RESOLUTION NO. 2610

A RESOLUTION OF THE CITY OF WILSONVILLE TO SELECT THE PREFERRED FINAL ALIGNMENT OF THE BOONES FERRY ROAD TO BROWN ROAD EAST-WEST CORRIDOR

WHEREAS, though all intersections in the study area currently meet the City of Wilsonville's operating standards, when traffic incidents occur or capacity is surpassed on I-5, impacts to the I-5 / Wilsonville Road / Boones Ferry Road interchange area are significant and cause the intersections to fail; and

WHEREAS, an east-west extension of SW Brown Road and an extension of Kinsman Road south of its terminus would help alleviate motor vehicle congestion along Wilsonville Road near the I-5 interchange area, improve neighborhood connectivity, and provide a more direct route for emergency responders; and

WHEREAS, the adopted 2013 City of Wilsonville Transportation System Plan (updated in 2016) identifies the need for an east-west connector south of Wilsonville Road between Boones Ferry Road and Brown Road and called for a corridor study to assist the City with determining the final alignment; and

WHEREAS, the TSP lists the connector as the Brown Road Extension, project RE-04A to serve as alternate access to and from the Old Town neighborhood and other destinations in the study area and to meet the forecasted mobility demands projected for 2035 in the TSP, Urban Renewal Plans, and Comprehensive Plan;

WHEREAS, the TSP includes two alignment options, connecting at 5th Street and at Bailey Street, and calls for a thorough alternatives analysis, listing 15 specific factors for consideration in selecting the final alignment;

WHEREAS, the City undertook the Boones Ferry Road to Brown Road Connector Corridor Plan project to identify the final alignment for the Connector and specifically identify the connection to Boones Ferry Road at Bailey Street or 5th Street;

WHEREAS, the Boones Ferry Road to Brown Road Connector Corridor Plan addressed the alternatives analysis factors for consideration listed in the TSP, including access, bicycle and pedestrian connections, environmental impacts, freight benefits / impacts, future development plans, motor vehicle capacity, neighborhood / commercial

connectivity, private property impacts, project costs, public input, railroad crossings, and traffic diversion, among other issues; and

WHEREAS, the project and report recommending the preferred final alignment is considered to be Transportation Project Development per the Oregon Administrative Rules and its adoption process requires City Council decision following a quasi-judicial public hearing; and

WHEREAS, Council's goal is to identify and approve the preferred connection point of the Brown Road extension as either Bailey Street or 5th Street, weighing how the various factors of the project best meet the specific Council Goals of Fiscal Discipline, Clear Vision and Community Design, Multi-Modal Transportation Network, and promoting a Safe Healthy and Aesthetically Pleasing Community; and

WHEREAS, the Boones Ferry Road to Brown Road Connector Corridor Plan Alternatives Analysis Final Report (Report) attached hereto as **Attachment 1** and thereby fully incorporated herein, documents the study and selection process along with detailed analysis and recommendations, and is consistent with direction provided by the TSP; and

WHEREAS, the 1996 Wilsonville West Side Master Plan provides a vision, goals, and policies for the Old Town neighborhood and Arrowhead Creek Planning area; and

WHEREAS, the findings of the 2009 Wilsonville Road Interchange Area Management Plan highlights the need for local east-west connectivity; and

WHEREAS, the accepted Wilsonville 2012 Old Town Neighborhood Plan described the need for a Connector as critical, but does not identify either the 5th Street or Bailey Street options as being preferred over the other;

WHEREAS, the 5th Street alignment option best balances transportation needs with cost considerations, economic development goals related to industrial land, and impacts to private property; and

WHEREAS, Conclusionary Findings, attached hereto as **Attachment 2** and thereby fully incorporated herein, have been prepared to support the decision; and

WHEREAS, the draft Boones Ferry Road to Brown Road Connector Corridor Plan was presented to the Planning Commission at their November 9, 2016 work session where they provided comments and feedback (the Planning Commission meeting minutes are attached hereto as **Attachment 3** and thereby fully incorporated herein) that were carefully considered when preparing the final Report and recommendations.

WHEREAS, the project can be designed to mitigate for the traffic-related impact concerns raised by members of the Old Town neighborhood association and Planning Commission; and

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

- 1. The Boones Ferry Road to Brown Road Connector Corridor Plan Alternative Analysis Final Report, attached hereto and thereby fully incorporated herein, summarizes the results of the comprehensive study completed to determine a preferred final alignment for the Boones Ferry Road to Brown Road Connector.
- 2. The preferred final alignment connects to Boones Ferry Road at SW 5th Street.
- 3. The findings presented in this Resolution supporting this alignment are hereby adopted.
- 3. This resolution becomes effective upon adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 19th day of December, 2016, and filed with the Wilsonville City Recorder this date.

	Tim Knapp, Mayor
ATTEST:	
Sandra C. King, City Recorder, MMC	_

SUMMARY OF VOTES:

Mayor Knapp – The Mayor recused himself and did not vote on the matter.

Council President Starr Yes
Councilor Fitzgerald Yes
Councilor Stevens Yes
Councilor Lehan Yes

Attachments:

- 1. Boones Ferry Road to Brown Road East-West Corridor Plan Alternatives Analysis Final Report N:\shared\Engineering\Attachment 1 BFR2BR Final Report 8Dec2016 -HMK.pdf
- Conclusionary Findings
 Minutes from the 11/9 PC discussion



Boones Ferry Road to Brown Road Connector Corridor Plan

ALTERNATIVES ANALYSIS FINAL REPORT

CITY OF WILSONVILLE

Otak DKS Associates JLA Alta Planning + Design

December 2016



FINAL REPORT

EXECUTIVE SUMMARY

The objective of the City of Wilsonville's Boones Ferry Road to Brown Road Connector Corridor Plan is to identify the preferred final alignment for the long-anticipated roadway network connection. This study is consistent with direction provided by the City of Wilsonville 2013 (updated in 2016) Transportation System Plan (TSP) for the Brown Road Extension project. Following the decision by the Wilsonville City Council, the City will be positioned to move forward with alignment design, permitting, and construction of the project's first phase.

The study developed a range of six alternative alignments, completed a thorough assessment of the study area, and defined two alignment options for further evaluation. Through multiple venues and approaches, the project team engaged with property owners, stakeholders, and the broader Wilsonville community to understand concerns and positions and discuss alignment options for this future link to the city's transportation network.

As a result, the project team's technical recommendation is that the preferred final alignment is at the 5th Street connection with Boones Ferry Road. The technical recommendation is based on an evaluation of the engineering and other technical analyses as well as input regarding the needs and concerns of stakeholders. The 5th Street option best balances transportation needs with environmental resources, industrial and rail access, efficient development of and access to existing undeveloped land, and economic development goals.

Adoption of the alignment will allow the City to move forward with Phase 1 construction of the Connector - from Boones Ferry West to Kinsman Road.

INTRODUCTION

The City of Wilsonville's Boones Ferry Road to Brown Road Connector Corridor Plan identifies a preferred final alignment for a new east-west connection south of Wilsonville Road (referred to in this report as the Connector) to serve as alternate access to and from the Old Town neighborhood and other destinations in the study area. The Brown Road Extension project identified in the TSP continues Brown Road from its current southern terminus near the intersection with Wilsonville Road to Boones Ferry Road. The new roadway will be classified as a Collector roadway to serve all modes of travel.

The Connector is also needed to meet the forecasted mobility demands projected for 2035 in the TSP, Urban Renewal Plans, and Comprehensive Plan. The Connector is not a project needed to increase roadway capacity; rather, it is a project to expand the existing road network. Wilsonville has grown rapidly since incorporation in 1969, and some parts of the roadway network are not yet in place to support new and existing development. Since the network is a work in progress, Wilsonville lacks local connectivity for all modes of travel. Without a proper grid, there are many dead-end streets and few options for reaching key destinations. The City has set the groundwork for better community connections through these policies and plans and will continue contributing to the network with many other roadway projects underway.

For the Connector, the City has studied six alternatives. Using input from the public and scoring evaluation criteria, the project team narrowed the six alternative alignments down to two, shown in Figure 1, which would extend Brown Road approximately 3,500 feet to connect with Boones Ferry Road.

THE PROJECT WILL INCLUDE THESE COMPONENTS:

- A new east-west Connector roadway
- Extension of Kinsman Road south to intersect with the Connector
- Two bridge crossings of Coffee Lake Creek
- One crossing of the active Portland & Western Railroad
- Connection to the Ice Age Tonquin Trail through the planning area
- Establishment or replacement of local property access, as required
- Provision and extension of sanitary sewer and water service to the planning area
- Careful consideration of mobility and safety for existing and future users and travel modes

The Connector is planned to be constructed in two phases. Phase One would include the Kinsman Road extension to the south connecting with the new Connector and all improvements east to Boones Ferry Road. Phase Two, between Kinsman Road and Brown Road, would be designed and constructed in conjunction with private development proposals.

Figure 1: Project Area Map



PROJECT PURPOSE

The Boones Ferry Road to Brown Road Connector will link Boones Ferry Road to Brown Road as part of a long-standing plan to increase connectivity between Wilsonville neighborhoods as the community grows and develops. There is currently severe vehicular traffic congestion along Wilsonville Road in the vicinity of the I-5 interchange, particularly at the intersection of Wilsonville Road and Boones Ferry Road, during peak periods and when demand exceeds capacity on I-5. Though all intersections currently meet the City of Wilsonville's operating standards, when traffic incidents or other congestion occur on I-5, the related impacts to the I-5 / Wilsonville Road interchange area are significant and cause the intersections to fail.¹

Once built, this Connector will help reduce the severity and frequency of motor vehicle congestion on Wilsonville Road and Boones Ferry Road near the I-5 interchange area by providing an alternate route for local business and neighborhood traffic. The Connector will also improve routes for people walking and biking, and minimize environmental impacts while supporting the local economy and businesses by filling a missing gap within the roadway network. The Connector will provide an alternative to traveling on Wilsonville Road and provide needed secondary access to Old Town. This last point is of utmost importance, as I-5, the Willamette River, and the railroad cut off Old Town from the rest of the community and, at times, prevent residents and emergency responders from getting to or leaving the neighborhood.

At the outset, the project team identified a set of goals for the Connector, based on established goals set by the community in the TSP, Comprehensive Plan, and other City projects. The new east-west Connector will serve residential and commercial uses and promote public safety by fulfilling the following project goals:

- · Create the foundation for a great place to live, work, and enjoy. The Connector will knit together the surrounding land environment to support existing and planned development that enhances Wilsonville's vibrant economy and quality of life.
- **Multi-modal corridor.** Design the corridor for safe and comfortable travel by auto, truck, bus, bicycle, walking, or through use of mobility devices. The alignment should minimize conflicts between pedestrians, bicyclists, and freight vehicles.
- Minimize environmental impacts. Minimize impacts to Coffee Creek and other natural resources related to sensitive lands.
- Support existing residents and businesses. The Connector will serve and enhance the residential and commercial development in Old Town, east of the railroad tracks. The alignment should improve access, economic growth, and livability for the study area. The Connector will also serve the existing industrial uses on the west side of the railroad tracks. The alignment should provide mobility and access for trucks serving the existing businesses in the Industrial Way area.

PROJECT GOALS

¹ The intersection of Wilsonville Road and SW Boones Ferry Road operates at level of service D in 2016. When there is an incident on I-5, vehicles on Wilsonville Road experience traffic delays similar to level of service F (greater than 80 seconds of delay).

- Accommodate redevelopment of the land according to the Comprehensive Plan. The Connector will be located on land where some major industrial uses operate today; however, much of the land is undeveloped or underdeveloped, leaving considerable potential for new development.
- Consider the Ice Age Tonquin Trail. The southernmost segment of this regional trail will connect from the existing trail at the Water Treatment Park to Boones Ferry Road, then south and east to cross under I-5 or connect with the planned French Prairie Bridge over the Willamette River. The Connector's alignment should consider and help facilitate this future connection.

EXISTING CONDITIONS

The Boones Ferry Road to Brown Road Connector planning area is bounded by Wilsonville Road to the north, Boones Ferry Road to the east, 4th Street to the south, and Brown Road to the west. The Portland & Western Railroad line and Coffee Lake Creek bisect the study area, with the Arrowhead Creek Planning Area to the west and Old Town to the east.

PLANS AND POLICIES

The purpose of the project, increasing connectivity for all modes of travel, is a major goal identified in the City's adopted transportation plans. As such, the Connector would fill a critical gap in the roadway network and is mentioned in the following City plans:

• The 2013 (updated in 2016) Wilsonville Transportation System Plan (TSP) identified the need for an east-west connector south of Wilsonville Road between Boones Ferry and Brown Road, named in the TSP the "Brown Road Extension". The TSP articulates the goal of increasing connectivity for all modes of travel, and specifically identified the study area as an "Area of Special Concern". On page 5-15, the TSP calls out this corridor for alternatives analysis, listing the following factors for consideration:

- Access
- Bicycle and pedestrian network connections
- Environmental impacts
- Freight benefits/impacts
- Future development plans and land use changes in both areas most impacted by the roadway extension: (1) west of the railroad tracks south of Wilsonville Road and (2) in Old Town, specifically along Boones Ferry Road
- Motor vehicle capacity
- Neighborhood/commercial connectivity
- Private property impacts
- Project costs
- Public input
- Railroad crossings
- Small business impacts
- Timing
- Traffic diversion
- Water and sewer utility issues

Both connection options, at 5th Street and at Bailey Street, are included in the City's TSP and are identified as Project RE-04A. The TSP indicates that the Boones Ferry Road to Brown Road Connector will provide north-south street connections at both Kinsman Road and Montebello Drive. It will be a two-lane roadway and classified as a Collector. The TSP cites the importance of the new roadway because it will provide a parallel route to Wilsonville Road that will relieve congestion (particularly at the Wilsonville Road/Boones **Ferry** Road intersection), provide a secondary access to Town, and accommodate development south of Wilsonville Road.

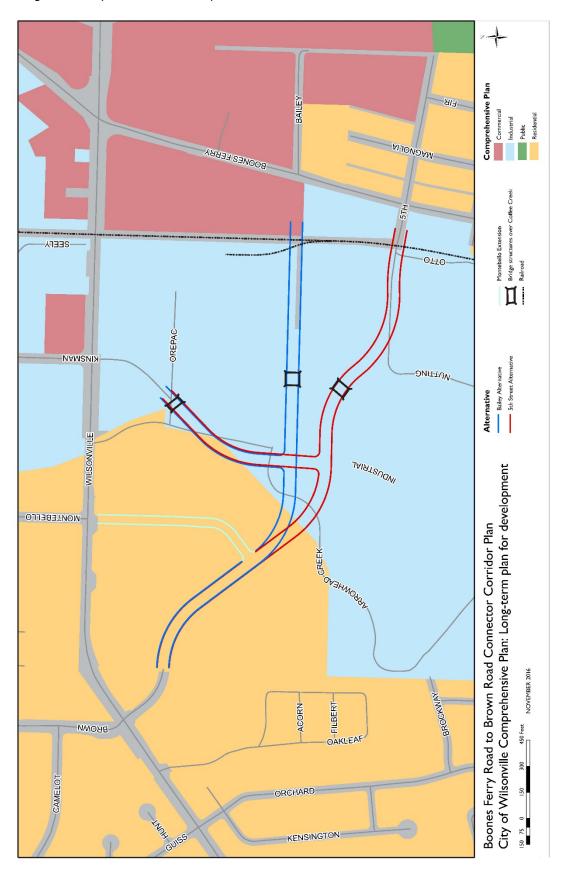
• The 2014 Wilsonville Urban Renewal Strategic Plan identified the Connector (referred to as the "Old Town Escape") as a critical project, to be funded up to \$7 million through the Year 2000 Urban Renewal District. The report assumes the road will be built in partnership with redevelopment.

- The 2009 Wilsonville Road Interchange Area Management Plan findings highlight the need for local east-west connectivity.
- The 2009 Bicycle and Pedestrian Master **Plan** and the TSP include new connections for walking and biking through the study area, both along the east-west corridor and connecting Kinsman Road to the Ice Age Tonquin Trail and the City's Water Treatment Plant Park.
- Metro's 2013 Ice Age Tonquin Trail Master **Plan**, which was endorsed by the City, calls for the trail to connect from the Willamette River to the existing trail in Morey's Landing. The Plan assumes this segment of the trail will follow the Connector. Thus, the Plan states that the alignment in this area is unresolved due to lack of consensus on where the future roadway and trail will connect to Boones Ferry Road.
- The 2012 Old Town Neighborhood Plan, developed by the Old Town Neighborhood Association with support by City staff and accepted (but not adopted) by the City Council, states that providing a new roadway to provide Old Town access and emergency egress will be "critical." The Plan discusses two potential alignments for this roadway, between both 5th Street and Bailey Street west to Brown Road and does not identify either as preferred. The Plan included being recommendations for future changes to the Comprehensive Plan. As shown in Appendix A, the recommendation is to change the designation of the lots along Boones Ferry Road to Main Street Commercial, between Bailey Street and just south of 5th Street.

The Plan calls for Boones Ferry Road in the study area to perform as a Main Street and "viable commercial area". The streetscape plan and recommendations for Boones Ferry Road describe sidewalks and bike lanes on both

- sides of Boones Ferry Road between Bailey Street and 5th Street. In the residential part of Boones Ferry Road, south of 4th Street and elsewhere in the neighborhood, recommendation is to "maintain the casual, curb-less street".
- In 1996 the City adopted the West Side Master Plan, a plan for development of Wilsonville west of I-5, including the study area. It highlighted the need for increasing local connectivity for all modes of transportation, and called out "5th Street and Bailey Street extensions west to Wilsonville Road" as priority street extensions. It called for creation of a business district along Boones Ferry Road.
- The Wilsonville Comprehensive Plan defines the long-term plan for development in the study area to be a mix of residential, industrial, and commercial land uses (see Figure 2). In the Arrowhead Creek Planning Area, land is generally planned to include residential lots in the northwest quadrant and industrial uses to the south and east. On the east side of the railroad tracks within Old Town, the land use designation west of Boones Ferry Road is planned for commercial or industrial use. The land use designation of lots east of Boones Ferry Road is residential.

Figure 2: Comprehensive Plan Map



EXISTING FEATURES

EXISTING LAND USES

The study area includes several distinct land uses, including agricultural production (primarily former hazelnut orchards and a variety of nursery crops), dispersed single-family and multi-family residential, mixed manufacturing and commercial (Wilsonville Concrete, Fred Meyer, and OrePac are most notable among the businesses), and municipal uses such as the Wilsonville Water Treatment Plant and Park. There are undeveloped open spaces scattered throughout; see Figure 3 for more detail. The existing roadway network includes intermittent onstreet facilities for walking and biking. Though Wilsonville Road includes bicycle lanes, given the number of lanes, actual speed, and merging situations, conditions for bicycling on Wilsonville Road are only conducive to the most confident of cyclists. Table 1 provides an inventory of the roadway facilities in the area.



Bicycle lane on Wilsonville Road

Table 1: Study Area Roadway Characteristics

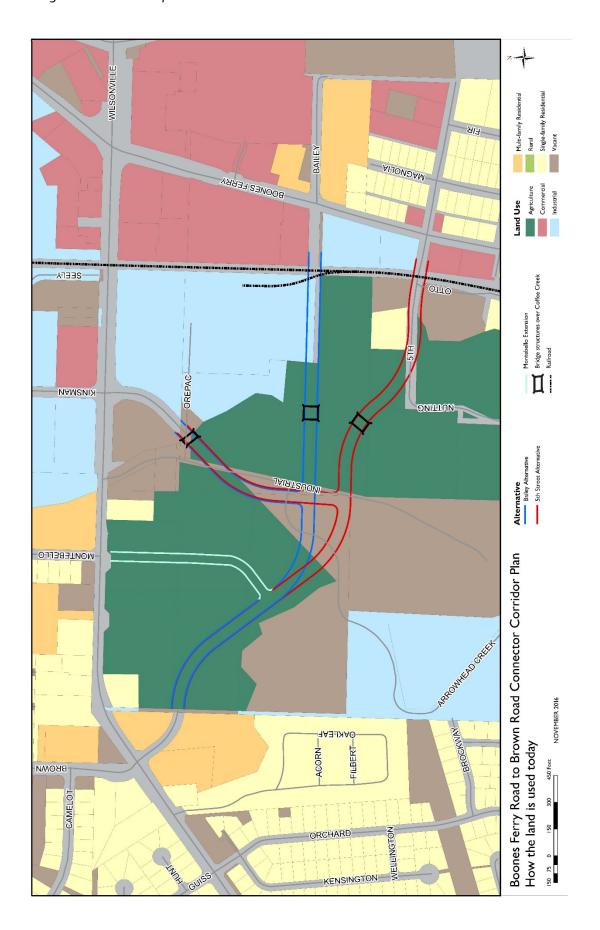
Roadway	dway Classification		Number Posted of Lanes Speed		Bike Lanes	
Wilsonville Road	Minor Arterial/Major Arteriala	2-4	25-35	Yes	Yes	
Boones Ferry Road	Collector	2-4	25	West side only from 4 th St to Bailey St, Both sides north of Bailey St	West side only from Tauchman St to Bailey St, Both sides north of Bailey St	
Brown Road	Collector	2	35	Yes	No	
Montebello Drive	Local Road	2	25	Yes	No	
Kinsman Road	Minor Arterial/Collector ^b	2	40	Yes	Yes	
Bailey Street	Collector	2	None	Yes ^c	No	
5th Street	Local Road/Collector	2	None	West of Boones Ferry Rd	West of Boones Ferry Rd	

^a Minor arterial west of Kinsman Road, Major arterial east of Kinsman Road

^b Minor Arterial north of Wilsonville Road, Collector south of Wilsonville Road

^c There are no sidewalks west of Boones Ferry Road on south side

Figure 3: Land Use Map



ROADWAY NETWORK

The existing roadway network in the study area is fragmented and disconnected, with only Wilsonville Road providing through connectivity between destinations. All other roads in the study area deadend. Figure 4 illustrates the existing road network, intersections, planned roadway extensions, and planned closures.

North of Wilsonville Road, Brown Road provides connectivity to the Villebois development and several other residential areas and is classified as a Collector. It extends a few hundred feet south of Wilsonville Road and provides access to existing apartment complexes.

As shown in red in Figure 4, the northern segment of Industrial Way that currently intersects Wilsonville Road does not meet City access spacing standards and will be removed or may be converted

into a bicycle and pedestrian path once the southern Kinsman Road extension is completed. The recently constructed Kinsman Road extension is signal controlled at the intersection with Wilsonville Road. Kinsman Road serves as the main access to the industrial development south of Wilsonville Road. The Montebello Extension will serve the future residential development in the area, and construction will coincide with such development. See Appendix B for the technical memorandum addressing the existing and forecasted conditions of traffic and transportation in the area. See Appendix C for the technical memorandum addressing the existing and planned conditions of active transportation facilities in the area.

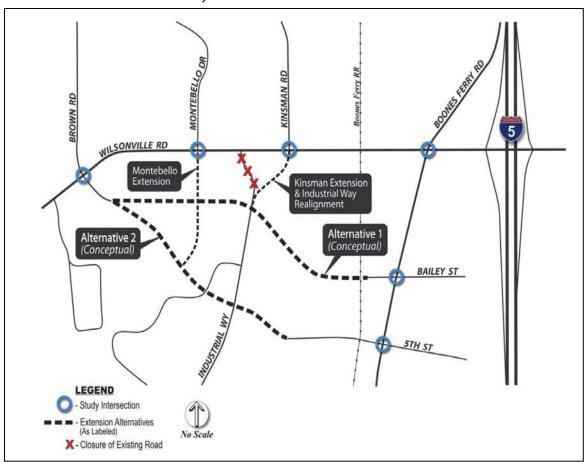


Figure 4: Existing and Planned Roadway Network in the Study Area

TRAIL SYSTEM

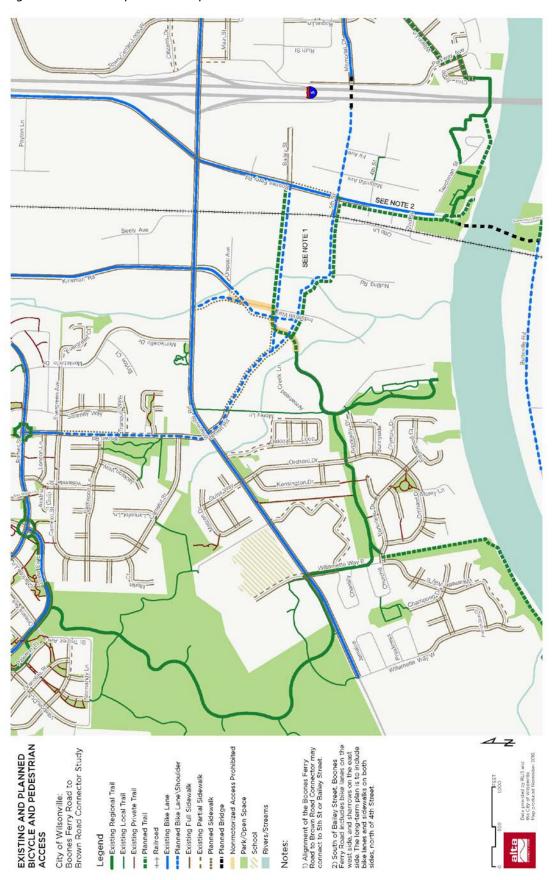
Wilsonville's recreation and transportation system plans include a robust network of regional and local trails. Figure 5 illustrates the existing and planned bicycle and pedestrian connections in the study area, including trails. As shown, several local and regional trails already exist within the study area:

- Ice Age Tonquin Trail: This regional trail will connect Wilsonville with Sherwood and other cities to the north. The City has completed 3.4 miles of this Regional trail in Wilsonville. The two longest continuous segments exist within the Graham Oaks Nature Park and Morey's Landing Open Space, directly west of the Arrowhead Creek Planning Area. Significant extensions from Graham Oaks Park have been constructed throughout the Villebois community.
- Wilsonville Waterfront Trail: Completed local segments exist in the Wilsonville Water Treatment Plant Park and Boones Ferry Park. This trail connects under I-5 and links with Memorial Park and neighborhoods to the east.
- Local Access Trails: Runs north-south from Wilsonville Road to the Morey's Landing Trail segment and is located parallel to Arrowhead Creek Lane between Industrial Way and the Water Treatment Plant.



Terminus of the Ice Age Tonquin Trail at the bridge on Arrowhead Creek Lane

Figure 5: Active Transportation Map



TRAFFIC OPERATIONS

All intersections in the study area currently meet the City's level of service (LOS) D operating standard for traffic operations. However, it is important to note that the I-5/SW Wilsonville Road interchange area (which includes the Wilsonville Road/Boones Ferry Road intersection) is significantly impacted when crashes occur on I-5. When this happens, the number of cars waiting to access the highway exceed the capacity of the on-ramp (and the ramp meter), and highway-bound traffic spills back onto the local street system. In these instances, vehicles experience severe traffic delays similar to LOS F.

Using the City's traffic model, DKS Associates forecasted the future average daily traffic (ADT) on roads in the area for 2035. In 2035, Wilsonville Road is projected to be at 20,300 ADT east of Kinsman Road without the Connector and at 18,300 with the Connector in place. Additional traffic modeling done on Kinsman Road and the Connector indicates the traffic anticipated to use these two roadways following the opening of Phase 1 and into the future depends heavily on how future development occurs.

NATURAL RESOURCES

Coffee Lake Creek flows roughly north-south through the study area. Its central location will necessitate a new crossing for the primary east-west road alignment, a reconstructed crossing for the southward Kinsman Road extension, as well as removal of the current crossing at OrePac Avenue.

Coffee Lake Creek is a perennial stream that originates in the Tonquin Scablands to the north of the City between Tualatin and Sherwood. Its course has been highly modified for much of its length, particularly where it has been straightened and channelized within the broad Coffee Lake Creek wetlands south of SW Boeckman Road. However, it is confined to a relatively narrow channel from the basin southward to its confluence with the Willamette River. Anadromous fish, including Upper Willamette River Chinook salmon and steelhead,

have both been documented in the lower reach of Coffee Lake Creek; however, a barrier to upstream travel by anadromous fish has been documented on the Wilsonville Concrete property below the project area.

There are two other waterways in the project vicinity: Arrowhead Creek, which is southwest of the proposed southern alignments, and an unnamed seasonal drainageway located within a forested area west of the SW 5th Street railroad crossing. The 5th Street alignment option runs parallel to the Arrowhead Creek buffer in the western portion of the project. In addition, the unnamed drainageway may or may not be sufficiently south of the 5th Street alignment to avoid all impacts; as such, further investigation will be necessary to determine the need for permits. See Appendix D for the technical memorandum addressing the natural resources in the area.

CULTURAL RESOURCES

Records reveal that while portions of the current project area were previously surveyed for cultural resources, the project area remains largely unstudied. Three archaeological resources have been identified within 150 meters (495 feet) of the current project area. Environmental variables and the limited amount of development within the project area suggest a high probability of encountering archaeological resources.

The Portland & Western Railroad may be eligible for listing in the National Register of Historic Places, but this would require further research. Two buildings at the intersection of 5th Street and Boones Ferry Road may also be considered. These would need to be evaluated for resource value and consideration for protection if the 5th Street alternative is chosen as the preferred alternative. A goal of the Phase 1 construction project (Boones Ferry Road to Kinsman Road) is to not impact either of these buildings. The new intersection is intended to be designed to avoid them. See Appendix E for the technical memorandum addressing cultural resources.

RAILROAD

The Boones Ferry Road to Brown Road Connector will involve crossing the Portland & Western Railroad and the Oregon Electric District mainline at either 5th Street or Bailey Street. The ODOT Crossing permit process is required to approve either option. See Appendix F for the technical memorandum addressing the railroad crossings.

Currently, the public right of way for Bailey Street dead-ends at the railroad tracks. A private track crossing continues across the tracks. Private crossings are permitted with the railroad such that the property owner accepts all liability for the crossing. There is a spur track into OrePac starting just to the south of the proposed crossing location. This spur drops off approximately 20 inches in elevation to match to the existing paving elevation of the OrePac site. It continues north into one of the large buildings.

Currently, the existing public railroad crossing at 5th Street is a small gravel and timber at-grade crossing serving a number of home sites and private roads. ODOT Rail considers it to be an "Ordered crossing" and it is the preferred crossing location for the project based on the field review provided by ODOT Rail and Portland & Western Rail Line staff and engineers.



Intersection of Boones Ferry Road and 5th Street. Older buildings on left sit on or over the edge of right-of-way.



Bailey Street at railroad crossing



5th Street at railroad crossing

ALTERNATIVES EVALUATION PROCESS

ALIGNMENT ALTERNATIVES

The Connector study developed six alternatives and, through input from stakeholders, reduced this to the four alternative alignments shown in the September 2016 Project Area map (see Figure 6). Each alternative originates at Brown Road at the west end. Alternatives 1, 2, and 3 terminate at Bailey Street and Alternative 4 terminates at 5th Street. All alternatives include a connection to Kinsman Road.

Analysis using the Wilsonville traffic model estimates Average Daily Traffic (ADT) volumes for the two alignment alternatives. See Tables 2 and 3 for the estimated volumes for each phase of the project.

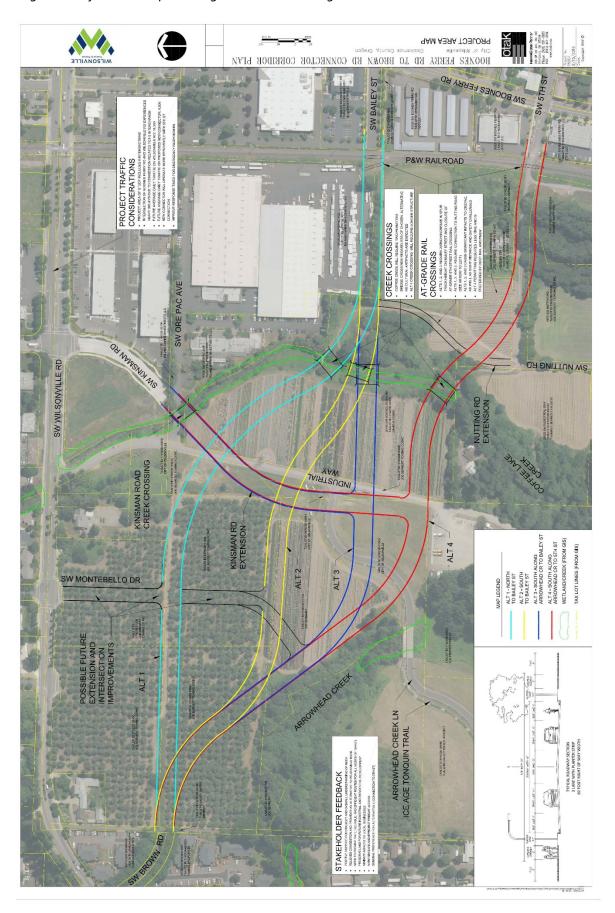
Tables 2 & 3: Forecasted Average Daily Traffic Volume Estimates

		Phase 1		Phase 1 & 2					
Roadway	Year of	Year 10	(2026)	2020 (Year		2035; With Development			
	Opening (2020); Without Development	Without Development	With Development	of Opening); With Development	2026 (Year 10); With Development				
Kinsman Road south of Wilsonville Road	2,300	2,800	2,800ª	2,500	3,400	4,800			
Future Boones Ferry to Brown Road Connector	1,800	2,300	2,800	2,000	3,000	4,000			

^a There is negligible difference in the model with and without development on Kinsman Road as it assumes the residential development uses the future Montebello Drive connection for Wilsonville Road access.

	Phase 1 & 2						
Roadway	2035 No Build	2035 Build (Bailey St. Alt.)	2035 Build (5th St. Alt.)				
Wilsonville Road (east of Kinsman Road)	20,300	18,200	18,300				
Wilsonville Road (west of Kinsman Road)	15,000	14,100	14,200				
Boones Ferry to Brown Road Connector	-	4,000	3,900				

Figure 6: Project Area Map Showing Four Alternative Alignments



In October 2016, following initial technical analysis and meetings with property owners and stakeholders, the project team decided to advance Alternatives 3 and 4. Alternative 3 is referred to as the Bailey Street alternative and Alternative 4 is referred to as the 5th Street alternative.

