requirements for perpendicular access. Also, connecting temperate 16

Z0004-20-CP 3 | Page e (Allied Homes & Development) \_Page 26 of 34 extending Cascadia Village Drive northwest of Highway 211 as Gunderson Road as prescribed in the TSP would not be possible. Alignments further to the southwest have natural resource constraints and are further away from the existing UGB/City. A road alignment to the southwest would be of diminished utility in serving urban transportation demands from the City of Sandy.

5. Other than the cost to the developer of acquiring property for right-of-way from properties to the east, which the connectivity plans for the 100-lot subdivision already anticipate, why couldn't the 100-lot subdivision be served with a connection to the highway further east on the north side of Hwy 211 in an area already within the UGB?

This would not match the City's TSP, which shows the general location where the connection is desired.

6. Why is it necessary to include a section of an existing State highway in the UGB expansion?

This was included to accommodate improvements along the highway for a turn lane and to provide a connection to the stormwater management facility. BTW, the City of Sandy is in negotiations with ODOT for a jurisdictional transfer of HWY 211 from downtown Sandy to just west of Gunderson Road.

7. Where are the proposed right-of-way dedication and construction easements in relation to the historic Barlow Road? How will the historic Barlow Road be disturbed with the planned road construction?

The County Assessor's map indicates the alignment of the historic Barlow Road. It is similar to the Hwy 211 alignment. There will be road construction activities in a portion of the area shown on the Assessor's map where the Barlow Road is indicated.

#### E. Park land

1. The City's Planning Commission calculates that 1.29 acres of park land is, according to City rules, due to be dedicated for a 100-lot subdivision. What demonstrates the need for approximately 2.38 acres off additional park land?

This is the amount of land that remains after right-of-way is dedicated for the Gunderson Road extension. The City's position on park land dedication is that a fee in lieu should be accepted rather than require dedication in future subdivisions. However, the City, its residents and the City's Trails and Parks Advisory Board, would all like to see a public park in this area. This area for park land dedication will go beyond serving this subdivision and will accommodate demands for future subdivisions in the URA when the UGB is expanded.

2. The proposed park land is not identified in the City's Parks Master Plan. Why is a park needed here, at this particular location? What facilities with the park include?

The Parks Master Plan identifies a park in the Nicolas Glen subdivision immediately north of the proposed subdivision in File No. 19-023 SUB/VAR/TREE; however, for reasons unbeknownst to current City staff that park development never occurred. Since that park was never dedicated nor developed the Parks and Trails Advisory Board would like parkland in the general vicinity of Bailey Meadows. The City of Sandy is currently in the process of a Parks Master Plan revision

EXHIBIT 16

Z0004-20-CP
4 | Page e

(Allied Homes & Development)

Page 27 of 34

Exhibit 2

Page 4 of 6

(we hired ESA) and my guess is the additional parkland as proposed will be needed based on the results and analysis completed by ESA.

- 3. Why can't needed park land be provided within the City's existing UGB? The identified location in the UGB expansion is preferred.
  - 4. Why can't park land, presumably serving adjacent development, be located within those adjacent developments?

There are no developments adjacent to Bailey Meadows currently being proposed.

5. Why aren't Knollwood Park, Hamilton Ridge Playground, Barlow Ridge Park, and the Bornstedt Park & Splashpad sufficient to serve the area's residents?

Our Parks and Trails Advisory Board doesn't believe these other parks you have identified are sufficient. Knollwood, Hamilton Ridge, and Barlow are all small parks that serve existing neighborhoods. These are small parks. Bornstedt Park is across Highway 211 and does not serve children in Nicolas Glen or the proposed Bailey Meadows, unless you are arriving by vehicle to play at the splashpad. The residents of Nicolas Glen and we assume the future residents of Bailey Meadows will want a park they can safely walk to.

6. Why is a new park in the area not located nearer to existing development, rather than at the edge of the UGB and along the highway?

This is the area proposed for parkland at this time.

7. If the areas is to be a park, why isn't the City's Comprehensive Plan Map being amended to designate this park land area as "Parks and Open Space"? Why will the area instead be dedicated "Low Density Residential"?

It will most likely be Parks and Open Space (POS). This will be a staff recommendation to our hearing bodies. In our telephone conversation, Kelly indicated that the park would likely be designated Parks and Open Space (POS).

8. Lancaster Engineering determined that the proposed park will be a "passive-use neighborhood park that will be used primarily by the residents in the area" and that "trips to and from the park will be primarily pedestrian and bicycle trips and no separate parking lot is planned."

How did Lancaster Engineering make this determination, given that the park is not in the Parks Master Plan and that, according to the applicant, how the park will be developed will be determined at some undefined point in the future?

Also given that the park will be nearly twice as large as what City rules require for a 100-lot subdivision, and given that it will be located at a new highway intersection and across the highway from existing development, how is the applicant certain the park will not need/have a parking lot?

Two-acre parks are considered neighborhood parks that are intended to serve a ½ mile around it. Visitors generally arrive by walking or bicycles. Parking is not a typical feature for neighborhood parks. Other parks within the City of Sandy that are larger and more active use, such as the Sandy Bluff Park & Dog Park, Cascadia Park, and Bornstedt Park & Splashpad, do not have parking lots. The only park in the City with off-street parking is Meinig Memorial Park, which is a regional facility and served large events and festivals.

EXHIBIT 16
Z0004-20-CP
5 | Page
(Allied Homes & Development)
Page 28 of 34
Exhibit 2
Page 5 of 6

9. Is dedication of park land to the City a condition of the subdivision's approval? If not, what assurances are there that the acreage will actually be used for a park, and not for additional housing or other development?

If zoned POS, housing will not be a permitted use. Additionally, A condition of approval requests that the applicant attempt to provide park land dedication through the UGB expansion application.

#### F. Stormwater tract area

1. What will the stormwater tract area shown in the "Exhibit Key Map" contain? What types and sizes of facilities will it have?

The stormwater facility will be in the form of a pond that provides detention and water quality treatment. It will be vegetated with native species and will have inlet and outlet structures, typical of these features. Stormwater facilities within the City of Sandy follow the City of Portland Stormwater Management Manual (SWMM) standards. The stormwater facility will have to follow the provisions of the SWMM.

2. What development will the stormwater tract serve?

The stormwater facility will serve Gunderson Road extension and any necessary additional paving along Hwy 211.

3. Is the stormwater tract necessary to serve the development proposed in 19-023?

No.

4. Why couldn't the proposed stormwater tract be located within the City's existing UGB?

Existing topography prevents this. The applicant is proposing the stormwater facility at the low point for gravity purposes.

5. What other sites have been evaluated for the siting of these facilities, and why are those other sites not appropriate?

Due topography, this is the only location that can accommodate the Gunderson Road and Hwy 211 improvements. Again, the applicant has to place this facility at the low point for gravity purposes.

6. Where are proposed stormwater facilities in relation to the historic Barlow Road crossing the property?

Based on the County Assessor's map, the stormwater facility is planned between the Barlow Road corridor and Hwy 211.

Land Conservation and Development Department

Chapter 660

Division 24

**URBAN GROWTH BOUNDARIES** 

660-024-0050

Land Inventory and Response to Deficiency

(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.

Land Conservation and Development Department

Chapter 660

Division 24

**URBAN GROWTH BOUNDARIES** 

660-024-0050

Land Inventory and Response to Deficiency

(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.

Home Business Voting Elections State Archives Audits

## Land Conservation and Development

OARD Home

Rules Coordinator / Rules

Writer Login

Department Search Current Rules

Search Filings Chapter 660

Access the Oregon Bulletin Division 24

**URBAN GROWTH BOUNDARIES** 

660-024-0065

Establishment of Study Area to Evaluate Land for Inclusion in the UGB

(1) When considering a UGB amendment to accommodate a need deficit identified in OAR 660-024-0050(4), a city outside of Metro must determine which land to add to the UGB by evaluating alternative locations within a "study area"  $established \ pursuant \ to \ this \ rule. \ To \ establish \ the \ study \ area, \ the \ city \ must \ first \ identify \ a \ "preliminary \ study \ area" \ which \ identify \ area" \ identify \ area$ shall not include land within a different UGB or the corporate limits of a city within a different UGB. The preliminary

- (a) All lands in the city's acknowledged urban reserve, if any;
- (b) All lands that are within the following distance from the acknowledged UGB:
- (A) For cities with a UGB population less than 10.000; one-half mile:
- (B) For cities with a UGB population equal to or greater than 10,000: one mile;
- (c) All exception areas contiguous to an exception area that includes land within the distance specified in subsection (b) and that are within the following distance from the acknowledged UGB:
- (A) For cities with a UGB population less than 10,000: one mile;
- (B) For cities with a UGB population equal to or greater than 10,000: one and one-half miles;
- (d) At the discretion of the city, the preliminary study area may include land that is beyond the distance specified in
- (2) A city that initiated the evaluation or amendment of its UGB prior to January 1, 2016, may choose to identify a preliminary study area applying the standard in this section rather than section (1). For such cities, the preliminary study area shall consist of:
- (a) All land adjacent to the acknowledged UGB, including all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency, and
- (b) All land in the city's acknowledged urban reserve established under OAR chapter 660, division 21, if applicable.
- (3) When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site characteristics may be found in only a small number of locations, the preliminary study area may be limited to those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:
- (a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular
- (b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks. schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.
- (4) The city may exclude land from the preliminary study area if it determines that:

- (a) Based on the standards in section (7) of this rule, it is impracticable to provide necessary public facilities or services to the land;
- (b) The land is subject to significant development hazards, due to a risk of:
- (A) Landslides: The land consists of a landslide deposit or scarp flank that is described and mapped on the Statewide Landslide Information Database for Oregon (SLIDO) Release 3.2 Geodatabase published by the Oregon Department of Geology and Mineral Industries (DOGAMI) December 2014, provided that the deposit or scarp flank in the data source is mapped at a scale of 1:40,000 or finer. If the owner of a lot or parcel provides the city with a site-specific analysis by a certified engineering geologist demonstrating that development of the property would not be subject to significant landslide risk, the city may not exclude the lot or parcel under this paragraph;
- (B) Flooding, including inundation during storm surges: the land is within the Special Flood Hazard Area (SFHA) identified on the applicable Flood Insurance Rate Map (FIRM);
- (C) Tsunamis: the land is within a tsunami inundation zone established pursuant to ORS 455.446;
- (c) The land consists of a significant scenic, natural, cultural or recreational resource described in this subsection:
- (A) Land that is designated in an acknowledged comprehensive plan prior to initiation of the UGB amendment, or that is mapped on a published state or federal inventory at a scale sufficient to determine its location for purposes of this rule, as:
- (i) Critical or essential habitat for a species listed by a state or federal agency as threatened or endangered;
- (ii) Core habitat for Greater Sage Grouse; or
- (iii) Big game migration corridors or winter range, except where located on lands designated as urban reserves or exception areas:
- (B) Federal Wild and Scenic Rivers and State Scenic Waterways, including Related Adjacent Lands described by ORS 390.805, as mapped by the applicable state or federal agency responsible for the scenic program;
- (C) Designated Natural Areas on the Oregon State Register of Natural Heritage Resources;
- (D) Wellhead protection areas described under OAR 660-023-0140  $\$  and delineated on a local comprehensive plan;
- (E) Aquatic areas subject to Statewide Planning Goal 16 that are in a Natural or Conservation management unit designated in an acknowledged comprehensive plan;
- (F) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 17, Coastal Shoreland, Use Requirement 1;
- (G) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 18, Implementation Requirement 2;
- (d) The land is owned by the federal government and managed primarily for rural uses.
- (5) After excluding land from the preliminary study area under section (4), the city must adjust the area, if necessary, so that it includes an amount of land that is at least twice the amount of land needed for the deficiency determined under OAR 660-024-0050(4) or, if applicable, twice the particular land need described in section (3). Such adjustment shall be made by expanding the distance specified under the applicable section (1) or (2) and applying section (4) to the expanded area.
- (6) For purposes of evaluating the priority of land under OAR 660-024-0067 the "study area" shall consist of all land that remains in the preliminary study area described in section (1), (2) or (3) of this rule after adjustments to the area based on sections (4) and (5), provided that when a purpose of the UGB expansion is to accommodate a public park need, the city must also consider whether land excluded under subsection (4)(a) through (c) of this rule can reasonably accommodate the park use.
- (7) For purposes of subsection (4)(a), the city may consider it impracticable to provide necessary public facilities or services to the following lands:
- (a) Contiguous areas of at least five acres where 75 percent or more of the land has a slope of 25 percent or greater, provided that contiguous areas 20 acres or more that are less than 25 percent slope may not be excluded under this subsection. Slope shall be measured as the increase in elevation divided by the horizontal distance at maximum ten-foot contour intervals:
- (b) Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services to the land within the planning period. The city's determination shall be based on an evaluation of:
- (A) The likely amount of development that could occur on the land within the planning period;

- (B) The likely cost of facilities and services; and,
- (C) Any substantial evidence collected by or presented to the city regarding how similarly situated land in the region has, or has not, developed over time.
- (c) As used in this section, "impediments to service provision" may include but are not limited to:
- (A) Major rivers or other water bodies that would require new bridge crossings to serve planned urban development;
- (B) Topographic features such as canyons or ridges with slopes exceeding 40 percent and vertical relief of greater than
- (C) Freeways, rail lines, or other restricted access corridors that would require new grade separated crossings to serve planned urban development;
- (D) Significant scenic, natural, cultural or recreational resources on an acknowledged plan inventory and subject to protection measures under the plan or implementing regulations, or on a published state or federal inventory, that would prohibit or substantially impede the placement or construction of necessary public facilities and services.
- (8) Land may not be excluded from the preliminary study area based on a finding of impracticability that is primarily a result of existing development patterns. However, a city may forecast development capacity for such land as provided in OAR 660-024-0067(1)(d).
- (9) Notwithstanding OAR 660-024-0050(4) and section (1) of this rule, except during periodic review or other legislative review of the UGB, the city may approve an application under ORS 197.610 to 197.625 for a UGB amendment to add an amount of land less than necessary to satisfy the land need deficiency determined under OAR 660-024-0050(4), provided the amendment complies with all other applicable requirements.

Statutory/Other Authority: ORS 197.040, 197A.305, 197A.320 & 197.235 & Statewide Planning Goal 14  $\textbf{Statutes/Other Implemented:} \ ORS\ 195.036,\ 197.015,\ 197.295 - 197.314,\ 197.610 - 197.650,\ 197.764 \&\ 197A.300 - 197.610 - 197.$ 197A.325

History:

LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16

Please use this link to bookmark or link to this rule.

v1.8.6

System Requirements Privacy Policy Accessibility Policy Oregon Veterans Oregon.gov

Oregon State Archives • 800 Summer Street NE • Salem, OR 97310 Phone: 503-373-0701 • Fax: 503-378-4118 • reference.archives@oregon.gov

## Hamburg, Glen

**From:** Gary Boyles <fmboyles.sandyfire@gmail.com> **Sent:** Wednesday, February 26, 2020 9:34 AM

**To:** Hamburg, Glen

Cc: koneill@cityofsandy.com; p.schneider@sandyfire.org; FIRE DIST SANDY FIRE MARSHAL

**DON PATTY** 

**Subject:** Z0004-20-CP Bailey Meadows Subdivision

**Attachments:** Scanned from a Xerox Multifunction Printer (2).pdf

Good morning Glen,

Please see attached letter detailing my support for the proposed expansion of the City of Sandy's urban growth boundary.

Gary Boyles Fire Marshal

## Sandy Fire District No. 72

PO Box 518 17460 SE Bruns Ave. Sandy, Oregon 97055

Business line: 503-668-8093 Cell number: 503-891-7042

**CONFIDENTIALITY NOTICE**- This email, and any attachments may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. It is intended only for the use of the person(s) names above. If you are not the intended recipient, you are hereby notified that any review, dissemination, distribution, or duplication of this communication is strictly prohibited. If you are not the intended recipient, please contact me by reply email and delete the message and any attachments from your system.