Figure 7 illustrates the conceptual design of each of these alternatives, including the local connections that would be associated with the Connector.

Figures 8 and 9 illustrate how each alternative would connect with Boones Ferry Road, and show the predominant travel movement in red. Figure 9 also illustrates potential changes that would be required to the existing infrastructure at that intersection (e.g., addition of a northbound sidewalk and bike lane on Boones Ferry Road), and potential elements that could be added (e.g., signage and curb extensions) to ensure that motorists do not inadvertently turn into the neighborhood when that is not their destination.

Below is a list of key assumptions that apply to each of the alignment alternatives:

- The intersection of Kinsman Road with the Connector will be signalized.
- The intersections of the Connector with Boones Ferry Road will be stop controlled, with stop signs placed on the east and west legs of the intersection, just as they currently operate.
- For planning and costing purposes, the project assumes that the Connector will include two 11-foot-wide travel lanes, bike lanes, and swales or planter strips on both sides of the right-of-way. The north side of the street will include a sidewalk and the south side will include a separated shared use path. There will be a 12-foot-wide center turn lane approaching major intersections at Kinsman Road, Wilsonville Road, and Boones Ferry Road. The total roadway width will be 38 to 50

feet, curb-to-curb and the typical right-of-way width is assumed to be 70 feet.

PROJECT AREA MAP CITA OF ALGORATE CONTROLLOS CONTROLLOS COMBIDOS BIVA Security of the second

Figure 7: Project Area Map Showing Two Alternative Alignments

Figure 8: Bailey St. / Boones Ferry Road Intersection Plan

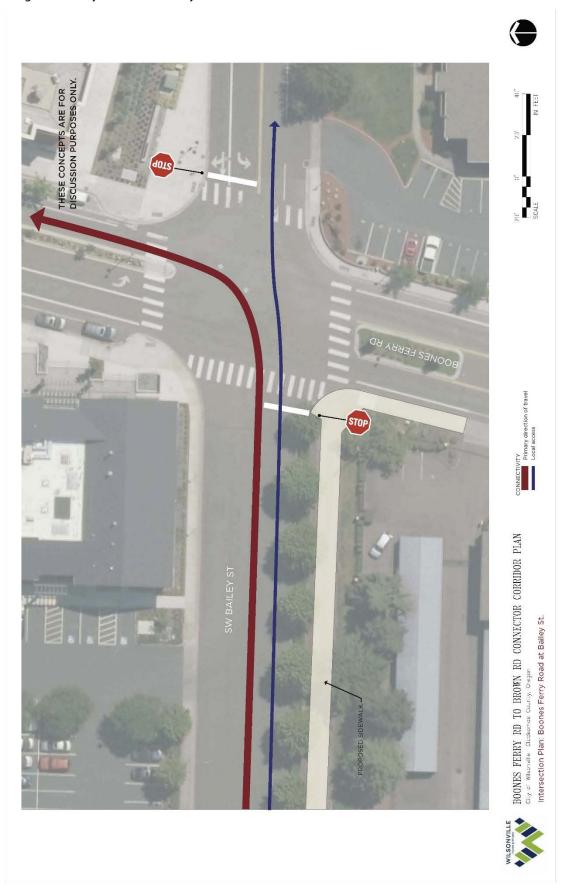
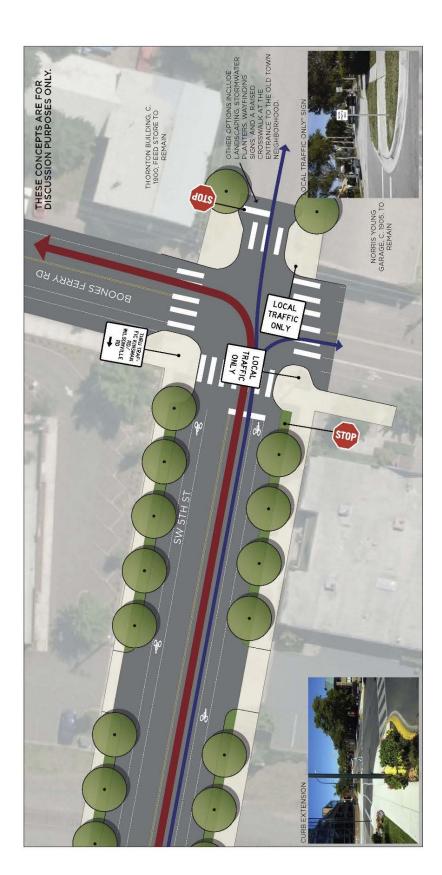


Figure 9: 5th St. / Boones Ferry Road Intersection Plan











BOONES FERRY RD TO BROWN RD CONNECTOR CORRIDOR PLAN City of Wilsonville. Cockernes Sourty, Oregan Intersection Plan: Boones Ferry Road at 5th St.



COST ESTIMATE

The cost estimates for both phases of the project and both alternatives are shown below in Table 3. See Appendix G for a detailed Cost Comparison of the alternatives.

The estimates include costs for the roadway sections (asphalt for the Connector and concrete for Kinsman Road), stormwater management, extension of utilities (sanitary and water) into the project area, roadway lighting, a signalized intersection at Kinsman Road, two bridge crossings (assumes deep pile supported foundations) of Coffee Lake Creek, a multi-use pedestrian pathway and other typical construction costs associated with this type of project such as traffic control, erosion control, and mobilizations.

The right-of-way estimates assume assessor values and also values known to be in the range of possibility, based on comparable projects near the project area. The analysis is not an appraisal nor a cost estimate, but the land values used were sufficient to conclude that one alternative would be costlier and have greater right-of-way impacts than another. Impacts to the OrePac business and operations to construct a new crossing at Bailey St. were not included in the cost estimates but are anticipated to range between \$500,000 and \$1 million based on discussions with the operations manager. The right-of-way costs (appraisal, negotiation, and relocation services) used are standard costs generally associated with area rightof-way projects of this size and nature.

The project estimates were broken into two separate phases of construction as intended to be built by the City. This was considered a planning-level cost estimate and a contingency of 30% was applied to the costs. Preliminary engineering and construction administration was also factored in to the estimate to provide an overall cost for the full build-out of either option.

EVALUATION

To provide a decision-making framework for the City, the project team drafted a set of alignment evaluation criteria based on consideration factors provided in the TSP and six themes resulting from community feedback and project goals: community character, travel patterns, cost, environment, existing properties, and construction risks. The specific criteria related to each theme were used to compare the alternatives in multiple ways, using the information generated by the technical analysis. The criteria are both qualitative and quantitative. See Appendices H and I for the detailed evaluation matrices distributed by the project team at the October 2016 open house meeting. See Appendix J for the detailed traffic operations analysis memorandum.

Table 3: Estimated Cost

Project	Construction (Subtotal)	Contingency (30%)	R OW	P reliminary E ng ineering (10%)	Cons truction Adminis tra tion (7.5%)	Total
Bailey Alternative, Phase 1	\$ 7,375,400	\$ 2,212,700	\$ 1,395,580	\$ 959,000	\$ 720,000	\$ 12,664,000
Bailey Alternative, Phase 2	\$ 1,879,000	\$ 563,700	\$ 527,180	\$ 245,000	\$ 184,000	\$ 3,399,000
TOTAL	\$ 9,254,400	\$ 2,776,400	\$ 1,922,760	\$ 1,204,000	\$ 904,000	\$ 16,063,000
5th Alternative, Phase 1	\$ 6,820,400	\$ 2,046,120	\$ 1,163,300	\$ 887,000	\$ 666,000	\$ 11,583,000
5th Alternative, Phase 2	\$ 1,964,900	\$ 589,470	\$ 434,000	\$ 256,000	\$ 192,000	\$ 3,437,000
TOTAL	\$ 8,785,300	\$ 2,635,590	\$ 1,597,300	\$ 1,143,000	\$ 858,000	\$ 15,020,000

KEY SIMILARITIES BETWEEN THE ALIGNMENT OPTIONS

After applying the criteria to each alternative, it was clear that in some ways, the 5th Street and Bailey Street alternatives perform equally (see Appendix I). Below is a list of key similarities between the two alternatives:

- Provide similar travel time for vehicles traveling through the corridor.
- · Reduce the vehicle traffic on Wilsonville Road by approximately 15%.
- Provide opportunity to use the Connector as a SMART transit route.
- Provide opportunity for comfortable and safe travel for people walking, bicycling, and rolling.
- · Improve emergency access to and from Old Town.
- Require two bridge crossings of Coffee Creek and require environmental permitting.
- Allows residential development west of Kinsman extension and north of the Connector alignment. See Appendix K, Analysis of Potential for Development.

KEY DIFFERENCES BETWEEN THE ALIGNMENT OPTIONS

Under some important criteria, however, the 5th Street and Bailey Street alternatives do not perform equally. See Table 4 and Appendix H for further details.

The Bailey Street alignment would result in more costly and intense impacts involving railroad crossing reconstruction and closure, limitations to industrial property operation and expansion, additional land acquisition and the need for street connections. The likelihood is high that the ODOT Rail permit process to create a public rail crossing at Bailey Street would be difficult, and may not result in a permit. Additionally, the Bailey Street option may lead to additional expenses for industrial property owners.

The 5th Street alternative avoids these rail-related costs, impacts, and risks, and provides the greatest opportunity for industrial land to develop. A connection at 5th Street, 640 feet to the south of Bailey Street, also provides more space for northbound vehicles to queue (see Figure 10). This means it is more likely that the Connector will address a primary need of the project, addressing the severe congestion experienced in the Wilsonville Old Town Square area, over the long term.

Figure 10: Queuing Capacity Diagram, showing the approximate number of cars that can wait in-lane without blocking the intersections. Note that 2 lanes exist between the signals, 1 lane is south of the signal.

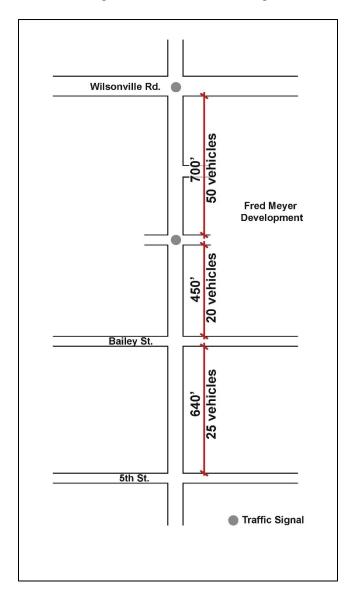


Table 4: Key Differences Between Alignment Options

Bailey Street Alignment

- Would require reconstruction of the railroad crossing (raising the spur track 20 inches), leading to higher costs and complexity of construction.
- Has greater impact on the larger, contiguous undeveloped industrial land parcels.
- Requires closing a public crossing at 5th and converting another private crossing to a public crossing; therefore would require more time and introduce uncertainty.
- Would cause significant impacts to OrePac operations during construction and impacts to its planned expansion.
- Would be a more expensive option, largely due to property impacts and greater cost for larger property acquisitions for right-of-way.
- Provides more direct access to the large commercial center on the east side of the railroad (e.g., Fred Meyer, auto dealership).
- Would require construction of a new local street connection to the properties south of 5th Street due to the necessity of closing the 5th Street crossing.

5th Street Alignment

- Provides the most space for northbound vehicles queuing at signals and provides more distance between major intersections.
- Requires closure of the private Bailey Street rail crossing. Preferred by ODOT Rail and Portland & Western Railroad.
- Results in an increase of approximately 3,900 vehicles per day (at full build out, in year 2035) on Boones Ferry Road between Bailey and 5th. The design of the project would need to (and can) address this. See Appendix L for detail.
- Would require some changes to the intersection of Boones Ferry and 5th (potential changes to on-street parking, adding bike lanes, changing curb extensions).
- Provides better access to existing and future businesses along 5th Street and south of Bailey Street and the ability to achieve a "Main Street" environment in this area.
- Provides a safer railroad crossing with better sight distance.
- By creating a node at the intersection of 5th and Boones Ferry Road, would reinforce the long-term vision of creating a "Main Street" commercial area on Boones Ferry Road in Old Town.

EVALUATION MATRIX

To understand the similarities and differences between the Bailey Street and 5th Street alternatives, the project team created an evaluation criteria matrix to score how each alternative performed against the project goals outlined on page 3 of this report. The Evaluation Matrix in Table 5 indicates that the 5th Street alternative scores better in terms of travel patterns, cost, environment, existing properties, and construction risks, while the

Bailey Street alternative scores better with regard to changes or enhancements to community character.

Table 5: Summary Comparison of Alternatives

Evaluation Key: Meets criteria / Lowest impact Does not meet criteria / Highest impact

72		Does not meet criteria / n		<u> </u>
Theme	Goal / Issue	Evaluation Criteria	Connect at Bailey St	Connect at 5th Street
	Minimize changes to Boones Ferry Road	Minimal redesign/construction of Boones Ferry Road.		
How will it change or enchance community	Minimize traffic into north end of Old Town	2035 Average Daily Traffic on Boones Ferry Road between 5th and Bailey		
character?	Number of businesses served	Number of existing businesses served by new Connector.		
	Connect residential to commercial	Shortest distance (650-ft Bailey to 5th)		
	Connect residential to residential	Shortest distance		
	Reduce traffic on Wilsonville Road / Boones Ferry Road	Reduction in forecasted 2035 trips (4,000 trips with Bailey; 3,900 trips with 5th)		
How will it affect travel in the area?	Connect bicyclists to commercial	(650-ft Bailey to 5th)		
	Connect bicyclists to neighborhoods and parks	Directness of bike route		
	Major roadway network spacing	TSP - connectiviety and spacing		
	Reduce congestion during peak travel times	Provide alternate access Boones Ferry Road to Wilsonville Road		
	Minimize construction costs	Rank in order of cost		
What is the cost?	Minimize ROW acquisition	Rank in order of ROW cost		
	Minimize other costs - permitting and mitigation	Ease of obtaining the ODOT Rail Order and rail construction impacts to OrePac		
How will it affect the environment?	Minimize bridge impacts to Coffee Lake Creek	Span length / bridge footprint		
How will it affect	Minimize impacts to existing businesses	Impacts to property or access		
property in the area?	Maintain industrial lots and "development potential"	Maximize lot size and development potential		
	Property impact risks	Minimize iimpacts to properties		
Is there a higher risk related to building the	Railroad crossing risks	Crossing safety / minimize permitting time		
corridor?	Constructability risks	Minimize construction challenges		
<u>.</u>	1	1	7	

STAKEHOLDER AND COMMUNITY INPUT

Throughout the study, the project team engaged with affected property owners, stakeholders, local businesses, and interested members of the community. Project stakeholders gave feedback about the evaluation process and the alternatives being considered during one-on-one and small-group interviews, an online survey, and at two public meetings.

Based on the interviews and public Open House input, the most important project outcomes expressed by the community are the following:

- Provide improved travel options and increased connectivity to the area.
- Minimize impacts to the natural environment.
- Enhance the community character along the corridor and within the surrounding area.
- Develop a cost-effective project.

INTERVIEWS

Project team members from JLA, Otak, and the City of Wilsonville interviewed twelve key stakeholders identified by the project team between July 25th and August 23rd, 2016. These stakeholders either own property or manage businesses within the project area. Each individual or stakeholder group was asked the same set of questions. The main purpose of the interviews was to learn about their concerns and preferences for the planned corridor connection between Boones Ferry and Brown Road. Stakeholder interviews are detailed in a Stakeholder Interview Summary Report in Appendix M.

The feedback received was used to shape the evaluation criteria outlined in the Evaluation Matrix that helped to narrow the corridor alignment alternatives. Below is a summary of the most common feedback the project team received during the interviews:

- Relieve congestion on Wilsonville Road by providing an alternative east-west connection.
- Provide safe, reliable and efficient routes for all modes of travel.

- Reduce impacts to local businesses.
- Minimize changes and traffic impacts to the north end of the Old Town neighborhood.

In general, several stakeholders interviewed raised concern about impacts to OrePac with the Bailey Street alternative and cited a preference for the 5th Street option.

PUBLIC MEETINGS AND SURVEY

In September 2016, the City of Wilsonville hosted a public workshop and online survey to share information with the community about the Boones Ferry Road to Brown Road Corridor Connector Plan, evaluation process, and the alignment alternatives being considered. The project team gathered input from participants about the project goals and alternatives. Community feedback generated from the workshop and survey was also used to develop and refine the evaluation criteria. Input from the online survey and public meetings are detailed in the Workshop and Survey Summary Report Appendix N.

An online survey was made available to the public from September 9th through September 25th. The survey provided information about the project goals and explained that these goals would inform the development of the evaluation criteria that would be used to establish a preferred alignment for the Boones Ferry Road to Brown Road Corridor Connector.

Fifty-three people responded to the online survey. For each of the six goals, the respondents indicated the level of importance for that goal. Respondents also ranked all six goals in priority order. There was an opportunity to provide additional open-ended comments and to sign-up for a project email list. Respondents specified whether they lived or worked in the project area or if they would use the future roadway when built.

In October, 2016, the City of Wilsonville hosted a second public meeting to share information with the community and gather input about the Boones Ferry to Brown Road Corridor Connector Plan, the

evaluation process, and the alignment alternatives being considered. Outcomes of the project open house are detailed in the Open House Summary Report in Appendix O.

Nearly half of the open house attendees were from the Old Town neighborhood, most of whom were in support of the Bailey Street connection over the 5th Street connection. Concerns raised by the Old Town residents centered on safety and increased traffic congestion between 5th Street and Bailey Street on Boones Ferry Road. Many attendees also observed that the Bailey Street option provided a more direct route to Fred Meyer.

RECOMMENDED ALIGNMENT

PREFERRED FINAL ALIGNMENT

As a result of the technical study and evaluation of the alternative alignments and input from the public, the preferred final alignment for the Connector is to intersect with Boones Ferry Road at 5th Street. The project team recommends the 5th Street alignment due to the following considerations:

- ODOT Rail and Portland & Western Railroad strongly prefer the 5th Street alignment. Therefore, the City's ability to acquire permits for the crossing is more certain and therefore this option is more feasible, with less cost and schedule risk. ODOT Rail has concerns over significant safety issues with regards to sight distance with the Bailey Street crossing.
- The Bailey Street alternative would greatly reduce the functionality and development potential of the large industrial properties at the east end of the project area.
- The Bailey Street alternative would pose significant impacts to current and future operations at OrePac.
- Though Bailey Street is 650 feet closer than 5th Street to the main commercial destination, there is minimal difference in travel time and

- connection opportunities for all modes of travel.
- Though the 5th Street option would introduce additional traffic between 5th Street and Bailey Street in Old Town, using 5th Street supports the long-term vision in the Old Town Neighborhood Plan for a "Main Street Commercial" environment on Boones Ferry Road north of 4th Street. The pass-by traffic will provide exposure for the businesses along this section.
- The 5th Street option provides more distance on Boones Ferry Road between the new connection and the existing intersections to the north. This expansion capacity will provide a buffer to congestion in the Wilsonville Road/Boones Ferry Road intersection and I-5 interchange area. The intersection at Bailey Street, being closer to the signalized access to Fred Meyer, does not meet the City's major intersection spacing standards and provides less room on Boones Ferry Road to accommodate queuing vehicles and would preclude the ability to ever signalize this intersection if needed in the future. Therefore, it is far less likely to provide congestion relief on Boones Ferry Road and could potentially be viewed as compounding the congestion.
- The majority of available land for development east of Kinsman is zoned for Industrial uses. Both alternatives provide development opportunity for this vacant Industrial land. However, the Bailey St. option significantly impacts the ability of the Industrial parcels owned by OrePac to be developed in a contiguous manner. The Bailey Street alternative bisects the large industrial parcels and will create future access challenges when the land is developed. The 5th Street alternative allows for full contiguous development of this industrial land and provides opportunities for safe operations of the existing use of the OrePac property.
- The 5th Street connection provides the parcels to the south of 5th Street with direct access to a Collector roadway. Bailey Street would

- require a new local road extension of Nutting Road to provide access.
- The 5th Street option requires less property acquisition and utilizes City-owned property much more than Bailey Street, reducing private property impacts and acquisitions.
- 5th Street will provide an intersection with Kinsman Road just north of Wilsonville Concrete, and access to this business.

With the 5th Street connection to Boones Ferry Road, a primary design consideration will be to address the traffic concerns expressed by many in the Old Town neighborhood. It is important to note that the Connector is a vital component to complete the City's transportation system - a system that provides essential community connectivity for all via multiple travel modes and for emergency responders. While there will be changes to Old Town, these changes can be mitigated and are outweighed by the more complex permitting, industrial property, construction staging, and intersection spacing and long-term transportation network risks posed by the Bailey Street alternative.

DESIGN CONSIDERATIONS

Selecting an alignment for the Connector will allow the City to move forward with implementation. The next steps will be design and permitting for Phase 1, between Kinsman Road and Boones Ferry Road. As the City designs the corridor, key elements to be addressed and considered include, but are not limited to:

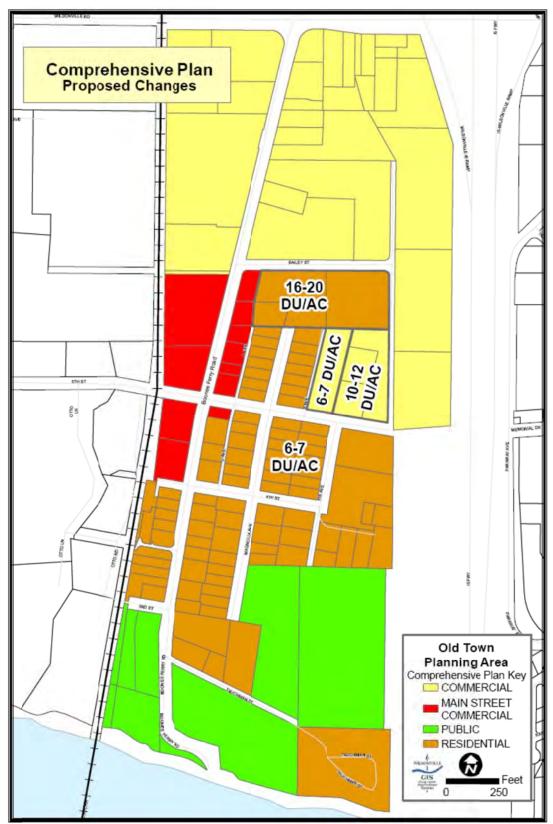
- 1. Design of traffic calming and wayfinding mitigation for Boones Ferry Road (see Figure 9)
- 2. Typical sections for the Connector and Kinsman Road
 - a. Connector Road as an asphalt surface and Kinsman Road as a concrete surface
 - b. Width/need of turn lanes
 - c. Width/need of planter strips/stormwater swales
 - d. Bike lanes and sidewalks on both sides of the street

- e. Sidewalk on one side of the connector will be replaced by the Ice Age Tonguin Trail
- Finalize the alignment of the Ice Age Tonquin Trail through the study area
- 3. Decision on whether to construct asphalt or concrete pathways
- 4. Utility design for sanitary and water service
- 5. Update signal timing at the Wilsonville Road / Kinsman Road intersection
- 6. Lighting design for the roadway and pedestrian realms
- 7. Closure of Industrial Way and design of the pedestrian path connections to Kinsman Road
- 8. Roadway cross-section and intersection design at 5th Street and Boones Ferry Road will need to account for on-street parking requirements. Consider parking requirements on 5th Street and the need for providing additional parking if onstreet parking is removed.
- 9. Consider potential changes for Kinsman Road access to OrePac
- 10. Transit route design from Old Town to the Connector
- 11. Freight route accommodations and signage on Kinsman Road
- 12. Intersection design at Boones Ferry Road and 5th Street
- 13. Otto Lane access connection to 5th Street for homes and pedestrians
- 14. Nutting Road access connection to 5th Street
- 15. Intersection design at the Connector and Kinsman Road
- 16. Access to Wilsonville Concrete and a safe pedestrian and bicycle crossing design, considering truck access needs
- 17. Design driveway access to Wilsonville Concrete offices at 10050 SW Wilsonville Road (presently connects to Industrial Way)

- 18. Stormwater design
- 19. Access to Wilsonville Concrete office on Wilsonville Road will need to be coordinated with the closure of Industrial Way and Kinsman extension
- 20. Obtain approval from US Army Corp of Engineers and Oregon Department of State Lands
- 21. Obtain necessary approvals from Bonneville Power Authority

APPENDICES

- A. Old Town Neighborhood Comp Plan Map
- B. Existing Conditions Traffic and Transportation Memo
- C. Active Transportation Existing Conditions Memo
- D. Natural Resources Memo
- E. Cultural Resources Memo
- F. Rail Crossing Memo
- G. Cost Estimate
- H. Alternatives Evaluation Matrix
- I. Alternatives List of Similarities
- J. Alternatives Analysis Traffic Memo
- K. Analysis of Potential for Development
- L. Future Traffic ADT Projections Memo
- M. Stakeholder Interview Summary Report
- N. Workshop and Survey Summary Report
- O. Open House Summary Report
- P. Geotechnical Memo (not cited)



Map 6.3. Comprehensive Plan – Proposed Changes

GENERAL DEVELOPMENT CONCEPT

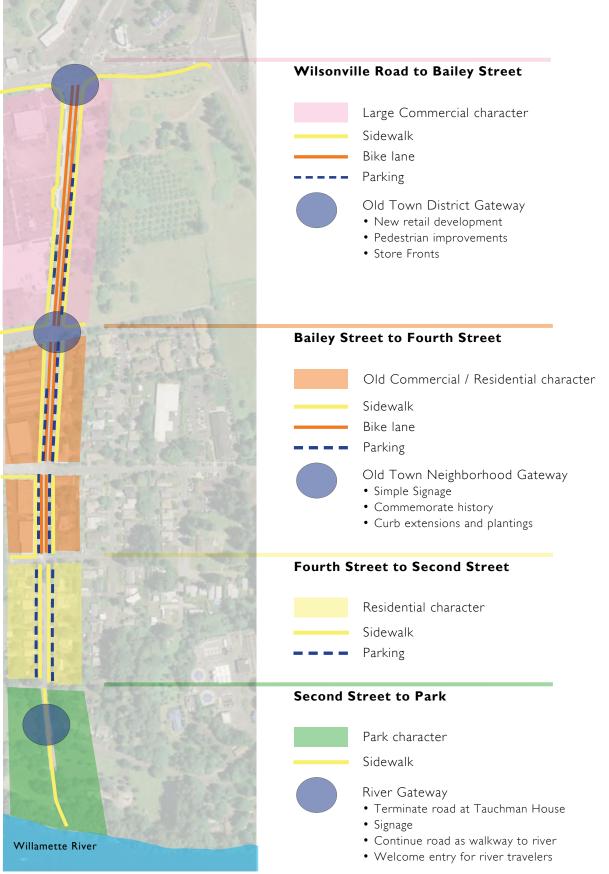
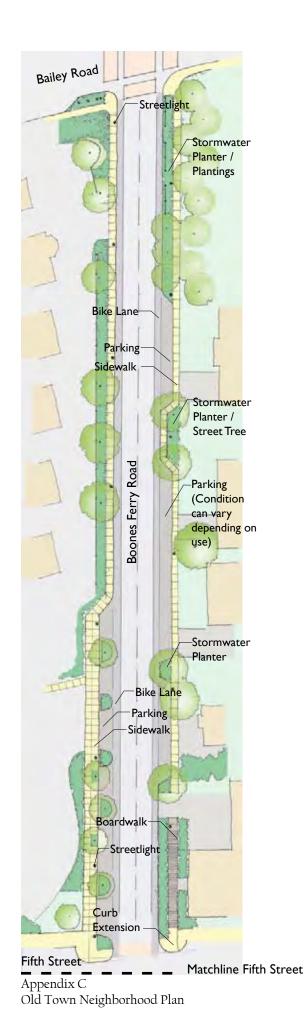


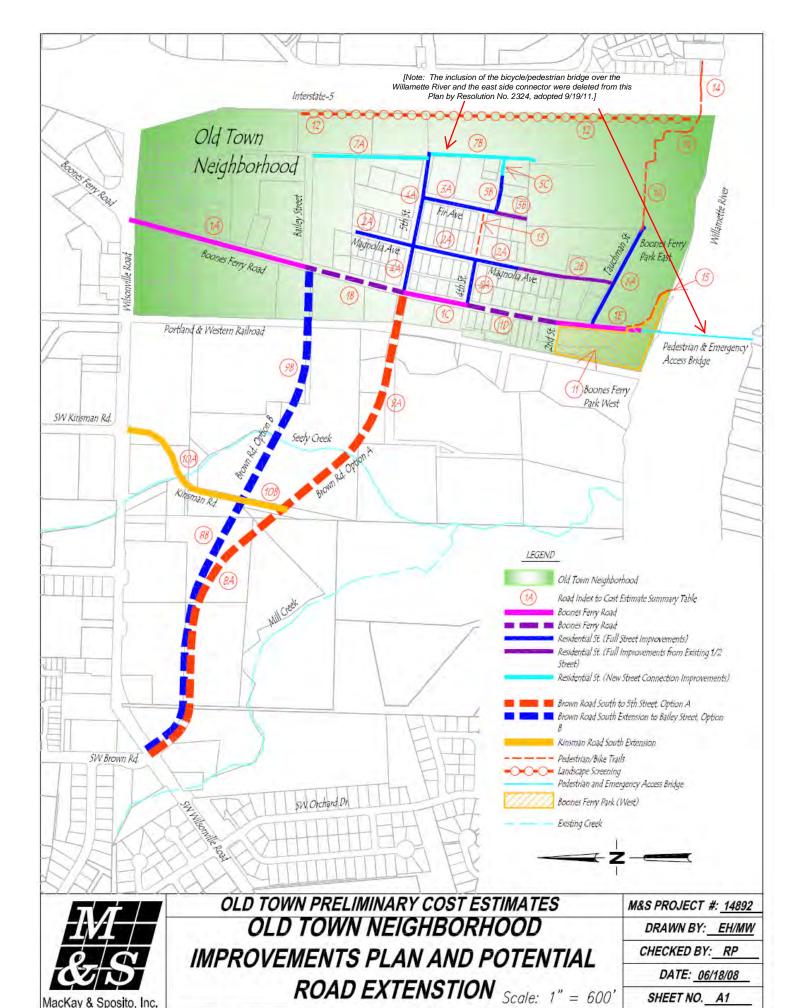
Figure 3: Diagram of Proposed Concept

RECOMMENDATIONS



Matchline Fifth Street Fifth Street Curb Extension Boardwalk Streetlight **Boones Ferry Road** Parking-Bike Lane Streetlight Sidewalk Curb Extension Fourth Street

Figure 12: Bailey Road to Fourth Street Proposed Plan Page 19



TECHNICAL MEMORANDUM

DATE:

October 27, 2016

TO:

Steve Adams, P.E., City of Wilsonville

FROM:

Scott Mansur, P.E., PTOE

Jordin Ketelsen, EIT





SUBJECT:

Boones Ferry to Brown Road Connector Study – Existing and Future Conditions

P16112-000

Existing and future conditions analysis was performed to set the stage in the comparison for two east-west connector alternatives located between Brown Road (to the west) and Boones Ferry Road (to the east) in Wilsonville, Oregon. This memorandum documents the related background information, existing traffic conditions, and future network conditions. A summary of the memorandum findings is then provided.

Background

Brown Road runs north-south and is located on the west side of the City of Wilsonville. North of Wilsonville Road, Brown Road provides connectivity to the Villebois development and several other residential areas and is classified as a Collector. It extends a few hundred feet south of Wilsonville Road and provides access to existing apartment complexes. The east-west connector alignments would be south of Wilsonville Road and connect the south end of Brown Road to Boones Ferry Road, but would connect to Boones Ferry Road at either Bailey Street or 5th Street as shown Figure 1 at the top of the next page.

Both connection options are included in the City's Transportation System Plan (TSP) and are identified as Project RE-04A. ¹ The TSP indicates that the Boones Ferry Road to Brown Road connector will provide north to south street connections at both Kinsman Road and Montebello Drive. It will be a two-lane roadway and classified as a collector. The extension will be approximately one-half mile in length and passes through existing undeveloped properties. ² This new roadway is important because it will provide a parallel route to Wilsonville Road that will relieve congestion (particularly at the Wilsonville Road/Boones Ferry Road intersection), provide a secondary access to Old Town, and accommodate new development south of Wilsonville Road.

The northern segment of Industrial Way that currently intersects Wilsonville Road (classified here as a minor arterial) does not meet City access spacing standards and will be removed or may be converted into a bicycle and pedestrian path once the southern Kinsman Road extension is completed. The existing Wilsonville Road/Kinsman Road intersection is signal controlled and the south leg was recently constructed and serves as the main access to the industrial development south of Wilsonville Road.

¹ City of Wilsonville Transportation System Plan, Adopted June 17, 2013.

² The City of Wilsonville Comprehensive Plan currently designates these properties as residential and industrial uses.



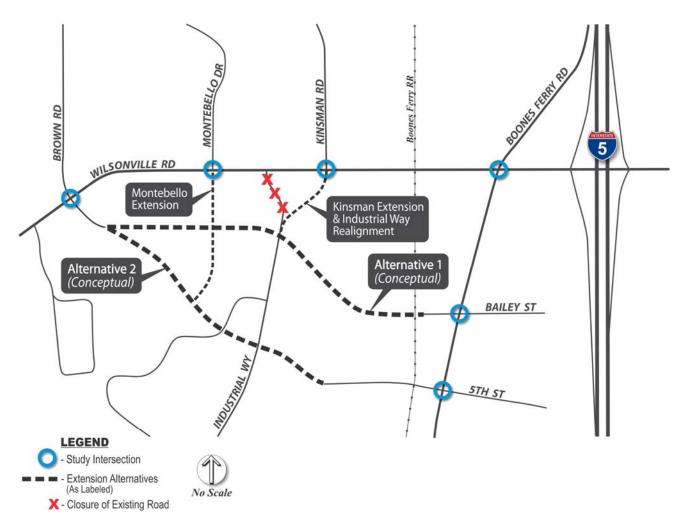


Figure 1: East-West Connector Alignment Alternatives Concept Drawing

The Montebello Drive extension will run north-south and connect Wilsonville Road to the Boones Ferry Road to Brown Road connector. The existing Wilsonville Road/Montebello Drive intersection is signal controlled and has three existing active legs and an inactive south leg stub, which were constructed as part of the Wilsonville Road Phase 2A construction.

Existing Traffic Conditions

Key roadways in the study area are summarized in Table 1 at the top of the next page along with their existing roadway characteristics. The following sections include discussion on the existing traffic volumes and operations.



Table 1: Study Area Roadway Characteristics

Roadway	Classification	Number of Lanes	Posted Speed	Sidewalks	Bike Lanes
Wilsonville Road	Minor Arterial/Major Arterial ^a	2-4	25-35	Yes	Yes
Boones Ferry Road	Collector	2-4	25	West side only from 4 th St to Bailey St, Both sides north of Bailey St	West side only from Tauchman St to Bailey St, Both sides north of Bailey St
Brown Road	Collector	2	35	Yes	No
Montebello Drive	Local Road	2	25	Yes	No
Kinsman Road	Minor Arterial/Collector ^b	2	40	Yes	Yes
Bailey Street	Collector	2	None	Yes ^c	No
5th Street	Local Road/Collector	2	None	West of Boones Ferry Rd	West of Boones Ferry Rd

^a Minor arterial west of Kinsman Road, Major arterial east of Kinsman Road

Existing Traffic Volumes

Existing 2016 PM Peak Hour traffic volumes were collected from intersection turn movement counts conducted on June 7, 2016 at the following study intersections:

- Wilsonville Road/Brown Road
- Wilsonville Road/Montebello Drive
- Wilsonville Road/Boones Ferry Road
- Wilsonville Road/Kinsman Road
- Boones Ferry Road/Bailey Street
- Boones Ferry Road/5th Street

The existing volumes utilized for the existing conditions analysis can be seen in Figure 2. Also shown in this figure are the existing condition volumes from a previous alignment study³ conducted by OBEC in 2009.⁴ A comparison between the 2016 motor vehicle volumes and the 2009 motor vehicle volumes can also be found in Figure 2. This comparison shows the changes that have occurred on Wilsonville Road and Boones Ferry Road since 2009.

Since traffic counts were taken in 2009, the Fred Meyer development, several Villeboise neighborhoods, Coca Cola expansion, and Wilsonville Business Park were constructed. Other developments in the study area include the SMART/TriMet Transit/WES Commuter Rail Center, Fred Meyer Gas conversion (from Chevron), Wilsonville Endodontics, Sherlock Mini Storage, and Wilsonville Self-Storage.

^b Minor Arterial north of Wilsonville Road, Collector south of Wilsonville Road

^c There are no sidewalks west of Boones Ferry Road on south side

³OBEC Alternative Analysis Summary, April 16, 2009

⁴ Wilsonville Road/Boones Ferry Road intersection traffic volumes were from 2008 as part of the 2009 Fred Meyer Transportation Impact Study



Constructed alongside these developments were road extensions that diverted some east-west traffic from Wilsonville Road. Tooze Road was extended to Boeckman Road and opened to traffic in June 2008; this made Boeckman Road an available east-west route option. Later, Villebois Drive was extended north to Tooze Road/Boeckman Road and likely decreased east-west traffic on Wilsonville Road even further. The Barber Street extension was completed in 2015, which created an additional connection to Villebois.

These changes present themselves in predictable ways; less through traffic on Wilsonville Road due to the Tooze Road extension, Villebois Drive extension, and Barber Street extension, as well as greater vehicle volumes on Boones Ferry Road due to the Fred Meyer development and other developments along that road. As shown, motor vehicle volumes near 5th Street and Bailey Street remain relatively similar from 2009 to 2016.

Existing Intersection Operations

Existing traffic conditions at the study intersections were analyzed to understand existing study area traffic operations and to provide a baseline for comparing the future Boones Ferry Road to Brown Road connector alternatives. The existing PM Peak Hour traffic operations at the study intersections were determined based on the 2000 Highway Capacity Manual methodology⁵ for signalized intersections and 2010 Highway Capacity Manual⁶ methodology for unsignalized intersections. The estimated average delay, level of service (LOS), and volume to capacity (v/c) ratio of each study intersection are shown in Table 2. As shown in the table, all intersections currently meet the City of Wilsonville LOS D operating standard.

Table 2: 2016 Existing PM Peak Hour Study Intersection Operating Conditions

Intersection	Operating	PM Peak Hour						
mersection	Standard	Delay	LOS	V/C				
Signalized								
Wilsonville Rd/Brown Rd	LOS D	19.2	В	0.45				
Wilsonville Rd/Montebello Dr	LOS D	6.1	Α	0.46				
Wilsonville Rd/Kinsman Rd	LOS D	24.6	С	0.63				
Wilsonville Rd/Boones Ferry Rd	LOS D	40.1	D	0.81				
Unsignalized								
Boones Ferry Rd/Bailey St	LOS D	12.8	A/B	0.10				
Boones Ferry Rd/5 th St	LOS D	10.3	A/B	0.08				
Signalized Intersections: Delay = Average Stopped Delay per Vehicle (set LOS = Level of Service of Intersection V/C = Volume-to-Capacity Ratio of Intersection	•	Unsignalized Intersections: Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement LOS = Level of Service of Major Street/Minor Street V/C = Volume-to-Capacity Ratio of Worst Movement						

⁵ 2000 Highway Capacity Manual, Transportation Research Board, Washington DC, 2000.

⁶ 2010 Highway Capacity Manual, Transportation Research Board, Washington DC, 2010.



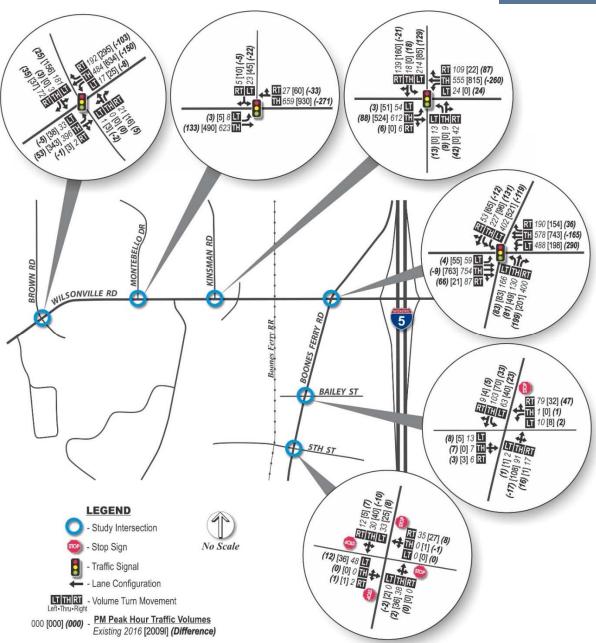


Figure 2: 2016 Existing PM Peak Hour Traffic Volumes

It is important to note that when traffic incidents occur on I-5 and I-205 such that the additional traffic exceeds the existing ramp meter capacity or the I-5 mainline falls below the threshold required to accommodate the existing levels of traffic, the I-5/SW Wilsonville Road interchange area (which includes the Wilsonville Road/Boones Ferry Road intersection) is significantly impacted and vehicles experience traffic delays similar to level of service "F" (greater than 80 seconds of delay).

East-West Connector Existing and Future Conditions Analysis October 27, 2016 Page 6 of 9



Table 3-2. Access Spacing Standards

To improve traffic flow and safety, the City of Wilsonville
limits access to higher classification roadways to reduce
conflicts between vehicles on the roadway and vehicles
entering or exiting the roadway. Table 3-2 in the TSP lists
the City's desired and minimum spacing for a Minor Arterial
road as 1,000 feet and 600 feet, respectively. Spacing
between Brown Road, Montebello Road and Kinsman Road

Functional Classification	Access Spaci Desired ^b	ng Standards ^a <i>Minimum</i>				
Near Interchanges	ODOT Requires 1,320 ft					
Major Arterial	1,320 ft	1,000 ft				
Minor Arterial	1,000 ft	600 ft				
Collector	300 ft	100 ft				
Local Street	Access Permitted to Each Lot					

along Wilsonville Road are all above the City's minimum spacing standards. However, it is recommended that the City remove the curb cut just west of Montebello Road intersection because it is only approximately 350 feet away from the Montebello Road intersection and therefore does not meet access spacing requirements.

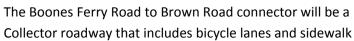
Furthermore, spacing for a Collector Road such as Boones Ferry Road is 300 feet.

Pedestrian and Bicycle Facilities

Access Spacing

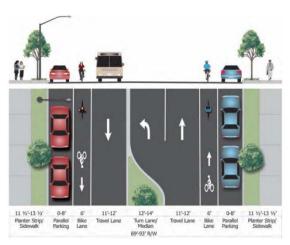
Currently, there are 5-foot bicycle lanes and sidewalks present in both the eastbound and westbound directions on Wilsonville Road from Brown Road to Boones Ferry Road. Boones Ferry Road also has standard 6-foot bicycle lanes and sidewalks in both directions from Wilsonville Road to Bailey Street. At Bailey Street, there is only a bicycle lane and sidewalk in the southbound direction.

The City plans to build a network of bicycle lanes and shared-use paths within the study area which will provide important connections to destinations throughout the city. Planned shared-use facilities in the study area include the Ice Age Tonquin Trail continuation. As shown in the figure to the right, the Tonquin Trail currently terminates at the bridge on Arrowhead Creek Lane but is planned to run along the new Boones Ferry Road to Brown Road Connector to SW Boones Ferry Road. The City is currently looking for funding to upgrade or replace the bicycle/pedestrian path under the I-5 bridge connecting Kalyca Terrace subdivision to Boones Ferry Park. The proposed extension of the Tonquin Trail is anticipated to connect to this crossing.





Ice Age Tonquin Trail in Study Area



Collector Street Cross-Section Standards

(see Collector Street Standards figure from the City's TSP). However, the existing portion of Brown Road just south of Wilsonville Road does not include bicycle lanes, lacks sufficient width to accommodate three lanes and two bike lanes, and will require modification to include bicycle facilities.

East-West Connector Existing and Future Conditions Analysis October 27, 2016 Page 7 of 9



Future Traffic Conditions

The following sections include discussion on the future 2035 traffic volumes and operations.

Future Traffic Volumes

Future traffic forecasts were performed for a 2035 horizon year based on the Metro Gamma Model that was refined for the City of Wilsonville. Within the study area, the model used HCM node delays at the intersections and travel times on the roadway links to perform the traffic assignment. The raw model volumes were post-processed to estimate 2035 turn movement volumes at the future study intersections which are shown in Figure 3 on the next page. As shown, the majority of traffic growth between 2016 and 2035 is expected to occur at the Boones Ferry Road/Wilsonville Road intersection with moderate traffic volume increases at the remaining study intersections.

Future Intersection Operations

Transportation demand modeling of the future roadway network in the vicinity of the east-west connector was performed for the 2035 horizon year for a no build scenario. The purpose of the modeling was to estimate the future traffic volumes under the existing road network.

The future no build PM Peak Hour traffic operations at the study intersections were determined based on the 2000 Highway Capacity Manual methodology for signalized intersections and 2010 Highway Capacity Methodology for unsignalized intersections. The estimated average delay, level of service (LOS), and volume to capacity (v/c) ratio of each study intersection are shown in Table 2. As shown in the table, all intersections currently meet the City of Wilsonville LOS D operating standard but have higher delays and v/c ratios than the existing operating conditions. However, if congestion issues caused by traffic incidents and the capacity of I-5 across the Boone Bridge are not resolved, it is important to note that the interchange area LOS and V/C will continue to degrade as traffic demand increases and vehicles are likely to more often experience traffic delays similar to level of service "F" (greater than 80 seconds of delay).

Table 3: 2035 Future No Build PM Peak Hour Study Intersection Operating Conditions

Intersection	Operating	PM Peak Hour						
Intersection	Standard	Delay	LOS	V/C				
Signalized								
Wilsonville Rd/Brown Rd	LOS D	23.2	С	0.53				
Wilsonville Rd/Montebello Dr	LOS D	7.3	Α	0.50				
Wilsonville Rd/Kinsman Rd	LOS D	33.2	С	0.75				
Wilsonville Rd/Boones Ferry Rd	LOS D	56.5	Е	0.91				
Unsignalized	-	-						
Boones Ferry Rd/Bailey St	LOS D	13.9	A/B	0.12				
Boones Ferry Rd/5 th St	LOS D	11.2	A/B	0.10				
Signalized Intersections:		Unsignalized Intersection	ns:					
Delay = Average Stopped Delay per Vehicle (sec)	Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement						
LOS = Level of Service of Intersection		LOS = Level of Service of Major Street/Minor Street						
V/C = Volume-to-Capacity Ratio of Intersection	on	V/C = Volume-to-Capacity Ratio of Worst Movement						



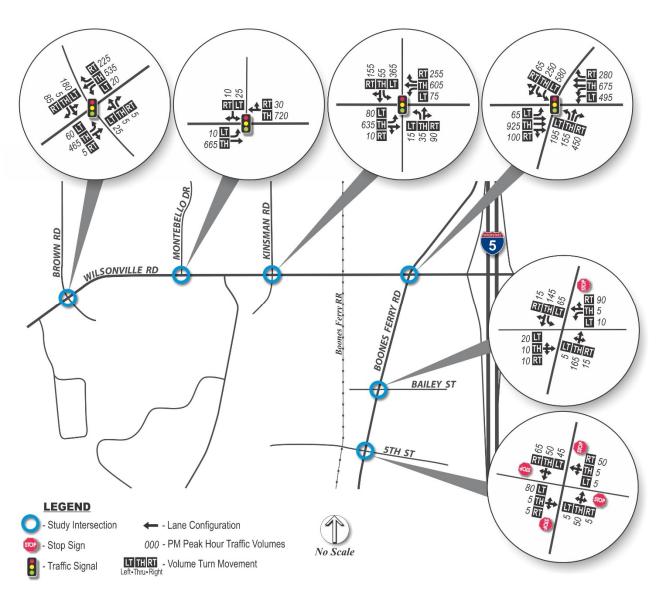


Figure 3: Future 2035 PM Peak Hour Traffic Volumes

Corridor Travel Times on Wilsonville Road

The corridor travel times for Wilsonville Road were observed to be approximately 2 minutes and 15 seconds in both directions under existing conditions. These travel times are expected to increase an average of 10 seconds going eastbound and an average of 35 seconds traveling westbound in the year 2035. The implementation of either alternative is expected to alleviate much of the travel time increase from existing conditions to 2035 nobuild conditions. However, when incidents and congestion on I-5 impact Wilsonville Road, the east-west travel times will be affected. A Boones Ferry Road to Brown Road connector south of Wilsonville Road will provide an alternative route from the Boones Ferry Road commercial districts to residential areas in west Wilsonville.

East-West Connector Existing and Future Conditions Analysis October 27, 2016 Page 9 of 9



Summary

Below is a summary of the findings in this technical memorandum:

- An east-west connector between Brown Road to Boones Ferry Road is being considered in order to
 alleviate congestion on Wilsonville Road create access to new development south of Wilsonville Road,
 and provide a secondary route to access the Old Town neighborhood. This connector would satisfy the
 City of Wilsonville's goal to improve connectivity by constructing parallel facilities spaced at regular
 intervals to provide alternative routes and choices for all modes even where significant barriers exist
 such as the Willamette River and I-5.
- The PM peak hour traffic operations for the existing conditions meet the City of Wilsonville operating standard of LOS D when not influenced by congestion or an incident on I-5.
- The proposed Boones Ferry Road to Brown Road connector would meet the access spacing standards outlined in the City's TSP. The future intersection on the south side of Wilsonville Road approximately 350 feet west of Montebello Road should be removed as it would not meet access spacing standards.
- The PM peak hour traffic operations for the future no-build conditions also meet the standard LOS D, but indicate increased congestion in the six study intersections.
- When traffic incidents occur on I-5 and I-205 such that the additional traffic exceeds the existing ramp
 meter capacity or the I-5 mainline cannot deliver the existing traffic flow, the I-5/SW Wilsonville Road
 interchange area (which includes the Wilsonville Road/Boones Ferry Road intersection) is significantly
 impacted and vehicles experience traffic delays similar to level of service "F" (greater than 80 seconds of
 delay).



Appendix C

MFMORANDUM

711 SE Grand Ave. Portland, OR 97214 (503) 230-9862 www.altaplanning.com

To: Steve Adams, P.E., City of Wilsonville

From: Katie Mangle, Alta Planning + Design

Date: November 4, 2016

Re: Active Transportation Existing Conditions

Boones Ferry Road to Brown Road Connector Study

Introduction

This memorandum summarizes the existing and planned bicycle and pedestrian conditions analysis that was performed for the Boones Ferry Road to Brown Road Connector Study in Wilsonville, Oregon. It documents the related background information, existing conditions including off-street and on-street networks, pertinent policies, and planned facilities for the Arrowhead Creek Planning Area, the study area for the Connector. It also presents new opportunities to improve access, comfort, and safety for people walking and biking on and around Wilsonville Road and displays these findings in the accompanying Bicycle and Pedestrian Access Map found on page 6.

Existing Conditions

Off-street Network

Several local and regional trails exist within the study area:

- Ice Age Tonquin Trail: This Regional trail connects Wilsonville with Sherwood and other cities to the north. The City has completed 3.4 miles of this Regional trail in Wilsonville. The two longest continuous segments exist within the Graham Oaks Nature Park and Morey's Landing Open Space, directly west of the Arrowhead Creek Planning Area.
- Wilsonville Waterfront Trail: Completed local segments exist in the Wilsonville Water Treatment Plant
 Park and Boones Ferry Park. This trail connects under I-5 and links with Memorial Park and neighborhoods
 to the east.
- Local Access Trails:
 - o Runs north-south from Wilsonville Road to the Morey's Landing Trail segment.
 - o Located parallel to Arrowhead Creek Lane between Industrial Way and the Water Treatment Plant.

On-Street Network

As shown in Table 1 of the Existing and Future Conditions memo prepared for this project by DKS Associates, the existing roadway network includes intermittent on-street facilities for walking and biking. In addition to that inventory, this section provides additional observations on the level of service provided for people walking and bicycling in the vicinity of the study area.

- Wilsonville Road: When traveling east, Wilsonville Road is winding and rural in character until Willamette Way West when it straightens at Graham Oaks Nature Park and becomes flanked by residential and commercial land uses. Though sidewalks and bike lanes exist on both sides, it is mostly a five-lane arterial (three-lanes west of Kinsman Road) that ultimately travels through the I-5 freeway interchange to the east. The 5-6 ft sidewalks are sometimes separated from the street by a planter strip; all intersections include curb ramps; crosswalks are provided at all signals. All bike lanes are standard, striped lanes, approximately 5-6 feet wide. In the vicinity of the I-5 interchange, grade separated multi-use pathways were installed under I-5 as part of the interchange expansion project in 2012. The City has applied green paint to the bike lane to signify a lane merge transition. Given the number of lanes, actual speed, and merging situations, conditions for bicycling on Wilsonville Road are only conducive to the most confident of cyclists.
- Boones Ferry Road: Boones Ferry Road is a two-lane street that includes turn pockets north of Bailey Street. Between SW Bailey Street and 4th Street, there is a through sidewalk only on the west side of the street. However, the sidewalk network is mostly complete north of 5th Street and in the adjoining neighborhoods. SW Boones Ferry Road has standard bicycle lanes from SW Wilsonville Road to SW Bailey Street on both sides of the street. South of SW Bailey Street, Boones Ferry Road has a standard bike lane for southbound travel and is striped with sharrows for northbound travel, indicating that people riding bicycles should share the lane with the slow-moving vehicles. The bike lane's southern terminus is at Tauchman Street. Tauchman Street is not a through street for motor vehicles, but provides a connection to the



Wilsonville Waterfront Trail for bicyclists and pedestrians. Traffic volumes and speeds on Boones Ferry Road are low, particularly south of 5th Street.

Industrial Way and Arrowhead Creek Lane: Industrial Way is a freight route that connects north-south from Wilsonville Road to the Wilsonville Concrete property, and provides access to Arrowhead Creek Lane, which provides access to the Water Treatment Plant and park. Between Wilsonville Road and Arrowhead Creek Lane, the road does not include bicycle or pedestrian facilities.

Due to concerns regarding physical conflicts between the heavy freight traffic on Industrial Way and trail users, non-motorized access is not allowed on Arrowhead Creek Lane between Industrial Way and the bridge over Arrowhead Creek. Between the bridge and the Water Treatment Plant, a trail parallels Arrowhead Creek Lane, but the trail ends abruptly and is signed to discourage trespassing.

Per an agreement between the City and Bernert et al, the City agreed

to "postpone construction of the bicycle pedestrian alignment" of a trail connection until such time when a new roadway connection (such as the Connector) "would allow for a crossing at a signalized or unsignalized intersection with Industrial Way."



Planned Network

Complete Street Connections and New Bridges

The Wilsonville Transportation System Plan includes many policies that support complete streets and connectivity for all modes. Within the project study area, below is a list of planned sidewalk and bicycle facilities to be constructed with roadway extensions or widening. Refer to the Bicycle and Pedestrian Access Map on page 6 for greater detail.

- Kinsman Road extension
- Brown Road extension to Boones Ferry Road
- Brown Road Urban Upgrade (north of Wilsonville Road)
- East of Boones Ferry Road, bike lane planned on 5th, connecting via bridge over I-5 to Memorial drive
- 5th Street Urban Upgrade, east of Boones Ferry Road to lead to a future bicycle and pedestrian bridge over
 I-5 that would connect to Memorial Drive
- The French Prairie Bridge over the Willamette River

Trail Plans

Waterfront Trail, a Regional Trail, was originally planned to run east-west from Memorial Park through Boones Ferry Park to the Water Treatment Park (see Wilsonville Bicycle and Pedestrian Master Plan Map 1, Regional Trail 4). During the TSP process, the City modified the alignment of this trail to remove the segment shown on Wilsonville Concrete property. Thus, this trail connection will utilize the Ice Age Tonquin Trail alignment to connect Boones Ferry Park and the Water Treatment Park.

A two-phase project is underway on the Wilsonville Waterfront Trail. Phase I will bring the grade of the existing segment in and around the I-5 undercrossing up to ADA standards. Phase II, planned for construction in 2018, will construct a new trail segment linking the I-5 undercrossing to Boones Ferry Park along a route south of SE Tauchman Street.

Ice Age Tonquin Trail, a Regional Trail, is planned to ultimately connect Wilsonville with Sherwood and other cities to the north. This trail will connect from the existing Morey's Landing segment to the west of the study area, to the on-street segment on Boones Ferry Road. In the Ice Age Tonquin Trail Master Plan, the segment in the study area (see p. 33, Table 2) is described in the following segments:

- 1H: Trail to either follow an independent corridor or follow parallel to a potential future roadway such as Brown Road extension.
- 1G: Trail design to occur in tandem with potential future roadway design in the area. Trail will parallel 5th or Bailey.
- 1F: Upgrade railroad crossing.
- 1E (along Boones Ferry Road): Coordinate trail development with Boones Ferry Road improvements;
 consider re-striping roadway to position bike lane on east (northbound) side to accommodate uphill cyclists and shared lane markings in southbound direction.

Boones Ferry Road

The design of Boones Ferry Road is determined by the TSP and City Public Works Standards. As a minor Collector north of 5th Street, the road is presumed to ultimately include bike facilities and sidewalks on both sides of the street.

In 2011, the City completed the Old Town Neighborhood Plan, in cooperation with the Old Town neighborhood. The Plan was recognized, not adopted, by City Council though aspects of it have been incorporated into ongoing work of the City. The Plan calls for Boones Ferry Road north of 5th Street to be a Main Street and "viable commercial area". The streetscape plan and recommendations for Boones Ferry Road describe sidewalks and bike lanes on both sides of Boones Ferry Road between Bailey and 4th Street.

For the residential part of Boones Ferry Road south of 4th, and elsewhere in the neighborhood, the recommendation is to 'maintain the casual, curb-less street" (see Recommendation Matrix, Old Town Neighborhood Plan Appendix C, page 24).

Relevant Policies

In addition to the City's many policies encouraging connectivity for all modes of travel and creation of complete streets, the following specific policies relate to the evaluation of the Connector alternatives.

Walking and Biking Access Spacing

Improving connectivity between neighborhoods and other destinations is a major policy objective of the City's TSP. In addition to the access spacing standards addressed in the Existing and Future Conditions memo prepared for this project by DKS, the City has also established access spacing standards for walking and biking facilities. Per the TSP (p. 3-6), "Bicyclists and pedestrians benefit the most from closely spaced facilities because they are the most affected by distance. By providing walking and biking facilities spaced less than 300 feet apart, Wilsonville will support walking and biking use within and between its neighborhoods. In addition, these connections can improve access to transit." This standard is implemented through the Development Code as well.

Sidewalks on Boones Ferry Road

The Development Code includes an Old Town Overlay Zone to ensure the special character of the neighborhood is reinforced. This section of the code includes the following policy, which describes a continuous Main Street design along Boones Ferry Road:

4.138(.04)C. Sidewalk width may vary from block to block, depending upon the nature of adjacent land uses and the setbacks of existing buildings. Provided, however, that a continuity of streetscape design is maintained along Boones Ferry Road, generally following the pattern that has been started with the 1996 approval for Old Town Village on the west side of Boones Ferry Road from Fourth Street to Fifth Street.

Opportunities

To further bolster the planned projects and connections outlined above, the Connector project presents some new opportunities to improve access, comfort, and safety for people walking and biking through the Arrowhead Creek study area. Below are two project recommendations for consideration. Refer to the Bicycle and Pedestrian Access Map, Planned Bike Lane lines, on page 6 for greater detail.

- Create a bicycle and pedestrian-only connection to Wilsonville Road along the Industrial Way segment, north of Kinsman Road.
- Development of the Arrowhead Creek Planning Area raises the opportunity to create a bicycle and pedestrian-only connection at the 2nd Street railroad under-crossing, to connect Boones Ferry Road and the planned French Prairie Bridge to the Connector via Otto Lane. This is not assumed to be constructed as part of the Connector project, but should be considered during the design of the alignment.
- Determine a final alignment for the Ice Age Tonquin Trail that uses the new signalized intersection at Kinsman Road to ensure safe bicycle and pedestrian crossing of the roadways, and separating people walking and bicycling from freight vehicles.

EXISTING AND PLANNED BICYCLE AND PEDESTRIAN ACCESS

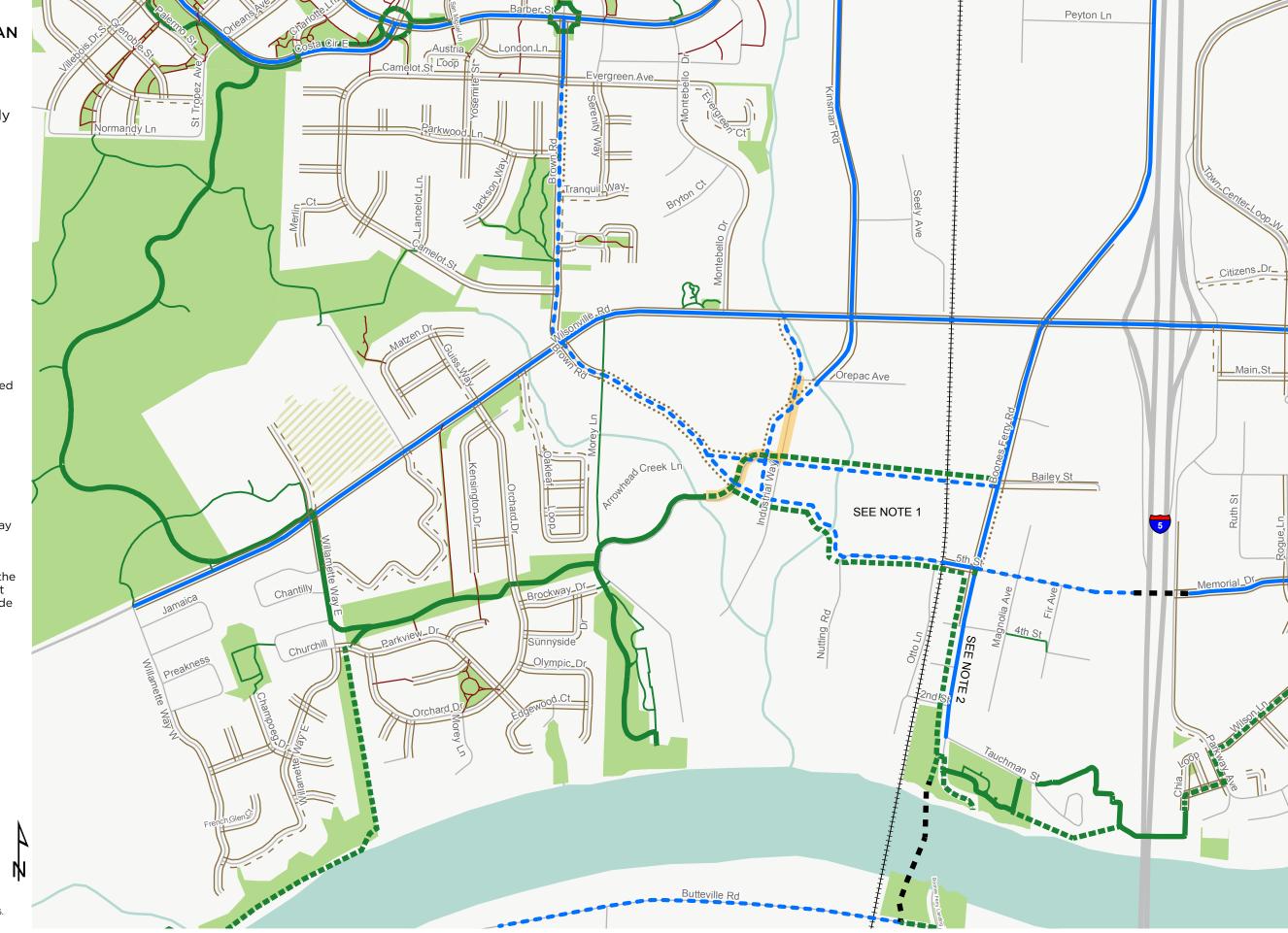
City of Wilsonville: Boones Ferry Road to Brown Road Connector Study

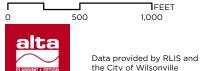
Legend

- Existing Regional Trail
- Existing Local Trail
- Existing Private Trail
- ■■ Planned Trail
- ++ Railroad
- Existing Bike Lane
- ••• Planned Bike Lane\Shoulder
- Existing Full Sidewalk
- Existing Partial Sidewalk
- •••• Planned Sidewalk
- ■■ Planned Bridge
- Nonmotorized Access Prohibited
- Park/Open Space
- School
- Rivers/Streams

Notes:

- 1) Alignment of the Boones Ferry Road to Brown Road Connector may connect to 5th St or Bailey Street.
- 2) South of Bailey Street, Boones Ferry Road includes bike lanes on the west side, and sharrows on the east side. The long-term plan is to include bike lanes and sidewalks on both sides, north of 4th Street.





the City of Wilsonville Map produced November 2016.



Pacific Habitat Services, Inc.

9450 SW Commerce Circle, Suite 180 Wilsonville, Oregon 97070

Telephone number: (503) 570-0800 Fax number: (503) 570-0855

Memorandum

Date: September 15, 2016

To: Steve Adams, P.E. City of Wilsonville

From: Fred Small

RE: SW Boones Ferry to SW Brown Road Corridor Plan: Natural Resource Concerns

(PHS #5929)

The City of Wilsonville is implementing a study to determine the best alignment for a proposed new road connection linking SW Boones Ferry Road with SW Brown Road to the west. This new east-west connection will increase connectivity in this area of Wilsonville and help relieve traffic congestion on Wilsonville Road near the Interstate-5 interchange. The new alignment will also improve alternative modes of transportation in the area, as well as enhance the local economy by filling a gap in the road network.

Four route variations are currently proposed, each of which converge at the west end to connect with SW Brown Road, and also intersect with a southward extension of SW Kinsman Road. However, in order to connect with SW Boones Ferry Road, a single route converges with SW 5th Street while the other three routes converge at SW Bailey Street, all before crossing the P & W Railroad right-of-way (Figure 1).

As part of this study, it is imperative that any potential natural resource impacts from the potential alignments be examined in order to rank the least to most viable alternatives. As such, the following discussion describes current conditions within the study area, assesses their significance in terms of local, state, and federal regulations, and then addresses which elements are most likely to influence the project design.

EXISTING CONDITIONS

The study area includes several distinct and current land uses, including agricultural production (primarily hazelnut orchards and a variety of row crops), dispersed and multi-family residential, mixed manufacturing/ commercial (Wilsonville Concrete and OrePac most notable among other businesses), and municipal use (City of Wilsonville water treatment plant). The Coffee Lake Creek riparian corridor roughly divides the study area into primarily agricultural (west of creek) and industrial/urbanizing (east of creek) areas, there are undeveloped open spaces scattered throughout.

Steve Adams, P.E., City of Wilsonville SW Boones Ferry to SW Brown Road Corridor Plan: Natural Resource Concerns /PHS #5929 September 15, 2016 Page 2

Relatively few of the undeveloped areas are comprised of particularly notable vegetation communities. The short length of SW Brown Road that adjoins the alignments is bordered by an overstory of mature non-native oaks (*Quercus* sp.), while the remainder of all the alignments west of the Coffee Lake Creek riparian area primarily pass through hazelnut orchards, cultivated fields, or existing roadways. However, both of the southern alignments run parallel with and may potentially encroach into a portion of the Arrowhead Creek riparian/SROZ buffer.

East of the Coffee Lake Creek riparian area, the alignments primarily pass through small stands or individuals of common street tree plantings. Exceptions include the southernmost alignment connecting to SW 5th Street, which will closely pass, and possibly impact, the northern edge of a mixed forest stand containing the riparian area for an unnamed tributary to the Willamette River. The mixed forest includes mature bigleaf maple (*Acer macrophyllum*), Douglas fir (*Pseudotsuga menziesii*), and sweet cherry (*Prunus avium*). In addition, the three SW Bailey Street alignments could impact several mature Douglas fir trees within the OrePac property.

Regulated Waterways

Of particular note from a natural resource perspective, Coffee Lake Creek flows roughly north to south through the study area. Its central location will necessitate a new crossing for the primary east-west road alignment, as well as a reconstructed crossing for the southward Kinsman Road extension (the existing SW OrePac Avenue will be redesigned to connect to Kinsman Road north of the new crossing).