Spam Email
Phishing Email



## SANDY FIRE DISTRICT NO. 72

17460 Bruns Avenue • P.O. Box 518 Sandy, Oregon 97055

Business Phone: 503.668.8093 • Facsimile: 503.668.7941

February 24, 2020

Clackamas County Planning and Zoning Division Attn: Glen Hamburg, Planner II 150 Beavercreek Road Oregon City, OR 97045

RE: Planning File Number Z0004-20-CP. Expansion of the City of Sandy's UGB to allow a road connection between Hwy 211 and the new Bailey Meadows subdivision

Mr. Hamburg,

I would like to thank you for taking my call last Friday and answering my questions. After further discussions with the City of Sandy Planning Division and the Sandy Fire District Administrative Staff, I would like to provide my written testimony showing support for the proposed expansion of the City of Sandy's urban growth boundary.

By allowing this expansion, the applicant would be able to provide the much-needed secondary fire department access (Gunderson Road) that would connect the proposed Bailey Meadows subdivision to Hwy 211. Connecting the Bailey Meadows subdivision to Hwy 211 and Melissa Avenue would also benefit the existing Nicolas Glen subdivision that is currently served by only one means of fire department access. The separated fire department access roads to both the existing subdivision and proposed subdivision could also enhance emergency service capabilities by eliminating a potential of impairment/congestion at a single point of access as well as providing first responders options that could decrease emergency response times in the event of a medical, police or fire emergency.

Sincerely.

Gary Boyles

Fire Marshal

## Hamburg, Glen

From: Hamburg, Glen

Sent: Wednesday, February 26, 2020 2:41 PM

To: 'Kelly O'Neill Jr.'

Subject: RE: Z0004-20-CP Bailey Meadows Subdivision

Roger that. I suspect that we will be proposing a condition of the County's approval on the City having an explicit condition of approval limiting the expansion area to the proposed public facilities if/when the property is annexed and rezoned. Without such a condition, we understand from DLCD that the property could not be zoned residential without a Goal 10 analysis.

#### Glen

From: Kelly O'Neill Jr. [mailto:koneill@ci.sandy.or.us] Sent: Wednesday, February 26, 2020 1:57 PM To: Hamburg, Glen < GHamburg@clackamas.us> Subject: Re: Z0004-20-CP Bailey Meadows Subdivision

Good question. In our staff report findings we are planning on having a finding that the land will not be eligible to be used for residential, commercial, or industrial purposes. So yes:)

On Wed, Feb 26, 2020 at 1:43 PM Hamburg, Glen < GHamburg@clackamas.us > wrote:

HI Kelly,

Will the City Council vote on a condition of approval specifically limiting the expansion area to the public facilities described in the application?

Glen

From: Kelly O'Neill Jr. [mailto:koneill@ci.sandy.or.us] Sent: Wednesday, February 26, 2020 1:42 PM To: Hamburg, Glen < GHamburg@clackamas.us>

Cc: Gary Boyles <fmboyles.sandyfire@gmail.com>; koneill@cityofsandy.com; p.schneider@sandyfire.org; FIRE DIST SANDY FIRE MARSHAL DON PATTY <d.patty3710@gmail.com>; Robinson, Michael C. <MRobinson@schwabe.com>

Subject: Re: Z0004-20-CP Bailey Meadows Subdivision

Thanks Gary. We will include this in the record for the hearing on March 2 before City Council.

**EXHIBIT 18** Z0004-20-CP

(Allied Homes & Development)

On Wed, Feb 26, 2020 at 1:03 PM Hamburg, Glen < GHamburg@clackamas.us > wrote:

Hi Gary,

Terrific. I'll make sure to include this letter with the record and to mention it in the County's staff report to our Planning Commission.

Regards,

## **Glen Hamburg**

Senior Planner

Clackamas County Planning & Zoning

150 Beavercreek Rd

Oregon City, OR 97045

Tel: 503.742.4523

General Schedule: Tuesday-Friday, 7am-5:30pm



The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your <u>feedback</u>. We appreciate your comments and will use them to evaluate and improve the quality of our public service.

From: Gary Boyles [mailto:fmboyles.sandyfire@gmail.com]

**Sent:** Wednesday, February 26, 2020 9:34 AM **To:** Hamburg, Glen < GHamburg@clackamas.us>

Cc: koneill@cityofsandy.com; p.schneider@sandyfire.org; FIRE DIST SANDY FIRE MARSHAL DON PATTY

<<u>d.patty3710@gmail.com</u>> **Subject:** Z0004-20-CP Bailey Meadows Subdivision

**EXHIBIT 18** 

Z0004-20-CP

(Allied Homes & Development)

2

Good morning Glen,

Please see attached letter detailing my support for the proposed expansion of the City of Sandy's urban growth boundary.

Gary Boyles

Fire Marshal

## Sandy Fire District No. 72

PO Box 518

17460 SE Bruns Ave.

Sandy, Oregon 97055

Business line: 503-668-8093

Cell number: 503-891-7042

**CONFIDENTIALITY NOTICE**- This email, and any attachments may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. It is intended only for the use of the person(s) names above. If you are not the intended recipient, you are hereby notified that any review, dissemination, distribution, or duplication of this communication is strictly prohibited. If you are not the intended recipient, please contact me by reply email and delete the message and any attachments from your system.

--

Kelly O'Neill Jr.

EXHIBIT 18 Z0004-20-CP (Allied Homes & Development) Page 3 of 4 **Development Services Director** 

City of Sandy

**Development Services Department** 

39250 Pioneer Blvd

Sandy, OR 97055

(503) 489-2163

koneill@ci.sandy.or.us

This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

--

Kelly O'Neill Jr. Development Services Director

City of Sandy Development Services Department 39250 Pioneer Blvd Sandy, OR 97055 (503) 489-2163 koneill@ci.sandy.or.us

This e-mail is a public record of the City of Sandy and is subject to the State of Oregon Retention Schedule and may be subject to public disclosure under the Oregon Public Records Law. This e-mail, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please send a reply e-mail to let the sender know of the error and destroy all copies of the original message.

Spam Email
Phishing Email

EXHIBIT 18 Z0004-20-CP (Allied Homes & Development) Page 4 of 4

## City of Sandy

## **Agenda**





**Meeting Location:** City Hall- Council Chambers, 39250 Pioneer Blvd., Sandy, Oregon 97055

Meeting Date: Monday, March 2, 2020 Meeting Time: 6:00 PM

1.	CITY COUNCIL	<b>EXECUTIVE SESSION -</b>	6:00 PM

The Sandy City Council will meet in executive session pursuant to ORS 192.660(2)(d) to conduct deliberations with persons designated by the governing body to carry on labor negotiations.

- 2. CITY COUNCIL WORK SESSION 6:30 PM
- 2.1. SAM RFP Update

RFP details can be found on the Sandy Transit webpage.

- 3. CITY COUNCIL REGULAR MEETING 7:00 PM
- 4. PLEDGE OF ALLEGIANCE
- 5. ROLL CALL
- 6. CHANGES TO THE AGENDA
- 7. PUBLIC COMMENT
- 8. PROCLAMATIONS

9.

8.1. Proclamation - League of Women Voters Month

Proclamation - League of Women Voters Month - Pdf

**EXHIBIT 19** 

CONSENT AGENDA Z0004-20-CP

(Allied Homes & Development)

9.1. City Council Minutes

City Council - 18 Feb 2020 - Minutes - Pdf

9.2. Authorize Staff to Enter into Agreement for Refurbishment of Effluent Filters at Wastewater Treatment Plant

<u>Authorize Staff to Enter into Agreement for Refurbishment of Effluent Filters at Wastewater Treatment Plant - Pdf</u>

#### 10. ORDINANCES

10.1. Ordinance 2020-01: An Ordinance Adopting an Urban Growth Boundary Expansion Analysis and Comprehensive Plan Amendment for the City of Sandy

<u>20-002 UGB Expansion for Gunderson Road & Parkland - Pdf</u> Exhibit K - Letter from Applicant Attorney

#### 11. NEW BUSINESS

11.1. Intergovernmental Agreement with the City of Lake Oswego for After-Hours Police Records Services

IGA City of Sandy/City of Lake Oswego LOCOM - Pdf

11.2. Planning Commission Term Adjustment

Planning Commission Term Adjustment - Pdf

- 12. REPORT FROM THE CITY MANAGER
- 13. COMMITTEE /COUNCIL REPORTS
- 14. STAFF UPDATES
- 14.1. Monthly Reports
  - 15. ADJOURN



## **Staff Report**

Meeting Date: March 2, 2020

From Kelly O'Neill, Development Services Director

**SUBJECT:** 20-002 UGB Expansion for Gunderson Road & Parkland

## **Background:**

The applicant, Allied Homes and Development, proposes to expand the UGB expansion to accommodate Gunderson Road and parkland to the south of Bailey Meadows to fulfill conditions of approval from the Bailey Meadows land use application. The alignment for Gunderson Road is located on property (Tax Map 24E23 Tax Lot 701) that is located outside of Sandy's City limits and UGB. The subject property is currently designated Exclusive Farm Use (EFU) by Clackamas County, but is within the City of Sandy's Urban Reserve Area (URA). Under Oregon law, lands designated URA are "first priority" lands to be included in a UGB expansion. The portion of the property that is planned to be included within the amended UGB is limited to areas necessary for parkland, a portion of Highway 211 and land to construct the Gunderson Road extension, including land for the roadway, associated storm drainage improvements, accompanying utilities, grading, etc. The areas being considered in the UGB expansion are detailed as follows:

Area 1 - Parkland Area: 2.38 acres

Areas 2 and 6 - Permanent Slope Easement/Temporary Construction Easement Area: 30,970 square feet

Area 3 - Public Right-of-Way Dedication (for Gunderson Road): 1.02 acres

Area 4 - Public Utility Easement: 4,802 square feet Area 5 - Stormwater Facility: 30,143 square feet

Area 7 - Highway (211) Area: 2.05 acres

As explained by the applicant if you add the square footage and acreage, the sum is greater than 6.42 acres because Areas 2 and 4 overlap and are included within Area 1. The total acreage is the same when Areas 2 and 4 are removed from the equation.

If the proposed UGB expansion is approved the applicant will proceed with an annexation, comprehensive map amendment, and zoning map amendment for the property brought into the UGB.

The Planning Commission reviewed the request at a public hearing on February 11, 2020 and forwarded a recommendation to approve the UGB expansion to the City Council.

EXHIBIT 19 Z0004-20-CP (Allied Homes & Development) Page 3 of 11

## **Recommendation:**

Approve the UGB expansion by passing Ordinance 2020-01.

## **Code Analysis:**

See attached staff report.

## **Budgetary Impact:**

Unknown



**SUBJECT:** File No. 20-002 UGB Expansion for Gunderson Road

**AGENDA DATE:** March 2, 2020

**DEPARTMENT:** Development Services Department

STAFF CONTACT: Kelly O'Neill Jr., Development Services Director

### **EXHIBITS:**

## **Applicant's Submittals:**

- A. Land Use Application
- B. Narrative
- C. Transportation Impact Analysis
- D. Legal Description and Maps

## **Agency Comments:**

E. City Transportation Engineer, Replinger & Associates (January 20, 2020)

## **Public Comments:**

F. Paul Savage, 37506 Rachael Drive (February 2, 2020)

## **Staff Report:**

G. Planning Commission Staff Report dated February 11, 2020

## **Additional Submittal from Applicant:**

H. Letter from Michael Robinson from Schwabe, Williamson, and Wyatt (February 20, 2020)

## **Additional Agency Comments:**

- I. Sandy Fire District Fire Marshall (February 26, 2020)
- J. Department of Land Conservation and Development (February 13, 2020)

#### I. BACKGROUND

#### A. PROCEEDING

Type IV UGB Expansion

#### **B. FACTUAL INFORMATION**

- 1. APPLICANT: Allied Homes & Development
- 2. OWNERS: Lawrence Pullen, Richard Pullen, and Sherrene TenEyck
- 3. PROJECT NAME: UGB Expansion for Gunderson Road and Parkland
- 4. LEGAL DESCRIPTION: T2S R4E Section 23 Tax Lot 701

**EXHIBIT 19** 

Z0004-20-CP

(Allied Homes & Development)

- 5. PROPERTY LOCATION: North of Highway 211 and South of Ponder Lane
- 6. PROPOSED AREA: 6.42 acres
- 7. PROPOSAL: The applicant, Allied Homes and Development, proposes to expand the Sandy Urban Growth Boundary by approximately 6.42 acres to meet a need for certain public facilities (a minor arterial road, a portion of Highway 211, and parkland). The land is currently designated Urban Reserve.
- 8. CITY COMPREHENSIVE PLAN DESIGNATION: Low Density Residential
- 9. COUNTY COMPREHENSIVE PLAN DESIGNATION: Agriculture (AG)
- 10. COUNTY ZONING DISTRICT DESIGNATION: Exclusive Farm Use (EFU)
- 11. RESPONSE FROM GOVERNMENTAL AGENCIES, UTILITY PROVIDERS, CITY DEPARTMENTS AND THE GENERAL PUBLIC: City of Sandy Transportation Engineer, Sandy Fire District, Department of Land Conservation and Development (DLCD)
- C. APPLICABLE CRITERIA: Sandy Development Code 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; Sandy Comprehensive Plan Goals and Policies and Oregon Statewide Planning Goals Nos. 1, 2, 6, 8, 11, 12, and 14; Clackamas County Comprehensive Plan Chapter 4; Oregon Administrative Rules Chapter 660, division 12; Oregon Administrative Rules Chapter 660, division 24.

#### D. BACKGROUND INFORMATION

The City of Sandy is also processing a land use application for the Bailey Meadows subdivision (File No. 19-023 SUB/VAR/TREE). The proposed subdivision is located near Highway 211 and Ponder Lane. The purpose of this UGB expansion is to accommodate Gunderson Road and parkland to the south of Bailey Meadows to fulfill conditions of approval from the Bailey Meadows land use application. The alignment for Gunderson Road is located on property (Tax Map 24E23 Tax Lot 701) that is located outside of Sandy's City limits and UGB. The subject property is currently designated Exclusive Farm Use (EFU) by Clackamas County, but is within the City of Sandy's Urban Reserve Area (URA). Under Oregon law, lands designated URA are "first priority" lands to be included in a UGB expansion. The portion of the property that is planned to be included within the amended UGB is limited to areas necessary for parkland, a portion of Highway 211 and land to construct the Gunderson Road extension, including land for the roadway, associated storm drainage improvements, accompanying utilities, grading, etc. The areas being considered in the UGB expansion are detailed in Exhibit D as follows:

Area 1 - Parkland Area: 2.38 acres

Areas 2 and 6 - Permanent Slope Easement/Temporary Construction Easement Area: 30,970 square feet **EXHIBIT 19** 

Area 3 - Public Right-of-Way Dedication (for Gunderson Road): 1.02 acres

Z0004-20-CP

Area 4 - Public Utility Easement: 4,802 square feet

Area 5 - Stormwater Facility: 30,143 square feet

Area 7 - Highway (211) Area: 2.05 acres

As explained by the applicant if you add the square footage and acreage, the sum is greater than 6.42 acres because Areas 2 and 4 overlap and are included within Area 1. The total acreage is the same when Areas 2 and 4 are removed from the equation.

If the proposed UGB expansion is approved the applicant will proceed with an annexation, comprehensive map amendment, and zoning map amendment for the property brought into the UGB.

## E. PROCEDURAL CONSIDERATIONS

This request is being processed under a Type IV quasi-judicial review. Notification of the proposal was mailed to property owners within 500 feet of the subject property and to affected agencies on January 22, 2020. Notification of the proposal was sent to the Department of Land Conservation and Development (DLCD) on January 9, 2020 and a legal notice was published in the Sandy Post on January 29, 2020. The Planning Commission reviewed the request at a public hearing on February 11, 2020 and forwarded a recommendation to approve the UGB expansion to the City Council.