Coffee Lake Creek is a perennial stream that originates in the Tonquin Scablands to the north of the City between Tualatin and Sherwood. Its course has been highly modified for much of its length, particularly where it has been straightened and channelized within the broad Coffee Lake Creek wetlandssouth of SW Boeckman Road. However, it is confined to a relatively narrow channel from the basin southward to its confluence with the Willamette River. Anadromous fish, including Upper Willamette River (UWR) Chinook salmon and UWR steelhead, have both been documented in the lower reach of Coffee Lake Creek; however, a barrier to upstream travel by anadromous fish has been documented on the Wilsonville Concrete property below the project area.

There are two other waterways in the project vicinity: Arrowhead Creek, which is southwest of the proposed southern alignments; and an unnamed seasonal drainageway located within a forested area west of the SW 5th Street railroad crossing. Both south alternative routes run parallel to the Arrowhead Creek buffer in the western portion of the project. In addition, the unnamed drainageway may or may not be sufficiently south of the 5th Street alignments to avoid all impacts; as such, further investigation will be necessary to determine the need for any permits.

Regulated Wetlands

PHS reviewed the available documentation of area soils, the City's Natural Resource Inventory and Significant Resources Overlay Zone (SROZ) mapping, and other online sources to determine the likelihood of encountering any potentially regulated wetlands within the study area. The Natural Resources Conservation Service (NRCS) has not mapped any hydric soils in the study area. In addition, the City's SROZ mapping, which includes both the previously inventoried resources and required buffers, does not indicate any water resources besides the riparian areas

Steve Adams, P.E., City of Wilsonville SW Boones Ferry to SW Brown Road Corridor Plan: Natural Resource Concerns /PHS #5929 September 15, 2016 Page 3

described above. As such, it is highly unlikely that any significant wetlands are present within the study area, particularly outside of the mapped SROZ boundaries (Figure 2).

Regulated Wildlife Habitat Areas

In addition to regulated water resources and their buffers, the City's SROZ boundaries typically include those contiguous upland habitats that have high wildlife value. The outer SROZ boundary, as a consequence, can be wider than the required water resource buffer in order to include a forested wildlife habitat area. For instance, the riparian boundary near the confluence of Coffee Lake Creek and Arrowhead Creek is significantly broader than slightly upstream on either drainage, which may reflect a deeper and wider ravine associated with the combined streams, while also including the contiguous upland forested wildlife habitat. Likewise, the previously described forested stand near the SW 5th Avenue connection provides the required riparian buffer to the unnamed seasonal drainageway, while also providing high quality upland wildlife habitat within the City's SROZ mapping (note: this capital project will be exempt from SROZ buffer requirements).

POTENTIAL CONSTRAINTS BY ALIGNMENT

The primary concern with each of the alignments is the crossing of Coffee Lake Creek, since constructing a new bridge is necessary in all cases. Figure 2 depicts the SROZ resource areas potentially impacted by each alignment. Although there are likely to be significant advantages to a more northerly crossing of the channel (the southerly alignments will impact a generally wider, less impacted riparian area), the channel morphology and substrate conditions of each alignment cannot be assumed without further geotechnical studies. As such, obtaining the necessary federal and state permits may be more or less complicated by the varying structural requirements at each location.

Necessary Resource Permits

Any fill or removal of material below the Ordinary High Water line of Coffee Lake Creek (or in wetlands if any are encountered) will require permits from the US Army Corps of Engineers and the Oregon Department of State Lands. The federal permit addresses Section 404 of the federal Clean Water Act (CWA), while the state permit addresses its Removal-Fill rules (OAR 141-085). Other regulatory agencies that review and provide input to this permitting process include the US Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) Fisheries, as well as the Oregon Department of Fish and Wildlife (ODFW). Potential water quality impacts are reviewed by the Oregon Department of Environmental Quality (ODEQ), which acts on behalf of the federal Environmental Protection Agency (EPA) to assure that federal CWA requirements are met by regulating all stormwater generated from new impervious surfaces, as well as any construction-related runoff. A cultural resources study will also be required, as both state and federal agencies mandate that tribal and historic preservation interests be addressed and that significant resources not be disturbed.

The bridge crossing will potentially impact a stream with documented salmonid habitat relatively close to its confluence with the Willamette River; however, a barrier to upstream travel by anadromous fish has been documented on the Wilsonville Concrete property below the project area. Nevertheless, since the fisheries agencies will be influential in bridge authorization at this location, the City should assure that the bridge design meets all applicable conditions of the

Steve Adams, P.E., City of Wilsonville SW Boones Ferry to SW Brown Road Corridor Plan: Natural Resource Concerns /PHS #5929 September 15, 2016 Page 4

SLOPES programmatic biological opinion for Stormwater, Transportation or Utilities which specifically address Endangered Species Act (ESA) fisheries issues.

Compensatory mitigation for any stream impacts will likely be required in order to gain agency approval; this may take the form of riparian enhancement or restoration activities within the same stream or nearby in the same watershed. If any wetlands are encountered and cannot be avoided, the resulting impacts are likely to be very minor and readily mitigated through purchase of mitigation bank credits. The closest mitigation bank is the Mud Slough Wetland Mitigation Bank, which currently sells credits (at a 1:1 ratio of impact to mitigation) for approximately \$85,000 per credit.

Please feel free to contact us with any questions or concerns.

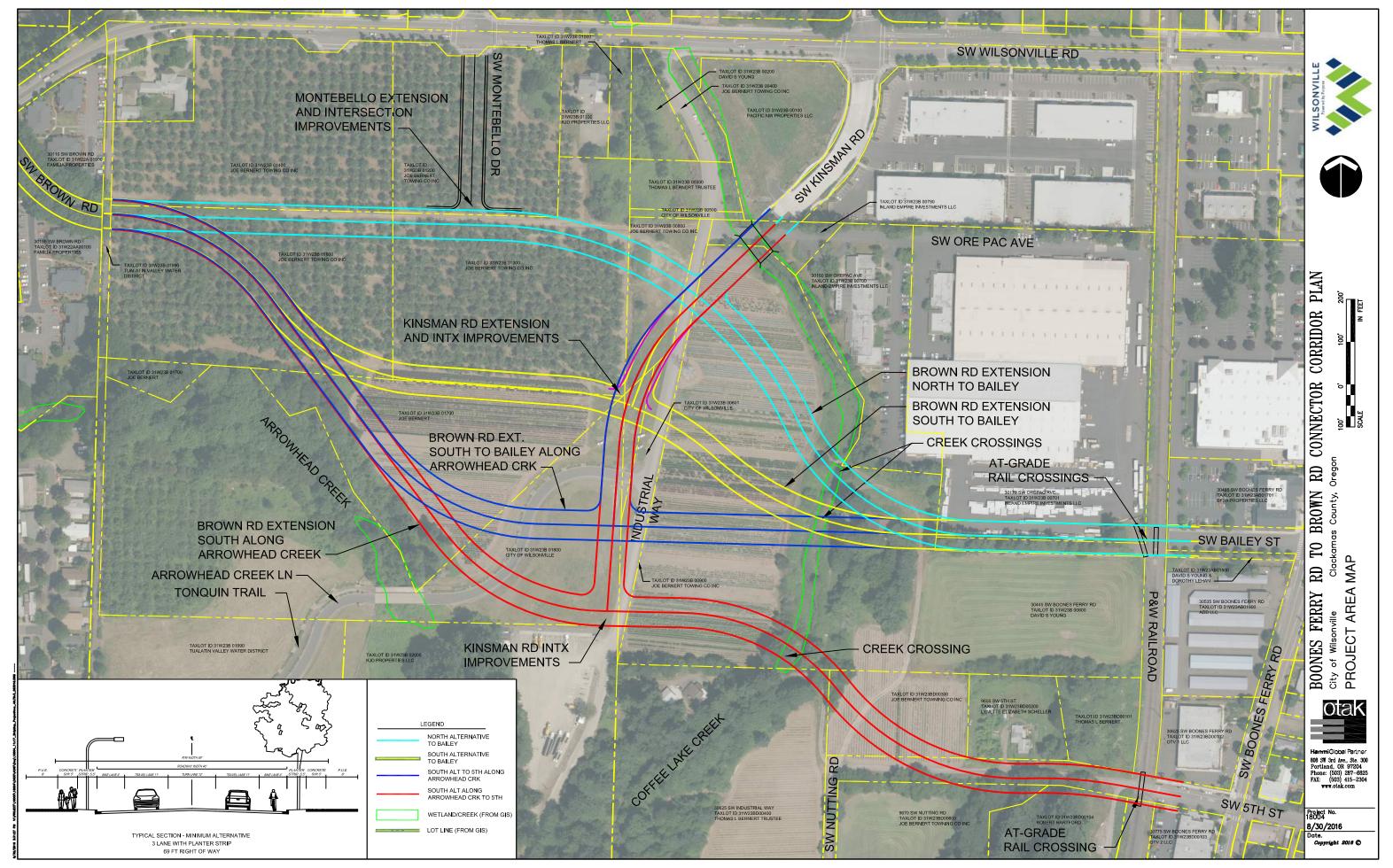
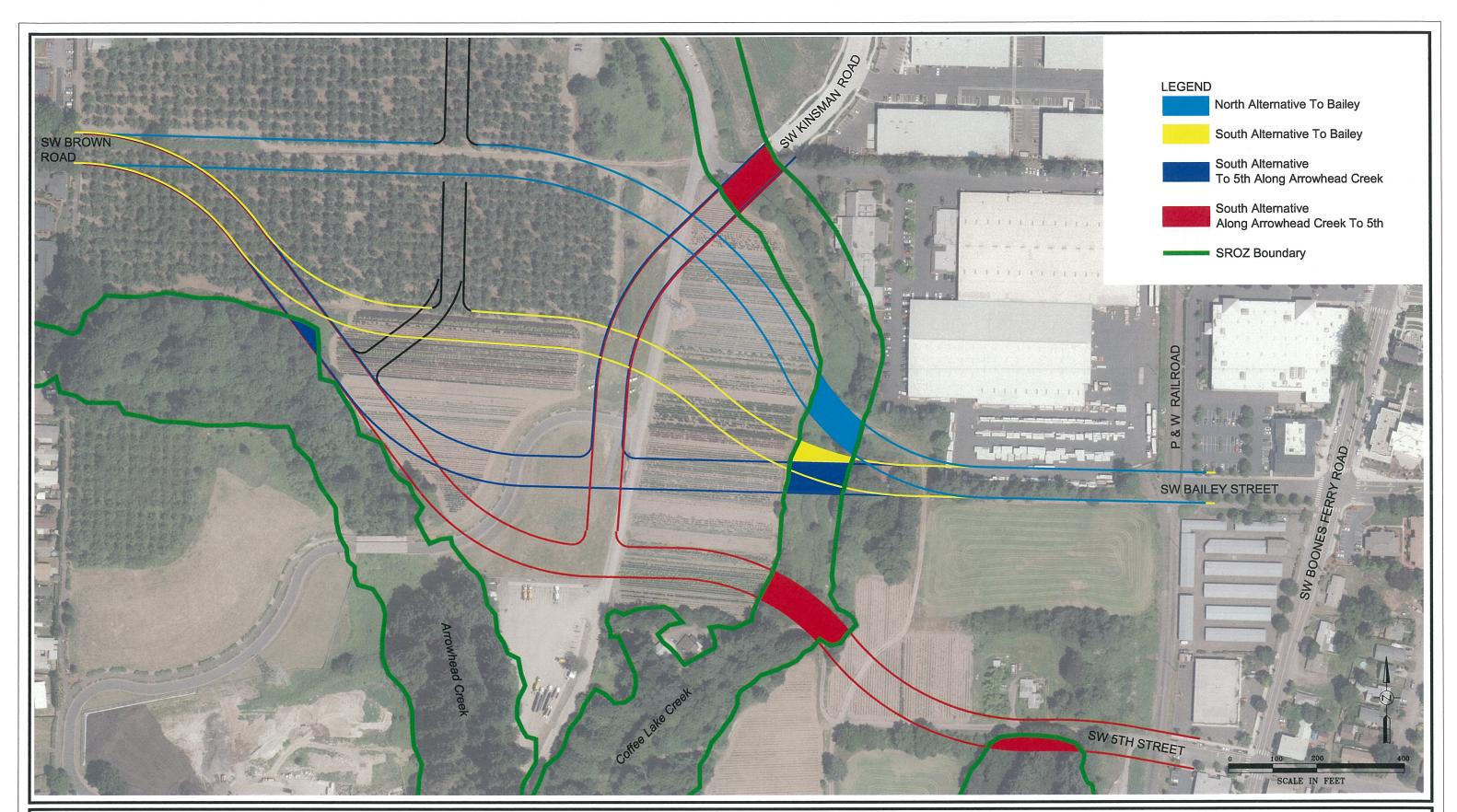


Figure 1





Plan Provided By OTAK Hanmi Global Partners SROZ Boundaries and Potential Impact Areas From Plan Alternatives Boones Ferry Road to Brown Road Connector Corridor Plan - Wilsonville, Oregon

FIGURE 2

9-15-2016



Archaeological Investigations Northwest, Inc.

3510 N.E. 122nd Ave. • Portland, Oregon 97230 Phone (503) 761-6605 • Fax (503) 761-6620

Vancouver Phone (360) 696-7473 E-mail: ainw@ainw.com Web: www.ainw.com

MEMO

Date: September 7, 2016

Revised November 14, 2016

To: Allen Hendy, Senior Project Manager, Otak

From: Alexandra Williams-Larson, M.A., R.P.A., Supervising Archaeologist

Lucie Tisdale, M.A., R.P.A., Senior Archaeologist

Re: Boones Ferry Road to Brown Road Connector Corridor Project,

City of Wilsonville, Clackamas County, Oregon Cultural Resources Review and Recommendations

AINW Report No. 3709

Introduction

The City of Wilsonville has contracted with Otak to study a preferred alignment for a new east-west corridor connection linking Boones Ferry Road and Brown Road in Wilsonville, Clackamas County, Oregon (Figure 1). The proposed project is part of the City's Transportation System Plan, Urban Renewal Plan, and Comprehensive Plan. The project will enhance connectivity between neighborhoods and alleviate vehicle congestion on Wilsonville Road.

The project entails extending Brown Road approximately 909 meters (m) (3,000 feet [ft]) to the east from its current terminus near its intersection with Wilsonville Road. The extension will be designed as a collector and will include two 4-m (12-ft) wide travel lanes with a turn lane or median. The collector will also include bike lanes, planter strips, and sidewalks. This extension will be constructed on a new roadway prism. Six alternative routes, including one north and five south routes, are proposed for the project (Figure 2). Each route will cross Coffee Lake Creek, requiring a large culvert or three-sided structure to allow water flow. A railroad crossing will be included with the project at either SW Bailey Street or SW 5th Street. New intersections are also planned to increase safety for pedestrians and bicyclists.

Otak contracted with Archaeological Investigations Northwest, Inc. (AINW), to perform a cultural resources review of the proposed project area as a part of the larger study. AINW reviewed records to identify whether archeological resources had been documented or cultural resource surveys had been completed within or near the current project area. Maps and other documents were also examined to assess the probability of encountering archaeological resources in the project area.

Project Location

The project area is located in southern Wilsonville in Section 23, Township 3 South, Range 1 West, of the Willamette Meridian. This part of Wilsonville is predominantly used for agricultural purposes, although industrial, commercial, and residential developments surround the project area. Coffee Lake Creek flows roughly north-to-south through the project area, converging with the Willamette River approximately 500 m (1,650 ft) to the south.

Previous Cultural Resource Studies

AINW reviewed records online using the Oregon Archaeological Records Remote Access website administered by the Oregon State Historic Preservation Office (SHPO) to determine whether previously recorded archaeological resources were present in or near the current project area. These records were also reviewed to identify previous archaeological surveys in the project vicinity.

The records indicate that portions of the current project area were surveyed during a cultural reconnaissance for the Proposed Tualatin Basin Water Supply project. This project's 61- to 122-m (200- to 400-ft) wide alignment intersects with each of the proposed alternatives in an agricultural part of the project area between SW Wilsonville Road and SW Arrowhead Creek Lane. No archaeological resources were identified within the current project area as a result of this investigation, which included a records review, background research, and a reconnaissance survey (Smits et al. 2006).

One cultural resource study was conducted immediately southwest of the current project area for the Wilsonville Water Treatment Plant Location project. This project consisted of a records review, background research, pedestrian survey, and shovel testing in high probability areas. No archaeological resources were documented during this investigation (Ellis 2000). Twenty-three other studies have been completed near the current project area for residential development, road improvement, and utilities projects (Table 1). As a result of these studies, nine archaeological resources, including two sites and seven isolates, were recorded within 1.6 kilometers (km) (1.0 miles [mi]) of the current project area.

Three pre-contact isolates were identified within 150 m (495 ft) of the current project area near the location of a reported "Indian Trail" depicted on an 1852 General Land Office (GLO) map (GLO 1852). These resources were recorded during a cultural resource survey for the Wilsonville Road project (Wilson 1993a, 1993b). The closest resource, Isolate #1, is located on the west terrace of Coffee Lake Creek, approximately 140 m (462 ft) north of the current project area. This isolate consists of one broken quartzite cobble, one cryptocrystalline silicate (CCS) unifacial tool, and quartzite and CCS debitage that were observed on the ground surface and during shovel testing (Wilson 1993a). Located 150 m (495 ft) west of the project area, Isolate #2 is a sparse scatter of CCS, quartzite, and petrified wood debitage and a CCS core fragment (Wilson 1993a). Isolate #3 is 150 m (495 ft) northwest of the current project area and contains one CCS flake and two fire-cracked rocks that were recovered during shovel testing (Wilson 1993b).

Three other pre-contact isolates have been recorded near the project area: Isolated Find 1, an obsidian Cascade-style projectile point (Darby 2005); Isolate Tri-Met 001, a CCS flake (Brannan 2007); and 21087-ZW-IS1, a CCS dart-sized projectile point (Windler et al. 2013). The isolates were identified on terraces overlooking creeks (Brannan 2007; Darby 2005; Windler et al. 2013).

Three historic-period archaeological resources, including sites 35CL317, 35CL398, and the Seely Ditch, were recorded northwest of the project area. Site 35CL317, also known as the Jaeger Farmstead Historic Site, is a circa 1875 farmstead with a surface scatter of ceramic, glass, and metal domestic artifacts dating between circa 1870 and the twentieth century. Site 35CL398 is a historic-period refuse scatter identified during archaeological monitoring for the Retherford Meadows Subdivision.

 ${\it TABLE~1}$ CULTURAL RESOURCE STUDIES WITHIN 1.6 KM (1 MI) OF THE PROJECT AREA.

		DURCE STUDIES WITHIN 1.6 B	WI (I WII) OF THE I ROSECT	
SHPO#	REFERENCE	ТҮРЕ	LOCATION	RESOURCES IDENTIFIED
22372	Smits et al. 2006	Cultural resources reconnaissance survey	Overlaps project area	None
17033	Ellis 2000	Cultural resources survey	10 m (33 ft) southwest of project area	None
13764	Wilson 1993b	Cultural resources survey	100 m (330 ft) north of project area	Isolate #3
13765	Wilson 1993a	Cultural resources survey	160 m (528 ft) north of project area	Isolate #1 Isolate #2
22373	Punke et al. 2007	Cultural resources survey	300 m (1,800 ft) southwest of project area	None
21110	Cabebe 2007	Archaeological survey	370 m (1, 221 ft) southeast of project area	None
23128	Carlisle 2010	Archaeological survey	400 m (1,320 ft) west of project area	None
21275	Baker and Reese 2007	Archaeological survey	420 m (1,386 ft) west of project area	None
20548	Darby 2004a	Cultural resource survey	620 m (2,046 ft) north of project area	Seely Ditch
26372	Maceyko and Gall 2013	Archaeological monitoring	650 m (2,145 ft) north of project area	Site 35CL398
21165	Brannan 2007	Cultural resource survey	760 m (2,508 ft) northeast of project area	Isolate Tri-Met 001
23709	Lloyd-Jones and Fagan 2010	Archaeological survey	830 m (2,739 ft) north of project area	None
20569	McDaniel 2006	Archaeological survey	950 m (3,135 ft) northeast of project area	None
26648	McDaniel 2007	Archaeological survey	970 m (3,301 ft) northeast of project area	None
19816	Darby 2005	Cultural resource survey	1.08 km (0.67 mi) northwest of project area	Site 35CL317; Isolated Find 1
28218	Perkins 2016	Cultural resource survey	1.08 km (0.67 mi) south of project area	None
22416	Buchanan et al. 2009	Archaeological survey	1.15 km (0.72 mi) northeast of project area	None
22395	Stipe 2008	Cultural resource survey	1.22 km (0.76 mi) south of project area	None
22373	Windler et al. 2013	Cultural resource survey	1.26 km (0.78mi) west- northwest of project area	21087-ZW-IS1
19234	Darby 2004b	Cultural resource survey	1.26 km (0.78 mi) northwest of project area	None
19844	Edwards and Long 2005	Archaeological survey	1.30 km (0.81 mi) southeast of project area	None
3473	Pettigrew 1982	Archaeological survey	1.35 km (0.84 mi) east- northeast of project area	None
18588	Darby and Bibb 2003	Cultural resources survey	1.38 km (0.86 mi) northwest of project area	None
21317	Buchanan and Ellis 2007	Cultural resources survey	1.44 km (0.90 mi) east of project area	None
19841	Cabebe 2005	Archaeological survey	1.46 km (0.91 mi) southeast of project area	None

Site 35CL398 consists of fragmented glass, metal, and ceramic artifacts dating between the early twentieth century and the present (Maceyko and Gall 2013). The Seely Ditch is a historic-period feature that was excavated by the Seely family in 1860 to drain Coffee Lake (Darby 2004a).

Historical maps and records on file at AINW were also examined to determine the probability of encountering pre-contact and historic-period archaeological resources within the current project area. The 1852 GLO map of the area shows an "Indian Trail" approximately 150 m (495 ft) north of the current project area (GLO 1852), suggesting a high probability of encountering pre-contact archaeological resources (Figure 1). Earlier work in the Portland Basin and the larger Willamette Valley has demonstrated that significant pre-contact archaeological resources are more likely to be found on terraces along rivers and streams, on high ground adjacent to marshes, and in specific resource areas visited routinely by Native Americans (Ames 1992:16-28; Beckham and Toepel 1983:4; Brauner and Robbins 1976:3,14; Jenkins and Soper 1989:5, 8-9; O'Brien et al. 2005; Pettigrew 1990). The likelihood of encountering a significant site increases where these environmental factors overlap and in areas with limited development (O'Brien et al. 2005; Smits et al. 2006).

As the project area is situated on the terraces of Coffee Lake Creek between Coffee Lake and its surrounding wetlands to the north and the Willamette River to the south, there is a high probability that pre-contact archaeological resources are present in the project area. Furthermore, U.S. Geologic Survey (USGS) maps and aerial photography show limited development within the project area between 1916 and the present, increasing the likelihood of encountering intact archaeological deposits (USGS 1916, 1939, 1940, 1954, 1961, 1985, 2011, 2014).

The SHPO Oregon Historic Sites Records database was reviewed for previously recorded historic resources that may be listed or eligible for listing in the National Register of Historic Places (NRHP) within the four proposed alternatives. Two historic resources were identified and are located at the northeastern and southeastern corners of the intersection of SW 5th Street and SW Boones Ferry Road. The building on the northeastern corner is identified as the Thornton Building and was built in 1900. It was moved from 2nd and Main Streets to its current location sometime during the early twentieth century (Koler and Morrison 1989a). The building on the southeastern corner is identified as the Norris Young Garage and was built in 1905 (Koler and Morrison 1989b).

Recommendations

AINW has completed a cultural resources review for the Boones Ferry Road to Brown Road Connector Corridor project in Wilsonville, Clackamas County. The records revealed that while portions of the current project area were previously surveyed, the project area remains largely unstudied. Three archaeological resources have been identified within 150 m (495 ft) of the current project area near an "Indian Trail" shown on an 1852 GLO map. Environmental variables and the limited amount of development within the project area also suggest a high probability of encountering archaeological resources.

There are four proposed alternatives, all of which cross Coffee Lake Creek and the P&W Railroad, a potential historic-period resource. The P&W Railroad may be considered eligible for listing in the NRHP; however, its NRHP-eligibility is not known without further research. All four alternatives also connect to SW Kinsman Road. The two historic buildings at the

intersections of SW 5th and SW Boones Ferry Road will need to be evaluated for listing in the NRHP if the South Alternative is chosen for the preferred alternative.

As currently proposed, the alternative that appears to have the least impact on cultural resources is the North Alternative to Bailey. This alternative connects from the existing SW Brown Road and follows a two-track farm road eastward, crossing Coffee Lake Creek, connecting to the existing SW Bailey Street (Figure 2). Cultural resources are protected under both State and Federal law and impacts to cultural resources within the North Alternative to Bailey or any of the other three proposed alternatives will not be fully known without a formal cultural resource study consisting of a pedestrian survey and shovel testing. Based on this review, AINW recommends a pedestrian survey and shovel testing once a preferred alignment is selected.

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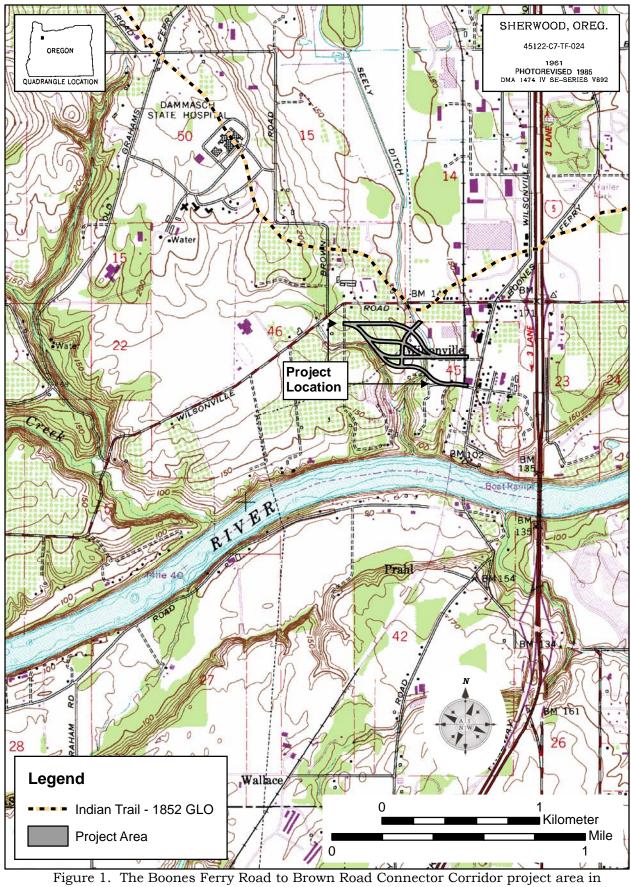
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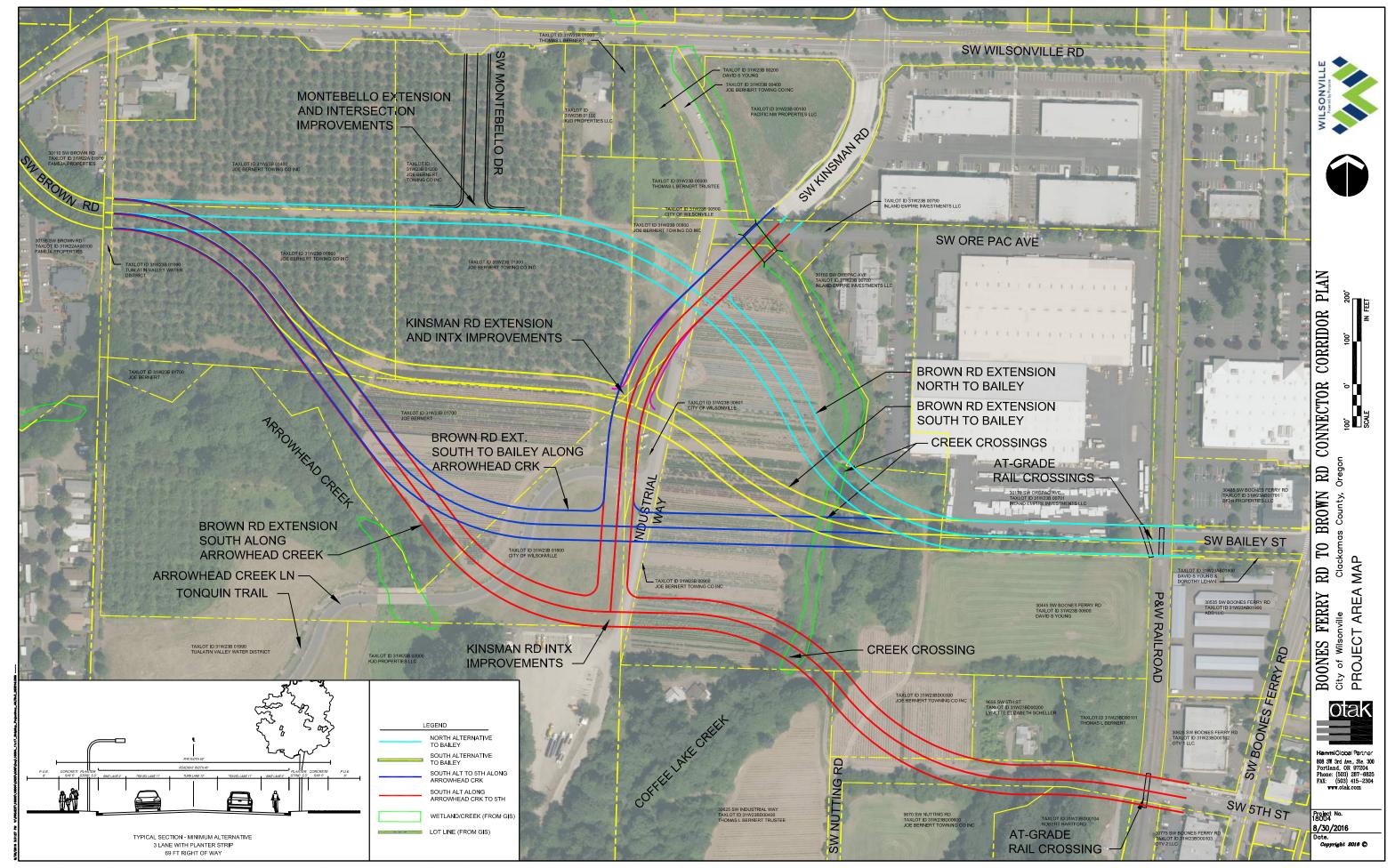


Figure 2. The Boones Ferry Road to Brown Road Connector Corridor project area showing the north and south alternative routes.

THOMAS W. WISER, P.E.

Consulting Railway Engineer



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503 / 691-6095 FAX 503 / 692-4753

ТО	Allen Hendy, PE	DATE	October 31, 2016
COMPANY	OTAK	PHONE	360-906-6786
ADDRESS	700 Washington St., Suite 401	PROJECT No.	16004
	Vancouver, WA 98660	PROJECT NAME	Wilsonville E-W Corridor

SUBJECT Rail Crossing Status and Recommendations

The City of Wilsonville is proposing an East-West Connector to provide traffic flow from Brown Road to Boones Ferry Road. This will involve crossing the Portland & Western Railroad, Oregon Electric District mainline at either Fifth Street or Bailey Street. Fifth St. is a permitted crossing with ODOT Rail. Bailey St. is a private crossing permitted with the Portland & Western Railroad (PNWR). We have met on site with Jason Sims (Director of Engineering) and Rob Rathburn (Roadmaster) from the PNWR and Rick Shankle (Manager, Crossing Safety) ODOT Rail to review the crossing proposals. Rick followed up with an email on July 13, 2016 outlining the ODOT Rail perspective for each crossing. The existing condition and requirements from PNWR and ODOT Rail for each crossing will be discussed in the following paragraphs.

Bailey Street

Currently, Bailey St. dead ends at the railroad right-of-way with a private crossing running parallel along south side that crosses the tracks. Private crossings are permitted with the railroad such that the property owner accepts all liability for the crossing. There is a spur track into OrePac starting just to the south of the proposed crossing location. This spur drops off a couple of feet in elevation to match to the existing paving elevation of the OrePac site. It continues north into one of the large buildings. The following are the conditions to be met to permit a crossing at this location:

- The OrePac siding will need to be raised 6 to 18 inches to match to the top of rail for the main line. This will have significant impact on the spur going into their site. It will require a significant area of the paving to be raised to provide for truck access and operations across the existing spur. There may be strong resistance from OrePac with this approach. It may be possible to skew the crossing to the south to reduce the amount of track raise on the spur. This may also reduce the amount of OrePac property required.
- The two track crossing is sufficiently close together that ODOT Rail will allow for a single set of railroad gates and lights instead of requiring a set at each track.
- The sidewalks will need to be oriented such that they are perpendicular to the tracks at each
 crossing. With the spur track curving away from the main line this will require additional space
 to provide this condition.
- The two tracks will each require track circuits. This will increase the cost of this crossing.
- ODOT Rail will require the closure of at least one public crossing on the same rail line, preferably 5th Street. In addition, the private crossing running adjacent to Bailey will need to be removed to allow placement of the public crossing. The PNWR is requiring 5th Street to be closed and would also prefer for the 2nd Street under crossing to be closed. The closure of 2nd may be

- negotiable considering the City is proposing to make this a pedestrian/bicycle only undercrossing.
- There are overhead power lines on both sides of the tracks. They may require modification due to the height and location of the raised gate arm.
- This crossing has reduced sight clearance for a westbound vehicle looking left and right due to the location of the storage facility to the south and the landscaping on the parking lot to the north. This will present a challenge to overcome at this crossing.