#### F. ADDITIONAL HEARING DATES

Pursuant to OAR 660-018-0021(2) and the Urban Growth Management Agreement (UGMA) between the City of Sandy and Clackamas County, this UGB amendment application is subject to a coordinated City-County effort. Here is additional information on meetings before the Clackamas County Planning Commission and Clackamas County Board of Commissioners:

March 9, 2020 at 6:30 PM – Clackamas County Planning Commission Clackamas County Development Services Building Auditorium (Room 115) 150 Beavercreek Road Oregon City, OR 97045

March 18, 2020 at 9:30 AM – Clackamas County Board of Commissioners Clackamas County Public Services Building BCC Hearing Room (4th Floor) 2051 Kaen Road Oregon City, OR 97045

## II. ANALYSIS OF CODE COMPLIANCE

#### **ACRONYMS**

Urban Growth Boundary = UGB

From DLCD: "Each Oregon city is surrounded by an urban growth boundary (UGB); a line drawn on planning maps to designate where a city expects to grow over a 20-year period. This growth can occur with new houses, industrial facilities, businesses, or public facilities such as parks and utilities. Restrictions in areas outside of a UGB protect farm and forest resource land and prohibit urban development. Generally speaking, it's where the city ends and the fare the farest begin."

Z0004-20-CP

(Allied Homes & Development)

#### Urban Reserve Area = URA

From DLCD: "By designating urban reserves, the agriculture and forest industries, private landowners, and public and private service providers, are aware of future long-term (for the next 50 years) expansion locations of the UGB."

### Transportation System Plan = TSP

The TSP serves as the transportation element of the City of Sandy Comprehensive Land Use Plan, establishing a system of facilities and services to meet local transportation needs.

## Traffic Impact Analysis = TIA

A TIA evaluates the adequacy of the existing transportation system to serve a proposed development, and the expected effects of the proposed development on the transportation system.

## Department of Land Conservation & Development = DLCD

From DLCD: "DLCD works in partnership with local governments, and state and federal agencies, to address the land use needs of the public, communities, regions, and the state."

## Land Conservation and Development Commission = LCDC

From LCDC: "Oregon's Land Conservation and Development Commission (LCDC), assisted by the department (DLCD), adopts state land-use goals and implements rules, assures local plan compliance with the goals, coordinates state and local planning, and manages the coastal zone program."

#### Oregon Department of Transportation = ODOT

From ODOT: "Today, we develop programs related to Oregon's system of highways, roads, and bridges; railways; public transportation services; transportation safety programs; driver and vehicle licensing; and motor carrier regulation."

#### **APPLICABLE CRITERIA**

The UGB expansion is necessary to accommodate the extension of Gunderson Road as identified in the Sandy TSP, a portion of Highway 211, and to accommodate parkland in the general vicinity of the Nicolas Glen subdivision as identified in the Sandy Parks Master Plan.

The proposal complies with applicable Statewide Planning Goals 1, 2, 3, 4, 5, 6, 8, 10, 11, 12 and 14 as reviewed below.

#### Goal 1: Citizen Involvement

The application is being processed according to Chapter 17.12 of the Sandy Development Code, which involves public notification, public hearings, and appeal procedures. The application is being reviewed through a Type IV process that requires two public hearings before the City of Sandy. A notice of the proposal was sent to DLCD on January 9, 2020. The Planning Commission reviewed the application at a public hearing on February 11, 2020 and made a recommendation to approve the UGB expansion to City Council. City Council will hold a public hearing on March 2, 2020 to make a decision on the property 19

Z0004-20-CP

The public will have the opportunity to review and comment on the application at several meetings, therefore staff finds this application is consistent with Goal 1.

## Goal 2: Land Use Planning

The City's Comprehensive Plan guides land uses within the City's Urban Growth Boundary. This application is being processed by the City through a Type IV Quasi-Judicial process in accordance with the Development Code and Comprehensive Plan. The subject property is within the City's existing URA and will retain the present Clackamas County zoning designation until annexed into the City of Sandy. The proposed improvements on Tax Lot 701, including the planned transportation facility (Gunderson Road), stormwater facility for the transportation facility, a portion of Highway 211, and parkland are appropriate uses for the subject property. No private land uses are proposed on Tax Lot 701.

Goal 2 also requires the application to be coordinated with other affected units of government and requires an adequate factual base to support its approval. As discussed in this report, the City has notified other affected agencies of the application, including DLCD and ODOT. Clackamas County is concurrently reviewing the proposed expansion in accordance with its standards and state law.

Staff believes there is an adequate factual base in the record to support an approval of the application. An "adequate factual base" requires that substantial evidence exist in the entire record to support the decision – that is, evidence that reasonable persons would rely on in making day-to-day decisions. The City's TSP identifies Gunderson Road as a minor arterial that would accommodate growth in the area of the subject property, including providing a second access into the Bailey Meadows subdivision. The City's Parks Master Plan identifies a general need for a park in the surrounding area as well.

Therefore, staff finds this application is consistent with Goal 2.

#### Goal 3: Agricultural Lands

*Pursuant to OAR 660-024-0020(1)(b), Goal 3 is not applicable to the decision.* 

#### Goal 4: Forest Lands

Pursuant to OAR 660-024-0020(1)(b), Goal 4 is not applicable to the decision.

#### Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces

The decision does not affect a Goal 5 resource under OAR 660-023-0250(3)(a) or (b) because it does not "create[] or amend[] a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5;" and does not "allow[] new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list."

The County did note that this site includes portions of the Historic Barlow Trail. However, the County did not identify the resource category of the Historic Barlow Trail, or what actions the City and the applicant could take to preserve or address the location of texhibit 19 Historic Barlow Trail. Nothing in the County's plan or zoning ordinance prohibits 20004-20-CP

from crossing the trail. No amendment to a designated Goal 5 resource is proposed with this application; therefore, consistent with the application of Goal 5 and its implementing administrative rule, the issue of addressing the Historic Barlow Trail is relevant, if at all, in the context of subsequent land use actions the City may take (for example, zoning and permitting) once the property is inside the UGB.

For these reasons, staff finds this application is consistent with Goal 5.

#### Goal 6: Air, Land, and Water Resources

Goal 6 is implemented by Comprehensive Plan policies to protect air, land, and water resource quality. These policies rely on coordination with the Department of Environmental Quality (DEQ) for their implementation. Specific standards related to the project include requirements for addressing stormwater runoff, grading, and erosion control standards related to a minor public facility (i.e. Gunderson Road) and requirements related to site preparation for parkland development. Therefore, staff finds this application is consistent with Goal 6.

#### Goal 8: Recreational Needs

Goal 8 is implemented by Comprehensive Plan policies pertaining to parks, open space, and recreation facilities. The proposed location of the parkland on the subject property, Tax Lot 701, is outside the UGB. The UGB expansion will include parkland and satisfy the recreational needs of citizens in the vicinity of the Bailey Meadows subdivision. The planned parkland dedication included in this application will benefit the residents of Sandy and provide parkland as identified in the Sandy Parks Master Plan. Goal 8 is satisfied by the evidence in this record because the City has found it needs part of the UGB for park needs. The remainder of Goal 8 addresses destination resorts, which are not applicable to this application. Therefore, staff finds this application is consistent with Goal 8.

#### Goal 10: Housing

No portion of the proposed 6.42-acre UGB expansion is proposed for housing and the applicant has never proposed housing for this area. The application for the expansion of the UGB is solely for the accommodation of Gunderson Road, a portion of Highway 211, and parkland. Therefore, staff finds this application is consistent with Goal 10.

#### Goal 11: Public Facilities and Services

The subject property is currently located outside the UGB and the City limits, but within the City's acknowledged URA. Since the purpose of the UGB expansion is to permit construction of a public road (Gunderson Road), inclusion of Highway 211, and parkland the area being considered for urban expansion will not necessitate extension of mainlines for water or sanitary sewer. Laterals may be required to service the parkland in the future. The public road installation is required to include stormwater infrastructure. This application will not impact the City's ability to provide urban services. The UGB expansion will serve the transportation system in the area consistent with the Sandy TSP and the parks needs in the vicinity consistent with the Sandy Parks Master Plan. Therefore, staff finds this application is consistent with Goal 11.

EXHIBIT 19 Z0004-20-CP (Allied Homes & Development) Pages 16 9f 11 A portion of the subject property is planned to be used as a public transportation facility (Gunderson Road), connecting to the local transportation system north of the site and providing for future extension possibilities to the west. The submitted TIA (Exhibit C) and the comments from the City of Sandy Transportation Engineer (Exhibit E) contain additional information regarding traffic impacts. The City Transportation Engineer stated the following: "I find the TIA and Addendum meet City requirements. The TIA and Addendum demonstrate that the development can be accommodated with a north access using Melissa Avenue and a south access using a new extension of Gunderson Road with an intersection with Highway 211. I recommend approval of the subdivision with conditions that assure the dedication of all appropriate rights-of-way and the construction of the Gunderson Road extension and the intersection of Gunderson Road and Highway 211, with a left-turn lane on Highway 211." The street extension and connectivity improvements create a safe and convenient transportation system to the south of the Bailey Meadows subdivision. Therefore, staff finds this application is consistent with Goal 12.

### Goal 14: Urbanization

Tax Lot 701 is located within the URA and is currently designated as Exclusive Farm Use (EFU). An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow creation of the public transportation and parkland facilities. It should be noted that the City has a "Parks and Open Space" zoning designation that would ultimately apply to the area proposed for a parkland dedication. The City does not have a zoning designation specific to public facilities such as transportation facilities. Therefore, the likely zoning for the Gunderson Road area would be Single Family Residential (SFR). However, staff recommends a condition that would only permit public facilities for the area encompassing the Gunderson Road extension. The subject application accommodates urban population within the UGB by providing an efficient transportation network per the Sandy TSP and does not involve new commercial, industrial, or agricultural uses in the area proposed in the UGB expansion. The parkland will enhance the lives of the residents in the vicinity of the Bailey Meadows subdivision. Additionally, the proposed location for the parkland is appropriate by locating the park in the "donut hole" created by the expansion of the UGB to accommodate Gunderson Road. If the UGB is not expanded to include the area for the parkland, a "donut hole" would be created within the acknowledged URA. Interim use and development of Tax Lot 701 is not associated with the subject application. Therefore, staff finds this application is consistent with Goal 14.

# Transportation Planning Rule Compliance - Oregon Administrative Rule Chapter 660, Division 12

OAR 660, Division 12, is the Oregon Transportation Planning Rule (the TPR) adopted by LCDC. The TPR implements Goal 12, Transportation, and is an independent approval standard in addition to Goal 12 for map amendments. OAR 660-012-0060(1) and (2) apply to amendments to acknowledged maps, as is the case with this application. The TPR requires a two-step analysis. First, under OAR 660-012-0060(1), the applicant shall determine if the application has a "significant affect," as that term is defined in OAR 660-012-0060(1). The City may rely on transportation improvements found in transportation system plans, as allowed by OAR 660-012-0060(3)(a), (b), and (c), to show that failing there is a "significant affect," then the applicant must demonstrate appropriate mitigation under (Allied Homes & Development)

## Hamburg, Glen

From: Hamburg, Glen

Sent: Friday, February 28, 2020 8:45 AM

To: 'Sarah Bettey'

**Subject:** RE: Planning File Number Z0004-20-CP

Good morning Sarah,

I'll make sure your comments are included in the record.

Regards,

#### Glen Hamburg

Senior Planner Clackamas County Planning & Zoning 150 Beavercreek Rd Oregon City, OR 97045 Tel: 503.742.4523 General Schedule: Tuesday-Friday, 7am-5:30pm



The Clackamas County Department of Transportation and Development is dedicated to providing excellent customer service. Please help us to serve you better by giving us your <u>feedback</u>. We appreciate your comments and will use them to evaluate and improve the quality of our public service.

From: Sarah Bettey [mailto:sarahbettey2978@hotmail.com]

**Sent:** Thursday, February 27, 2020 10:05 AM **To:** Hamburg, Glen <GHamburg@clackamas.us> **Subject:** Planning File Number Z0004-20-CP

Clackamas County Planning and Zoning Division

Attn: Glen Hamburg

RE: Planning File Number Z0004-20-CP

My name is Sarah Bettey and my husband and I are homeowners in the Nicholas Glen neighborhood off Melissa Ave and Dubarko Rd in Sandy, Oregon. As a member of the Sandy community, I am writing to you to express my apprehension about the potential planned project for the Bailey Meadows subdivision as it has been approved. We hope you will keep our concerns in mind when it comes time for you to review the Urban Growth Boundary expansion proposal.

The City of Sandy Planning Commission has approved the plan to build the Bailey Meadows subdivision, despite their presently being one street that could serve as access to this new EXHIBIT 20 neighborhood, Melissa Avenue. The developers of the subdivision, Allied Homes and Developers of the subdivision, Allied Homes and Developers of the subdivision, Plant to include a life of point of entry into the not include a life of point of entry into the not include a life of point of entry into the not include a life of point of entry into the not include a life of en

new subdivision via Hwy 211 by building Gunderson Road, along with much needed park land dedication. It would give both Bailey Meadows and Nicholas Glen a 2nd access point, which is safer in case of emergencies and inclement winter weather. It will also drastically reduce the number of increased vehicle trips that are projected for Melissa Avenue on a daily basis.

We 100% support the UGB expansion due to this imminent safety issue. Our family and community want assurance that a second access point will be part of the future of this subdivision plan. Since the proposed expansion tax lot is already in the Urban Reserve Area, it has been anticipated that someday this section would be included in the Sandy UGB. We hope that this expansion can happen now so that the proposed Gunderson Road entrance to Bailey Meadows can be included in the development and reduce traffic through Nicholas Glen as soon as possible.

Myself and my family have a vested interest in our community and hope that our neighborhoods quiet character and charm will remain intact. My husband and I chose to raise our young son here in my hometown of Sandy and selected the Nicholas Glen neighborhood specifically because of its beauty, its quiet, and its safety. Without the UGB expansion, upwards of 1000 vehicle trips will be added to the daily traffic on our street, eliminating that safety factor completely. Sandy residents like us want the community to grow and thrive; we just want it to be done in a way that protects our families and our quality of life. Without the approval of the UGB expansion and road connection via Gunderson Road to Hwy 211, I truly fear for the safety of my family and our neighbors.

I hope you will hear my concerns and take them into consideration as you make decisions on this matter.

Thank you for your time,

Sarah Bettey 18195 Melissa Ave Sandy OR 97055 <u>Sarahbettey2978@hotmail.com</u> 971-246-2974

theBetteyfamily | 18195 Melissa Avenue Sandy, OR 97055 | \$ 971.246.2974 | R 503.953.3366 | sarahbettey2978@hotmail.com

Spam Email
Phishing Email



## Land Conservation and Development

OARD Home

Search Current Rules

Search Filings

Access the Oregon Bulletin

Access the Annual Compilation

FAQ

Rules Coordinator / Rules Writer Login

## Department

## Chapter 660

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);
- (b) Change standards implementing a functional classification system; or
- (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection 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;
- (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
- (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.
- (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
- (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.

Z0004-20-CP

(Allied Homes & Development)

- (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.
- (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.
- (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 facilitie XHIBIT 21 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).
- (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.
- (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, pedestrianfriendly 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.
- (7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria liexhibit 21 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.

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).
- (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.
- (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.
- (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) section. This section does not exempt a proposed amendment from other transportation performance standards TIBIT 21 policies that may apply including, but not limited to, safety for all modes, network connectivity for all modes (20004-20-CP sidewalks, bicycle lanes) and accessibility for freight vehicles of a size and frequency required by the development.

  (Allied Homes & 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.
- (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.