Fifth Street

Currently, Fifth street is a small gravel/timber crossing serving a number of home sites and private roads. There are no serious obstacles to developing this crossing with the following conditions to be met to permit a crossing at this location:

- As Fifth Street is currently an Ordered crossing with ODOT Rail, the permit process is extremely simplified. It will require the submission of an application showing the widened condition and the inclusion of the concrete surface and gates and lights. No crossing closures will be required.
- Sidewalks will need to be oriented perpendicular to the tracks. As the crossing is perpendicular to the main line this will allow for the simplest condition for the placement of sidewalks.
- There are overhead power lines on both sides of the tracks. They may require modification due to the height and location of the raised gate arm. There are poles immediately adjacent to the crossing which will locate the lines at their highest location so this may not be as much of an issue as at Bailey.
- ODOT Rail would like to see the private crossing at Bailey closed with access provided from the
 new roadway. Even though they do not have jurisdiction over the issuance of private crossings,
 they are concerned with reducing all crossings to help reduce safety issues. With easy access
 now available from the proposed new roadway, the Portland & Western will also require this
 crossing to be closed as it increases maintenance costs and track deterioration.
- Sight visibility is good for both vehicular directions as the extra right-of-way width for the old station on the east side provides good clear distance and there are no sight obstructions on the west side
- Provides an easy, perpendicular crossing with fairly level grades. Sidewalks should be easy to design.

ODOT Crossing Process

The ODOT Crossing process will be required for either crossing. The basic process is outlined below:

- Early efforts to build a consensus with ODOT Rail and the PNWR is essential. The process will simplify the time line further down the line by reviewing the proposed crossing plan with both parties periodically throughout the design process. Thus, when the application arrives, they are already in agreement and the process times can be reduced.
- At 60% design, it is recommended that a Draft application be submitted with all plans for review by the ODOT Rail Division. This allows the Rail Division to review and comment on the applications before it is required to follow the legislated process of review.
- At 90% design, the formal application may be completed and submitted by the City.
- Following Rail Division review, a Proposed Order (PO) will be developed and sent to the interested parties (railroads, road authorities, etc.). They have 20 days to comment. If there are no objections it moves to the finalization of the crossing Order. The interested parties have

60 days to request a reconsideration.

As outlined above, the 5th Street crossing will be the simplest to obtain the ODOT Rail Order and least expensive of the two crossings to construct from a rail perspective. The Rail Order process for 5th will also have fewer obstacles to overcome. Bailey Street has the following obstacles that may be more difficult to resolve:

- Raising the OrePac site There are no guarantees that OrePac will approve of the significant
 track raise in their yard. It has the potential to have a large impact to their operations. As it is
 a requirement for the crossing design, not obtaining this would eliminate this option from
 consideration. This aspect could have a big impact on the time frame to obtain the ODOT Rail
 Order.
- Closing one to two other crossings. There could be objections raised by those affected by the proposed closure of 5th Street that could delay the ODOT Rail process.
- Both of these issues as well as the more complication design will increase the cost and length
 of time to obtain the ODOT Order for the Bailey crossing.
- If the objections noted above can not be resolved to the satisfaction of all parties and objections are raised to ODOT Rail, there could be a significant increase in the time to obtain the Order. As OrePac is a client of the railroad, they may object to the Order due to the disruption of service and impacts to their facility. This would then send the process to court and can delay it for a number of years. The longest I've seen a contested process take is 10 years to finalize.

In conclusion, the 5th Street crossing appears to be the simplest of the crossing to permit and approve with ODOT Rail and the Portland & Wester Railroad. The significant obstacles to Bailey Street could have impacts to the cost and schedule of the permitting process.

Thank You,

Thomas W. Wiser, P.E. Consulting Railway Engineer

Thomas W Wide



Boones Ferry Road to Brown Road Connector Corridor Plan

Oct. 13, 2016

															P	reliminary	Const	ruction	
											Construction	Contingency			E	ingineering	Admini	istration	
Project	Roadway	S	Stormwater	Railroad	В	ridge	Utilities		Traffic	Landscaping	(Subtotal)	(30%)	P	.OW		(10%)	(7.	5%)	Total
Bailey Alternative, Phase 1	\$ 2,513,000	\$	761,000	\$ 853,000	\$	2,185,000	\$ 187,600	\$	766,100	\$ 110,500	\$ 7,375,400	\$ 2,212,700	\$	1,395,580	\$	959,000	\$	720,000	\$ 12,664,000
Bailey Alternative, Phase 2	\$ 1,017,000	\$	407,500	\$ -	\$	-	\$ 198,800	\$	171,500	\$ 84,000	\$ 1,879,000	\$ 563,700	\$	527,180	\$	245,000	\$	184,000	\$ 3,399,000
TOTAL	\$ 3,530,000	\$	1,168,500	\$ 853,000	\$	2,185,000	\$ 386,400	\$	937,600	\$ 194,500	\$ 9,254,400	\$ 2,776,400	\$	1,922,760	\$	1,204,000	\$	904,000	\$ 16,063,000
5th Alternative, Phase 1	\$ 2,434,000	\$	693,750	\$ 516,200	\$	2,330,000	\$ 198,800	Ş	538,850	\$ 108,400	\$ 6,820,400	\$ 2,046,120	\$	1,163,300	\$	887,000	\$	666,000	\$ 11,583,000
5th Alternative, Phase 2	\$ 1,062,000	\$	431,500	\$ -	\$	-	\$ 210,000	Ş	172,000	\$ 89,200	\$ 1,964,900	\$ 589,470	\$	434,000	\$	256,000	\$	192,000	\$ 3,437,000
TOTAL	\$ 3,496,000	\$	1,125,250	\$ 516,200	\$	2,330,000	\$ 408,800	\$	710,850	\$ 197,600	\$ 8,785,300	\$ 2,635,590	\$	1,597,300	\$	1,143,000	\$	858,000	\$ 15,020,000

Bailey St. Alternative					0 100 20
Study area (gross ac.)	Connector Road R/W (ac.)	Right of way (ac.)	Net Development Area (ac.)	Open Space	% open space
28.12	2.15	5.91	20.06	5.28	26.3%
Alley Load SF Detached Lots	Front Load SF Detached Lots		Total SF Lots	du/gross ac.	Usable open space (ac.)
60	80		140	5.0	0.91

Development Sum	mary				
5th St. Alternative				0	100 200
Study area (gross ac.)	Connector Road R/W (ac.)	Right of way (ac.)	Net Development Area (ac.)	Open Space	% open space
28.12	2.17	5.91	20.04	5.28	26.3%
Alley Load SF Detached Lots	Front Load SF Detached Lots		Total SF Lots	du/gross ac.	Usable open space (ac.)
60	80		140	5.0	0.91

	Preliminay - COST ESTIMATE - 2015	Items			
Boones I	Ferry Rd to Brown Rd Connector Corridor Plan - BAILEY ALTERNA	TIVE F	PH. 1		
	KIND OF WORK		DATE		
	Roadway, Earthwork, Structures, Drainage, Planting, Lighting, Signal		10/6/16		
SPEC SECTION	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
MOBILIZATION	AND TRAFFIC CONTROL				
	MOBILIZATION (10%)	LS	1	10.00%	\$619,780
	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC, COMPLETE (5%)	LS	1	5.00%	\$309,890
	EROSION CONTROL (4%)	LS	1	4.00%	\$247,912
	POLLUTION CONTROL PLAN	LS	1	\$2,500 \$10,000	\$2,500 \$10,000
0290-0102000A	WORK CONTAINMENT PLAN AND SYSTEM	Lo	1	\$10,000	\$10,000
ROADWORK					
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	\$25,000	\$25,000
0320-0100000A	CLEARING AND GRUBBING	LS	1	\$15,000	\$15,000
	GENERAL EXCAVATION	CUYD	7,800	\$15	\$117,000
0350-0105000J	SUBGRADE GEOTEXTILE	SQYD	15,000	\$1	\$15,000
EROSION CONT	POL				
	SEDIMENT FENCE	FOOT	6,000	\$2.00	\$12,000
	INLET PROTECTION, TYPE 2	EACH	85	\$75.00	\$6,375
1200 01140202					,
DRAINAGE AND	SEWERS				
	8 INCH SANITARY SEWER PIPE, 5 FT DEPTH	FOOT	1340	\$60	\$80,400
	12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	2600	\$75	\$195,000
	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	1340	\$80	\$107,200
	CONCRETE STORM SEWER MANHOLES CONCRETE INLETS, TYPE XXX	EACH	6 10	\$4,000 \$2.000	\$24,000 \$20,000
	BIORETENTION PONDS (LIDA)	LS	10	\$522,000	\$522,000
1011-02000007	BIONE TENTION I ONDO (LIDA)	LO		Ψ022,000	4022 ,000
STRUCTURES					
	STRUCTURE, KINSMAN @ COFFEE LAKE CREEK	LS	1	\$768,000	\$768,000
0595-0100000F	STRUCTURE, BROWN @ COFFEE LAKE CREEK	LS	1	\$1,417,000	\$1,417,000
BASES					
	AGGREGATE BASE	TON	6,100	\$32	\$195,200
0040-010000000	AGGILLONIE BAGE	1011	0,100	ΨΟΣ	ψ100,200
WEARING SURF	ACES				
	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	2,750	\$95	\$261,250
	ASPHALT APPROACHES	EACH	5	\$500	\$2,500
	PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK	SQYD	3,500	\$90	\$315,000
	CONCRETE CURBS, CURB AND GUTTER				007.400
0750 04050005	COMODETE OLIDDO OLIDD AND OLITTED MODIFIED	_	3,050	\$22	\$67,100
	CONCRETE CURBS, CURB AND GUTTER, MODIFIED	FOOT	3,400	\$25	\$85,000
0759-0100000F	CONCRETE CURBS, STANDARD CURB	_	3,400 1,840	\$25 \$18	\$85,000 \$33,120
0759-0100000F 0759-0127000J	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED	FOOT FOOT	3,400	\$25	\$85,000 \$33,120 \$10,400
0759-0100000F 0759-0127000J	CONCRETE CURBS, STANDARD CURB	FOOT FOOT SQFT	3,400 1,840 1,300	\$25 \$18 \$8.00	\$85,000 \$33,120
0759-010000F 0759-0127000J 0759-0128000J PERMANENT TR	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES	FOOT FOOT SQFT SQFT	3,400 1,840 1,300 32,450	\$25 \$18 \$8.00 \$5.00	\$85,000 \$33,120 \$10,400 \$162,250
0759-010000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED	FOOT FOOT SQFT SQFT FOOT	3,400 1,840 1,300 32,450	\$25 \$18 \$8.00 \$5.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS	FOOT SQFT SQFT SQFT FOOT EACH	3,400 1,840 1,300 32,450 12,500 30	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900
0759-010000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED	FOOT FOOT SQFT SQFT FOOT	3,400 1,840 1,300 32,450	\$25 \$18 \$8.00 \$5.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS	FOOT SQFT SQFT SQFT FOOT EACH	3,400 1,840 1,300 32,450 12,500 30	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J PERMANENT TF	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS	FOOT SQFT SQFT SQFT FOOT EACH	3,400 1,840 1,300 32,450 12,500 30	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS RAFFIC CONTROL AND ILLUMINATION SYSTEMS	FOOT SQFT SQFT SQFT FOOT EACH SQFT	3,400 1,840 1,300 32,450 12,500 30 275	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS RAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE	FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 13	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH	3,400 1,840 1,300 32,450 12,500 30 275 11 13 1 2	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000 \$250,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000 \$500,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS RAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS	FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 13	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH	3,400 1,840 1,300 32,450 12,500 30 275 11 13 1 2	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000 \$250,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000 \$500,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXXX 0970-XXXXXXXXXX X RIGHT OF WAY	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 1 3 1 1 2	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000 \$250,000 \$100,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$15,000 \$15,000 \$10,000 \$100,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXXX RIGHT OF WAY	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH	3,400 1,840 1,300 32,450 12,500 30 275 11 13 1 2	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$853,000 \$250,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000 \$500,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXXX RIGHT OF WAY 1030-XXXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 1 3 1 2 1	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$500,000 \$100,000
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXX 0990-0101000A 0990-XXXXXXXX 0990-0101000A 0990-XXXXXXXXX 0900-0101000A 0990-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS RAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000 \$8.00 \$100,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$500,000 \$100,000 \$110,400 \$0 \$0
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXX 0990-0101000A 0990-XXXXXXXX 0990-0101000A 0990-XXXXXXXXX 0900-0101000A 0990-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PARMENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION NSTRUCTION ITEMS	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000 \$100,000.00 \$175,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$500,000 \$100,000 \$10,400 \$0 \$0 \$0
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXX 0990-0101000A 0990-XXXXXXXX 0990-0101000A 0990-XXXXXXXXX 0900-0101000A 0990-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS RAFFIC CONTROL AND ILLUMINATION SYSTEMS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000 \$8.00 \$100,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$500,000 \$100,000 \$110,400 \$0 \$0
0759-0100000F 0759-0127000J 0759-0128000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXX 1040-XXXXXXXX SUBTOTAL, CO	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION NSTRUCTION ITEMS CONTINGENCIES	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000 \$100,000.00 \$175,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$853,000 \$100,000 \$100,000 \$0 \$0 \$7,375,400 \$2,212,700
0759-0100000F 0759-0127000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-01XXXXX 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXX RIGHT OF WAY 1030-XXXXXXXX 1040-XXXXXXXX	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION NSTRUCTION ITEMS CONTINGENCIES	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000.00 \$100,000.00 \$175,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$1,500 \$6,900 \$1,650 \$15,000 \$15,000 \$150,000 \$100,000 \$500,000 \$110,400 \$0 \$0 \$7,375,400 \$2,212,700
0759-0100000F 0759-0127000J 0759-0128000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXX 1040-XXXXXXXX SUBTOTAL, CO	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION NSTRUCTION ITEMS CONTINGENCIES	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000 \$100,000.00 \$175,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$12,500 \$6,900 \$1,650 \$15,000 \$130,000 \$530,000 \$100,000 \$0 \$0 \$7,375,400 \$2,212,700
0759-0100000F 0759-0127000J 0759-0128000J 0759-0128000J PERMANENT TF 0865-0160000F 0867-0144000J PERMANENT TF 0940-XXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0970-XXXXXXXX 0990-0101000A 0990-XXXXXXXX 1040-XXXXXXXX SUBTOTAL, CO	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED CONCRETE WALKS RAFFIC SAFETY AND GUIDANCE DEVICES THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED PAVEMENT LEGEND, TYPE B-HS PAVEMENT BAR, TYPE B-HS PAVEMENT BAR, TYPE B-HS PERMANENT SIGNS, COMPLETE STREET LIGHTING SYSTEM, COMPLETE RAILROAD CROSSING COSTS TRAFFIC SIGNAL INSTALLATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE BUFFER MITIGATION WETLAND MITIGATION NSTRUCTION ITEMS CONTINGENCIES RUCTION COST PRELIMINARY ENGINEERING COSTS	FOOT FOOT SQFT SQFT FOOT EACH SQFT LS EACH LS EACH LS	3,400 1,840 1,300 32,450 12,500 30 275 1 1 3 1 1 2 1 1 3,800 0.00	\$25 \$18 \$8.00 \$5.00 \$1.00 \$230 \$6 \$15,000 \$10,000.00 \$250,000 \$100,000.00 \$100,000.00 \$175,000.00	\$85,000 \$33,120 \$10,400 \$162,250 \$1,500 \$6,900 \$1,650 \$15,000 \$130,000 \$500,000 \$100,000 \$110,400 \$0 \$0 \$2,212,700 \$958,000 \$959,000

	Preliminay - COST ESTIMATE - 2015	Items					
Boones I	S Ferry Rd to Brown Rd Connector Corridor Plan - BAILEY ALTERNATIVE PH. 2 KIND OF WORK DATE						
SPEC SECTION	Roadway, Earthwork, Structures, Drainage, Planting, Lighting, Signal	UNIT	10/6/16 AMOUNT	UNIT COST	TOTAL		
	AND TRAFFIC CONTROL	UNII	AWOUNT	UNIT COST	TOTAL		
	MOBILIZATION (10%)	LS	1	10.00%	\$157,890		
	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC, COMPLETE (5%)	LS	1	5.00%	\$78,945		
	EROSION CONTROL (4%)	LS	1	4.00%	\$63,156		
	POLLUTION CONTROL PLAN	LS	1	\$2,500	\$2,500		
0290-0102000A	WORK CONTAINMENT PLAN AND SYSTEM	LS	1	\$10,000	\$10,000		
ROADWORK							
	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	\$5,000	\$5,000		
0320-0100000A	CLEARING AND GRUBBING	LS	1	\$10,000	\$10,000		
0330-0105000K	GENERAL EXCAVATION	CUYD	3,700	\$15	\$55,500		
0350-0105000J	SUBGRADE GEOTEXTILE	SQYD	10,200	\$1	\$10,200		
0280-0113000F	ROL SEDIMENT FENCE	FOOT	3,200	\$2.00	\$6,400		
	INLET PROTECTION, TYPE 2	EACH	28	\$75.00	\$2,100		
0200-0 1 14020E	INCLUTION, THE Z	LAUIT	0	ψ. σ.σσ	Ψ=,100		
DRAINAGE AND) SEWERS						
	8 INCH SANITARY SEWER PIPE, 5 FT DEPTH	FOOT	1420	\$60	\$85,200		
	12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	1420	\$75	\$106,500		
	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	1420	\$80	\$113,600		
	CONCRETE STORM SEWER MANHOLES	EACH	3	\$4,000	\$12,000		
	CONCRETE INLETS, TYPE XXX	EACH	2	\$2,000	\$4,000		
1011-0200000A	BIORETENTION PONDS (LIDA)	LS	1	\$285,000	\$285,000		
STRUCTURES							
	STRUCTURE, KINSMAN @ COFFEE LAKE CREEK	LS	1	\$0	\$0		
0595-0100000F	STRUCTURE, BROWN @ COFFEE LAKE CREEK	LS	1	\$0	\$0		
BASES		TON	0.700	200	0110 100		
0640-0100000M	AGGREGATE BASE	TON	3,700	\$32	\$118,400		
WEARING SURF	FACES						
	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	2,600	\$95	\$247,000		
	ASPHALT APPROACHES	EACH	5	\$500	\$2,500		
	PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK	SQYD	0	\$90	\$0		
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	FOOT	825	\$22	\$18,150		
0759-0105000F	CONCRETE CURBS, CURB AND GUTTER, MODIFIED	FOOT	2,375	\$25	\$59,375		
0759-0100000F	CONCRETE CURBS, STANDARD CURB	FOOT	2,300	\$18	\$41,400		
	CONCRETE DRIVEWAYS, REINFORCED	SQFT	1,500	\$8.00	\$12,000		
0759-0128000J	CONCRETE WALKS	SQFT	23,300	\$5.00	\$116,500		
DEDMANENT TO	RAFFIC SAFETY AND GUIDANCE DEVICES						
	THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED	FOOT	8,500	\$1.00	\$8,500		
	PAVEMENT LEGEND, TYPE B-HS	EACH	10	\$230	\$2,300		
	PAVEMENT BAR, TYPE B-HS	SQFT	120	\$6	\$720		
	RAFFIC CONTROL AND ILLUMINATION SYSTEMS						
	PERMANENT SIGNS, COMPLETE	LS	1	\$5,000	\$5,000		
	STREET LIGHTING SYSTEM, COMPLETE	EACH	8	\$10,000.00	\$80,000		
	RAILROAD CROSSING COSTS	LS	1	\$0 \$75,000	\$0 \$75,000		
	TRAFFIC SIGNAL MODIFICATION INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX	LS	1	\$75,000 \$0	\$75,000		
	THE THE PROPERTY OF THE PROPER		-	ΨΟ	ΨΟ		
RIGHT OF WAY	DEVELOPMENT AND CONTROL						
030-XXXXXXX	MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE	SQFT	10,500	\$8.00	\$84,000		
040-XXXXXXXX	BUFFER MITIGATION	ACRE	0.00	\$100,000.00	\$0		
040-XXXXXXXX	WETLAND MITIGATION	ACRE	0.00	\$175,000.00	\$0		
NIDTOTAL CO	NOTELIATION ITEMS				A4 CT0 CT		
SUBTUTAL, CO	NSTRUCTION ITEMS			30.00/	\$1,879,00		
	CONTINGENCIES			30.0%	\$563,700		
	RUCTION COST				\$2,443,00		
TOTAL CONSTR							
TOTAL CONSTR	PRELIMINARY ENGINEERING COSTS			10.0%	\$245.000		
TOTAL CONSTR	PRELIMINARY ENGINEERING COSTS CONSTRUCTION ENGINEERING COSTS			10.0% 7.5%			
FOTAL CONSTR		LS	1		\$245,000 \$184,000 \$527,180		

	Preliminay - COST ESTIMATE - 2015	Items			
Boones	s Ferry Rd to Brown Rd Connector Corridor Plan - 5TH ALTERNAT	IVE PH			
	KIND OF WORK		DATE		
	Roadway, Earthwork, Structures, Drainage, Planting, Lighting, Signal		10/6/16		
SPEC SECTION	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
	AND TRAFFIC CONTROL				
	MOBILIZATION (10%)	LS	1	10.00%	\$573,140
	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC, COMPLETE (5%) EROSION CONTROL (4%)	LS	1	5.00% 4.00%	\$286,570 \$229,256
	POLLUTION CONTROL (4%)	LS	1	\$2,500	\$2,500
	WORK CONTAINMENT PLAN AND SYSTEM	LS	1	\$10,000	\$10,000
ROADWORK	DEMOVAL OF STRUCTURES AND SPECTRUCTIONS	10	4	000,000	#00.000
	REMOVAL OF STRUCTURES AND OBSTRUCTIONS CLEARING AND GRUBBING	LS	1	\$20,000 \$15,000	\$20,000 \$15,000
	GENERAL EXCAVATION	CUYD	7,600	\$15	\$114,000
	SUBGRADE GEOTEXTILE	SQYD	14,600	\$1	\$14,600
EROSION CONT		Ec.			A
	SEDIMENT FENCE	FOOT	5,800 80	\$2.00	\$11,600
∪∠&U-U114020E	INLET PROTECTION, TYPE 2	EACH	00	\$75.00	\$6,000
DRAINAGE AND	SEWERS				
	8 INCH SANITARY SEWER PIPE, 5 FT DEPTH	FOOT	1420	\$60	\$85,200
	12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	2450	\$75	\$183,750
	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	1420	\$80	\$113,600
	CONCRETE STORM SEWER MANHOLES CONCRETE INLETS, TYPE XXX	EACH	5	\$4,000 \$2,000	\$20,000 \$10,000
	BIORETENTION PONDS (LIDA)	EACH LS	5 1	\$480,000	\$480,000
1011 020000071	BIORETERMIONT ONDO (EIDA)			ψ100,000	ψ100,000
STRUCTURES					
	STRUCTURE, KINSMAN @ COFFEE LAKE CREEK	LS	1	\$768,000	\$768,000
0595-0100000F	STRUCTURE, BROWN @ COFFEE LAKE CREEK	LS	1	\$1,562,000	\$1,562,000
BASES					
	AGGREGATE BASE	TON	5,820	\$32	\$186,240
WEARING SURF					
	LEVEL 3, 1/2 INCH ACP MIXTURE	TON EACH	2,230	\$95	\$211,850
	ASPHALT APPROACHES PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK	SQYD	5 4,350	\$500 \$90	\$2,500 \$391,500
	CONCRETE CURBS, CURB AND GUTTER	FOOT	2,500	\$22	\$55,000
	CONCRETE CURBS, CURB AND GUTTER, MODIFIED	FOOT	4,000	\$25	\$100,000
0759-0100000F	CONCRETE CURBS, STANDARD CURB	FOOT	1,900	\$18	\$34,200
	CONCRETE DRIVEWAYS, REINFORCED	SQFT	1,300	\$8.00	\$10,400
0759-0128000J	CONCRETE WALKS	SQFT	32,000	\$5.00	\$160,000
PERMANENT TE	RAFFIC SAFETY AND GUIDANCE DEVICES				
	THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED	FOOT	15,300	\$1.00	\$15,300
0867-01XXXXXX	PAVEMENT LEGEND, TYPE B-HS	EACH	30	\$230	\$6,900
0867-0144000J	PAVEMENT BAR, TYPE B-HS	SQFT	275	\$6	\$1,650
	ALEELO CONTROL AND IL LUMINATION OVOTENO				
	PERMANENT SIGNS, COMPLETE	LS	1	\$15,000	\$15,000
	STREET LIGHTING SYSTEM, COMPLETE	EACH	10	\$10,000.00	\$100,000
	RAILROAD CROSSING COSTS	LS	1	\$516,200	\$516,200
0990-0101000A	TRAFFIC SIGNAL INSTALLATION	EACH	1	\$250,000	\$250,000
990-XXXXXXX	INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX	LS	1	\$150,000	\$150,000
DIGHT OF WAY	DEVELOPMENT AND CONTROL			<u></u>	
	DEVELOPMENT AND CONTROL MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE	SQFT	13,550	\$8.00	\$108,400
	BUFFER MITIGATION	ACRE	0.00	\$100,000.00	\$108,400
	WETLAND MITIGATION	ACRE	0.00	\$175,000.00	\$0
SUBTOTAL, COI	NSTRUCTION ITEMS				\$6,820,400
	CONTINGENCIES	-		30.0%	\$2,046,120
	UICTION COST				\$8,867,000
TOTAL CONSTR	OUT OUT				
	PRELIMINARY ENGINEERING COSTS			10.0%	\$887,000
	PRELIMINARY ENGINEERING COSTS CONSTRUCTION ENGINEERING COSTS			10.0% 7.5%	\$887,000 \$666,000
	CONSTRUCTION ENGINEERING COSTS ROW (21 Total Files, 96,820 SF)	LS	1		

Boones	s Ferry Rd to Brown Rd Connector Corridor Plan - 5TH ALTERNAT	IVE PH	l. 2		
	KIND OF WORK		DATE		
	Roadway, Earthwork, Structures, Drainage, Planting, Lighting, Signal		10/6/16		
SPEC SECTION	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
	AND TRAFFIC CONTROL			,	
	MOBILIZATION (10%)	LS	1	10.00% 5.00%	\$165,110 \$82,555
	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC, COMPLETE (5%) EROSION CONTROL (4%)	LS	1	4.00%	\$66,044
	POLLUTION CONTROL PLAN	LS	1	\$2,500	\$2,500
	WORK CONTAINMENT PLAN AND SYSTEM	LS	1	\$10,000	\$10,000
ROADWORK	DEMOVAL OF STRUCTURES AND SPOTPHOTIONS	1.0		# F 000	#F 000
	REMOVAL OF STRUCTURES AND OBSTRUCTIONS CLEARING AND GRUBBING	LS	1	\$5,000 \$10,000	\$5,000 \$10,000
	GENERAL EXCAVATION	CUYD	3,900	\$10,000	\$58,500
	SUBGRADE GEOTEXTILE	SQYD	10,800	\$1	\$10,800
			-,	·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
EROSION CONT					
	SEDIMENT FENCE	FOOT	3,400	\$2.00	\$6,800
0280-0114020E	INLET PROTECTION, TYPE 2	EACH	29	\$75.00	\$2,175
DRAINAGE AND	SEWERS				
	8 INCH SANITARY SEWER PIPE, 5 FT DEPTH	FOOT	1500	\$60	\$90,000
	12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	1500	\$75	\$112,500
0445-060012AF	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	1500	\$80	\$120,000
	CONCRETE STORM SEWER MANHOLES	EACH	3	\$4,000	\$12,000
	CONCRETE INLETS, TYPE XXX	EACH	2	\$2,000	\$4,000
1011-0200000A	BIORETENTION PONDS (LIDA)	LS	1	\$303,000	\$303,000
STRUCTURES					
	STRUCTURE, KINSMAN @ COFFEE LAKE CREEK	LS	1	\$0	\$0
0595-0100000F	STRUCTURE, BROWN @ COFFEE LAKE CREEK	LS	1	\$0	\$0
BASES	ACCRECATE BACE	TON	0.700	# 20	0440 400
0640-0100000M	AGGREGATE BASE	TON	3,700	\$32	\$118,400
WEARING SURF	FACES				
	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	2,750	\$95	\$261,250
0749-0110000E	ASPHALT APPROACHES	EACH	5	\$500	\$2,500
	PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK	SQYD	0	\$90	\$0
	CONCRETE CURBS, CURB AND GUTTER	FOOT	875	\$22	\$19,250
	CONCRETE CURBS, CURB AND GUTTER, MODIFIED	FOOT	2,520	\$25	\$63,000 \$41,400
	CONCRETE CURBS, STANDARD CURB CONCRETE DRIVEWAYS, REINFORCED	FOOT	1,600	\$18 \$8.00	\$41,400
	CONCRETE DRIVEWATS, REINFORCED CONCRETE WALKS	SQFT	24,800	\$5.00	\$124,000
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PERMANENT TE	RAFFIC SAFETY AND GUIDANCE DEVICES				
0865-0160000F	THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED	FOOT	9,000	\$1.00	\$9,000
	PAVEMENT LEGEND, TYPE B-HS	EACH	10	\$230	\$2,300
0867-0144000J	PAVEMENT BAR, TYPE B-HS	SQFT	120	\$6	\$720
PERMANENT TE	RAFFIC CONTROL AND ILLUMINATION SYSTEMS				
	PERMANENT SIGNS, COMPLETE	LS	1	\$5,000	\$5,000
970-XXXXXXX	STREET LIGHTING SYSTEM, COMPLETE	EACH	8	\$10,000.00	\$80,000
970-XXXXXXX	RAILROAD CROSSING COSTS	LS	1	\$0	\$0
	TRAFFIC SIGNAL MODIFICATION	LS	1	\$75,000	\$75,000
990-XXXXXXXX	INTERSECTION IMPROVEMENTS, BOONES FERRY RD INTX	LS	1	\$0	\$0
RIGHT OF WAY	DEVELOPMENT AND CONTROL				
	MEDIAN AND PLANTER STRIP PLANTINGS, COMPLETE	SQFT	11,150	\$8.00	\$89,200
	BUFFER MITIGATION	ACRE	0.00	\$100,000.00	\$0
	WETLAND MITIGATION	ACRE	0.00	\$175,000.00	\$0
SUBTOTAL, CO	NSTRUCTION ITEMS				\$1,964,90
	CONTINGENCIES			30.0%	\$589,470
OTAL CONST	RUCTION COST				\$2,555,00
JIAL GONOTI	PRELIMINARY ENGINEERING COSTS			10.0%	\$2,555,00
	CONSTRUCTION ENGINEERING COSTS	t		7.5%	\$192,000
	CONSTRUCTION ENGINEERING COSTS				
	ROW (4 Total Files, 119,423 SF)	LS	1	\$434,000	\$434,000

Boones Ferry Road to Brown Road Connector Corridor Plan Alignment Alternative Evaluation

10/26/2016

Meets criteria / Lowest impact / Best Does not meet criteria / Highest impact

				Does not meet criteria / Highest impact
Theme	Goal / Issue	Evaluation Criteria	Connect at Bailey St	Connect at 5th Street
	Minimize physical changes to Boones Ferry Road in Old Town.	Requires minimal redesign/construction of Boones Ferry Road.	Bailey has sufficient width to accommodate turning movement. Bike lanes exist on both sides of Boones Ferry Road north of Bailey.	Remove curb extensions and parking on 5th to accommodate left turn lane on 5th. NB bike lane needed on Boones Ferry Road north of 5th.
How will it change or enhance community character?	Minimize traffic intrusions into north end of Old Town.	2035 ADT on Boones Ferry Road between Bailey and 5th.	No additional impact on Boones Ferry Road south of Bailey.	Increase of approximately 3,900 vehicles per day (year 2035) on Boones Ferry Road between Bailey and 5th.
character:	Maximize the number of businesses served by the Connector.	Number of existing commercial businesses served by new Connector.		Leads people to more businesses and directly serves those at Boones Ferry and 5th.
	Connect residential neighborhoods to commercial nodes.	Shortest distance from west neighborhoods (e.g. Villebois) to commercial sites (e.g. Fred Meyer).	Bailey is better for neighborhood-to-commercial connectivity.	
	Connect residential neighborhoods to each other.	Shortest distance between west neighborhoods (e.g. Villebois) and Old Town.		5th is better for neighborhood-to-parks and neighborhood-to-neighborhood connections.
	Reduce traffic on Wilsonville Road, at the intersection with Boones Ferry	Reduction in forecasted trips through Wilsonville Road / Boones Ferry Road intersection.	2035 traffic estimated at 4,000 vehicles per day	2035 traffic estimated at 3,900 vehicles per day
How will it affect travel in the area?	Provides an attractive route for biking between destinations (western Wilsonville to Fred Meyer).	Directness of route for biking from the intersection of Wilsonville Road and Brown Road to Fred Meyer.	Bike travel time would be less and a bit more direct.	
	Provides an attractive route for biking between neighborhoods and parks.	Directness of route between Morey's Landing and Boones Ferry Park.		5th provides a better connection to the RR xing at 2nd St and a more direct path to Boones Ferry Park and the future French Prairie Bridge.
	Major roadway network spacing	TSP - connectivity and spacing, 2,600 feet between Collector and Arterial	Bailey is 1,170 feet south of Wilsonville Rd	5th is 1,820 feet south of Wilsonville Road
	Reduce the congestion created in the vicinity during peak periods.	Allows vehicles queuing on Boones Ferry Road to access Wilsonville Road.	Meets intersection spacing standards, but over the long-term may be impacted by northbound queuing vehicles.	Provides the most space for northbound vehicles queuing at signals.
	Minimize total cost of construction.	Rank in order of total cost, not including ROW acquisition.	\$12.7 million, total Phase 1; likely additional costs related to mitigating impacts to OrePac operations.	\$11.6 million, total Phase 1; will require additional funds to reconstruct part of Boones Ferry Road.
What is the cost?	Minimize ROW acquisition.	Rank in order of total ROW cost.	\$1.4 million, Phase 1 (included in total costs above)	\$1.2 million, Phase 1 (included in total costs above) This option utilizes more existing ROW and City-owned property.
	Minimize other costs associated with permitting and mitigation.	Ease of obtaining the ODOT Rail Order and addressing construction impacts to OrePac.	This option would require a separate local road to connect to 5th and Nutting.	
How will it affect the environment?	Minimize span length of structures over Coffee Lake Creek. Span length is an indicator of environmental impacts and required mitigation.	Span length for Connector structure OR estimated total footprint of the bridge structure.		Larger impact area for 5th than for Bailey.
How will it affect	Minimize impacts to existing businesses.	Reduces or requires modification to access private property.	Impacts to OrePac operations.	Impacts of potential on-street parking removal.
property in the area?	Maintain industrial lots and development potential.	Establishes rail crossings and alignments that maintains and enhances access to industrial lots.	Requires splitting of the industrial lots west of the railroad tracks.	Provides sanitary service to a greater number of parcels.
	Control risks related to property impacts.	Minimize reconstruction of existing infrastructure.	Requires reconstruction of OrePac siding.	Requires removal of existing curb extensions.
Is there a higher risk related to building the	Control risks related to railroad crossings.	Minimize timing for permitting related to rail crossing (schedule impacts).	Requires closing a public crossing at 5th and converting another private crossing to a public crossing; requires more time.	OrePac has indicated they are willing to relinquich the private crossing at Bailey. Preferred by ODOT Rail and Portland & Western Railroad.
corridor?	Control risks related to constructability.	Minimize development in areas with construction challenges.	Requires possilbe temporary closure of OrePac when RR spur is reconstructed.	