Statutory/Other Authority: ORS 197.040

 $\textbf{Statutes/Other Implemented:} \ ORS\ 195.025, 197.040, 197.230, 197.245, 197.610 - 197.625, 197.628 - 197.646, 197.64$ 

197.712, 197.717, 197.732 & 197.798

History

LCDD 7-2016, f. 7-29-16, cert. ef. 8-1-16 LCDD 11-2011, f. 12-30-11, cert. ef. 1-1-12 LCDD 3-2005, f. & cert. ef. 4-11-05 LCDD 6-1999, f. & cert. ef. 8-6-99

LCDD 6-1998, f. & cert. ef. 10-30-98

LCDC 1-1991, f. & cert. ef. 5-8-91

Please use this link to bookmark or link to this rule.



## Land Conservation and Development

OARD Home

Search Current Rules

Search Filings

Access the Oregon Bulletin

Access the Annual Compilation

FAQ

Rules Coordinator / Rules Writer Login

## Department

## Chapter 660

Division 24

**URBAN GROWTH BOUNDARIES** 

#### 660-024-0000

#### Purpose and Applicability

- (1) The rules in this division clarify procedures and requirements of Goal 14 regarding a local government adoption or amendment of an urban growth boundary (UGB). The rules in this division do not apply to the simplified UGB process under OAR chapter 660, division 38.
- (2) The rules in this division interpret Goal 14 as amended by the Land Conservation and Development Commission (LCDC or commission) on or after April 28, 2005, and are not applicable to plan amendments or land use decisions governed by previous versions of Goal 14 still in effect.
- (3) The rules in this division adopted on October 5, 2006, are effective April 5, 2007. The rules in this division amended on March 20, 2008, are effective April 18, 2008. The rules in this division adopted March 13, 2009, and amendments to rules in this division adopted on that date, are effective April 16, 2009, except as follows:
- (a) A local government may choose to not apply this division to a plan amendment concerning the evaluation or amendment of a UGB, regardless of the date of that amendment, if the local government initiated the evaluation or amendment of the UGB prior to April 5, 2007;
- (b) For purposes of this rule, "initiated" means that the local government either:
- (A) Issued the public notice specified in OAR 660-018-0020 for the proposed plan amendment concerning the evaluation or amendment of the UGB; or
- (B) Received LCDC approval of a periodic review work program that includes a work task to evaluate the UGB land supply or amend the UGB;
- (c) A local government choice whether to apply this division must include the entire division and may not differ with respect to individual rules in the division.
- (4) The rules in this division adopted on December 4, 2015, are effective January 1, 2016, except that a local government may choose to not apply the amendments to rules in this division adopted December 4, 2015 to a plan amendment concerning the amendment of a UGB, regardless of the date of that amendment, if the local government initiated the amendment of the UGB prior to January 1, 2016.

 $\textbf{Statutory/Other Authority:} \ \mathsf{ORS}\ 197.040\ \&\ \mathsf{Statewide}\ \mathsf{Planning}\ \mathsf{Goal}\ 14$ 

 $\textbf{Statutes/Other Implemented:} \ ORS\ 195.036, 197.015, 197.295 - 197.314, 197.610 - 197.650\ \&\ 197.7644, 197.610 - 197.650\ \&\ 197.7644, 197.610 - 197.610\ &\ 197.7644, 197.610\ &\ 197.6100\ &\ 197.610\ &\ 197.610\ &\ 197.61000\ &\ 197.61000\ &\ 197.61000\ &\ 197.61000\ &\ 197.6$ 

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

#### 660-024-0010

#### Definition

In this division, the definitions in the statewide goals and the following definitions apply:

EXHIBIT 22 Z0004-20-CP

(Allied Homes & Development)

Page 1 of 17

- (1) "Buildable Land" is a term applying to residential land only, and has the same meaning as provided in OAR 660-008-0005(2)
- (2) "EOA" means an economic opportunities analysis carried out under OAR 660-009-0015.
- (3) "Housing need" or "housing need analysis" refers to a local determination as to the needed amount, types and densities of housing that will be:
- (a) Commensurate with the financial capabilities of present and future area residents of all income levels during the 20-year planning period;
- (b) Consistent with any adopted regional housing standards, state statutes regarding housing need and with Goal 10 and rules interpreting that goal; and
- (c) Consistent with Goal 14 requirements.
- (4) "Local government" means a city or county, or a metropolitan service district described in ORS 197.015(13).
- (5) "Metro boundary" means the boundary of a metropolitan service district defined in ORS 197.015(13).
- (6) "Net Buildable Acre" consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads.
- (7) "Safe harbor" means an optional course of action that a local government may use to satisfy a requirement of Goal 14. Use of a safe harbor prescribed in this division will satisfy the requirement for which it is prescribed. A safe harbor is not the only way or necessarily the preferred way to comply with a requirement and it is not intended to interpret the requirement for any purpose other than applying a safe harbor within this division.
- (8) "Suitable vacant and developed land" describes land for employment opportunities, and has the same meaning as provided in OAR 660-009-0005 section (1) for "developed land," section (12) for "suitable," and section (14) for "vacant land."
- (9) "UGB" means "urban growth boundary."
- (10) "Urban area" means the land within a UGB.

 $\label{thm:constraint} \textbf{Statutory/Other Authority:} ORS~197.040~\&~Statewide~Planning~Goal~14\\ \textbf{Statutes/Other Implemented:} ORS~195.036,~197.015,~197.295~197.314,~197.610~197.650~\&~197.764\\ \textbf{History:}$ 

LCDD 2-2009, f. 4-8-09, cert. ef. 4-16-09 LCDD 8-2006, f. 10-19-06, cert. ef. 4-5-07

#### 660-024-0020

#### 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.

Z0004-20-CP (Allied Homes & Development)

Page 2 of 17

 $\label{thm:constraints} \textbf{Statutory/Other Authority:} ORS 197.040 \& Statewide Planning Goal 14 \\ \textbf{Statutes/Other Implemented:} ORS 195.036, 197.015, 197.295 - 197.314, 197.610 - 197.650 \& 197.764 \\ \textbf{History:} \\ \textbf{History:} \\ \textbf{Statutes/Other Implemented:} ORS 195.036, 197.015, 197.295 - 197.314, 197.610 - 197.650 \& 197.764 \\ \textbf{History:} \\ \textbf{History:} \\ \textbf{Statutes/Other Implemented:} \\ \textbf{ORS 195.036}, \textbf{Statutes/Other Implemented:} \\ \textbf{ORS 197.045}, \textbf$ 

LCDD 2-2009, f. 4-8-09, cert. ef. 4-16-09 LCDD 8-2006, f. 10-19-06, cert. ef. 4-5-07

#### 660-024-0040

#### 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.
- (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.
- (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 HIBIT 22 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.

EXHIBIT 22 Z0004-20-CP

(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).
- (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).

**Statutory/Other Authority:** ORS 197.040, Statewide Planning Goal 14 & ORS 195.033(10) **Statutes/Other Implemented:** ORS 195.036, ORS 197.015, ORS 197.295 - 197.314, ORS 197.610 - 197.650, ORS 197.764, ORS 195.033, ORS 195.036 & OL 2013 Ch. 574 Sec. 3

LCDD 2-2019, amend filed 01/28/2019, effective 02/01/2019

LCDD 1-2015, f. & cert. ef. 3-25-15 LCDD 9-2012, f. 11-26-12, cert. ef. 12-10-12 LCDD 2-2009, f. 4-8-09, cert. ef. 4-16-09 LCDD 8-2006, f. 10-19-06, cert. ef. 4-5-07

#### 660-024-0045

#### Regional Large Lot Industrial Land

- (1) Local governments in Crook, Deschutes or Jefferson Counties may determine a need for large lot industrial land in the region and provide sites to meet that need in accordance with this rule.
- (2) In addition to the definitions in OAR 660-024-0010, the following definitions apply to this rule:
- (a) "Analysis" means the document that determines the regional large lot industrial land need within Crook, Deschutes, or Jefferson County that is not met by the participating local governments' comprehensive plans at the time the analysis is adopted. The analysis shall also identify necessary site characteristics of needed land.
- (b) "COIC" means the Central Oregon Intergovernmental Council.
- (c) "Intergovernmental Agreement (IGA)" means the document adopted by the three counties and any participating city to implement the provisions of the analysis.
- (d) "Participating city" means a city within Crook, Deschutes, or Jefferson County that has adopted the analysis and entered into the intergovernmental agreement to implement the provisions of the analysis.
- (e) "Participating local government" means Crook, Deschutes, and Jefferson Counties, and participating cities.
- (f) "Regional large lot industrial land need" means the need for a specific type of 20-year employment land need, as described in OAR 660-024-0040(1) and (5), that is determined based upon the analysis.
- (g) "Site" means land in the region that:

EXHIBIT 22 Z0004-20-CP (Allied Homes & Development) Page 5 of 17

- (A) Provides the site characteristics necessary for traded sector uses as set forth in the analysis;
- (B) Is 50 acres or larger as provided in section (3) of this rule; and
- (C) Is determined to be "available," as that term is defined in OAR 660-009-0025(7), for regional large-lot industrial users and for purposes identified by the analysis.
- (h) "Site characteristics" has the meaning given that term in OAR 660-009-0005(1).
- (i) "Traded Sector use" has the meaning given that term in ORS 285B.280.
- (3) For purposes of subsection (2)(g) of this rule, a large lot is at least 50 acres if it is:
- (a) A single lot, parcel that is at least 50 acres,
- (b) An aggregation of existing lots or parcels under the same ownership that comprises at least 50 acres, or
- (c) An aggregation of existing lots or parcels not in the same ownership created and maintained as a unit of land comprising at least 50 acres through a binding agreement among the owners.
- (4) Participating local governments may adopt the analysis and implement its provisions. The analysis may demonstrate a need for six vacant, suitable and available sites in the region, and up to three additional sites that may be designated in order to replace one of the original six sites that is developed or committed to development as provided in section (12) of this rule. The original six sites must include two sites of at least 100 acres and not more than 200 acres, and one site more than 200 acres.
- (5) If a participating city adopts the analysis, it is deemed to provide an adequate factual basis for the determination of regional large lot industrial land need for that city provided:
- (a) The city and other participating local governments have entered into an intergovernmental agreement with the COIC. and
- (b) The analysis is adopted by Crook, Deschutes and Jefferson Counties.
- (6) Participating cities may adopt the analysis and enter into the intergovernmental agreement without amending the Economic Opportunities Analysis adopted by the city prior to the adoption of the analysis.
- (7) The intergovernmental agreement shall describe the process by which the COIC shall coordinate with participating local governments in:
- (a) The determination of a qualifying site that a participating city may designate in order to satisfy the regional large lot industrial land need: and
- (b) The allocation of the qualifying sites among the participating cities in accordance with section (4) of this rule.
- (8) A participating city may amend its comprehensive plan and land use regulations, including urban growth boundaries (UGB), in order to designate a site in accordance with the requirements of this rule, other applicable laws and the intergovernmental agreement, as follows:
- (a) A participating city must show whether a suitable and available site is located within its existing UGB. If a participating city determines that a suitable site already exists within the city's urban growth boundary, that site must be designated to meet the regional industrial land need. Cities shall not be required to evaluate lands within their UGB designated to meet local industrial land needs.
- (b) If a site is not designated per subsection(a), then a participating city may evaluate land outside the UGB to determine if any suitable sites exist. If candidate sites are found, the city may amend its UGB in accordance with Goal 14, other applicable laws and the intergovernmental agreement.
- (9) A participating city that designates a site shall apply a regional large-lot industrial zone or overlay zone to the site in order to protect and maintain the site for regional large lot purposes. The zone or overlay zone must:
- (a) Include development agreements and other provisions that prevent redesignation of the site for other uses for at least 10 years from the time the site is added to the city's comprehensive plan to meet regional large lot industrial land needs;
- (b) Prohibit division or separation of lots or parcels within the site to new lots or parcels less than the minimum size of the site need until the site is developed with a primary traded sector use requiring a large lot; and
- (c) Limit allowed uses on the site to the traded sector uses, except as provided in section (10) of this rule.
- (10) The zone or overlay zone established under section (9) may allow:
- (a) Subordinate industrial uses that rely upon and support the primary traded sector use when a site is occupied Eya HIBIT 22 primary traded sector use; and Z0004-20-CP

- (b) Non-industrial uses serving primarily the needs of employees of industrial uses developed on the site provided the zone includes measures that limit the type, size and location of new buildings so as to ensure such non-industrial uses are intended primarily for the needs of such employees;
- (11) If a participating city adds a site to its plan pursuant to this rule, it must consider the site in any subsequent urban growth boundary evaluation conducted to determine local industrial land needs and the adequacy of land available to meet local industrial land needs.
- (12) A site may be considered developed or committed to industrial development if a large-lot traded sector user demonstrates a commitment to develop the site by obtaining land use approvals such as site plan review or conditional use permits, and
- (a) Obtaining building permits; or
- (b) Providing other evidence that demonstrates at least an equivalent commitment to industrial development of the site as is demonstrated by a building permit.
- (13) The participating local governments shall review the analysis after the regional supply of six sites has either been replenished by three additional sites or after ten years, whichever comes first.

 $\label{thm:continuity:order} \textbf{Statutory/Other Authority:} ORS 197.040 \& Statewide Planning Goal 14 \\ \textbf{Statutes/Other Implemented:} ORS 195.036, 197.015, 197.295 - 197.314, 197.610 - 197.650 \& 197.764 \\ \textbf{History:} \\ \textbf{History:} \\ \textbf{Statutory} = \textbf{Statutory} + \textbf{Statutory}$ 

LCDD 9-2012, f. 11-26-12, cert. ef. 12-10-12

#### 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.
- (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 max maintain the land as urbanizable land until the land is rezoned for the planned urban uses, either by retaining the zoning to the zoning to the planned urban uses.

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.

**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

#### 660-024-0060

#### Metro Boundary Location Alternatives Analysis

- (1) When considering a Metro UGB amendment, Metro must determine which land to add by evaluating alternative urban growth boundary locations. For Metro, this determination must be consistent with the priority of land specified in ORS 197.298 and the boundary location factors of Goal 14, as follows:
- (a) Beginning with the highest priority of land available, Metro must determine which land in that priority is suitable to accommodate the need deficiency determined under OAR 660-024-0050.
- (b) If the amount of suitable land in the first priority category exceeds the amount necessary to satisfy the need deficiency, Metro must apply the location factors of Goal 14 to choose which land in that priority to include in the Metro UGB.
- (c) If the amount of suitable land in the first priority category is not adequate to satisfy the identified need deficiency, Metro must determine which land in the next priority is suitable to accommodate the remaining need, and proceed using the same method specified in subsections (a) and (b) of this section until the land need is accommodated.
- (d) Notwithstanding subsection (a) to (c) of this section, Metro may consider land of lower priority as specified in ORS 197.298(3).
- (e) For purposes of this section, the determination of suitable land to accommodate land needs must include consideration of any suitability characteristics specified under section (5) of this rule, as well as other provisions of law applicable in determining whether land is buildable or suitable.
- (2) Notwithstanding OAR 660-024-0050(4) and subsection (1)(c) of this rule, except during a legislative review of the Metro UGB, Metro may approve an application under ORS 197.610 to 197.625 for a Metro UGB amendment proposing to add an amount of land less than necessary to satisfy the land need deficiency determined under OAR 660-024-0050 (4), provided the amendment complies with all other applicable requirements.
- (3) The boundary location factors of Goal 14 are not independent criteria. When the factors are applied to compare alternative boundary locations and to determine the Metro UGB location, Metro must show that all the factors were considered and balanced.
- (4) In determining alternative land for evaluation under ORS 197.298, "land adjacent to the UGB" is not limited to those lots or parcels that abut the UGB, but also includes land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency.
- (5) If Metro has specified characteristics such as parcel size, topography, or proximity that are necessary for land to be suitable for an identified need, Metro may limit its consideration to land that has the specified characteristics where the boundary location alternatives analysis and applies ORS 197.298.

Z0004-20-CP

- (6) The adopted findings for a Metro UGB adoption or amendment must describe or map all of the alternative areas evaluated in the boundary location alternatives analysis. If the analysis involves more than one parcel or area within a particular priority category in ORS 197.298 for which circumstances are the same, these parcels or areas may be considered and evaluated as a single group.
- (7) For purposes of Goal 14 Boundary Location Factor 2, "public facilities and services" means water, sanitary sewer, storm water management, and transportation facilities.
- (8) The Goal 14 boundary location determination requires evaluation and comparison of the relative costs, advantages and disadvantages of alternative Metro UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative boundary locations. This evaluation and comparison must be conducted in coordination with service providers, including the Oregon Department of Transportation (ODOT) with regard to impacts on the state transportation system. "Coordination" includes timely notice to service providers and the consideration of evaluation methodologies recommended by service providers. The evaluation and comparison must include:
- (a) The impacts to existing water, sanitary sewer, storm water and transportation facilities that serve nearby areas already inside the Metro UGB;
- (b) The capacity of existing public facilities and services to serve areas already inside the UGB as well as areas proposed for addition to the Metro UGB: and
- (c) The need for new transportation facilities, such as highways and other roadways, interchanges, arterials and collectors, additional travel lanes, other major improvements on existing roadways and, for urban areas of 25,000 or more, the provision of public transit service.

**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

#### 660-024-0065

#### Establishment of Study Area to Evaluate Land for Inclusion in the UGB

- (1) When considering a UGB amendment to accommodate a need deficit identified in OAR 660-024-0050(4), a city outside of Metro must determine which land to add to the UGB by evaluating alternative locations within a "study area" established pursuant to this rule. To establish the study area, the city must first identify a "preliminary study area" which shall not include land within a different UGB or the corporate limits of a city within a different UGB. The preliminary study area shall include:
- (a) All lands in the city's acknowledged urban reserve, if any;
- (b) All lands that are within the following distance from the acknowledged UGB:
- (A) For cities with a UGB population less than 10,000: one-half mile;
- (B) For cities with a UGB population equal to or greater than 10,000: one mile;
- (c) All exception areas contiguous to an exception area that includes land within the distance specified in subsection (b) and that are within the following distance from the acknowledged UGB:
- (A) For cities with a UGB population less than 10,000: one mile;
- (B) For cities with a UGB population equal to or greater than 10,000: one and one-half miles;
- (d) At the discretion of the city, the preliminary study area may include land that is beyond the distance specified in subsections (b) and (c).
- (2) A city that initiated the evaluation or amendment of its UGB prior to January 1, 2016, may choose to identify a preliminary study area applying the standard in this section rather than section (1). For such cities, the preliminary study area shall consist of:
- (a) All land adjacent to the acknowledged UGB, including all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency, and
- (b) All land in the city's acknowledged urban reserve established under OAR chapter 660, division 21, if applicable.

  EXHIBIT 22

  (3) When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires
- (3) When the primary purpose for expansion of the UGB is to accommodate a particular industrial use that requires specific site characteristics, or to accommodate a public facility that requires specific site characteristics, and the site of the second s

characteristics may be found in only a small number of locations, the preliminary study area may be limited to those locations within the distance described in section (1) or (2), whichever is appropriate, that have or could be improved to provide the required site characteristics. For purposes of this section:

- (a) The definition of "site characteristics" in OAR 660-009-0005(11) applies for purposes of identifying a particular industrial use.
- (b) A "public facility" may include a facility necessary for public sewer, water, storm water, transportation, parks, schools, or fire protection. Site characteristics may include but are not limited to size, topography and proximity.
- (4) The city may exclude land from the preliminary study area if it determines that:
- (a) Based on the standards in section (7) of this rule, it is impracticable to provide necessary public facilities or services to the land:
- (b) The land is subject to significant development hazards, due to a risk of:
- (A) Landslides: The land consists of a landslide deposit or scarp flank that is described and mapped on the Statewide Landslide Information Database for Oregon (SLIDO) Release 3.2 Geodatabase published by the Oregon Department of Geology and Mineral Industries (DOGAMI) December 2014, provided that the deposit or scarp flank in the data source is mapped at a scale of 1:40,000 or finer. If the owner of a lot or parcel provides the city with a site-specific analysis by a certified engineering geologist demonstrating that development of the property would not be subject to significant landslide risk, the city may not exclude the lot or parcel under this paragraph;
- (B) Flooding, including inundation during storm surges: the land is within the Special Flood Hazard Area (SFHA) identified on the applicable Flood Insurance Rate Map (FIRM);
- (C) Tsunamis: the land is within a tsunami inundation zone established pursuant to ORS 455.446;
- (c) The land consists of a significant scenic, natural, cultural or recreational resource described in this subsection:
- (A) Land that is designated in an acknowledged comprehensive plan prior to initiation of the UGB amendment, or that is mapped on a published state or federal inventory at a scale sufficient to determine its location for purposes of this rule, as:
- (i) Critical or essential habitat for a species listed by a state or federal agency as threatened or endangered;
- (ii) Core habitat for Greater Sage Grouse; or
- (iii) Big game migration corridors or winter range, except where located on lands designated as urban reserves or exception areas;
- (B) Federal Wild and Scenic Rivers and State Scenic Waterways, including Related Adjacent Lands described by ORS 390.805, as mapped by the applicable state or federal agency responsible for the scenic program;
- $\hbox{(C) Designated Natural Areas on the Oregon State Register of Natural Heritage Resources};\\$
- (D) Wellhead protection areas described under OAR 660-023-0140 and delineated on a local comprehensive plan;
- (E) Aquatic areas subject to Statewide Planning Goal 16 that are in a Natural or Conservation management unit designated in an acknowledged comprehensive plan;
- (F) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 17, Coastal Shoreland, Use Requirement 1;
- (G) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 18, Implementation Requirement 2;
- (d) The land is owned by the federal government and managed primarily for rural uses.
- (5) After excluding land from the preliminary study area under section (4), the city must adjust the area, if necessary, so that it includes an amount of land that is at least twice the amount of land needed for the deficiency determined under OAR 660-024-0050(4) or, if applicable, twice the particular land need described in section (3). Such adjustment shall be made by expanding the distance specified under the applicable section (1) or (2) and applying section (4) to the expanded area.
- (6) For purposes of evaluating the priority of land under OAR 660-024-0067, the "study area" shall consist of all land that remains in the preliminary study area described in section (1), (2) or (3) of this rule after adjustments to the area based on sections (4) and (5), provided that when a purpose of the UGB expansion is to accommodate a public park need, the city must also consider whether land excluded under subsection (4)(a) through (c) of this rule can reasonably accommodate the park use.
- (7) For purposes of subsection (4)(a), the city may consider it impracticable to provide necessary public facilities of 004-20-CP services to the following lands:

- (a) Contiguous areas of at least five acres where 75 percent or more of the land has a slope of 25 percent or greater, provided that contiguous areas 20 acres or more that are less than 25 percent slope may not be excluded under this subsection. Slope shall be measured as the increase in elevation divided by the horizontal distance at maximum ten-foot contour intervals;
- (b) Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services to the land within the planning period. The city's determination shall be based on an evaluation of:
- (A) The likely amount of development that could occur on the land within the planning period;
- (B) The likely cost of facilities and services: and.
- (C) Any substantial evidence collected by or presented to the city regarding how similarly situated land in the region has, or has not, developed over time.
- (c) As used in this section, "impediments to service provision" may include but are not limited to:
- (A) Major rivers or other water bodies that would require new bridge crossings to serve planned urban development;
- (B) Topographic features such as canyons or ridges with slopes exceeding 40 percent and vertical relief of greater than 80 feet:
- (C) Freeways, rail lines, or other restricted access corridors that would require new grade separated crossings to serve planned urban development;
- (D) Significant scenic, natural, cultural or recreational resources on an acknowledged plan inventory and subject to protection measures under the plan or implementing regulations, or on a published state or federal inventory, that would prohibit or substantially impede the placement or construction of necessary public facilities and services.
- (8) Land may not be excluded from the preliminary study area based on a finding of impracticability that is primarily a result of existing development patterns. However, a city may forecast development capacity for such land as provided in OAR 660-024-0067(1)(d).
- (9) Notwithstanding OAR 660-024-0050(4) and section (1) of this rule, except during periodic review or other legislative review of the UGB, the city may approve an application under ORS 197.610 to 197.625 for a UGB amendment to add an amount of land less than necessary to satisfy the land need deficiency determined under OAR 660-024-0050(4), provided the amendment complies with all other applicable requirements.

 $\begin{tabular}{l} \textbf{Statutory/Other Authority:} ORS 197.040, 197A.305, 197A.320 \& 197.235 \& Statewide Planning Goal 14 \\ \textbf{Statutes/Other Implemented:} ORS 195.036, 197.015, 197.295 - 197.314, 197.610 - 197.650, 197.764 \& 197A.300 - 197A.325 \\ \end{tabular}$ 

History:

LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16

#### 660-024-0067

#### Evaluation of Land in the Study Area for Inclusion in the UGB; Priorities

- (1) A city considering a UGB amendment must decide which land to add to the UGB by evaluating all land in the study area determined under OAR 660-024-0065, as follows
- (a) Beginning with the highest priority category of land described in section (2), the city must apply section (5) to determine which land in that priority category is suitable to satisfy the need deficiency determined under OAR 660-024-0050 and select for inclusion in the UGB as much of the land as necessary to satisfy the need.
- (b) If the amount of suitable land in the first priority category is not sufficient to satisfy all the identified need deficiency, the city must apply section (5) to determine which land in the next priority is suitable and select for inclusion in the UGB as much of the suitable land in that priority as necessary to satisfy the need. The city must proceed in this manner until all the land need is satisfied, except as provided in OAR 660-024-0065(9).
- (c) If the amount of suitable land in a particular priority category in section (2) exceeds the amount necessary to satisfy the need deficiency, the city must choose which land in that priority to include in the UGB by applying the criteria in section (7) of this rule.
- (d) In evaluating the sufficiency of land to satisfy a need under this section, the city may use the factors identified in sections (5) and (6) of this rule to reduce the forecast development capacity of the land to meet the need.
- (e) Land that is determined to not be suitable under section (5) of this rule to satisfy the need deficiency determined under OAR 660-024-0050 is not required to be selected for inclusion in the UGB unless its inclusion is necessary to serve other higher priority lands.
- (2) Priority of Land for inclusion in a UGB:

- (a) First Priority is urban reserve, exception land, and nonresource land. Lands in the study area that meet the description in paragraphs (A) through (C) of this subsection are of equal (first) priority:
- (A) Land designated as an urban reserve under OAR chapter 660, division 21, in an acknowledged comprehensive plan;
- (B) Land that is subject to an acknowledged exception under ORS 197.732; and
- (C) Land that is nonresource land.
- (b) Second Priority is marginal land: land within the study area that is designated as marginal land under ORS 197.247 (1991 Edition) in the acknowledged comprehensive plan.
- (c) Third Priority is forest or farm land that is not predominantly high-value farm land: land within the study area that is designated for forest or agriculture uses in the acknowledged comprehensive plan and that is not predominantly high-value farmland as defined in ORS 195.300, or that does not consist predominantly of prime or unique soils, as determined by the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS). In selecting which lands to include to satisfy the need, the city must use the agricultural land capability classification system or the cubic foot site class system, as appropriate for the acknowledged comprehensive plan designation, to select lower capability or cubic foot site class lands first.
- (d) Fourth Priority is agricultural land that is predominantly high-value farmland: land within the study area that is designated as agricultural land in an acknowledged comprehensive plan and is predominantly high-value farmland as defined in ORS 195.300. A city may not select land that is predominantly made up of prime or unique farm soils, as defined by the USDA NRCS, unless there is an insufficient amount of other land to satisfy its land need. In selecting which lands to include to satisfy the need, the city must use the agricultural land capability classification system to select lower capability lands first.
- (3) Notwithstanding section (2)(c) or (d) of this rule, land that would otherwise be excluded from a UGB may be included if
- (a) The land contains a small amount of third or fourth priority land that is not important to the commercial agricultural enterprise in the area and the land must be included in the UGB to connect a nearby and significantly larger area of land of higher priority for inclusion within the UGB; or
- (b) The land contains a small amount of third or fourth priority land that is not predominantly high-value farmland or predominantly made up of prime or unique farm soils and the land is completely surrounded by land of higher priority for inclusion into the UGB.
- (4) For purposes of categorizing and evaluating land pursuant tosubsections (2)(c) and (d) and section (3) of this rule,
- (a) Areas of land not larger than 100 acres may be grouped together and studied as a single unit of land;
- (b) Areas of land larger than 100 acres that are similarly situated and have similar soils may be grouped together provided soils of lower agricultural or forest capability may not be grouped with soils of higher capability in a manner inconsistent with the intent of section (2) of this rule, which requires that higher capability resource lands shall be the last priority for inclusion in a UGB;
- (c) Notwithstanding subsection (4)(a), if a city initiated the evaluation or amendment of its UGB prior to January 1, 2016, and if the analysis involves more than one lot or parcel or area within a particular priority category for which circumstances are reasonably similar, these lots, parcels and areas may be considered and evaluated as a single group;
- (d) When determining whether the land is predominantly high-value farmland, or predominantly prime or unique, "predominantly" means more than 50 percent.
- (5) With respect to section (1), a city must assume that vacant or partially vacant land in a particular priority category is "suitable" to satisfy a need deficiency identified in OAR 660-024-0050(4) unless it demonstrates that the land cannot satisfy the specified need based on one or more of the conditions described in subsections (a) through (g) of this section: Existing parcelization, lot sizes or development patterns of rural residential land make that land unsuitable for an identified employment need; as follows:
- (A) Parcelization: the land consists primarily of parcels 2-acres or less in size, or
- (B) Existing development patterns: the land cannot be reasonably redeveloped or infilled within the planning period due to the location of existing structures and infrastructure."
- (b) The land would qualify for exclusion from the preliminary study area under the factors in OAR 660-024-0065(4) but the city declined to exclude it pending more detailed analysis.
- (c) The land is, or will be upon inclusion in the UGB, subject to natural resources protections under Statewide Planning
  Goal 5 such that that no development capacity should be forecast on that land to meet the land need deficiency.

  EXHIBIT 22

- (d) With respect to needed industrial uses only, the land is over 10 percent slope, or is an existing lot or parcel that is smaller than 5 acres in size, or both. Slope shall be measured as the increase in elevation divided by the horizontal distance at maximum ten-foot contour intervals.
- (e) With respect to a particular industrial use or particular public facility use described in OAR 660-024-0065(3), the land does not have, and cannot be improved to provide, one or more of the required specific site characteristics.
- (f) The land is subject to a conservation easement described in ORS 271.715 that prohibits urban development.
- (g) The land is committed to a use described in this subsection and the use is unlikely to be discontinued during the planning period:
- (A) Public park, church, school, or cemetery, or
- (B) Land within the boundary of an airport designated for airport uses, but not including land designated or zoned for residential, commercial or industrial uses in an acknowledged comprehensive plan.
- (6) For vacant or partially vacant lands added to the UGB to provide for residential uses:
- (a) Existing lots or parcels one acre or less may be assumed to have a development capacity of one dwelling unit per lot or parcel. Existing lots or parcels greater than one acre but less than two acres shall be assumed to have an aggregate development capacity of two dwelling units per acre.
- (b) In any subsequent review of a UGB pursuant to this division, the city may use a development assumption for land described in subsection (a) of this section for a period of up to 14 years from the date the lands were added to the UGB.
- (7) Pursuant to subsection (1)(c), if the amount of suitable land in a particular priority category under section (2) exceeds the amount necessary to satisfy the need deficiency, the city must choose which land in that priority to include in the UGB by first applying the boundary location factors of Goal 14 and then applying applicable criteria in the acknowledged comprehensive plan and land use regulations acknowledged prior to initiation of the UGB evaluation or amendment. The city may not apply local comprehensive plan criteria that contradict the requirements of the boundary location factors of Goal 14. The boundary location factors are not independent criteria; when the factors are applied to compare alternative boundary locations and to determine the UGB location the city must show that it considered and balanced all the factors. The criteria in this section may not be used to select lands designated for agriculture or forest use that have higher land capability or cubic foot site class, as applicable, ahead of lands that have lower capability or cubic foot site class.
- (8) The city must apply the boundary location factors of Goal 14 in coordination with service providers and state agencies, including the Oregon Department of Transportation (ODOT) with respect to Factor 2 regarding impacts on the state transportation system, and the Oregon Department of Fish and Wildlife (ODFW) and the Department of State Lands (DSL) with respect to Factor 3 regarding environmental consequences. "Coordination" includes timely notice to agencies and service providers and consideration of any recommended evaluation methodologies.
- (9) In applying Goal 14 Boundary Location Factor 2 to evaluate alternative locations under section (7), the city must compare relative costs, advantages and disadvantages of alternative UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative boundary locations. For purposes of this section, the term "public facilities and services" means water, sanitary sewer, storm water management, and transportation facilities. The evaluation and comparison under Boundary Location Factor 2 must consider:
- (a) The impacts to existing water, sanitary sewer, storm water and transportation facilities that serve nearby areas already inside the UGB;
- (b) The capacity of existing public facilities and services to serve areas already inside the UGB as well as areas proposed for addition to the UGB; and
- (c) The need for new transportation facilities, such as highways and other roadways, interchanges, arterials and collectors, additional travel lanes, other major improvements on existing roadways and, for urban areas of 25,000 or more, the provision of public transit service.
- (10) The adopted findings for UGB amendment must describe or map all of the alternative areas evaluated in the boundary location alternatives analysis.