Alignment Alternative Evaluation

The Alignment Options perform substantially equally against the following criteria:

Theme	Criterion			
How will it change or				
enhance community character?	Minimize the duration of construction.			
	Forecasted intersection operations should meet City standards.			
	Minimize travel time for vehicles using the Connector.			
	Create the best opportunity to use the Connector as a transit route.			
	Enhance freight vehicle maneuverability.			
How will it affect travel in	Implementation of the Tonquin Trail.			
the area?	improvements to emergency access to and from Old Town.			
	Ability to separate people walking and biking from freight use.			
	Reduction in forecasted trips through the Wilsonville Rd and Boones Ferry Rd intersection.			
	Meets minor collector roads access spacing standards of 1,000' (desired) and 600' (minimum).			
	Creek crossing permit and related impacts to schedule.			
	Minimizes impacts to areas susceptible to slope erosion, liquefaction and lateral spread.			
How will it affect the	Minimizes potential impacts to cultural resources.			
environment?	Avoids impacts to the forested stand near SW 5th Ave that may provide required riparian buffer to a seasonal drainageway and high quality upland habitat.			
	Minimizes impacts to areas susceptible to slope erosion, liquefaction and lateral spread			
How will it affect property in	Minimize closure of existing public and private access points, rail crossings and spur alignments.			
the area?	Number of lots that could be created in a contiguous subdivision.			

TECHNICAL MEMORANDUM

DATE:

October 27, 2016

TO:

Steve Adams, P.E., City of Wilsonville

FROM:

Scott Mansur, P.E., PTOE

Jordin Ketelsen, EIT

SUBJECT:

Boones Ferry Road to Brown Road Connector Alternatives Analysis

SHERED PROFESSION STANDARD STA



117 Commercial Street NE Suite 310 Salem, OR 97301 503.391.8773 www.dksassociates.com

P16112-000

Background

This memorandum expands upon the Existing and Future Conditions Memorandum which included existing and future conditions analysis on the proposed Boones Ferry Road to Brown Road Connector in Wilsonville, Oregon. ¹ That analysis was performed to set the stage for the comparison of two Boones Ferry Road to Brown Road Connector alternatives, both of which will extend from the existing south end of Brown Road but differ on where they will connect to Boones Ferry Road. The Bailey Street



Congestion on Wilsonville Road

Alternative will connect to Boones Ferry Road at Bailey Street and the 5th Street Alternative will connect to Boones Ferry Road at 5th Street. This memorandum documents the comparison of the two alternatives and provides a summary of the findings.

¹ Boones Ferry Road to Brown Road Connector Study - Existing and Future Conditions, DKS Associates, August 2016, 2016



Comparison of Alternatives

The following section includes discussion on the comparison of the two Boones Ferry Road to Brown Road Connector alternatives. Figure 1 below shows the two alternatives (conceptually) and the study area. Factors such as traffic volumes, intersection operations, corridor travel times, lane configuration needs, and transit service are considered for the two alternatives, and are detailed in the rest of the memorandum.

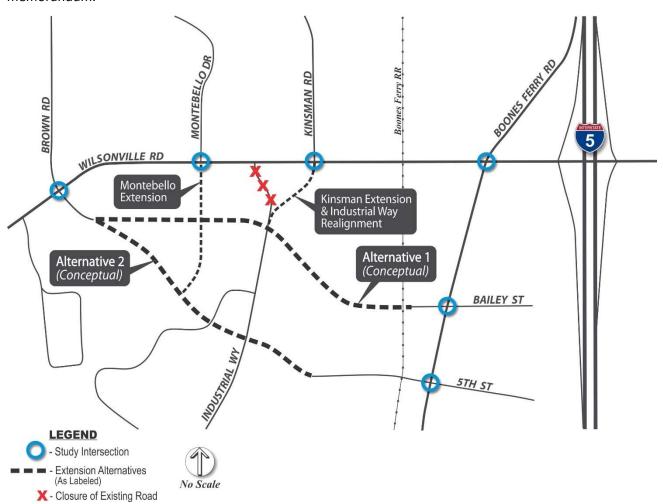


Figure 1: Boones Ferry Road to Brown Road Connector Alignment Alternatives Conceptual Drawing

Traffic Volumes

Future traffic forecasts were performed for a 2035 horizon year based on the Metro Gamma Model that was refined for the City of Wilsonville. This model assumes the full buildout of the current land use zoning in the comprehensive plan (even if currently vacant) as well as full buildout of the higher priority transportation projects documented in the TSP such as the Kinsman Road extension, Villebois Drive extension, Barber Street extension, and many more.



Within the study area, the model used Highway Capacity Manual node delays at the intersections and travel times on the roadway links to perform the traffic assignment. The raw model volumes were post-processed to estimate 2035 turn movement volumes as well as the assumed lane configurations at the future study intersections which are shown in Figure 2 (Bailey Street Alternative) and Figure 3 (5th Street Alternative) on the following pages.

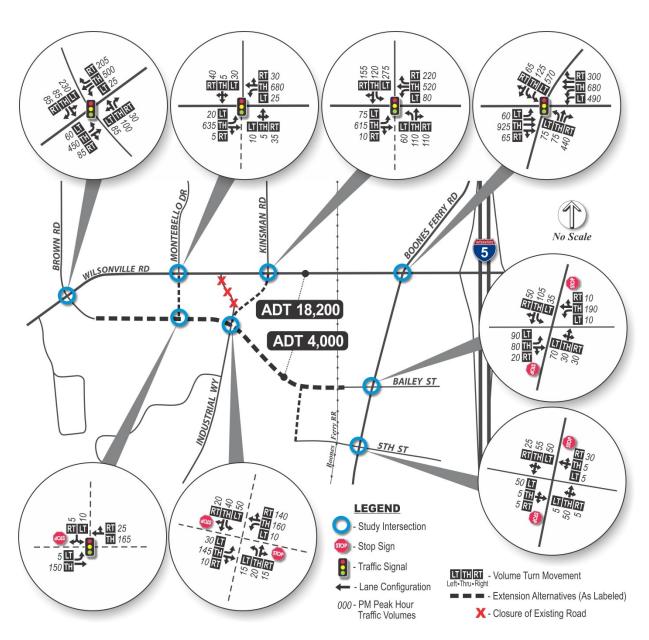


Figure 2: Brown Rd to Bailey St Alternative – 2035 Future PM Peak Hour Traffic Volumes



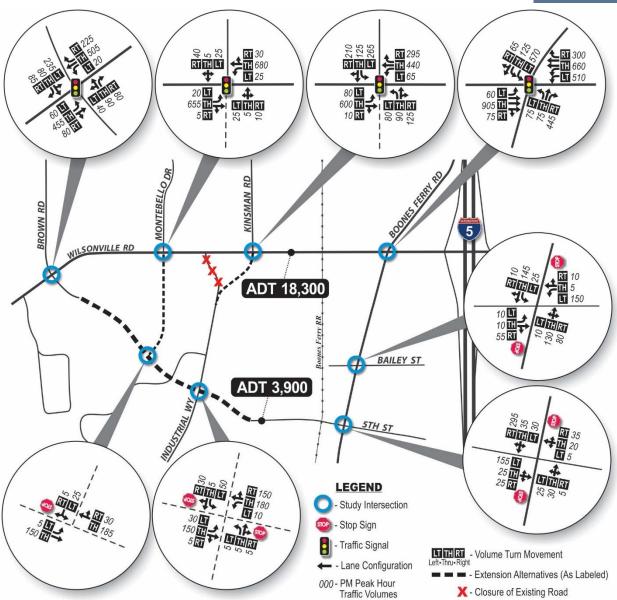


Figure 3: Brown Rd to 5th St Alternative – 2035 Future PM Peak Hour Traffic Volumes

As shown, traffic volumes are similar between the two alternatives although the Bailey Street Alternative is projected to divert slightly more vehicles per day off of Wilsonville Road with an approximate Average Daily Traffic (ADT) of 4,000 vehicles per day whereas the 5th Street Alternative is projected to divert approximately 3,900 vehicles per day off of Wilsonville Road.

Boones Ferry Road to Brown Road Connector Alternatives Analysis October 27, 2016 Page 5 of 10



However, the volumes expected on Boones Ferry Road between Bailey Street and 5th Street are expected to change significantly from existing conditions under the implementation of the 5th Street Alternative (5th Street Connection). Currently, the average daily traffic (ADT) on Boones Ferry Road between 5th Street and Bailey Street is approximately 2,100 vehicles per day. Under the future Bailey Street Alternative scenario, the ADT is expected to increase to 2,300 vehicles per day, and under the future 5th Street Alternative scenario, the ADT is expected to increase to 5,300 vehicles per day. The area between 5th Street and Bailey Street is currently fronting residential on the east side and a mix of commercial and industrial uses on the west. An increase of approximately 3,200 vehicles per day from existing conditions in that area would be a significant change for the residents. However, the Old Town Neighborhood Plan (October 2007 Draft) Comprehensive Plan proposes a Main Street Commercial Zone on both sides of Boones Ferry Road between 4th Street and Bailey Street.

Alternative Lane Configurations

Based on estimated traffic volumes and a review of intersection operations, recommended lane configurations were determined for the planned intersection approaches of Bailey Street, 5th Street, and Montebello Drive as well as for the two new intersections where the proposed connector intersects with Montebello Drive and Kinsman Road roadway extensions.

The two Boones Ferry Road to Brown Road Connector alternatives connect to Boones Ferry Road at different locations. Therefore, the lane configurations for the new or improved intersection approaches to Boones Ferry Road are different depending on the Boones Ferry Road connection location. Although the street has not been striped, the west leg at the Boones Ferry Road/Bailey Street intersection has been constructed to accommodate two 6-foot bike lanes, two 11-foot travel lanes and a 14-foot left-turn lane, and thus, could provide a left turn pocket due to the existing width. With the current curb extensions, the lane configuration on the west leg of the Boones Ferry Road/5th Street intersection lacks the existing width to include a left turn lane on 5th Street west of Boones Ferry Road. However, if the existing curb extensions are removed along with on-street parking a left turn lane could be provided. It is important to note that the Bailey Street



Figure 4: Approximate Lane Widths at Bailey Street and 5th Street

Alternative would require a new local road that extends south of the connector to provide access to residences that are currently only accessed by 5th Street. It is also important to note that a new local road connecting the new connector to Nutting Road would be required under the Bailey Street Alternative to access residences currently accessed off of 5th Street due to the proposed removal of the railroad crossing at 5th Street.

Since curb cuts, crosswalks, and sidewalks already exist on the south leg of the Wilsonville Road/Montebello Drive intersection, it is suggested to utilize the existing roadway width and create a

Boones Ferry Road to Brown Road Connector Alternatives Analysis October 27, 2016 Page 6 of 10



single lane approach similar to the north approach. As development occurs, the cross-section of Montebello Drive south of Wilsonville Road should be reevaluated to determine the appropriate cross-section. The lane configuration for this intersection remain the same for both alternatives.

The Kinsman intersection is proposed to have four legs and is proposed to be a signalized intersection. The City will need to confirm signal warrants are met prior to construction of the signal. All four approaches are recommended to be single lane with a left-turn pocket although a continuous left turn lane is likely not necessary for either Kinsman Road or the connector and should be reevaluated as development occurs. The new Montebello Drive roadway extension will terminate at the Boones Ferry Road to Brown Road Connector intersection with each of the three approaches also recommend to be single lane. The lane configurations for the new intersections remain the same under either alternative. Additionally, the new driveway connection to OrePac Way needs to have a sufficient radius to handle the existing truck traffic. Should the Bailey Street Alternative be implemented, a new local road connecting the new connector to Nutting Road would be required.

Intersection Operations

Future 2035 PM Peak Hour traffic operations at the study intersections were estimated for the two Boones Ferry Road to Brown Road Connector alternatives based on the *2000 Highway Capacity Manual* methodology² for signalized intersections and the *2010 Highway Capacity Manual* methodology³ for unsignalized intersections. The projected average delays, levels of service (LOS), and volume to capacity (v/c) ratios of the study intersections under each alternative are listed in Table 1 at the top of the next page. As shown in the table, all intersections under both alternatives will meet the City of Wilsonville level of service D operating standard and each study intersection operates similarly for both the Bailey Street and 5th Street Alternatives.

Under the Bailey Street Alternative, higher delays are experienced at the Boones Ferry Road/Bailey Street intersection due to the higher Bailey Street approach traffic; however, the intersection would still operate at acceptable levels. Because no additional traffic is routed to the south, the section of Boones Ferry Road south of Bailey Street (including the Boones Ferry Road/5th Street intersection) remains relatively unchanged from existing conditions. Therefore, there are expected to be minimal impacts to Old Town and the residential area south of Bailey Street under the implementation of the Bailey Street Alternative.

The 5th Street Alternative, on the other hand, routes traffic through the Boones Ferry Road/5th Street intersection and along Boones Ferry Road between 5th Street and Bailey Street. This creates less congestion and lower delays at the Boones Ferry Road/Bailey Street intersection, but it causes greater impacts to the nearby Old Town residential area, especially to the residences along Boones Ferry Road and 5th Street. However, it will also provide more traffic volume adjacent to the existing commercial and

² 2000 Highway Capacity Manual, Transportation Research Board, Washington DC, 2000.

³ 2010 Highway Capacity Manual, Transportation Research Board, Washington DC, 2010.



industrial businesses on the west side of this segment of Boones Ferry Road. Additionally, the Wilsonville Old Town Neighborhood Plan envisions a Boones Ferry Road frontage road from 5th Street to Bailey Street planned as Main Street Commercial. In the TSP the desired facility spacing for a Collector street from an Arterial street is listed as a half of a mile. The distance from Wilsonville Road to Bailey Street is 1,170 feet (0.22 mile); the distance from Wilsonville Road to 5th Street is 1,820 feet (0.35 mile). The 5th Street Alternative complies better with the desired facility spacing.

Queuing at the intersections along Wilsonville Road was evaluated under the existing conditions, future no build conditions, and for the two alternatives. From the 2035 future no build conditions to either of the alternatives, the intersection queues on Wilsonville Road were shown to improve, similar to what is experienced today. The connecting intersections onto Boones Ferry Road for both alternatives provide adequate queuing space under typical operating conditions when congestion on I-5 is not impacting Wilsonville Road. However, the 5th Street Alternative would provide the most desirable major intersection (Wilsonville Road to Fred Meyer Signal to connector) spacing on Boones Ferry Road.

Table 1: 2035 PM Peak Hour Study Intersection Operating Conditions (Both Alternatives)

Intersection	Operating Standard	Brown Ro	s Ferry Road Conr niley Stree	nector to	Boones Ferry Road to Brown Road Connector to 5 th Street		
		Delay	LOS	v/c	Delay	LOS	v/c
Signalized		ı					
Wilsonville Rd/Brown Rd	LOS D	36.5	D	0.70	31.3	С	0.71
Wilsonville Rd/Montebello Dr	LOS D	11.1	В	0.52	8.5	Α	0.54
Wilsonville Rd/Kinsman Rd	LOS D	39.8	D	0.76	30.5	С	0.71
Wilsonville Rd/Boones Ferry Rd	LOS D	35.0	D	0.74	35.6	D	0.74
Bailey St/Kinsman Rd	LOS D	11.7	В	0.34	-	-	-
5 th St/Kinsman Rd	LOS D	-	-	-	11.5	В	0.31
Unsignalized		•					
Bailey St/Montebello Dr	LOS D	10.2	A/B	0.02	-	-	-
Bailey St/Boones Ferry Rd	LOS D	22.4	A/C	0.43	16.3	A/C	0.33
5 th St/Montebello Dr	LOS D	-	-	-	10.8	A/B	0.05
5 th St/Boones Ferry Rd	LOS D	10.9	A/B	0.09	14.7	A/B	0.37
Signalized Intersections:	Unsignalized Intersections:						
Delay = Average Stopped Delay per Ve	hicle (sec)	•	•	,	per Vehicle (s	•	Movement
LOS = Level of Service of Intersection		LOS = Level of Service of Major Street/Minor Street					
v/c = Volume-to-Capacity Ratio of Intersection		v/c = Volume-to-Capacity Ratio of Worst Movement					

Corridor Travel Times

The corridor travel times for Wilsonville Road from Boones Ferry Road to Brown Road were simulated for future 2035 conditions as well as for each of the alternatives to provide a better understanding of how the corridor operations along Wilsonville Road would be impacted by the alternatives. Existing



travel times were measured by driving the corridor during ordinary p.m. peak period conditions on a weekday.⁴

As shown in Table 2, travel times are expected to increase an average of 53 seconds going eastbound and an average of 17 seconds traveling westbound in the year 2035. The implementation of either alternative is expected to alleviate some of the travel time increase from existing conditions to 2035 nobuild conditions. When compared to the future 2035 travel times, either alternative is projected to improve the eastbound travel time by 13 seconds and the westbound travel time by seven seconds.

Table 2: Approximate P.M. Peak Travel Times along the Wilsonville Road Study Corridor

Casmania	Travel Time (From Brown	Not Import from Existing	
Scenario	Eastbound	Westbound	Net Impact from Existing
Existing Conditions	2 minutes and 15 seconds	2 minutes and 19 seconds	-
2035 No Build	3 minutes and 8 seconds	2 minutes and 36 seconds	+53 seconds EB, +17 seconds WB
2035 Bailey Street Alternative	2 minutes and 55 seconds	2 minutes and 26 seconds	+ 40 seconds EB, +7 seconds WB
2035 5 th Street Alternative	2 minutes and 55 seconds	2 minutes and 26 seconds	+ 40 seconds EB, +7 seconds WB

During times of congestion on I-5, travel times on Wilsonville Road can be unreliable. Either of the proposed Boones Ferry Road to Brown Road connector will provide more reliable alternatives for east and west travel in the area other than Wilsonville Road.

Bicycle and Pedestrian Connections

As stated in the Existing and Future Conditions Memorandum, the City plans to build a network of sidewalks, bicycle lanes and shared-use paths within the study area which will provide important connections in this area of the city.

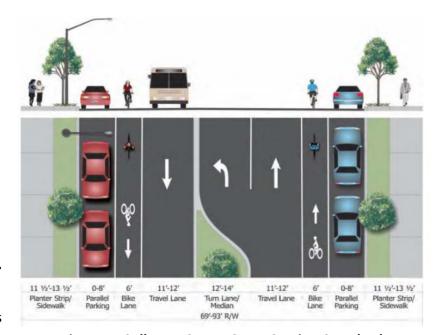


Figure 5: Collector Street Cross-Section Standard

⁴ Existing corridor travel times were measured by driving the corridor several times in both directions during the p.m. peak hour on Wednesday, August 17th, 2016.

Boones Ferry Road to Brown Road Connector Alternatives Analysis October 27, 2016 Page 9 of 10



Both alternatives of the Boones Ferry Road to Brown Road connector will be a Collector roadway that will include either on-street bicycle lanes and sidewalk (see Collector Street Standards figure from the City's TSP) or an adjacent shared-use trail that would also be consistent with TSP standards for separated shared-use paths (see Figure 6 to the right).

Note that on-street parking is not proposed to be included in the cross-section for the connector. The existing portion of Brown Road just south of Wilsonville Road does not include bicycle lanes, lacks sufficient width to accommodate three lanes and two bike lanes, and will require modification to include bicycle facilities for either alternative.

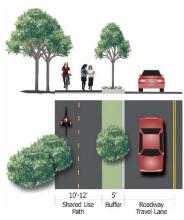


Figure 6: Shared Use Path Cross-Section Standard

Existing transit routes in the study area are provided by South Metro

Transit Service

Area Regional Transit (SMART). Route 4 travels along Wilsonville Road and Boones Ferry Road with 30 minute headways Monday through Friday and one hour headways on Saturday and Sunday.

Through coordination with SMART, it is clear that both alternatives present opportunities to improve the efficiency of Route 4 and that both alternatives would alleviate some of the congestion at the Wilsonville Road/Boones Ferry Road intersection which would create more predictable travel times, especially during the peak periods.

Whichever alternative is implemented, it is important to consider accessibility and connectivity to the Arrowhead Creek Planning Area for transit service.

Neighborhood Connectivity

The Bailey Street Alternative connects to Boones Ferry Road one block north of the 5th Street Alternative. Since commercial land uses are located to the north and to the south is Old Town residential land uses, the 5th Street Alternative will provide slightly better connectivity from neighborhoods to the west to the Old Town neighborhood.

However, the Bailey Street Alternative will provide slightly more direct connectivity from neighborhoods to the west to commercial land uses such as Fred Meyer and Albertsons as well as various other businesses and restaurants.

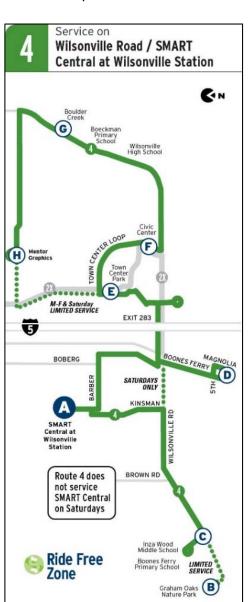


Figure 7: SMART Transit Route 4

Boones Ferry Road to Brown Road Connector Alternatives Analysis October 27, 2016 Page 10 of 10



Summary

Key findings from the comparison of the two Boones Ferry Road to Brown Road Connector alternatives in Wilsonville, Oregon are shown in Table 3 below. From a transportation planning perspective, both alternatives are relatively similar with no significant differences.

Table 3: Alternatives Transportation Impact Summary

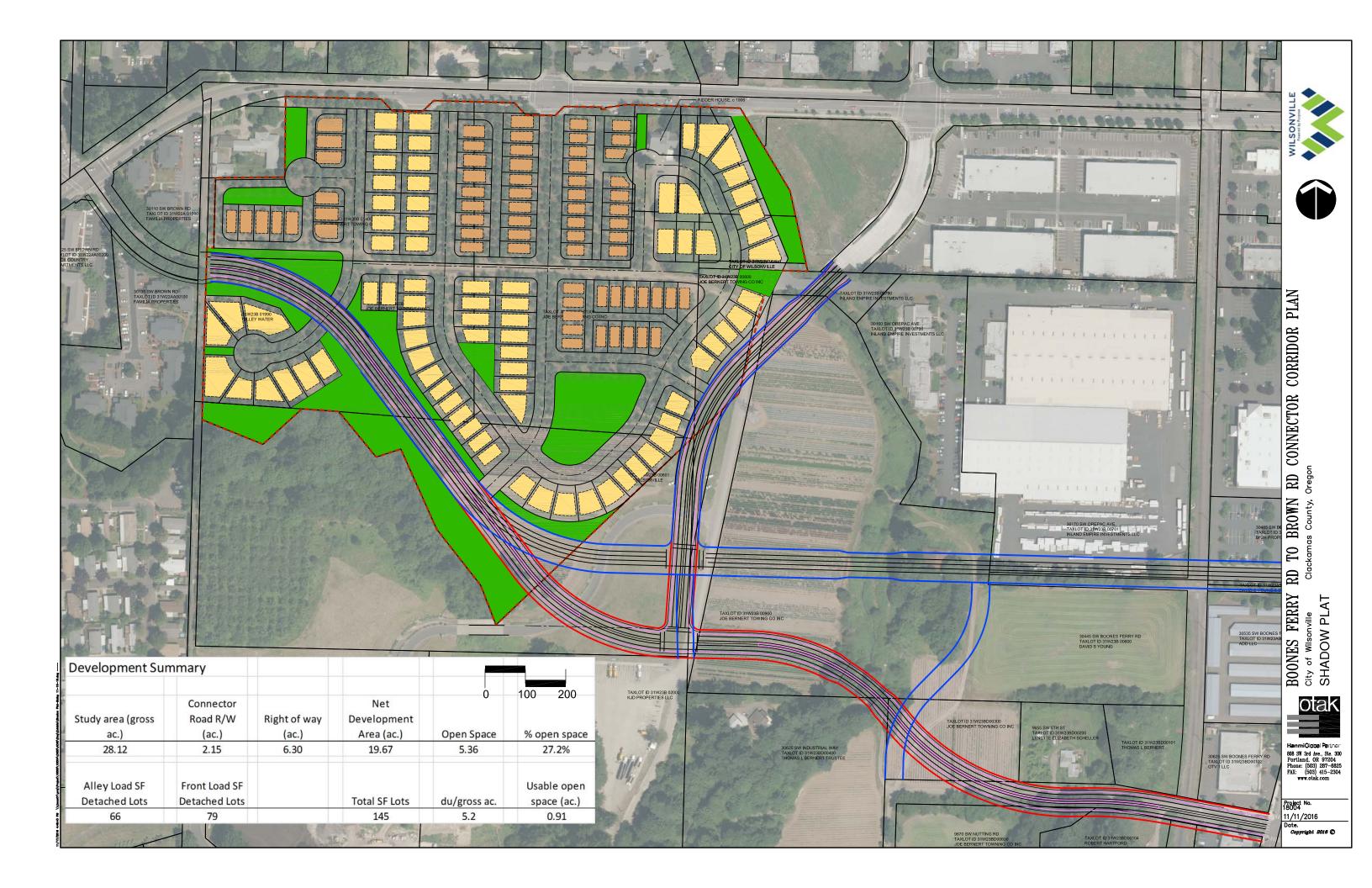
,							
Transportation	Transportation Impact Comparison						
Component	Bailey Street Alternative	5th Street Alternative					
Traffic Volumes	Slightly more traffic expected to divert from Wilsonville Road (100 more vehicles per day)	Slightly less traffic expected to divert from Wilsonville Road (100 less vehicles per day)					
Neighborhood Impacts	No added traffic to Old Town residential, commercial, and industrial segments	Additional added traffic to Old Town residential, commercial, and industrial segments					
Lane Configurations	Existing width could support left turn pocket on west leg	Existing width does not support left turn pocket on west leg without making modifications to curbs and removing on-street parking					
Intersection Spacing	Would exceed standards, but provide slightly less desirable major intersection spacing on Boones Ferry Road	Would provide the most desirable major intersection spacing on Boones Ferry Road					
Intersection Operations	Negligible difference when compared to the 5th Street Alternative	Negligible difference when compared to the Bailey Street Alternative					
Travel Times	Same travel times when compared to the 5th Street Alternative	Same travel times when compared to the Bailey Street Alternative					
Transit	Provides opportunity to improve existing SMART Route 4	Provides opportunity to improve existing SMART Route 4					
Bicycle and Pedestrian	Same bicycle and pedestrian connections	Same bicycle and pedestrian connections					
Neighborhood Connectivity	Provides better neighborhood to commercial development connectivity when compared to the 5 th Street Alternative	Provides better neighborhood to neighborhood/park connectivity when compared to the Bailey Street Alternative					

Analysis of Potential for Development

Land in the Arrowhead Creek Planning Area has capacity for both residential and industrial development. To understand the potential impacts of the future connection on the land planned for residential development, the project team created shadow plats. These revealed both the 5th Street and Bailey Street alternatives would accommodate approximately 140 single family lots, plus five acres of open space.

A number of constraints will shape the form and quantity of development on this land. The irregular shape of the study area, coupled with the need to accommodate an existing sanitary sewer mainline that runs east-west through the center of the study area, create some inefficiencies in the layout. The significant resource overlay zone (SROZ) forms the southern boundary of the study area. In addition, City code requirements such as 25% minimum open space within the residential development area, will affect the development potential of the residential lots; see Map 5.

In terms of industrial uses, the majority of available land for development east of Kinsman is zoned industrial. Both alternatives provide development opportunity of this vacant industrial land. However, the Bailey Street option significantly impacts the ability to develop the industrial parcels owned by Ore Pac in a contiguous manner. The Bailey Street alternative bisects the large industrial parcels and will create future access challenges when the land is developed. The 5th Street alternative allows for full contiguous development of this industrial land and provides opportunities for safe operations of the existing use of the Ore Pac property.





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MEMORANDUM

DATE: November 9, 2016

TO: Steve Adams, City of Wilsonville FROM: Scott Mansur, P.E., PTOE

SUBJECT: Boones Ferry Road to Brown Road Connector Future Scenario ADT Projections

This memorandum outlines the process used to forecast future traffic volumes on Kinsman Road south of Wilsonville Road and the future Boones Ferry Road to Brown Road connector for the following scenarios:

- Year of Opening (2020), Phase 1 Only, Without Residential Development
- Year 10 (2026), Phase 1 Only, With Residential Development
- Year 10 (2026), Phase 1 Only, Without Residential Development
- Year of Opening (2020), Phase 1 & 2, With Development
- Year 10 (2026), Phase 1 & 2, With Development

Future Projection Methodology

Baseline (2010) and Future (2035) PM peak hour scenarios from the Metro Gamma Model that was refined for the City of Wilsonville were used to estimate the Average Daily Traffic (ADT) for each of the scenarios (the PM peak hour volumes were factored to represent ADT volumes).

Two separate construction phases of the connector roadway were assumed as part of the future volume forecasts. Phase 1 assumes a connector from Boones Ferry Road to Kinsman Road and Phases 1 & 2 assume the full Boones Ferry Road to Brown Road connection (these phases also included the Montebello Drive connection to Wilsonville Road) were included in the model's evaluation.

Furthermore, the expected residential development south of Wilsonville Road and west of Kinsman Road was also included in the model's evaluation. Approximately 500 daily vehicles are expected



to access Boones Ferry Road under either the Phase 1 Only scenario or the Phase 1 & 2 scenario via the future connector.

ADT Volume Estimates

Table 1 below displays the ADT estimates on Kinsman Road south of Wilsonville Road and the future Boones Ferry Road to Brown Road connector for each of the scenarios. As shown, there is expected to be more motor vehicle volume on both roadways under the Phase 1 & 2 scenario when compared with the Phase 1 only scenario. Furthermore, the scenarios that include the residential development also have higher motor vehicle volume traffic on both roadways. Motor vehicle volumes also increase on both roadways under the Year 10 (2026) scenario as compared to the Year of Opening (2010) scenario.

Table 1: Average Daily Traffic Volume Estimates

		Phase 1			Phase 1 & 2	
	Year of	Year 10	(2026)	2020 (Year 2026 (Year		
Roadway	Opening (2020); Without Development	Without Development	With Development	of Opening); With Development	2026 (Year 10); With Development	2035; With Development
Kinsman Road south of Wilsonville Road	2,300	2,800	2,800ª	2,500	3,400	4,800
Future Boones Ferry to Brown Road Connector	1,800	2,300	2,800	2,000	3,000	4,000

^a There is negligible difference in the model with and without development on Kinsman Road as it assumes the residential development uses the future Montebello Drive connection for Wilsonville Road access.

Boones Ferry Road to Brown Road Connector Corridor Plan Stakeholder Interview Summary Report

Prepared by JLA Public Involvement August 31, 2016, updated December 1, 2016

Summary Overview

Between July 25th and November 18th, 2016 JLA, Otak and the City of Wilsonville interviewed thirteen key stakeholders identified by the project team. These stakeholders either own property, or manage businesses within the project area. Each individual or stakeholder group was asked the same set of questions. The main purpose of the interviews was to learn about their concerns and preferences for the planned corridor connection between Boones Ferry and Brown Road. The feedback received was used to shape the evaluation criteria that helped narrow the corridor alignment alternatives to a preferred option.

This report is a compilation of individual responses. The first part of the report summarizes the key themes and most commonly heard comments. The second part of the report provides a list of individual responses from each stakeholder meeting.

Stakeholders interviewed:

- 1. Orepac (Alan Kirk and Darin Coder)
- 2. Old Town Village Center (Tim Knapp)
- 3. Wilsonville Concrete (David Bernert, Eric Vermillion and Angie Hannon)
- 4. Sheri Young
- 5. Bob Hartford
- 6. Old Town Neighborhood (Doug Muench and Monica Keenan)
- 7. Kim A. McAvoy, Timber Creek Village Apartments/KWDS LLC
- 8. Barbara Eave
- 9. Lynette Scheller
- 10. Curran Coil Spring (Chad)
- 11. Fred Meyer (Alisa Shaver and Pam Knuth)
- 12. Sherlock Self Storage (Amanda Johnson)
- 13. Paul Missal

Key Themes

Several themes emerged. It is important to note that these themes are not universally accepted points of view, but simply those that were raised by multiple interviewees.

The summarized responses are organized into three main areas: *Key Points of Concern, Preferred Options, Future Opportunities, and Study Process and Next Steps*. The following paragraphs explain those key themes in more detail.

Key Points of Concern

There were many concerns raised in the conversations with stakeholders. Some of the most common points of view were:

- Provide a safe, reliable and efficient route for vehicular traffic, freight, and bicyclists and pedestrians.
- Preserve land for future industrial development.
- Preserve the Old Town neighborhood.
- Preserve access to residential and industrial properties.
- Minimize impacts to area businesses due right of way acquisition.

Preferred Options

When asked about the various alignment options, there was no clear favorite. Many of the concerns voiced about the route were centered on providing continuity of developable land parcels; not segmenting them. Several stakeholders indicated support for the southern alignment because they felt it preserved the most developable land. One person supported the "blue" middle alignment for the same reason. Another person showed support for the "yellow" middle alignment because it seemed the shortest and most direct route. A couple of stakeholders noted the increased cost of the creek crossing if the southern alignment was chosen.

In terms of the connection point at Boones Ferry Road, opinions were also divided. One of the most common reasons for supporting Bailey Street as the connection point seemed to be because it would provide the most direct route to retail services. Several stakeholders also voiced concerns about the adverse impacts to the neighborhood and businesses in the area if 5th Street was selected. Since the time these interviews were conducted, one stakeholder contacted the City to indicate they were now neutral with regard to the connection point. They had previously supported the Bailey option.