**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

- (1) For the purposes of this rule, the following definitions apply in addition to those in OAR 660-024-0010:
- (a) "Approved airport master plan" means a comprehensive study of an airport describing the short-, medium-, and long-term development plans to meet future aviation demand with any necessary approval from the Federal Aviation Administration and adoption as a component of the comprehensive plan.
- (b) "Master plan for economic development" means a written plan or plans developed by a city for a proposed pilot program site that explains how development of the proposed pilot program site will advance the city's economic EXHIBIT 22 development goals contained in the comprehensive plan; how the city expects urbanization of the proposed 2004-20-CP

program site to promote economic development, industry growth, and job creation that would not otherwise occur at other locations in the urban area; and how the site will be served with public facilities and services.

- (c) "Pilot program site" means the land included in the nomination for the pilot program under section (3) and selected for the program under section (4).
- (d) "Public facilities and services" means water, sanitary sewer, storm water management, transportation facilities, and emergency services.
- (e) "Traded sector" has the meaning provided in ORS 285B.280.
- (2) As provided in ORS 197A.405(5), the commission will select one city to implement a pilot program to promote economic development and industry growth and job creation at an airport. The commission will select a pilot program city according to the process in section (4). The pilot program will be implemented according to the requirements of sections (5) to (8).
- (3) A city may nominate a site adjacent to its UGB for participation in the pilot program. A nomination must:
- (a) Include a concept plan that contains:
- (A) A master plan for economic development of the proposed site. A master plan for economic development will be approved by the city's elected body after at least one public hearing;
- (B) A list of goals for the master plan for economic development of the proposed pilot program site;
- (C) Current comprehensive plan map designation and a description of proposed changes needed to implement the master plan for economic development;
- (D) Any proposed changes to comprehensive plan text needed to implement the master plan for economic development for at least 20 years; and
- (E) Current zoning regulations, a description of proposed changes needed to implement the master plan for economic development, and an explanation of how the proposed changes will only allow uses that are compatible with aviation uses at the adjacent airport.
- (b) Include a map or maps showing that the site is adjacent to the existing UGB and adjacent to an airport;
- (c) Include the approved airport master plan for the airport to which the nominated site is adjacent;
- $(d) \ Include \ public \ facilities \ plans \ showing \ that \ the \ nominated \ site \ is \ near \ public \ facilities \ and \ services;$
- (e) Report the number of jobs that were existing at all of the businesses located on the proposed pilot program site on the effective date of ORS 197A.405;
- (f) Include evidence that the governing body of the county containing the nominated site consents to the nomination; and
- (g) Be submitted to the department by a date selected by the director.  $\,$
- (4) The commission shall select a pilot program site from among those nominated. The selected site must satisfy the criteria in subsection (a). The commission will select the site that, in its judgment, best satisfies the criteria in subsection (b). The requirements of subsection (c) apply to the selection process.
- (a) The site is:
- (A) Not less than 78 miles from the urban growth boundary of any city with a population of 300,000 or more;
- (B) Located in a county with at least seven percent unemployment over the preceding five-year period. The unemployment rate shall be calculated using data from the Oregon Employment Department. For the purposes of this rule, "over the preceding five-year period" means the average annual, seasonally adjusted unemployment rate for the five years preceding the date in subsection (3)(g);
- (C) Adjacent to the city's existing UGB;
- (D) Adjacent to an airport with an approved airport master plan;
- (E) Near public facilities and services, including streets;
- $(F)\ Planned\ and\ zoned\ for\ commercial\ or\ industrial\ uses\ that\ are\ compatible\ with\ aviation\ uses; and$
- (G) Not high-value farmland as the term defined in ORS 195.300(10).
- (b) The pilot program site:

**EXHIBIT 22** 

(A) Will, once included in the UGB, provide economic development opportunities not present in other parts ozooca area; and

- (B) Can be served with public facilities and services at a level adequate for planned industrial and commercial uses.
- (c) The commission shall select one pilot program site for implementation. In selecting the pilot program site, the commission may only consider applications that the department determines are complete pursuant to subsections (3)(a) to (f). The commission shall issue a final order selecting the city for the expedited UGB amendment.
- (5) Notwithstanding OAR 660-024-0040, the city selected under subsection (4)(c) for the pilot program may expand the UGB for the city to include the pilot program site without demonstrating a need for land during the planning period.
- (6) Notwithstanding OAR 660-024-0050, the city selected under subsection (4)(c) for the pilot program may expand the UGB for the city to include the pilot program site without completing an inventory of land inside the UGB to determine development capacity and without determining whether the UGB has a deficiency of industrial land to accommodate 20-year needs.
- (7) Notwithstanding OAR 660-024-0065 and 660-024-0067, the city selected in subsection (4)(c) for the pilot program may expand the UGB for the city to include the pilot program site without establishing or evaluating a study area. Only the pilot program site may be included in a UGB amendment completed under the provisions of this rule.
- (8) The following requirements apply to the city and county expanding its UGB for the pilot program site:
- (a) Concurrently with adoption of a UGB amendment, the city or county must assign appropriate urban comprehensive plan and zoning designations to land added to the UGB consistent with the master plan for economic development. The pilot program site must remain planned and zoned for industrial uses, and commercial uses that support industrial or aviation use, that are compatible with aviation uses for a period of 20 years after the site is included in the UGB;
- (b) The pilot program site must be protected from conversion to other uses before, during, and after implementation of the master plan for economic development:
- (c) Industrial and commercial developments on the pilot program site must continue to be used to implement the master plan for economic development for a period of at least 50 years after the selection of the pilot program site through:
- (A) Zoning restrictions; or
- (B) Other regulations, provisions or conditions determined by the city.
- (9) A pilot program site included in a UGB must be treated as employment land for the purposes of a subsequent land need analysis under OAR chapter 660, division 24 or 38.
- (10) The city that expands its UGB pursuant to this rule must provide, to the extent practicable, the following information to the department by September 30, 2021:
- (a) The number of new businesses established within the boundaries of the pilot program site and the number of businesses that relocated to the pilot program site from another location in the urban area;
- (b) The number of jobs created at the pilot program site. Include:
- (A) The total number of jobs at businesses located on the pilot program site at the time of the report;
- (B) The number of jobs reported in paragraph (A) that were existing at a business located on the pilot program site before the site was included in the UGB;
- (C) The number of jobs reported in paragraph (A) that were created by an existing business located on the pilot program site after the site was included in the UGB;
- (D) The number of jobs reported in paragraph (A) that were created by a business or businesses that had no employees in the urban area containing the pilot program site before the business located on the pilot program site;
- (E) The number of jobs reported in paragraph (A) that were created by a business or businesses that relocated jobs on the pilot program site from another location within the urban area containing the pilot program site; and
- (F) The number of jobs reported in paragraphs (C) and (D) at businesses engaged in a traded sector.
- (c) The wages of the new jobs described in paragraphs (b)(C) and (D) created at the pilot program site. The wage data may be provided in categories or other generalized fashion;
- (d) The most recently available unemployment rate from the Oregon Department of Employment for the county containing the pilot program site and an analysis of the effect of the employment and unemployment in the city by business development at the pilot program site;
- (e) The number of residential properties listed for sale on the Residential Multiple Listing Service with an address from the city containing the pilot program site on a date one month after the commission selects the city and on June 30, 2021;

- (f) The average sale price of residential properties with an address from the city containing the pilot program site for the period beginning one month after the commission selects the city and ending June 30, 2021;
- (g) The average per-acre price of land zoned industrial listed for sale with an address from the city containing the pilot program site on a date one month after the commission selects the city and on June 30, 2021;
- (h) The dollars of private investment in the pilot program site after the pilot program site is included in the UGB, as determined from standard building permit records;
- (i) An analysis of the economic growth of the city and county since the implementation of the pilot program.

 $\begin{tabular}{ll} \textbf{Statutory/Other Authority:} ORS 197.040 \& ORS 197A.405 \\ \textbf{Statutes/Other Implemented:} ORS 197A.405-197A.413 \\ \textbf{History:} \end{tabular}$ 

 $LCDD\ 6\text{--}2018, adopt\ filed\ 08/06/2018, effective\ 08/06/2018$ 

#### 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.

Statutory/Other Authority: ORS 197.040 & Other Auth. Statewide Planning Goal 14 Statutes/Other Implemented: ORS 197.626 History:
LCDD 2-2009, f. 4-8-09, cert. ef. 4-16-09

v1.8.6

System Requirements Privacy Policy Accessibility Policy Oregon Veterans Oregon.gov

Oregon State Archives • 800 Summer Street NE • Salem, OR 97310
Phone: 503-373-0701 • Fax: 503-378-4118 • reference.archives@oregon.gov



March 5, 2020

Michael C. Robinson

Admitted in Oregon T: 503-796-3756 C: 503-407-2578 mrobinson@schwabe.com

#### VIA E-MAIL

Mr. Glen Hamburg, Planner II Clackamas County Department of Transportation and Development Planning and Zoning Division 150 Beavercreek Road, Room 225 Oregon City, OR 97045

RE: Clackamas County File No. Z0004-20-CP; Joint Submittal to City of Sandy and Clackamas County by Allied Homes & Development to Expand the City of Sandy Urban Growth Boundary Within the Acknowledged City of Sandy Urban Reserve Area by 6.42 Acres, Including 4.37 Acres for Tax Lot 701 and 2.05 Acres for Oregon Highway 211; Response to Three Questions Contained in March 3, 2020 Email

## Dear Mr. Hamburg:

This office represents the Applicant, Allied Homes & Development (the "Applicant"). I am writing to answer the three questions that you asked in your March 3, 2020 email. I have confirmed these answers with City of Sandy Planning Director Kelly O'Neill. Also enclosed with this letter is a formal request to Mr. O'Neill regarding the zoning request for the property to be annexed in the event that the Sandy Urban Growth Boundary (the "UGB") is amended.

1. "It's my understanding that the City will determine whether it already has, or will need to adopt, necessary [Statewide Planning] Goal 5 provisions for the Barlow Road when it processes an annexation/rezoning?"

**RESPONSE:** Mr. O'Neill and I have discussed this matter. As I stated to you in a prior telephone conversation, and as Mr. O'Neill and I discussed on March 4, 2020, if and when permitting for the Gunderson Road extension to Oregon Highway 211 which crosses the Barlow Road Trail is proposed, the Applicant will coordinate with the City and the County pursuant to the definition of coordination in ORS 197.015 on how to address the Barlow Road crossing. As City Attorney David Doughman told the Sandy City Council on March 2, 2020, many roads in the county cross Barlow Road. The Applicant understands and appreciates the importance of the Barlow Road Trail and will examine how to address it during permitting for Gunderson Road. An amendment to the City's acknowledged Comprehensive Plan to add or amend a Goal 5 provision regarding Barlow Road is unnecessary since the Applicant is committing to addressing it during the permitting exercise.

EXHIBIT 23 Z0004-20-CP Mr. Glen Hamburg, Planner II March 5, 2020 Page 2

2. "Has the pending annexation application before the City also now been modified from its original request for the area to all be zoned residential?"

**RESPONSE:** Yes. Attached is a letter dated today to Mr. O'Neill formally amending the request so that the area proposed for the public park will be zoned "Public open space" pursuant to Sandy Development Code ("SDC") Chapter 17.32, "Parks & Open Space" ("POS"). SDC 17.32.10.A.1 and 3 allow parks as a primary use permitted outright in the POS zone.

For the area needed for the Gunderson Road extension, the Applicant has proposed that the area be zoned "Single-Family Residential" ("SFR") pursuant to SDC Chapter 17.34. I note that the definition of "order" in SDC 17.10.30 is the final disposition of a case which includes an approval with conditions. Additionally, for Type III applications, SDC 17.12.30 also authorizes the imposition of conditions of approval. The Applicant has asked the County to condition the UGB expansion for Gunderson Road on no residential development and has made the same request to the City.

3. "[In the event the UGB expansion is not approved and the conditions of approval for the Bailey Meadows Subdivision provide for the Applicant to dedicate an easement for the Gunderson Road extension] would this be an easement for the same Gunderson Road highway connection through what is now and would remain EFU land?"

**RESPONSE:** Yes. As we discussed, although the Applicant may grant an easement for a particular purpose to the City, if the UGB expansion is not approved, the Gunderson Road extension cannot be constructed the UGB is expanded in the future. The property would remain zoned Exclusive Farm Use ("EFU") until the UGB is expanded, the City has annexed the land and the City has changed the zoning of the property to an urban zone.

Please place this letter before the Clackamas County Planning Commission prior to the commencement of the initial evidentiary hearing on the UGB amendment on March 9, 2020 and in the official Clackamas County Planning Department file for this matter.

schwabe.com

Very truly yours,

Michael C. Robinson

Muhal Chall -

MCR:jmhi Enclosure

Cc Mr. Cody Bjugan (via email) (w/enclosure)

Mr. Chris Goodell (via email) (w/enclosure)

Mr. Kelly O'Neill (via email) (w/enclosure)

Mr. David Doughman (via email) (w/enclosures)

EXHIBIT 23 Z0004-20-CP (Allied Homes & Development) Page 2 of 3



March 5, 2020

Michael C. Robinson

Admitted in Oregon T: 503-796-3756 C: 503-407-2578 mrobinson@schwabe.com

Mr. Kelly O'Neill, Director City of Sandy Planning & Building Department Sandy City Hall 39250 Pioneer Boulevard Sandy, OR 97055

RE: City of Sandy File No. 20-001 ANN CPA ZC, Gunderson Road and Parkland

Annexation and Zoning Map Amendment Application

Dear Mr. O'Neill:

This office represents the Applicant for the above-referenced files. On behalf of the Applicant, I hereby request that the area proposed to be annexed and zoned for the Gunderson Road extension be zoned Single-Family Residential ("SFR") with a condition limiting its use to the Gunderson Road extension and improvements necessary to support the Gunderson Road extension and not allowing residential uses and that the parkland area be zoned Park & Open Space ("POS").

Please place this letter in the official Planning Department file for this Application.