The most common reason for supporting 5th Street as the connection point seemed to be in the interest of keeping the existing public rail crossing which provides access to several homes in the area. If Bailey was chosen as the preferred route, the public rail crossing at 5th would be eliminated and residential access would have to be re-routed. It was also noted by two stakeholders that the process of transferring to the public rail crossing would be too costly and time consuming.

There was a lack of agreement on which option would best resolve congestion since both Bailey and 5th Street received support related to this issue. At least two stakeholders indicated that future traffic modeling data would be needed to determine which route would be best for alleviating traffic problems.

Future Opportunities

Nearly all of the stakeholders interviewed felt the project area would benefit from improved bike and pedestrian access through the area to reach nearby retail services, parks and trails. At

least two stakeholders indicated the need to resolve potential conflicts with large freight trucks when planning bike and pedestrian facilities and to avoid Kinsman Road.

There was support for a new transit loop through the project area along the corridor connector. This transit loop could serve area businesses by providing employees with an alternate mode to get to and from work, as well as connect people to neighborhoods and other services.

One person stated that when completed, the Corridor Plan would provide the certainty that is needed for area property owners to be able to move forward with plans for their property.

At least two people indicated that the roadway, when built, could serve as a natural buffer between residential development and industrial development.

Study Process and Next Steps

Everyone interviewed was aware of the project and most indicated that they had been engaged in previous studies.

None of the stakeholders who were asked about the project area name and logo had any concerns about it, although most weren't familiar with Arrowhead Creek.

All of the stakeholders indicated that e-mail was the best way to keep them informed about the project.

A few people noted that there were other area stakeholders that should be consulted, such as the Grange Hall owner, Old Town Neighborhood Association, D&M Glass Shop and the Mini Storage.

In closing, several stakeholders noted that they would like to see the land south of the project area developed as residential or mixed use with residential rather than industrial development to take advantage of the river views and access.

Complete Summary of Input

The following is a full compilation of the comments received during the interviews, organized by interview question.

- 1. Were you aware of the plans for the Boones Ferry to Brown Road corridor connector project prior to me contacting you? If so, how did you hear about it? Do you have any questions about the project?
 - Aware of the project plans.
 - Aware of the project plans.
 - Yes, aware of the project.
 - Yes, aware of the project.
 - Yes, aware of the project.
 - Yes, aware of the project and didn't have any questions.
 - Yes, aware of the project. Inquired about the project timing in terms of construction and funding.
 - Yes, were aware of the project and didn't have any questions.

• Yes, they were aware of the project and didn't have any questions.

2. When considering the various alignment alternatives, which do you prefer?

- Prefer the "yellow" middle alignment because it seemed to be the most straightforward and direct route.
- No preference on the alignment options.
- Continuity of industrial land parcels identified for future development should be maintained; however, the Bailey Street connection is preferred.
- The "blue"/middle alignment is preferred since it avoids segmenting and devaluing industrial land parcels identified for future development. However, the "red" route would be best if the southern alignment is selected since it seems to have the least impact to property owners on the south side of the project area. The bridge/crossing at Coffee Lake Creek will also be more expensive with the southern alignment because the creek is wider further south.
- Prefer the southern alternative because it has the least impacts to private property –
 keeps parcels contiguous for the most part. The "pink, purple, green and blue"
 alignment options don't seem feasible based upon the decreased property value they
 would create by segmenting private property parcels.
- Prefer the southern alternative. Least impact to developable property.
- Alignment should optimize City owned property and not orphan private property parcels. Consider that the Coffee Lake Creek crossing (bridge) will be more expensive with the southern alignments than the northern alignment alternatives. Southern options also impacts private homes/property.
- Prefer the southern alternative.

3. Do you have a preference for a connection point for Boones Ferry Road; either at Bailey Street or 5th Street?

- Prefer the Bailey Street connection based upon previous studies and discussions. Bailey provides the most direct route to Fred Meyer and other retail operations on Boones Ferry and would better serve Wilsonville residents and alleviate congestion. Also have concerns about the impacts to businesses on 5th and Boones Ferry if 5th Street was chosen. However, will need to determine how local access would be achieved if Bailey is chosen.
- 5th Street would be the best connection because of the direct access/route to their property.
- Bailey is preferred as the connection because of the direct access it would provide to retail businesses and to alleviate current problems with congestion in that area. However, would like to see the future traffic analysis to determine the best route/connection to alleviate congestion.
- Bailey is preferred since it would enhance the current aesthetic condition of the road, but there are concerns about the potential impacts to area businesses (loss of the self-storage building due to railroad sight lines). Also concerned about the 5th Street connection and the impacts it could cause to property owners with the widening of the road.

- No preference between Bailey and 5th Street. Based upon the past discussions and information, it seemed to make the most sense to use Bailey as the connection due to the direct access it would provide to retail services. But knowing the constraints with the railroad, 5th might be a better alternative. Brown Road will create major impacts with the apartments but that seems a long ways off from now. Widening will take away on street parking which isn't a huge issue since they didn't have it before and it's not really allowed, it's just not enforced. There are different options for accommodating the sidewalk. If the trees have to be removed, they won't be unhappy about it since they create maintenance issues.
- Bailey is the preferred connection due to the traffic impacts the 5th Street connection would create for the Old Town neighborhood. Bailey is identified in the Old Town Neighborhood Plan as the preferred connection. 5th Street would also create impacts to area businesses and historic buildings due to rightof-way acquisition. The turning radius needed for intersection would be problematic at 5th. Bailey provides better retail connection, traffic circulation.
- Bailey Street is the preferred connection for better access to retail (Fred Meyer) and because it would provide more relief of congestion on Wilsonville Road (since it's a shorter route). If Bailey is chosen and the public crossing at 5th is eliminated, a new access road, potentially Nutting, would have to be built for residents to the south. Sewer utilities would also need to be extended along Nutting or 2nd. This may create the need for a pump station. A connection at 5th would likely negatively impact businesses on that corner to due right-of-way acquisition (loss of on-street parking and planting strips).
- Prefer 5th street for safety reasons (sight line distance issues with Bailey) and for maintained access to private properties along 5th Street. Also the cost and potential complications/delay for creation of a new public rail crossing at Bailey seems problematic.
- 5th Street is preferred because the public access across the railroad is already at 5th Street and access to the residential properties to the south needs to be maintained. It would be less costly to provide sewer access as well.

 Abandoning the public rail crossing at 5th and establishing a new public crossing at Bailey would create a significant delay in the process.
- Prefer connection at Bailey because of existing easement owned by the City and this connection supports the redevelopment fees that were used for Fred Meyer. The connection at 5th Street is problematic due to the impact it would have to nearby property values. Nutting Road could provide access to residential properties to the south if Bailey served as the connection and the public crossing was removed at 5th.
- 5th Street is preferred since it would create the least amount of impact to private property parcels identified for future industrial development.
- 4. What are your thoughts about alternative modes of transportation, such as buses for access to retail and shopping on the east side of town?

- Not a lot of employees in the area currently use the bus, but there seems to be high ridership based upon the number of people seen at the stop on Boones Ferry.
- Transit it great and is widely used by apartment tenants.
- Transit it great having a new loop that changes the current route through Old Town would be advantageous.
- Transit (and infrastructure in general) is needed to support future development.
- SMART could benefit from a loop route option along the new corridor connection.
- A transit loop along the new corridor connection would be of value.
- It seems appropriate to establish a bus route through the area; some employees use the bus to get to work.
- 5. The City's master plans include the Tonquin Trail, a bike/ped pathway, through this area connecting residential areas and schools on the west side of Wilsonville to parks and businesses on the east side of Wilsonville and along Boones Ferry Road. What are your thoughts on how best to accommodate bicyclists and pedestrians through this area?
 - Improved bike/ped trails and overall connectivity would be a benefit to area retail businesses. No one currently bikes due to the unsafe conditions on Wilsonville Road.
 - Bike lockers are beginning to be a requirement at some apartment complexes, which
 provides a lot of advantages. The lockers encourage people to use their bikes by giving
 them added space for storage. Access to retail shopping, parks and trails via a
 pedestrian and bike paths in the project area would be another added bonus.
 - A bike/ped connection that travels south on Otto Lane and the 2nd Street underpass would be beneficial.
 - The Bailey connection and the middle alignment provides a better Bike/Ped route because its shorter and flatter. It's a more direct connection to retail services. The rail crossing does create an issue for bikes that would need to be addressed. Making a connection to the parks and the river to the south via Otto Lane and the 2nd Street undercrossing is a good idea.
 - Keep bike/ped paths on the south side to connect with the Tonquin Trail. Crossings should be made at a right angle for safety (prevent conflicts with truck traffic). Bike/ped connections to Fred Meyer and other retail on Boones Ferry (east side) need to be established. Need to keep bike/ped off Wilsonville Road and provide safe routes to school. Get people out of their cars.
 - Avoid conflicts with trucking operations on Industrial Way. Maintain bike/ped access on northern side of roadway and on Kinsman to avoid conflicts with trucks.
 - Would prefer to see a bike/ped trail south to Tonquin Trail to avoid conflicts with truck traffic. Keep bike/ped use off of Kinsman Road.
- 6. Do you think roundabouts could be a potential solution in this area? Why or why not?
 - Roundabouts are nice.
 - Roundabouts may not be functional in an industrial area (conflicts with truck traffic).

- Roundabouts take out a lot of developable land but work well to minimize collisions.
- Roundabouts wouldn't work because of the needed size (footprint) would take out too much developable land.
- More information is needed, such as traffic counts to be able to determine if roundabouts are feasible.

7. What do you think are the key issues to be considered and that will need to be addressed when examining the alternatives?

- Preserve Old Town neighborhood and the transition to residential/housing by making the connection at Bailey rather than 5th. Also for safety reasons there are daycare and dance lesson facilities on 5th and Boones Ferry Road.
- Look at intersections and access points for the property parcels when considering the alignments and connection at Boones Ferry.
- There are safety issues with sight distance and the grade for the rail road crossing at Bailey.
- Access to private property off of 5th Street must be maintained if Bailey becomes a public rail crossing rather than 5th Street.
- Impacts to businesses on 5th Street are a concern due to ROW acquisition, as well as any increased truck traffic—do not want it to be a truck route. Over-building the roadway will lead to it being a truck route. The corridor should be a neighborhood to neighborhood connection. Kinsman should be the truck route. 5th is the preferred connection, but minimize impacts to area businesses on both sides. On street parking should be maintained. Preserving the utility of residential and industrial land is critical. The Montebello Road connection is important for bike/ped access.
- There are issues with industrial uses and bike/ped conflicts currently, so this needs to be taken into consideration.
- Maintain truck access on Industrial Way to allow left hand turns for trucks with signalized intersections due to timing and spacing. Wilsonville Concrete business office access is also off of Industrial Way, which also needs to be maintained. Reconfiguring the parking lot at Wilsonville Concrete would be problematic.
- Having an adequate turn radius for trucks on Kinsman road is important.

8. What opportunities and benefits do you see for this project?

- The Corridor Plan, once completed, will provide some certainty for property owners to move forward with.
- Northern most alignment allows for SDCs to pay for construction on either side with residential development. The roadway could serve as a natural buffer between residential and industrial development.
- If the preferred alignment was adjacent to SRO zones (natural areas), the property to the north of Wilsonville Concrete could be developed as a park to provide an additional buffer between industrial and residential uses.
- 9. The project team has prepared a draft logo (refer to project fact sheet) and propose to refer to the general project area as the Arrowhead Creek Planning Area. How does that resonate with you?

- Arrowhead Creek planning area is fine. Didn't know Arrowhead Creek existed.
- Arrowhead Creek planning area is fine. No concerns with it.
- The name and logo didn't raise any red flags, but it wasn't familiar. Previously referred to the project as the section G planning area.
- No issues with the name "Arrowhead Creek". Previously referred to this area as Section G Planning Area. Although Arrowhead Creek is a drainage ditch that dries out and terminates at the cement plant.
- The name and logo didn't raise any red flags, but it wasn't familiar. Had previously referred to the project as the Brown Road Westside Bypass.

10. Are there any events, activities, plans, conditions, or anything else that we should be aware of?

- There is a gully at the Hartford property on 5th that should be looked at.
- Already queueing that takes place on Boones Ferry. Bailey won't accomplish the pressure relief.
- The deep gulley at the Hartford property doesn't have any water in it.
- Current interest with northern properties along Wilsonville Road is for high density residential development. All vacant lands are for sale.
- 6:30 to 7 a.m. is the peak traffic time for trucking operations at Wilsonville Concrete. Wilsonville concrete could potentially operate 24/7 in the future.
- The frequency and timing of rail cars in and out of Orepac is fairly unpredictable; more than 2 per month on average, sometimes more.

11. How can we best keep you informed throughout the project?

- E-mail
- E-mail
- E-mail
- E-mail. Can share information with the neighborhood through newsletters and upcoming block party.
- E-mail
- E-mail please invite to open houses and other public meetings.
- E-mail
- E-mail progress reports and other info.
- Email

12. Is there anyone one else you feel we should keep informed or we need to hear from?

- Grange owner
- Old Town neighborhood association
- D&M Glass shop
- Grange Hall
- Mini Storage

13. Do you have any parting thoughts you would like to share with me?

• Look at Old Town Master Plan to see desired uses for Boones Ferry Road. Pedestrian and human scale is important.

- The Grange building is currently a problem with cats and homeless people living there.
- Bailey seems to be the best option based on the direct access it provides to retail services; however would like to see future traffic modeling analysis.
- Would like to see railroad eliminate dinner stops in Old Town area. It's noisy
 because they keep the trains running. Would also like to see mixed use
 development south of 5th street to maximize river views and access rather than
 industrial development.
- Would like to see traffic modeling results for future growth projections to see if 5th or Baily would be better in terms of traffic routes (alleviating congestion on Wilsonville Road and Boones Ferry).
- Would like to see mixed use, including residential, to the south nearest the river. Should maximize the views and river use.
- Would like to see the southern parcels develop as residential due to the proximity to the river.
- Refer to planning area criteria included in Section G Planning Area document.
- Maintain access for trucking operations. Compatible uses near industrial operations is most important. Safety, minimizing truck and pedestrian/cyclist conflicts is most important.

Wilsonville Boones Ferry to Brown Road Corridor Connector Discussion with Paul Missal, Feed store Building Owner November 18, 2016

The following summarizes the discussion held with Paul Missal regarding his building on the corner of 5th Street and Boones Ferry Road.

Building History

Steve Adams provided a brief overview of the project and the potential impacts if 5th Street is chosen as the selected connection point with Brown Road, including:

- The connection with 5th Street can be made without impacting the building, however the hedge may need to be removed. If additional room is needed to widen the roadway, the on street parking will be removed along the west side of Boones Ferry Road.
- An archaeological study was conducted and found that the building was built in 1900 and was moved to its current location in 1928 from its original location on 2nd Street. Paul provided some additional history on the building, stating that the building was moved to it's location on 5th and Boones Ferry by cutting the trees along Magnolia street and rolling the building on the logs. He explained that this is how the street, "Magnolia" was named.
- Steve added that the city could look into moving the building if it was necessary.
- The building has had many previous uses and essentially served as a community center for Wilsonville when at its original location on 2nd Street. These uses included:
 - Grocery and sundries
 - Law offices
 - Bowling alley
 - Movie theater
 - Funeral parlor
 - Boxing ring
- After moving to the location on 5th and Boones Ferry the building was used as a feed and farm store prior. It was used as an antique store just prior to it being purchased in 1974 by Paul for residential use.
- Although the building use has been residential since 1974, the current zoning is commercial.

Building Condition

- Paul explained that the foundation of the building was concrete and included a 7-8 foot high basement with a dirt floor.
- There are a few places that need to be repaired within the exterior of the building due to its age and the rain. The metal roof was installed in 1964 and may need to be redone. Otherwise the building is in good condition. The lean-to in the rear of the building was added after 1974 when he purchased the building and made other improvements to make it a home.

Prior to the Columbus Day Storm, the building had a different, rectangular "false front", which
was destroyed by the storm. The original windows from that structure are located in the
basement.

Preferred Option

- Steve explained that the 5th Street connection seemed more appealing since a new public railroad crossing would be needed at Bailey if this connection was selected and the public crossing at 5th would be abandoned. This would increase the overall cost of the project by approximately \$2 million and would also create significant impacts to OrePac due to the need to upgrade the crossing as well as impede their future plans for expansion. If 5th is chosen, the City will do their best to mitigate the neighborhood's concerns.
- Paul expressed his concerns with the 5th Street connections and noted that he preferred the
 connection at Bailey. His concerns are related to increased traffic at Boones Ferry and 5th Street
 which would add additional noise and pollution. He also has concerns about safety, which he
 expressed in a previous letter. Paul noted that traffic is already a problem at this location and
 indicated that the buses that travel up and down Boones Ferry Road starting at 6 a.m. are very
 noisy and they cut the corner, making it very unsafe for pedestrians and other vehicles.
- When asked if he would consider selling his property, Paul indicated that he had thought about it, but he can't afford to live someplace else in Portland or Wilsonville and his home now provides him with the creative space and atmosphere he needs to make art and teach occasionally in Portland.
- Steve pointed out to Paul that should he decide to sell that with the commercial zoning and additional drive-by traffic the building would have greater potential to be used as a commercial property.



Community Workshop and Survey Summary Report

Public Outreach Overview

In September, 2016, the City of Wilsonville hosted a public workshop and online survey to share information with the community about the Boones Ferry to Brown Road Corridor Connector Plan, evaluation process, and the alignment alternatives being considered. Input was gathered from the participants about the project goals and alternatives. Community feedback generated from the workshop and survey was intended to help develop and refine the evaluation criteria that will be used to establish a preferred alignment for the Boones Ferry Road to Brown Road Corridor Connection.

Outreach Methods

Community members were invited to attend the public workshop or participate in the online survey in a number of ways, including:

- E-mail distributed to the project stakeholders list (53 people) on September 14.
- Announcement posted on the City's website on September 9.
- Postcard mailing sent to approximately 800 area residents and businesses on September 9.
- Press release distributed to local media on September 9.

Public Workshop

The City of Wilsonville held a public workshop for the Boones Ferry Road to Brown Road Corridor Connector on Wednesday, September 21, 2016 from 5:00 to 6:30 p.m. at City Hall, located at 29799 Town Center Loop E, Wilsonville, OR. Approximately 30 people attended, as well as staff from the City and the consultant team.

The meeting was a workshop format with a presentation beginning at approximately 5:15 p.m. The presentation provided an overview of the project purpose and need, preliminary findings from planning and engineering analysis, and an estimated timeline for completion. Prior to the presentation, members of the public had the opportunity to visit informational displays, review project handouts, and chat with the project team. Following the presentation, participants were asked to join small group discussions around three separate tables. Discussions were facilitated by members of the project team.

CREEK CROSSING SW ORE PAC AVE KINSMAN RD EXTENSION CREEK CROSSINGS AT-GRADE RAIL **CROSSINGS** ALT 4 NUTTING RD EXTENSION RTH ST JTH ST ITH ALONG AD CR TO BAILEY ST TH ALONG D CR TO 5TH ST REEK (FROM GIS) ES (FROM GIS)

Participants provided feedback on the Alignment Alternatives with comments that were recorded by meeting facilitators on the project area map

Prior to and after the presentation and discussion session, attendees were encouraged to participate in a "dot" exercise indicating their priority preference for the project goals and evaluation criteria categories. Comment forms were also provided for other written comments, but none were completed.

Online Survey

An online survey was made available to the public from September 9 through September 25.

The survey provided information about the project goals and explained that these goals would inform the development of the evaluation criteria that would be used to establish a preferred alignment for the Boones Ferry Road to Brown Road Corridor Connection. For each of the six goals, the public was asked to weigh in on the level of importance for that goal. Respondents were also asked to rank all six goals in priority order. There was also an opportunity to provide additional open-ended comments and to sign up for the email list. Respondents were asked if they lived or worked in the project area or if they would use the future roadway when built.

Fifty-three (53) people responded to the online survey. Following are the response summaries, including feedback that was collected at the open house during the workshop and the dot exercise.

Summary of Public Input

Overall

Overall, most respondents seemed to favor improved travel options and increased connectivity to the area as the most important goal for the project. At the public workshop, this goal received 20 dots and 34 Wilsonville Boones Ferry to Brown Road Corridor Connector Plan Community Workshop and Survey Summary Report - October 2016

out of 48 people ranked it as their top priority in the online survey. Traffic congestion in Wilsonville was one of the most-often cited concerns among workshop participants and survey responders.

In terms of the alignment alternatives, opinions were divided. Many of the reasons for supporting the alternatives connecting to Bailey Street centered on concerns about increased traffic in and around the Old Town neighborhood and providing direct access to retail services. For those that supported 5th Street as a connection point to Boones Ferry Road, preservation of developable land, maintaining access to residential property, and providing safe freight access were some of the reasons given.

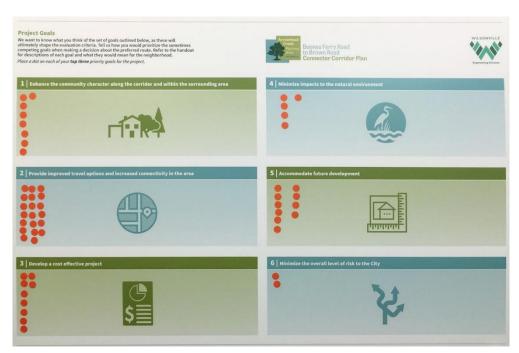
Other concerns raised were related to providing safe pedestrian and bike connections, and consideration of emergency access and the loss of on-street parking at Brown Road. Current issues with traffic congestion in Wilsonville were a commonly heard theme of the workshop discussions and survey responses. A few people did not feel that the project would do enough to alleviate traffic concerns.

Most online survey respondents indicated that they live or work near the project area, or travel through it frequently. Many expressed hope that a new road would improve their commute or access to the shopping area near Fred Meyer; others were concerned that it would bring more traffic to their neighborhood.

Full Workshop Response Summary

Project Goals Prioritization

Prior to and after the workshop presentation and discussion session, attendees were encouraged to participate in a "dot" exercise indicating their priority preference on the project goals/evaluation criteria categories.



Participants were asked how they would prioritize the sometimes competing goals when making a decision about the preferred route by placing a dot on the poster board for each of their top three priority goals for the project. The following are the results of their responses:

Project Goals

of dots (responses) received

20 Provide improved travel options and increased connectivity to the area

Accommodate future development	10
Develop a cost effective project	9
Enhance the community character along the corridor and within the surrounding area	8
Minimize impacts to the natural environment	5
Minimize overall level of risk to the City	2

Small Group Discussions

Participants were asked to join small group discussions around three separate tables. Discussions were facilitated by members of the project team. Participants were asked to share their concerns and ideas for the corridor connector project. Their input was documented on large project area maps and is summarized below in three main areas:

Preferred options

- Bailey is preferred because it provides direct access to retail services.
- Bailey is preferred because the 5th Street connection will adversely impact the character of the Old Town neighborhood.
- 5th Street is preferred to allow for development of industrial land and to keep parcels contiguous.
- Prefer option D; concerned about breaking up property parcels with alternatives A, B and C.
- Prefer 5th Street connection due to safety concerns at OrePac. It's important to have more space (breathing room) between Wilsonville Road and the new corridor connector.
- Alternative D provides a greater buffer for Wilsonville Concrete.
- Prefer 5th Street connection option for improved residential access.
- Northern alignment is better for bike and pedestrian path.

Key concerns

- Need to consider emergency access to apartments on Brown Road.
- Need to consider loss of on-street parking at apartments on Brown Road.
- Do not put in street trees. They require too much maintenance and cause damage.
- Bike paths should be separate from roadway.
- Need a bigger easement than 69'.
- Consider the local economy and providing connections to jobs.
- Need to alleviate congestion on Boones Ferry to Old Town. Don't want to exacerbate the issue.
- Uncertain that the Boones Ferry to Brown Road Corridor will provide any relief for gridlock in the area.
- Consider impacts to the Grange (Historic Property).
- Concerned with increased traffic to the Old Town neighborhood.
- Concerned about the increase in freight traffic.
- May be important to separate bikes and pedestrians from trucks on Kinsman unlike the east-west connector which would not necessarily need separation.
- Currently experiencing gridlock at intersection of Wilsonville Road and Boones Ferry Road.
- Cars and trucks currently turn around in neighborhood on 5th.
- Need to address turn-arounds.

- Concerned about increased traffic in the area near 5th Street; daycare and dance studio at that location. Need to address safety concerns.
- Concerned about freight access for Wilsonville Concrete and OrePac.
- Important to have attractive route for bikes to get to Fred Meyer and Walgreens. Desire comfortable, low risk routes where there is less competition with cars.
- Can the curb (barrier) be removed for bike entry to Fred Meyer?
- Make better connection to Boones Ferry Park.
- Concerned about families and children at apartment complex on Brown Road. Need to address potential safety issues.
- Check legal agreement regarding bike/ped conflicts with industrial uses.
- Need to allow left turn lanes and truck turning radius.
- Kinsman changes from private to public road.
- Private vs public crossing at railroad.

Other input and questions

- Traffic going eastbound on Wilsonville Road is a concern that this project will not resolve.
- Go under freeway to alleviate traffic congestion.
- Bridge is a bottle neck.
- Is there a difference in cost for the creek crossings between the two locations?
- What is the cost difference with the two different rail crossings?
- What are the traffic counts for Boones Ferry (between 5th and Bailey)?
- Where is access provided to properties to the south of 5th Street?
- Will on-street parking on 5th Street be removed?

Full Survey Response Summary

Feedback on Project Goals

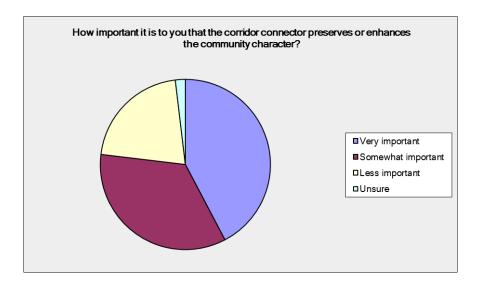
Respondents were asked how important each of the six project goals were by indicating whether they were: very important, somewhat important, less important, or unsure. The six project goals on which respondents were asked to provide feedback are:

- Goal #1: Enhance the community character along the corridor and within the surrounding area
- Goal #2: Provide improved travel options and increased connectivity in the area
- Goal #3: Develop a cost effective project
- Goal #4: Minimize impacts to the natural environment
- Goal #5: Accommodate future development
- Goal #6: Minimize the overall level of risk to the City

After weighing in on the individual goals, respondents were asked to rank the goals in order of importance.

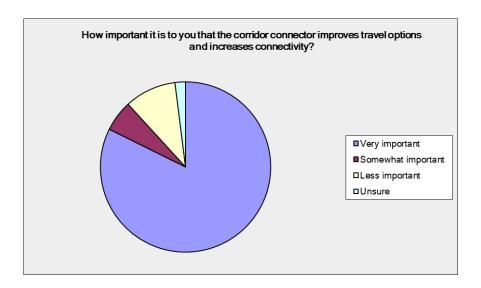
Community Character

When asked how important it is that the corridor connector preserves or enhances the community character, 42.3% (22 out of 52) felt it was very important, 34.6% (18 out of 52) felt it was somewhat important, 21.2% (11 out of 52) felt it was less important and 1 person was unsure.



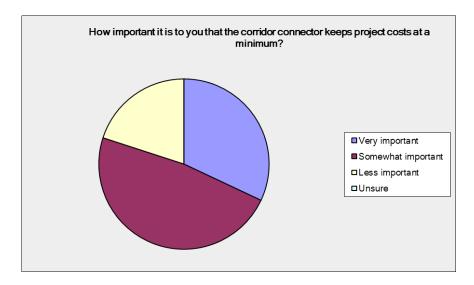
Travel options and Connectivity

When asked how important it is that the corridor connector improves travel options and increases connectivity, 82.4% (42 out of 51) felt it was very important, 5.9% (3 out of 51) felt it was somewhat important, 9.8% (5 out of 51) felt it was less important and 1 person was unsure.



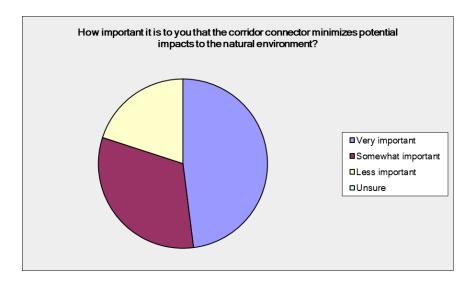
Cost

When asked how important it is that the corridor connector keeps project costs at a minimum, 32% (16 out of 50) felt it was very important, 48% (24 out of 50) felt it was somewhat important and 20% (10 out of 50) felt it was less important. No respondents indicated they were unsure.



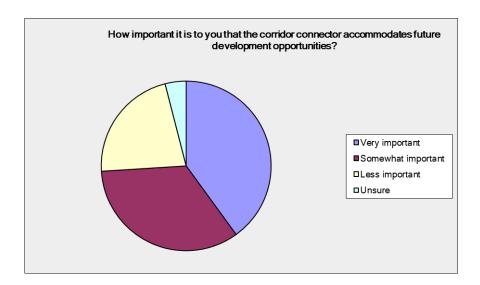
Natural Environment

When asked how important it is that the corridor connector minimizes potential impacts to the natural environment, 48% (24 out of 50) felt it was very important, 32% (16 out of 50) felt it was somewhat important, and 20% (10 out of 50 felt it was less important). No respondents indicated they were unsure.



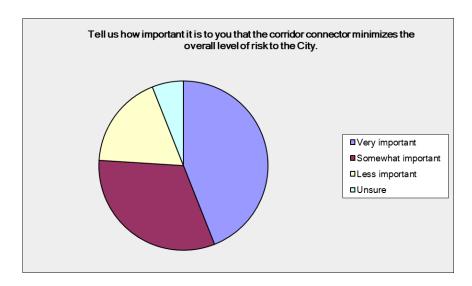
Future Development Opportunities

When asked how important it is that the corridor connector accommodates future development opportunities, 40% (20 out of 50) felt it was very important, 34% (17 out of 50) felt it was somewhat important, 22% (11 out of 50) felt it was less important and 4% (2 out of 50) were unsure.



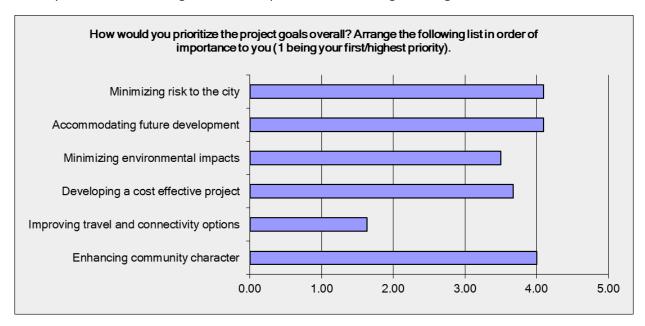
Risk

When asked how important it is that the corridor connector minimizes the overall level of risk to the City, 44% (22 out of 50) felt it was very important, 32% (16 out of 50) felt it was somewhat important, 18% (9 out of 50) felt it was less important and 6% (3 out of 50) were unsure.



Prioritizing the Project Goals

When asked to prioritize the project goals overall by ranking them in order of importance (1 being the first/highest priority), improving travel and connectivity options ranked the highest with an average rating of 1.63 (34 out of 48 ranked it number 1). Minimizing environmental impacts ranked second with an average rating of 3.50. Developing a cost effective project ranked third with an average ranking of 3.67. Enhancing community character ranked fourth with an average ranking of 4.00. Both minimizing risk to the City and accommodating future development had an average ranking of 4.10.



Comparison between Old Town and Villebois

Among respondents who indicated where they live or work (in response to open-ended questions or based on contact information they provided), 10 of them live, work, or own property in Old Town and 6 live in Villebois.

Responses from both of these sub-groups were similar to the overall responses. All Villebois respondents and eight out of ten Old Town respondents ranked "Improving travel and connectivity options" as their top priority. Villebois respondents ranked "Enhancing community character" and "Minimizing risk to the city" as their second priorities, tied with an average ranking of 3.5, and "Developing a cost effective project" came last with an average ranking of 4.8. For Old Town respondents, "Minimizing environmental

impacts" was second priority with an average ranking of 3.1, and "Minimizing risk to the city" came last with an average ranking of 4.7.

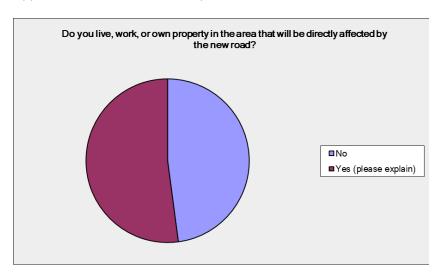
Other Input

Respondents were asked if they had any closing thoughts or comments you would like to share with the City. Twenty-nine people provided responses to this question. A complete list of their responses can be found in Appendix N1 attached to this report.

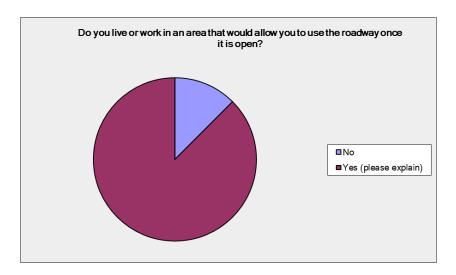
Many of the concerns heard were centered on the current problems with traffic congestion. A few people indicated they felt the project would not resolve these issues. Some respondents stated their support for one alternative over the other. Reasons for supporting Bailey were mainly to avoid increased traffic in and around the Old Town neighborhood and to provide direct access to retail services. The reasons stated for supporting 5th were to preserve development opportunities and avoid complications with the rail crossing.

Geography

When asked if respondents live, work, or own property in the project area that will be directly affected by the new road, 47.9% (23 out of 48) indicated no, they do not. 52.1% (25 out of 48) indicated that they do and explained how they would be affected. The complete listing of responses can be found in Appendix N2 attached to this report.



When asked if respondents live or work in an area that would allow them to use the roadway once it is opened, 12.5% (6 out of 48) responded no, they did not. 87.5% (42 out of 48) indicated that, yes, they did live or work in an area that would allow them to use the roadway once built and explained why. The complete listing of responses can be found in Appendix N3 attached to this report.



Respondents were asked if they would like to receive project updates via e-mail. A total of 23 people indicated they would and provided their contact information.