Very truly yours,

Michael C. Robinson

MCR:jmhi

cc:

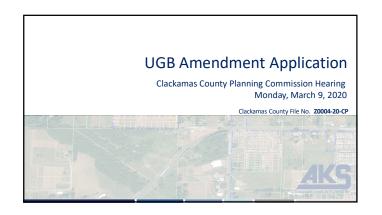
Mr. Cody Bjugan (via email)

Mr. Chris Goodell (via email)

Mr. David Doughman (via email)

Mr. Glen Hamburg (via email)

PDX\133569\245146\MCR\27468300.1

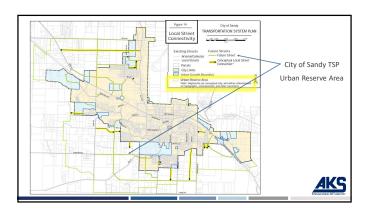


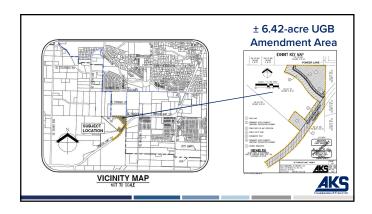
## **Project Team**

- » Allied Homes & Development
  - » Applicant
- » AKS Engineering & Forestry, LLC
  - » Land Use Planning, Civil Engineering, Surveying, Landscape Architecture, Arborist, and Natural Resources Consultant
- » Lancaster Mobley
  - » Transportation Engineering Consultant
- » Schwabe Williamson & Wyatt
  - » Legal Counsel









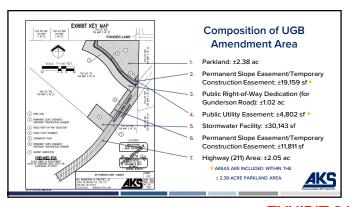
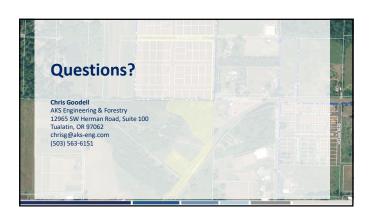


EXHIBIT 24 Z0004-20-CP (Allied Homes & Development) Page 1 of 2





# AN ORDINANCE ADOPTING AN URBAN GROWTH BOUNDARY EXPANSION ANALYSIS AND COMPREHENSIVE PLAN AMENDMENT FOR THE CITY OF SANDY

Whereas, the Sandy City Council desires to amend its Urban Growth Boundary (UGB) to include 6.42 acres, including Gunderson Road, a stormwater tract, a portion of Highway 211, and parkland as identified in the UGB application File No. 20-002 UGB and identified in Exhibit A; and

Whereas, the City of Sandy sent notice to the Department of Land Conservation and Development (DLCD) on January 9, 2020 in anticipation of public hearings before the Planning Commission and City Council; and

Whereas, the City of Sandy sent notice to all property owners within 500 feet of the site on January 23, 2020 describing the proposal and the applicable hearing dates before the City Planning Commission, City Council, Clackamas County Planning Commission, and the Clackamas County Board of Commissioners; and

Whereas, the Planning Commission held a public hearing to review the application on February 11, 2020 and forwarded a recommendation by a vote of 6:0 to the City Council to approve the application and expand the UGB; and

Whereas, the City Council held a public hearing to review the application on March 2, 2020.

## NOW, THEREFORE, THE CITY OF SANDY ORDAINS AS FOLLOWS,

**Section 1:** The application is approved and Sandy's Urban Growth Boundary is expanded to include the property identified in Exhibit A, which is attached and incorporated by reference.

**Section 2:** The City Council adopts by reference the March 2, 2020 staff report for File No. 20-002 UGB as its findings in support of the expansion.

**Section 3:** Staff is directed to take all additional actions that are necessary to implement the expansion, including providing Clackamas County and DLCD a copy of this ordinance and other documentation either agency may request or as may be required by law.

This ordinance is adopted by the Common Council of the City of Sandy and approved by the Mayor this 02 day of March 2020

Stan Pulliam, Mayor

MPR

ATTEST:

Jeff Aprati, City Recorder



## **AKS ENGINEERING & FORESTRY, LLC**

12965 SW Herman Road, Suite 100, Tualatin, OR 97062 P: (503) 563-6151 | www.aks-eng.com

AKS Job #7107

## EXHIBIT A

OFFICES IN: BEND, OR - KEIZER, OR - TUALATIN, OR - VANCOUVER, WA

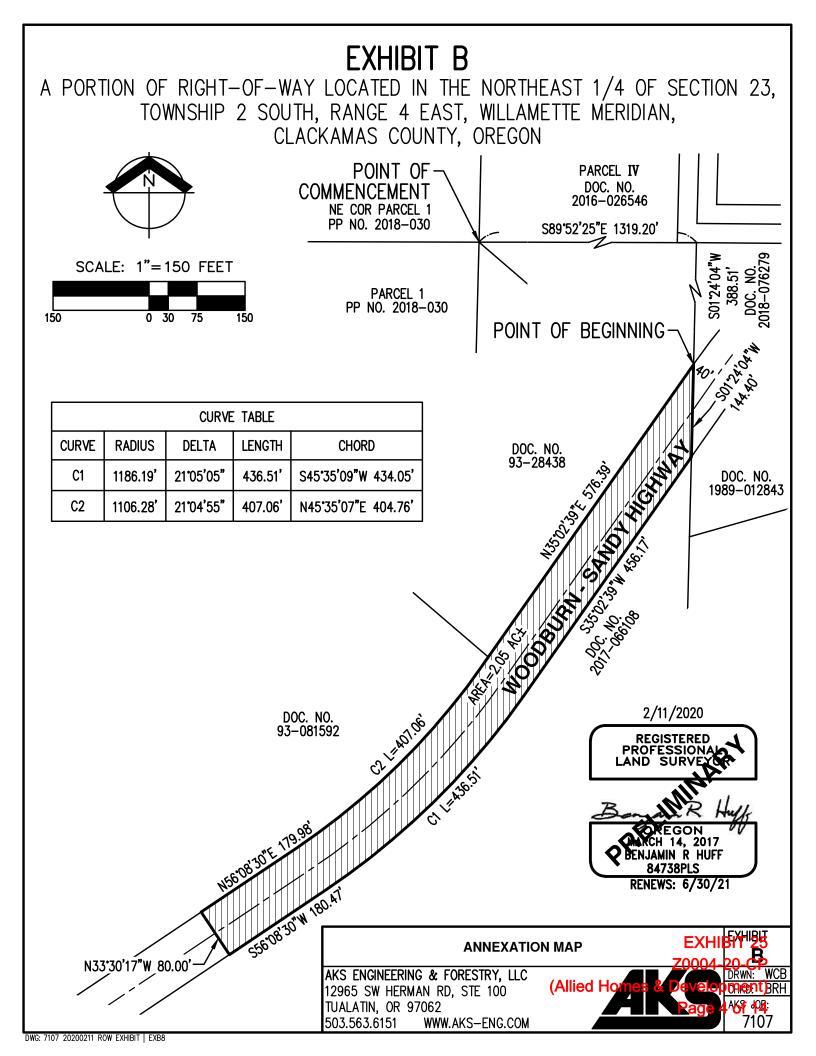
## **Annexation Description**

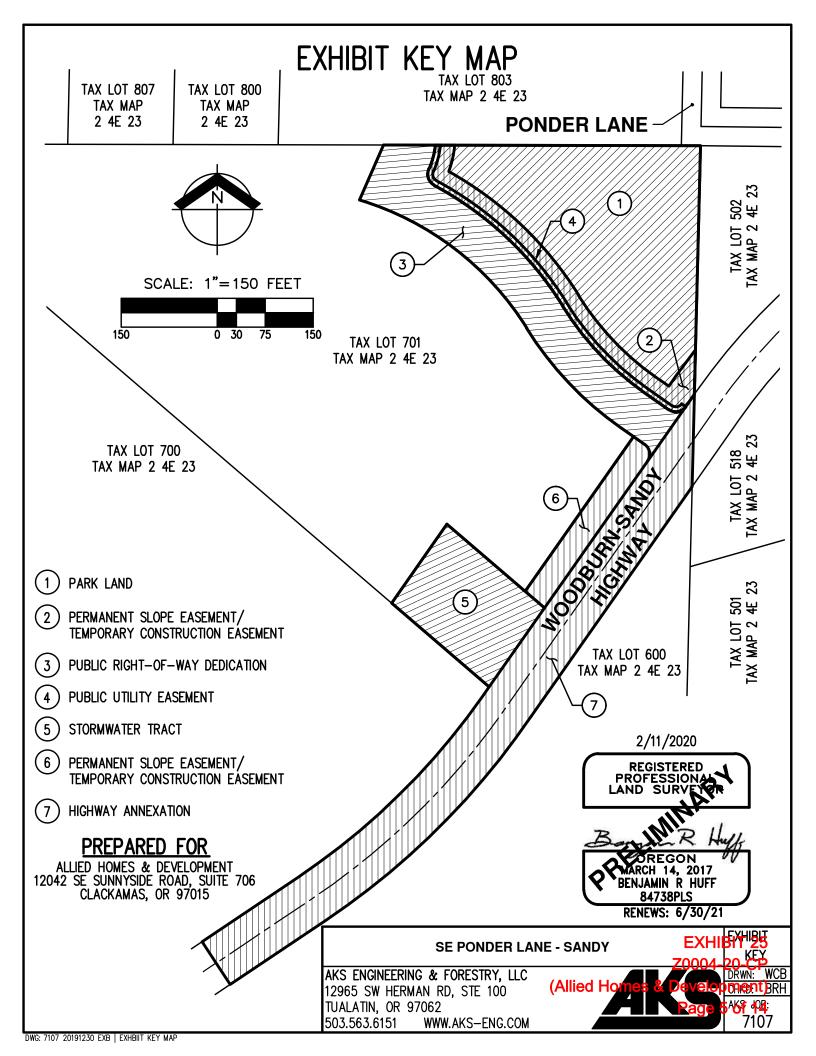
A portion of right-of-way located in the Northeast One-Quarter of Section 23, Township 2 South, Range 4 East, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the northeast corner of Parcel 1 of Partition Plat 2018-030, Clackamas County Plat Records; thence along the north line of Document Number 93-28438, Clackamas County Deed Records, South 89°52'25" East 1319.20 feet to the northeast corner of said deed; thence along the east line of said deed, South 01°24'04" West 388.51 feet to the northwesterly right-ofway of Woodburn-Sandy Highway (40.00 feet from centerline) and the Point of Beginning; thence along the southerly extension of said east line, South 01°24'04" West 144.40 feet to the southeasterly right-of-way line of Woodburn-Sandy Highway (40.00 feet from centerline); thence along said southeasterly right-of-way line, South 35°02'39" West 456.17 feet; thence along a curve to the Left with a Radius of 1186.19 feet, a Delta of 21°05'05", a Length of 436.51 feet, and a Chord of South 45°35'09" West 434.05 feet; thence South 56°08'30" West 180.47 feet; thence leaving said southeasterly right-of-way line, North 33°30'17" West 80.00 feet to said northwesterly right-of-way line; thence along said northwesterly right-of-way line, North 56°08'30" East 179.98 feet; thence along a curve to the Left with a Radius of 1106.28 feet, a Delta of 21°04'55", a Length of 407.06 feet, and a Chord of N45°35'07" East 404.76 feet; thence North 35°02'39" East 576.39 feet to the Point of Beginning.

The above described tract of land contains 2.05 acres, more or less.









**SUBJECT:** File No. 20-002 UGB Expansion for Gunderson Road

**AGENDA DATE:** March 2, 2020

**DEPARTMENT:** Development Services Department

STAFF CONTACT: Kelly O'Neill Jr., Development Services Director

## **EXHIBITS:**

## **Applicant's Submittals:**

- A. Land Use Application
- B. Narrative
- C. Transportation Impact Analysis
- D. Legal Description and Maps

## **Agency Comments:**

E. City Transportation Engineer, Replinger & Associates (January 20, 2020)

## **Public Comments:**

F. Paul Savage, 37506 Rachael Drive (February 2, 2020)

## **Staff Report:**

G. Planning Commission Staff Report dated February 11, 2020

## **Additional Submittal from Applicant:**

H. Letter from Michael Robinson from Schwabe, Williamson, and Wyatt (February 20, 2020)

## **Additional Agency Comments:**

- I. Sandy Fire District Fire Marshall (February 26, 2020)
- J. Department of Land Conservation and Development (February 13, 2020)

#### I. BACKGROUND

#### A. PROCEEDING

Type IV UGB Expansion

#### **B. FACTUAL INFORMATION**

- 1. APPLICANT: Allied Homes & Development
- 2. OWNERS: Lawrence Pullen, Richard Pullen, and Sherrene TenEyck
- 3. PROJECT NAME: UGB Expansion for Gunderson Road and Parkland
- 4. LEGAL DESCRIPTION: T2S R4E Section 23 Tax Lot 701

**EXHIBIT 25** 

Z0004-20-CP

(Allied Homes & Development)

- 5. PROPERTY LOCATION: North of Highway 211 and South of Ponder Lane
- 6. PROPOSED AREA: 6.42 acres
- 7. PROPOSAL: The applicant, Allied Homes and Development, proposes to expand the Sandy Urban Growth Boundary by approximately 6.42 acres to meet a need for certain public facilities (a minor arterial road, a portion of Highway 211, and parkland). The land is currently designated Urban Reserve.
- 8. CITY COMPREHENSIVE PLAN DESIGNATION: Low Density Residential
- 9. COUNTY COMPREHENSIVE PLAN DESIGNATION: Agriculture (AG)
- 10. COUNTY ZONING DISTRICT DESIGNATION: Exclusive Farm Use (EFU)
- 11. RESPONSE FROM GOVERNMENTAL AGENCIES, UTILITY PROVIDERS, CITY DEPARTMENTS AND THE GENERAL PUBLIC: City of Sandy Transportation Engineer, Sandy Fire District, Department of Land Conservation and Development (DLCD)
- C. APPLICABLE CRITERIA: Sandy Development Code 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; Sandy Comprehensive Plan Goals and Policies and Oregon Statewide Planning Goals Nos. 1, 2, 6, 8, 11, 12, and 14; Clackamas County Comprehensive Plan Chapter 4; Oregon Administrative Rules Chapter 660, division 12; Oregon Administrative Rules Chapter 660, division 24.

## D. BACKGROUND INFORMATION

The City of Sandy is also processing a land use application for the Bailey Meadows subdivision (File No. 19-023 SUB/VAR/TREE). The proposed subdivision is located near Highway 211 and Ponder Lane. The purpose of this UGB expansion is to accommodate Gunderson Road and parkland to the south of Bailey Meadows to fulfill conditions of approval from the Bailey Meadows land use application. The alignment for Gunderson Road is located on property (Tax Map 24E23 Tax Lot 701) that is located outside of Sandy's City limits and UGB. The subject property is currently designated Exclusive Farm Use (EFU) by Clackamas County, but is within the City of Sandy's Urban Reserve Area (URA). Under Oregon law, lands designated URA are "first priority" lands to be included in a UGB expansion. The portion of the property that is planned to be included within the amended UGB is limited to areas necessary for parkland, a portion of Highway 211 and land to construct the Gunderson Road extension, including land for the roadway, associated storm drainage improvements, accompanying utilities, grading, etc. The areas being considered in the UGB expansion are detailed in Exhibit D as follows:

Area 1 - Parkland Area: 2.38 acres

Areas 2 and 6 - Permanent Slope Easement/Temporary Construction Easement Area: 30,970 square feet

EXHIBIT 25

Area 3 - Public Right-of-Way Dedication (for Gunderson Road): 1.02 acres

Z0004-20-CP

Area 4 - Public Utility Easement: 4,802 square feet

(Allied Homes & Development)

Area 5 - Stormwater Facility: 30,143 square feet

Area 7 - Highway (211) Area: 2.05 acres

As explained by the applicant if you add the square footage and acreage, the sum is greater than 6.42 acres because Areas 2 and 4 overlap and are included within Area 1. The total acreage is the same when Areas 2 and 4 are removed from the equation.

If the proposed UGB expansion is approved the applicant will proceed with an annexation, comprehensive map amendment, and zoning map amendment for the property brought into the UGB.

## E. PROCEDURAL CONSIDERATIONS

This request is being processed under a Type IV quasi-judicial review. Notification of the proposal was mailed to property owners within 500 feet of the subject property and to affected agencies on January 22, 2020. Notification of the proposal was sent to the Department of Land Conservation and Development (DLCD) on January 9, 2020 and a legal notice was published in the Sandy Post on January 29, 2020. The Planning Commission reviewed the request at a public hearing on February 11, 2020 and forwarded a recommendation to approve the UGB expansion to the City Council.

## F. ADDITIONAL HEARING DATES

Pursuant to OAR 660-018-0021(2) and the Urban Growth Management Agreement (UGMA) between the City of Sandy and Clackamas County, this UGB amendment application is subject to a coordinated City-County effort. Here is additional information on meetings before the Clackamas County Planning Commission and Clackamas County Board of Commissioners:

March 9, 2020 at 6:30 PM – Clackamas County Planning Commission Clackamas County Development Services Building Auditorium (Room 115) 150 Beavercreek Road Oregon City, OR 97045

March 18, 2020 at 9:30 AM – Clackamas County Board of Commissioners Clackamas County Public Services Building BCC Hearing Room (4th Floor) 2051 Kaen Road Oregon City, OR 97045

## II. ANALYSIS OF CODE COMPLIANCE

#### **ACRONYMS**

Urban Growth Boundary = UGB

From DLCD: "Each Oregon city is surrounded by an urban growth boundary (UGB); a line drawn on planning maps to designate where a city expects to grow over a 20-year period. This growth can occur with new houses, industrial facilities, businesses, or public facilities such as parks and utilities. Restrictions in areas outside of a UGB protect farm and forest resource land and prohibit urban development. Generally speaking, it's where the city ends and the farexed the company of the company of the company of the city ends and the farexed the company of the city ends and the farexed the company of the

(Allied Homes & Development)

## Urban Reserve Area = URA

From DLCD: "By designating urban reserves, the agriculture and forest industries, private landowners, and public and private service providers, are aware of future long-term (for the next 50 years) expansion locations of the UGB."

## Transportation System Plan = TSP

The TSP serves as the transportation element of the City of Sandy Comprehensive Land Use Plan, establishing a system of facilities and services to meet local transportation needs.

## Traffic Impact Analysis = TIA

A TIA evaluates the adequacy of the existing transportation system to serve a proposed development, and the expected effects of the proposed development on the transportation system.

## Department of Land Conservation & Development = DLCD

From DLCD: "DLCD works in partnership with local governments, and state and federal agencies, to address the land use needs of the public, communities, regions, and the state."

## Land Conservation and Development Commission = LCDC

From LCDC: "Oregon's Land Conservation and Development Commission (LCDC), assisted by the department (DLCD), adopts state land-use goals and implements rules, assures local plan compliance with the goals, coordinates state and local planning, and manages the coastal zone program."

## Oregon Department of Transportation = ODOT

From ODOT: "Today, we develop programs related to Oregon's system of highways, roads, and bridges; railways; public transportation services; transportation safety programs; driver and vehicle licensing; and motor carrier regulation."

## **APPLICABLE CRITERIA**

The UGB expansion is necessary to accommodate the extension of Gunderson Road as identified in the Sandy TSP, a portion of Highway 211, and to accommodate parkland in the general vicinity of the Nicolas Glen subdivision as identified in the Sandy Parks Master Plan.

The proposal complies with applicable Statewide Planning Goals 1, 2, 3, 4, 5, 6, 8, 10, 11, 12 and 14 as reviewed below.

## Goal 1: Citizen Involvement

The application is being processed according to Chapter 17.12 of the Sandy Development Code, which involves public notification, public hearings, and appeal procedures. The application is being reviewed through a Type IV process that requires two public hearings before the City of Sandy. A notice of the proposal was sent to DLCD on January 9, 2020. The Planning Commission reviewed the application at a public hearing on February 11, 2020 and made a recommendation to approve the UGB expansion to City Council. City Council will hold a public hearing on March 2, 2020 to make a decision on the property 15.

Z0004-20-CP

The public will have the opportunity to review and comment on the application at several meetings, therefore staff finds this application is consistent with Goal 1.

## Goal 2: Land Use Planning

The City's Comprehensive Plan guides land uses within the City's Urban Growth Boundary. This application is being processed by the City through a Type IV Quasi-Judicial process in accordance with the Development Code and Comprehensive Plan. The subject property is within the City's existing URA and will retain the present Clackamas County zoning designation until annexed into the City of Sandy. The proposed improvements on Tax Lot 701, including the planned transportation facility (Gunderson Road), stormwater facility for the transportation facility, a portion of Highway 211, and parkland are appropriate uses for the subject property. No private land uses are proposed on Tax Lot 701.

Goal 2 also requires the application to be coordinated with other affected units of government and requires an adequate factual base to support its approval. As discussed in this report, the City has notified other affected agencies of the application, including DLCD and ODOT. Clackamas County is concurrently reviewing the proposed expansion in accordance with its standards and state law.

Staff believes there is an adequate factual base in the record to support an approval of the application. An "adequate factual base" requires that substantial evidence exist in the entire record to support the decision – that is, evidence that reasonable persons would rely on in making day-to-day decisions. The City's TSP identifies Gunderson Road as a minor arterial that would accommodate growth in the area of the subject property, including providing a second access into the Bailey Meadows subdivision. The City's Parks Master Plan identifies a general need for a park in the surrounding area as well.

Therefore, staff finds this application is consistent with Goal 2.

#### Goal 3: Agricultural Lands

Pursuant to OAR 660-024-0020(1)(b), Goal 3 is not applicable to the decision.

#### Goal 4: Forest Lands

Pursuant to OAR 660-024-0020(1)(b), Goal 4 is not applicable to the decision.

## Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces

The decision does not affect a Goal 5 resource under OAR 660-023-0250(3)(a) or (b) because it does not "create[] or amend[] a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5;" and does not "allow[] new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list."

The County did note that this site includes portions of the Historic Barlow Trail. However, the County did not identify the resource category of the Historic Barlow Trail, or what actions the City and the applicant could take to preserve or address the location of texhibit 25 Historic Barlow Trail. Nothing in the County's plan or zoning ordinance prohibits 20004-20-CP

from crossing the trail. No amendment to a designated Goal 5 resource is proposed with this application; therefore, consistent with the application of Goal 5 and its implementing administrative rule, the issue of addressing the Historic Barlow Trail is relevant, if at all, in the context of subsequent land use actions the City may take (for example, zoning and permitting) once the property is inside the UGB.

For these reasons, staff finds this application is consistent with Goal 5.

## Goal 6: Air, Land, and Water Resources

Goal 6 is implemented by Comprehensive Plan policies to protect air, land, and water resource quality. These policies rely on coordination with the Department of Environmental Quality (DEQ) for their implementation. Specific standards related to the project include requirements for addressing stormwater runoff, grading, and erosion control standards related to a minor public facility (i.e. Gunderson Road) and requirements related to site preparation for parkland development. Therefore, staff finds this application is consistent with Goal 6.

#### Goal 8: Recreational Needs

Goal 8 is implemented by Comprehensive Plan policies pertaining to parks, open space, and recreation facilities. The proposed location of the parkland on the subject property, Tax Lot 701, is outside the UGB. The UGB expansion will include parkland and satisfy the recreational needs of citizens in the vicinity of the Bailey Meadows subdivision. The planned parkland dedication included in this application will benefit the residents of Sandy and provide parkland as identified in the Sandy Parks Master Plan. Goal 8 is satisfied by the evidence in this record because the City has found it needs part of the UGB for park needs. The remainder of Goal 8 addresses destination resorts, which are not applicable to this application. Therefore, staff finds this application is consistent with Goal 8.

#### Goal 10: Housing

No portion of the proposed 6.42-acre UGB expansion is proposed for housing and the applicant has never proposed housing for this area. The application for the expansion of the UGB is solely for the accommodation of Gunderson Road, a portion of Highway 211, and parkland. Therefore, staff finds this application is consistent with Goal 10.

## Goal 11: Public Facilities and Services

The subject property is currently located outside the UGB and the City limits, but within the City's acknowledged URA. Since the purpose of the UGB expansion is to permit construction of a public road (Gunderson Road), inclusion of Highway 211, and parkland the area being considered for urban expansion will not necessitate extension of mainlines for water or sanitary sewer. Laterals may be required to service the parkland in the future. The public road installation is required to include stormwater infrastructure. This application will not impact the City's ability to provide urban services. The UGB expansion will serve the transportation system in the area consistent with the Sandy TSP and the parks needs in the vicinity consistent with the Sandy Parks Master Plan. Therefore, staff finds this application is consistent with Goal 11.

EXHIBIT 25 Z0004-20-CP (Allied Homes & Development) Pages 15 9f 14 A portion of the subject property is planned to be used as a public transportation facility (Gunderson Road), connecting to the local transportation system north of the site and providing for future extension possibilities to the west. The submitted TIA (Exhibit C) and the comments from the City of Sandy Transportation Engineer (Exhibit E) contain additional information regarding traffic impacts. The City Transportation Engineer stated the following: "I find the TIA and Addendum meet City requirements. The TIA and Addendum demonstrate that the development can be accommodated with a north access using Melissa Avenue and a south access using a new extension of Gunderson Road with an intersection with Highway 211. I recommend approval of the subdivision with conditions that assure the dedication of all appropriate rights-of-way and the construction of the Gunderson Road extension and the intersection of Gunderson Road and Highway 211, with a left-turn lane on Highway 211." The street extension and connectivity improvements create a safe and convenient transportation system to the south of the Bailey Meadows subdivision. Therefore, staff finds this application is consistent with Goal 12.

## Goal 14: Urbanization

Tax Lot 701 is located within the URA and is currently designated as Exclusive Farm Use (EFU). An application for annexation to the City of Sandy will be processed separately and include a comprehensive plan amendment to apply City zoning to allow creation of the public transportation and parkland facilities. It should be noted that the City has a "Parks and Open Space" zoning designation that would ultimately apply to the area proposed for a parkland dedication. The City does not have a zoning designation specific to public facilities such as transportation facilities. Therefore, the likely zoning for the Gunderson Road area would be Single Family Residential (SFR). However, staff recommends a condition that would only permit public facilities for the area encompassing the Gunderson Road extension. The subject application accommodates urban population within the UGB by providing an efficient transportation network per the Sandy TSP and does not involve new commercial, industrial, or agricultural uses in the area proposed in the UGB expansion. The parkland will enhance the lives of the residents in the vicinity of the Bailey Meadows subdivision. Additionally, the proposed location for the parkland is appropriate by locating the park in the "donut hole" created by the expansion of the UGB to accommodate Gunderson Road. If the UGB is not expanded to include the area for the parkland, a "donut hole" would be created within the acknowledged URA. Interim use and development of Tax Lot 701 is not associated with the subject application. Therefore, staff finds this application is consistent with Goal 14.

# Transportation Planning Rule Compliance - Oregon Administrative Rule Chapter 660, Division 12

OAR 660, Division 12, is the Oregon Transportation Planning Rule (the TPR) adopted by LCDC. The TPR implements Goal 12, Transportation, and is an independent approval standard in addition to Goal 12 for map amendments. OAR 660-012-0060(1) and (2) apply to amendments to acknowledged maps, as is the case with this application. The TPR requires a two-step analysis. First, under OAR 660-012-0060(1), the applicant shall determine if the application has a "significant affect," as that term is defined in OAR 660-012-0060(1). The City may rely on transportation improvements found in transportation system plans, as allowed by OAR 660-012-0060(3)(a), (b), and (c), to show that failing there is intersections will not be made worse or intersections not now failing will not fail. If there is a "significant affect," then the applicant must demonstrate appropriate mitigation under (Allied Homes & Development)

*OAR* 660-012-0060(2). The City Transportation Engineer (Exhibit E) stated the following: "The [applicant's traffic] engineer provides a detailed response to the criteria specified in the TPR. He explains that the proposed amendment to expand the UGB does not change the functional classification of any transportation facility and does not increase developable property that will increase trip generation. He concludes that the proposal helps to implement a project specified in the TSP. I think his argument is sound and supported by the analysis."

One of the two primary reasons for the subject UGB application is to implement the City's adopted TSP, by constructing Gunderson Road, a planned City Minor Arterial roadway. Refer to the submitted TIA (Exhibit C) and the comments from the City of Sandy Transportation Engineer (Exhibit E) for additional information. The subject property (Tax Lot 701) is in unincorporated Clackamas County and accessible from Highway 211. Highway 211 is currently classified as a major arterial in both the City and County TSPs but is under the jurisdiction of the State of Oregon Department of Transportation. The applicant met with City, County, and ODOT staff prior to submitting the applicable UGB expansion application to discuss the effects of the application. The City has coordinated the application with Clackamas County by providing the County with timely notice of this application, allowing the County to comment on the application, and including the County's comments in the decision, as is reasonable. The City has also notified ODOT of the application and will continue to coordinate with ODOT.

Based on the applicant's TIA and the opinion of the City's transportation engineer, staff finds that the application satisfies the TPR.

## Oregon Administrative Rule Chapter 660, Division 24

This application involves a UGB expansion to meet a need for the public facilities described in this report: a public transportation facility (i.e. Gunderson Road) as illustrated in the Sandy TSP, a portion of Highway 211, and land for park purposes as indicated in the Parks Master Plan. The Division 24 rule allows the City to consider one category of land needs (in this instance, public facilities) without simultaneously reviewing other categories of land needs. The application is not seeking to add land for additional residential, commercial or industrial development. Approving the application would only allow a road and public parkland in the area proposed for expansion.

Pursuant to OAR 660-024-0065(3), when the primary purpose for expanding the UGB is to accommodate a public facility with specific site characteristics, the study area can be limited to areas within the City's URA that provide the required site characteristics. Pursuant to OAR 660-024-0065(3)(b), site characteristics include "size, topography and proximity." In this instance, very specific site characteristics are associated with the need for the public facilities at issue (a road and additional parkland). In order to: (i) provide a second access from Highway 211 into the Bailey Meadows subdivision specifically (and the area around the subdivision generally); (ii) meet adequate sight distance requirements at the intersection of Highway 211; (iii) bring into the UGB the least amount of land necessary to provide the access and achieve adequate sight distance; and (iv) do so in the most economical way possible, the study area is reasonably limited to Tax Lot 701. In addition 1815 this area is identified in the City's TSP as the area within which Gunderson Road would connect to Highway 211. The conceptual alignment of Gunderson Road as proposed by the (Allied Homes & Development) applicant to meet the needs of the Sandy TSP is on property not currently within the UGB. The subject property, Tax Lot 701, is the most feasible location for Gunderson Road to safely intersect with Highway 211. The remnant parcel that would exist in the northeast portion of Tax Lot 701 is therefore the best location to accommodate the need for additional parkland without further expansion into the URA and avoids the creation of a "donut hole" within the URA itself.

The City's Public Open Space ("POS") zoning district allows parks as a permitted use outright per Sandy Development Code ("SDC") 17.32.10.A.1. The City's Single-Family Residential ("SFR") zoning district allows "Minor Public Facilities" as a permitted use outright per SDC 17.34.10.B.6. SDC 17.10.30 defines "Minor Public Facilities" to include "new or extended public streets." Finally, SDC 17.12.32 (for Type III applications) and 17.12.40 (for Type IV applications) allow the City Planning Commission and the City Council to impose conditions of approval on the decision. It is feasible to impose conditions of approval on the City map amendments and permitting applications for the Gunderson Road extension and parkland. This is sufficient to satisfy OAR 660-024-0050(6) and (7). The applicant has submitted a separate application to annex and rezone the subject property and will consent to the City's imposition of conditions of approval that would limit the use of the property specifically for road and park uses.

Based on the above information, the applicant's narrative and the applicant's TIA, staff finds that the applicable criteria in the Division 24 rule are satisfied.

## **III.RECOMMENDATION**

By a motion of 6:0 the Planning Commission forwarded a recommendation of approval to City Council. Planning Commission and staff recommend the City Council approve the UGB expansion.