Verbatim responses

Note: with these responses Options A & B were more northerly routes to Bailey that have both now been eliminated. Option C is the current alternative connecting to Bailey and Option D is the alternative connecting to 5th Street.

Question: Do you have any closing thoughts or comments you would like to share with the City?

- Keep the RR crossing at 5th.
- Use the existing RR crossing.
- I think option C is the best.
- Stupid idea to begin with to connect to Brown Rd. Why drop more traffic off on an already busy residential street/school zone area that already has speeders and drivers who do not stop at crosswalks with pedestrians and children present? How is this going to help anything except getting in/out of Fred Meyer in the late afternoon? Or the landowner(s) of the property it is going through? It is not going to help the backup on Wilsonville Rd. The City should be spending all of this money on THAT issue with I-5 and not this. What a waste.
- I don't see where a connection from Brown Rd to Old Town will help anything. It won't alleviate congestion, unless they go back out the way they came in, because Boones Ferry to Wilsonville Rd. can't take more traffic
- Ideally, having another Willamette crossing, or extending I-205 south of Wilsonville could possibly help more.
- Glad to see the City is taking steps to provide new travel options in and out of the Old Town Area.
- Although 5th St is the current crossing, it makes more sense that Bailey St is the proposed crossing.
 Having a heavily used road go further south into the Old Town neighborhood is going to make a
 nice quiet part of town into a busy intersection where it won't be safe for kids to walk, etc. Bailey St
 connector is already built to handle that type of traffic on the Fred Meyer side of the road and
 would make the most sense for the connector.
- I prefer option C; 2nd option D.
- We live in Old town and deal with the issues of traffic on Wilsonville Rd and Fred Meyer on a daily basis. It doesn't seem that these options will help the issue because there is no additional highway access being suggested. And what is proposed would be just dumping everyone off in old town, why?! It will make all the issues at the intersection of Wilsonville Rd and Boones Ferry way worse! We worry we will never be able to get out of our home!
- The road should be configured where it would be easy to incorporate a bridge across the Willamette in the future when opportunity arises. This will relieve even more pressure on Wilsonville Rd for I-5 access.
- If the city could figure out the traffic issue, that would satisfy most of the Wilsonville citizens. It's horrible.
- The sooner the better.
- Our TAXES ARE TOO HIGH. More residents should mean more to callry to tax burden. The City HAS to find alternatives to funding other than BONDS or TAX INCREASES. OR STOP BUILDING !!!!!!! This is going to make it IMPOSSIBLE for us to resell our homes.
- What about more access to I-5 and solving the traffic issue from 205S to Wilsonville Road
- I prefer option D. Given that the map shows multiple options, why didn't the survey ask my option preference?

- The Ice Age Trail will not work with current routing and the city should not support this trail system. The trail is not compatible with current zoning for Industrial usage and the current proposal make no sense.
- This road connection is long past due.
- I would like to minimize impact on the residents of Old Town. I would also like to minimize traffic
 on Wilsonville Road between Brown Road and Willamette Way West. If it gets any worse, a traffic
 signal will be necessary at the intersection where Guiss Way and SW Orchard Drive feed onto
 Wilsonville Road.
- As Old Town homeowners, we prefer the Bailey Street option. Traffic should be kept as far away from our neighborhood as possible.
- Minimize impact to already overcongested roadways. If this road is built with the thought to develop all that land, it will negate ease of travel and actually add to the traffic congestion problems.
- The questions do not facilitate feedback I want to give. Yes/no options are extremely ever helpful. Definitions of words leave the answer to most questions concerning.
- How about running Kinsman so that you only have to do one bridge
- D is the best plan! I worry about the livability of the folks who live in the apartments on the south side of Wilsonville road at Brown Rd... Will children have a safe place to play if a major road goes through their neighborhood? Or would that apartment area be relocated?
- Given our current traffic issues in the area, it seems like an important project that should be expedited.
- The Bailey option makes best use of the existing infrastructure already paid for and would have the least impact on Old Town.
- Bailey Street would be the best option and provide a natural turn-around for buses and keep them out of Old Town!
- Adding a new road would still have the same mess we are dealing with on Wilsonville Road. A few
 cars would use it thinking that they can get to the I-5 easier, but with Barber street bridge already
 open hardly anyone uses it during peak hours of traffic. So having another east west street would
 not help with the flow of traffic.
- Nothing is going to alleviate the congestion at Boones Ferry Road and Wilsonville Road because of
 the close proximity to I-5 and the Fred Meyer shopping mall. This connector project from Boones
 Ferry Road to Brown Road will help those who live on the west side of town get to the Fred Meyer
 shopping mall and other businesses in Old Town without going on Wilsonville Road and dealing
 with the traffic mess at Boones Ferry Road.

Verbatim responses

Question: Do you live, work, or own property in the area that will be directly affected by the new road?

- I travel from East side to take my son to Boones Ferry Primary. In a few years I will be taking him to Wood Middle school
- will have more traffic, vehicles, industry in resident area
- I live on Boones Ferry, this may give an alternate route out of Old Town but that is it
- business owner on 5th
- Commuting to/from Salem, this could help the mess of getting on I5. It takes just as long to leave Wilsonville as it does to get to Salem, once I'm on the freeway.
- Homeowner
- Work
- Reside on Boones Ferry Road between 4th and 3rd Sts
- We live in Old Town on Magnolia Ave and are highly worried about how this project will completely impact our area. We chose to live here because of the dead end and how it is isolated.
- If the connection is from 5th, I think it will increase traffic on Otto Lane.
- Maybe in a roundabout way, we live in Villebois
- I live in Villebois and work at Fred Meyers
- I live directly off Brown Road
- I live on the corner of Brown. I fear the traffic is insane and unsafe now, it will only get worse. Why don't you just widen Wilsonville Rd?
- Work in Wilsonville and Own property
- I manage a business on 5th Street.
- work and own property
- It could potentially add traffic on Wilsonville Road, west of Brown Road
- All Old Town residents will be impacted by this new road. We own a home in Old Town.
- I live in Old Town
- 4th Street in Old Town
- I live & work on Wilsonville road and its already hard enough to get onto Wilsonville road during peak hours. Having a new road that no body will use is a waste of tax payers money!

Verbatim responses

Question: Do you live or work in an area that would allow you to use the roadway once it is open?

- If I need to get to Fred Meyers and I am not able to get through traffic...?
- could use it to go to/from Fred Meyer; not worth it
- only in emergency traffic jams
- · need an option to get out of old town
- Live in west Wilsonville.
- Yes property on 5th st
- This road would allow us to exit out of our neighborhood (Old Town) if there is an emergency
- I do not live or work in that area, but would use the road
- We live in Old Town and own Jewarts Gymnastics NW
- Better accessibility to Fred Meyer at rush hour.
- I would use it to access East Wilsonville and also to avoid traffic when it backs up onto Boones Ferry from I-5.
- Live in Villebois
- This road would become my preferred route to work.
- I live off Grahams Ferry Rd
- I live on Brown and travel on it everyday
- I live in Villebois. It can take 30 minutes or more to travel to Fred Meyer (or other shops in the same area) during peak traffic times.
- I expect it would be more bike safe than Wilsonville Road.
- Villebois
- I commute from the Villebois to Old Town for appointments several times per week
- I live near
- easier access to Fred Meyer Center from Villebois during high peak traffic
- I use Brown Rd and Kinsman St to drive to 5th St and the shopping centers
- work at property location on the Brown Rd side of the connector
- I will not be able to use the roadway but it will benefit my commute to and from work.
- work and own property
- NA
- During times of busy traffic it will be a nice way to leave the Fred Meyer area.
- Easier access to Fred Meyer from West Wilsonville
- I work across the street from the access to Wilsonville road
- It would allow me to get to and from Fred Meyer without using Boones Ferry Road
- We are Old Town homeowners.
- live off Tooze road
- But I don't expect the need of using it much. It is a waste of money!
- I live off Brown Rd. and it would make easier to go to Fred Meyers
- Live on SW Jackson Way, work at Lowrie Primary
- We would use the road as an alternative to getting to the area via Boones Ferry.
- Depending on chosen option, this could give us a more direct entry to the shopping area.

- Currently very difficult to get to Fred Meyer etc from the north
- Old town to that side of Wilsonville would be much easier

Additional comments received

After the online survey closed, the following email comments were received by City staff:

COMMENT #1:

To me, Option A, is the clear choice.

Bailey Road connection is most appropriate (not 5th St)... this disqualifies Option D.

I don't like Option C due to the severe topographical challenges as it intersects with Arrowhead Creek Ln.

Option B is okay, but it causes an intersection with Kinsman very close to the intersection with Arrowhead Creek Ln.

Only Option A, provides safe distance between intersections along Kinsman, avoids topographical challenges, and terminates at Bailey Street.

COMMENT #2:

As you know, I own the property on 5th Street just west of the Railroad tracks. Sanitary sewer is available to serve my property on the east side of the Railroad tracks at the intersection of 5th and Boones Ferry. I met with City representatives in 2013 to discuss extending it through the existing Railroad crossing on 5th and they were supportive. Water is also available at the crossing. The availability of sewer and water obviously impacts my property, as well as others.

I have not heard or read any discussion of how those currently available utilities would be able to serve my property if the crossing is moved to Bailey. Please let me know if any thought has been put into that, and what those plans are.

COMMENT #3:

The following comments related to the Arrowhead Planning issue in general.

1) It was said at the last meeting that the City projects that the new extension from Brown Road over to Boones Ferry will reduce the traffic on Wilsonville Road by 15%.

Is that 15% figure based on a 2015 traffic count (or maybe even older?)? 2016 traffic count? Or is it a projection of the 20-year planning period?

COMMENTS:

a) The 'projections' around the traffic on Boones Ferry Road were seriously flawed back during the passage of the Fred Meyer development plans. Old Town resident concerns about traffic were ignored. Thus we are starting this process with mistrust already in our minds.

- b) The mistrust issue is only magnified with the denial that we have received so far about the Arrowhead Planning Area/Brown Road Extension having no intention of impact of traffic between Boones Ferry/Wilsonville Road intersection and the freeway!
- c) If these are current projections, we need at least a good faith attempt of an idea of how long it will be until all the new traffic created by the Arrowhead Planning Area (and any other projects waiting out there) will place us right back to the place we are now. At that point, those west side shoppers will have an easier way to get to spend their money, but Old Town residents will only have the <u>additional</u> issues in doing the same thing, BUT ALSO THOSE SAME ISSUES every time we attempt to go ANYWHERE!!
- 2) It was said that a benefit to Old Town will be that safety vehicles (namely fire engines) will be able to get into Old Town quicker with the new route.

COMMENTS:

- a) It is interesting that this is an identical point that Old Town made in the fight against the Fred Meyer approval that the Fred Meyer development would make it more difficult for emergency responders to get into Old Town. Now the City is using our argument in an attempt to resolve the issue that should have been listened to back then!
- b) I'm supposing that the 15% of traffic that is diverted from Wilsonville Road (which the Spokesman reported to be about 4000 vehicle trips a day) is based on 'current' 2016 numbers. Projecting a few years out won't they have the same problem getting to us on this new road as they do now? What will the difference be?
- c) Thus, it feels like this comment is only a 'stop gap' dynamic. Thus my suggestion is that the City needs to step back and take a more comprehensive look at this issue and not spend millions of dollars as merely a stop gap!
- 3) In counseling terms, it is called "an elephant in the living room that everybody avoids". This refers to the denial that the Arrowhead Planning Area development will have any impact what-so-ever on the traffic between the Wilsonville Road/Boones Ferry intersection and the Freeway.

COMMENTS:

- a) I've explained elsewhere that this is a totally impossible position to support. Also, it is a factor leading to mistrust.
- b) Additional traffic provided by Arrowhead Planning Area will only make all the traffic issues in the Wilsonville Road/Boones Ferry intersection to the freeway that much more difficult and they are almost untenable already! This was seen at the recent City Council meeting when some of the Council members couldn't get to the meeting due to traffic issues to talk about "the traffic issues"! And this did not refer to EAST side traffic issues!!
- c) Old Town will be specifically hit by any increase in these traffic issues.
- d) Permitting processes were halted in the past because of traffic issues in this area. It feels that we are seriously close already to that level again. So it seems really weird that the City is trying to move ahead with this planning.
- e) Referencing Steve Adams email, it appears that the City is working on the freeway issue supposedly for two years already! However, we don't know what that means. It is easy, however, to read between the lines in Mr. Adam's email to see that there is no solution in sight. THEREFORE whatever problems we currently have, <u>AND</u> whatever additional problems the development of the Arrowhead Planning Area brings with it, have no solution whatsoever or even any hope of a solution.
- f) So this "elephant" is something I guess we are supposed to just keep tiptoeing around and pretending doesn't exist but supposedly we need to keep on planning anyway like the problems don't exist! g) It just seems that without making some progress on the existing issues that we are simply getting the cart before the horse in proceeding with planning of this area at all.

In short, I feel strongly that the whole project needs to be put on the shelf for a while until other issues are worked out. It is ridiculous to be pushing a project that is going to singularly aggravate already insurmountable existing problems. One project goal of the Arrowhead Planning Area project is to increase the livability of Wilsonville. With the issues raised above, I think that the project will achieve exactly the opposite! We have quite a number of friends from outside of Wilsonville that are already complaining about "Wilsonville" and its traffic problems. Jokes are beginning to be made with the City as the butt of them. Thus, I really do not understand the need to keep pushing this project that has the single big picture benefit of making all matters worse! Why? Why right now?

Another issue coming up that will impact this area – and is another reason to postpone further planning on this area is how the bicycle-pedestrian bridge will hook up to the Tonquin Trail and/or the WES Train Station. That traffic will cross the area somewhere but we don't know where yet.

In the interim (while the plan is on the shelf) a task force should be appointed to identify a number of options to deal with all traffic-related issues on Wilsonville Road between the Freeway and Wood Middle School. I am unfamiliar with any comprehensive effort ever having been placed on this "ongoing problem area". It might be surprising what could come out of such an effort with a little foresight and positive planning. This could avoid spending millions on a stop gap project!

Finally, I'd like to state that I wish there would have been an opportunity to voice these kinds of issues before the City had gotten this far. None-the-less, I look forward to hearing what the City will present at the meeting later this week.

COMMENT #4

I apologize that is has taken me so long to get back to you from your very "quick" return e-mail to me before that last meeting on the Brown Road Extension. You did good – but I've been slow!!! I have made three renditions of this reply as there is so much that I'd like to say. But to keep it simple, I'll use this e-mail to respond simply to your email. If I can get time/chance, I hope to make specific replies regarding the project in a separate response.

You were very perceptive in your comment about my strong opinions on the subject. Having lived in Old Town for nearly 30 years and seeing Wilsonville grow from 4700 to nearly 23,000 - I've seen a lot. I've seen the City succeed in a lot of projects, and frankly not do so well in others. This is one where I see some grave concerns.

Regarding your e-mail, you stated ...

- 1. "The intention of the project is not to bring additional traffic to the Wilsonville Road/Boones Ferry/I-5 area, but to provide an alternate route for ... and avoid existing and future increases to traffic in the Wilsonville road/Boones Ferry Road/I-5 area."
- a) This comment was made at the last meeting, as well, and in all honesty it left me literally totally aghast and shaking my head.
- b) The pure purpose of the Brown Road Extension (thankfully is no longer the joke of being an "Old Town Escape Route") is to get the west side residents into the commercial area more easily to spend their money at Fred Meyers. Okay, fine but that is an extremely narrow view of the domino effects the project creates.
- c) How can there possibly be a sizable jump in the number of homes on the west side (namely in the Arrowhead Planning Area) PLUS a number of new businesses in the same area, plus any other growth on

the West Side area – and there NOT be ANY increase in traffic "to the Wilsonville Road/Boones Ferry/I-5 area"? That would be a total impossibility! Yes, the new road will/could take some of the traffic away, but I have a strong hunch those new residents and new businesses will from time to time be making their way on over to the freeway and/or to the east side of town – THUS INCREASEING TRAFFIC IN THE SPECIFIC AREA YOU SAY YOU ARE NOT GOING TO IMPACT!!!!

- d) Thus the whole Arrowhead Planning Area project spells nothing but increased doom and gloom for the traffic problems we already have. For us in Old Town specifically, more traffic issues in this area means more problems simply getting out of/into our homes in Old Town, more problems at the maligned intersection of Wilsonville Road/Boones Ferry, more problems to getting to the freeway, and more problems trying to get onto/off the freeway.
- e) I can understand that it is not your "intention" to create more problems in our adjoining area, but it is unutterably undeniable that development of the Arrowhead Planning Area without corresponding (or even preceding what a novel idea!!!) solution to the already existing problems will do nothing but aggravate further existing problems!!! This could drive business AWAY from Wilsonville; make new potential residents think twice before moving here; AND leave Old Town with nothing but the added new problems to what we already have which is already nearly intolerable!! (It was an interesting note when City Counselors couldn't make it to that recent council meeting in time to talk about traffic issues because they were stuck in traffic!!!! Hmmm??? And the City Engineers want to further ADD to these issues with the development of the Arrowhead Planning Area without doing corresponding planning on the existing problems??? Oh, boy!!! Government!!!)

2) "In regards to congestion on I-5 and the impacts it has on traffic on Wilsonville Road and Boones Ferry Road ... and we have been working with ODOT for over two years now on what options are available to mitigate ..."

- a) This is the kind of statement that makes me totally lose confidence in government. It comes across to me as a totally empty, bureaucratic comment because I have no information what-so-ever to back it up. There's simply your statement. I've read nothing in the paper about it, or heard anything about two years of work with ODOT by the City.
- b) I don't know if this means that somebody from the City happened to make a brief mention of the issue over cocktails two years ago (thus "we have been working with ODOT for over two years") or whether this means that dedicated, weekly meetings with ODOT have been happening for two years specifically on the topic.
- c) It seems that if ongoing meetings have been happening, we would have heard about the efforts, and information regarding what the roadblock is that is holding things up would have come out sometime during these two years. So without any such info, and for it to come up in this manner, the comment is just an empty comment with no meaning what-so-ever.
- d) I find it very interesting that with the situation at a nearly critical status already, the City wants to go ahead and proceed with increasing those same problems further with, reading into your statement, no hope of mitigation anywhere even on the horizon with the State. Thus, in short, lets increase the problems and just make the citizens have to live with it that way! And the goals are to 'enhance the livability' of Wilsonville! I would suggest that I think there is a STRONG contradiction here!!!!

3) "However, just because it is taking time to work with ODOT on the I-5 issues does not mean that you abandon all other transportation projects in the City."

- a) I think this is a little over-generalizing! I don't believe anybody said anything about "abandoning all other transportation projects in the City."
- b) I find the statement interesting from the standpoint that the City of Wilsonville indeed halted building permits projects on the west side for a lengthy time based pretty much solely on TRAFFIC ISSUES related specifically to Wilsonville Road and the freeway. That is a primary reason Fred Meyers was not built a number of years earlier!
- c) So, yes, development can be stopped when the infrastructure to serve it can't handle it. We've/The City has done it! And that can be a very intelligent move! With the current traffic problems, I believe we

are at that same point again where we were prior to Fred Meyers some years back! But because you should prudently chose to hold up on the Arrowhead Planning area planning does not – and I agree, should not have any impact on 'other transportation issues in the City'!!!

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Without even getting into my comments about the specifics of 5<sup>th</sup> Street versus Bailey Street, for me the above three issues alone are significant enough to recommend that the City hold up on it's whole planning effort on the Arrowhead Planning area until at least SOME of the existing traffic issues are addressed within the Wilsonville Road/Boones Ferry/I-5 area. This study should include the projected traffic increase resulting from the Arrowhead Planning Area and any other projects waiting in the wings out there. Thus a comprehensive approach could be taken rather than a narrow view not recognizing domino effects one project has on other issues.

Another option would be to put a planning team together to study specifically Wilsonville Road traffic west of the freeway to Wood Middle School. I believe some interesting results could come out of this kind of a study to simply make Wilsonville Road itself work better for this entire stretch. With efforts thus made, a more sensible and far-sighted approach could really be made that would benefit everyone (not just the west side Fred Meyer shoppers!!!).

A third thought, which hasn't officially hit the boards yet, is the new traffic that the bicycle-pedestrian bridge is going to create. With a strong connection between the bridge and the WES Train Station, strong thought needs to be given to how/where that traffic will flow and thus affect/cross this same stretch of Wilsonville Road.

Thank you for this chance to respond. I hope to give specific comments on the 5<sup>th</sup> Street versus Bailey as soon as I can. See you at the meeting!

#### **COMMENT #5:**

The following are specific comments related to the 5<sup>th</sup> Street versus the Bailey Street Connection on the Brown Road Extension.

1) I originally estimated 1500 vehicle trips to be the 15% of the traffic diverted from Wilsonville Road to the new street – and that was totally unacceptable! But the Spokesman then said the 15% would equal 4000 vehicle trips a day! All this traffic would go on a simple, two-lane street between Bailey and 5<sup>th</sup> if that option is selected.

#### **COMMENTS**

- a) 4000 vehicle trips per day plus the usual Old Town traffic on a simple two lane street ... and Old Town residents aren't supposed to be hopping mad? This would be on top of hte existing issues of backed up traffic on Boones Ferry Road from Wilsonville Road past the McMenamins at times! I can't begin to imagine what this would be like to try to simply get through to go to well, say, City Hall! Or to go to work! Or to a Trailblazer game! Or to anywhere else we all go to! This is a absurd situation to force on us!
- b) The additional 4000 trips a day we would have to content with obviously would not be divided between all 24 hours! Thus, they will be more concentrated in a lot fewer hours when we are trying to get in/out of Old Town.

- c) 4000 trips is only a 2016 figure. It unfortunately will grow and increase from there!!!!
- d) Granted, we could join that 4000 trips and go miles out of our way to avoid some of the congestion, but that would be worse than suffering through the 3/10 mile of congestion!
- 2) 5<sup>th</sup> Avenue would create a huge awkward jog.

#### **COMMENTS**

- a) Traffic coming out of the Fred Meyer parking lot onto Bailey would be very weirdly forced to make a huge jog south down to the 5<sup>th</sup> Street crossing.
- b) Besides being extremely awkward, it would be time consuming, gas wasting, and totally useless when they could just zip right across Boones Ferry and go straight to their destination via continuing on Bailey.
- 3) 4000 vehicle trips added to existing traffic on a residential street

#### **COMMENTS**

- a) There are private homes on the jog to the south from Bailey Street to 5<sup>th</sup>.
- b) There are historic buildings on this stretch
- c) There are youth serving businesses on the corner where all this traffic would be turning (one particularly has been expanding in recent years) this makes this corner a particularly dangerous place to arbitrarily put that much traffic. Is the City open to law suits for child injuries for choosing 5<sup>th</sup> Street?
- 4) City code

#### **COMMENTS**

- a) Old Town went through a two year process a while back with the City's lead to determine what we wanted our neighborhood to look like. It was put into the resulting plan, AND SIGNED BY CITY COUNCIL that there would be no sidewalks, curbs, gutters, etc. in the Old Town area. It seems that there would be some rules broken if this residential street were now upgraded to facilitate the traffic level that is expected (and that traffic level is only the initially beginning traffic amount not future!!!!!). But to do so will break City Code for Old Town. It may be the 'corner' of Old Town, but it is still part of Old Town! b) Residents do not want ANY further commercialization of Old Town which includes this strip of Boones Ferry Road!!! Thus, upgrading of the street is not in the offing! (Especially if there is a simple and more realistic option to go straight across on Bailey and not even get into Old Town!)
- c) The purpose of the City Code amendments for Old Town was to help preserve the historical sense of the neighborhood. The quiet neighborhood, with people walking around in the middle of the street to say hi to neighbors is a huge, unique characteristic of the neighborhood. The huge traffic influx would utterly destroy the sense of neighborhood AND the historical characteristic that we are trying to preserve!
- d) I can say that the overwhelming feeling of the neighborhood is that we want the historical nature of Boones Ferry to remain as it is. This was, as stated, concurred with by City Council when it was put into City Code. So there are issues around this problem other than just adding 4000 additional daily vehicle trips on the lifeline we have to get out of our neighborhood. Thus, it just isn't acceptable (and that's working with only 2016 numbers of traffic!)
- 5) Probable addition of two stoplights
  3 stop lights in under 3/10 of a mile is very excessive!!!! (Plus the one at Wilsonville Road!)

#### **COMMENTS**

a) We used to simply turn on Boones Ferry Road and simply drive up to Wilsonville Road and head towards the freeway. Now we have to stop at a stoplight. Granted, the one stoplight has not been too

much of a problem. However, if the 5<sup>th</sup> Street option is chosen, I would expect that a second light would have to be added at Bailey to allow that traffic out, and furthermore a third light would have to be added at the 5<sup>th</sup> Street corner because of the Old Town traffic attempting to get out of our homes – and the church traffic on Sundays. This light would also be necessary for safety reasons due to the dance studio and preschool already on that corner. So now we not only have to put up with 4000 additional vehicle trips, the existing traffic to get out of Boones Ferry Road, the current and additional traffic woes from the intersection to the freeway, and getting onto the freeway, now we will also have to put up with three traffic lights? And there is a much better, much preferred option that would avoid so much of all these hassles?

b) The additional lights would be a hindrance to the traffic flow you are trying to facilitate to get west side residents easily into the Fred Meyer complex to spend their money. The straight shot of just heading west on Bailey doesn't present the jog or the extra light!!! (AND PLEASE DO NOT EVEN THINK OF PUTTING IN ANY OF THOSE ROUND ABOUTS DOWN HERE!!!!! WE HAVE TO PUT UP WITH THEM ELSEWHERE. KEEP OUR AREA ROUNDABOUT FREE!!! THANK YOU!)

#### 6) Not choosing the Bailey Street option presents ethic questions

#### **COMMENTS**

- a) I feel for OREPAC since they just purchased the property south of Bailey down to 5<sup>th</sup>/west of the railroad tracks. I had not heard prior to the first meeting of that having occurred. Granted, the use of Bailey does put them in a bad spot with their new expansion plans. However, the flip side of the coin is that it was purchased with the knowledge of many years that a street could be coming from Bailey west to Brown Road.
- b) Many questions can be asked as to why ORPEC went ahead and purchased the property with the prior full knowledge that the City could well be putting the Brown Road Extension through it via hooking up with Bailey Street.
- c) A variety of questions could be asked here, but I would prefer to not have to get into them at this time. d) I am very sorry for a bad business decision on behalf of OREPAC. But they made it knowing the potential.
- 7) The numbers I believe are to be brought out at the meeting this week, but it seems like **the extra cost** for the railroad crossing at Bailey is more than offset by the cost of the bridge building required in the 5<sup>th</sup> Street scenario.

In light of so many factors, and for the benefit of the whole neighborhood (rather than just one business) it is clear that if the connection needs to be made to Boones Ferry Road, Bailey is the single, ONLY, real option.

As you astutely observed, I indeed do have some strong feelings – and I feel some pretty good arguments. Unfortunately, the structure of the first meeting or the structure of the web site option neither allowed for a lot of this kind of feedback. The meeting also did not allow any dialogue or answers for anything. So all this feedback is indeed made with the hope that the decision is not final yet. City processes don't usually see much variance from a chosen course once it is this far. So not only do I have strong feelings, but I am ultra-concerned as well and feeling a bit helpless. It is my life and my home that is going to be so negatively impacted if 5<sup>th</sup> Street is selected. So please do not take me as some 'bad guy' going on and on! I am simply standing up for things that, indeed, are very important to me.

#### **COMMENT #6 (see attached)**



October 20, 2016

VIA EMAIL kraushaar@ci.wilsonville.or.us; adams@ci.wilsonville.or.us

Ms. Nancy Kraushaar Community Development Director / City Engineer 29799 SW Town Center Loop E Wilsonville, OR 97070

Mr. Steve Adams Development Engineering Manager 29799 SW Town Center Loop E Wilsonville, OR 97070

Re: Input on Location for Brown Road Extension;

Dear Nancy & Steve,

As you are aware, OrePac has been headquartered in Wilsonville for many years. We currently employ over two hundred people locally and over 900 companywide. Due to several significant opportunities, we anticipate having to expand our local operations in the near future and have begun taking steps to accomplish that. Our goal is to remain in the City of Wilsonville if possible. I am writing to provide our thoughts on the City of Wilsonville's proposed extension of Brown Road, as this will have a direct and immediate impact on our operations. If done appropriately, we believe this will be a significant improvement in Wilsonville.

We understand there are two proposals being considered, one that would route the extension to Bailey Street, and the other that would route the extension through to Fifth Street. For the reasons discussed below, OrePac has a very strong preference for the extension being routed to Fifth Street. As we will discuss, we believe that routing the Brown Road extension through to Fifth Street is the far better alternative. It will be more cost effective for the City and will provide greater opportunity for future long-term growth on the parcels of land involved, it will provide safer routes for cars/trucks, and it will facilitate the planned future expansion of OrePac's operations in the City of Wilsonville.

In the past few years, we have been fortunate and seen OrePac's business grow to the point that we have begun looking to expand our operations. It is our true preference to expand our operations in Wilsonville if possible. As a first step toward accomplishing this, OrePac, through an affiliated entity, recently acquired tax lots 100, 300, and 600 in Wilsonville.

Ms. Nancy Kraushaar/Mr. Steve Adams October 20, 2016 Page 2

These parcels are located adjacent to OrePac's existing facility on our western and southern boundaries. These parcels will be ideal to accommodate our future expansion, and potentially other industrial development as well. The routing of the Brown Road extension, however, will have significant impact on these potential future plans. As will be discussed, OrePac believes that the routing of the Brown Road extension should be done to Fifth Street, not through Bailey.

## I. Routing The Extension Through to Fifth Is More Cost Effective, and Provides For Greater Long-Term Growth

#### a. Fifth Street Is More Cost Effective

Under both routes being considered, the City will be required to acquire private property in order to extend Brown Road through to SW Boones Ferry. Based on our understanding of the current proposed locations for both routes, extending Brown Road through to Bailey Street will require the City to purchase significantly more private property than if the extension is routed through to Fifth Street. Routing the proposed expansion through to Bailey will require the City to purchase not only more land to accomplish the expansion of Brown Road itself, it will also require the City to purchase more private property to facilitate the connection of Nutting Road. Our preliminary estimate for the additional land costs is approximately \$400,000.

In addition to the increased land acquisition costs associated with routing the extension through to Bailey Street, we believe there will be added costs to address the railroad crossing at that location. Routing the extension through to Bailey Street will require a 20" increase in the height of the rail spur on Bailey Street and additional associated expenses relating to the spur as it enters the OrePac facility, costs which we believe the City would have to bear. We have been advised that the costs to accomplish this could also approach approximately \$400,000. Additionally, the attendant work on the railroad spur will require OrePac to reduce business operations during the construction period, resulting in lost profits. OrePac would certainly look to the City to be reimbursed for these business losses.

In short, it will likely cost the City in excess of \$1 million more in the immediate future if the City elects to route the Brown Road extension through to Bailey Street as opposed to Fifth Street. Please know that these figures would need to be substantiated through the appropriate request for proposal process.

#### b. Fifth Street Provides More Long-Term Growth

The area through which the Brown Road extension will run is zoned Industrial, and we are not aware of any proposals to change that zoning designation (nor would that be appropriate in light of the existing businesses that are presently there). As a result, we believe the routing decision should take into account how best to maximize future development opportunities, which would redound to the City's benefit in the form of more jobs, increased

Ms. Nancy Kraushaar/Mr. Steve Adams October 20, 2016 Page 3

property tax revenues, and increased economic activity in the area. Routing the extension through to Fifth Street will provide for greater long-term growth opportunities for the City by leaving more land available for future industrial development. Specifically, we understand that the route being considered for extending Brown Road through to Fifth Street will run along the south western portion of lot 600, then drop down across the western portion of lot 300, and then along the southern border of lots 200 and 100. This route will leave the vast majority of lot 600 undisturbed and available for future redevelopment, including OrePac's anticipated expansion of its operations, and permit some development on lot 300.

By contrast, routing the Brown Road extension through to Bailey Street will unnecessarily reduce by a significant amount the potential land that could be available for future industrial development. It would essentially bisect the western portion of lot 600 and further bisect the southern portion of lot 600 to accommodate the Nutting Road connection. This would reduce a single large, attractive industrial property, into approximately no less than three relatively small industrial lots. Adding in the undevelopable area of land surrounding the existing BPA Tower, the resulting property would, in our estimation, be significantly less attractive to future industrial development. This reduced development potential will result in fewer jobs, long-term lower property tax revenue to the County and the City, and significant loss of potential future economic activity in the area.

#### II. Routing To Fifth Street Is Safer For Traffic

Routing the Brown Road extension through to Fifth Street will also be safer. At present, OrePac is able to route its truck traffic, which includes approximately 20 or more maximum size tractor trailers per day, by entering our facility via Wilsonville Road and Industrial Way. Extending Brown Road through to Fifth Street will allow us to continue to operate this way. Routing the extension through to Bailey Street will not.

Because of the length of many of our trucks, many of which are double trailers, they cannot effectively be backed up. As a result, they need sufficient room to be able "to loop" our facility to enter and exit the property. Routing the extension through to Bailey Street, we believe, will take away the space at our property that currently allows for our trucks to enter and exit by driving in the forward direction. Without this space, we will be required to use local streets to create our "loop." Routing the extension through to Bailey Street will mean significant increased truck traffic on local streets, including SW Boones Ferry Road and Bailey Street, in order to us to be able to unload and load our shipments. We believe this would be a significantly more dangerous traffic pattern for all concerned. This would likely be avoided if the Brown Road extension is routing through to Fifth Street, as OrePac expects to be able to continue to use the Industrial Way access as the primary access point to its facility.

#### III. Routing To Fifth Will Facilitate OrePac's Expansion In Place

On a personal level, routing the extension through to Bailey Street will likely eliminate OrePac's ability to expand its operations in Wilsonville. The ability to expand our operations onto the immediately adjacent parcel would enable us to expand our operations in one location. This is a very cost effective way for us to expand. If we cannot expand our operations onto the adjacent parcels, it is highly likely that OrePac would have to consider relocating its entire operations to a different location, including a different city, so that all of our local operations could be in one location. It is not our desire to relocate our business from Wilsonville, but our ability to remain will certainly be impacted by our ability to expand our operations.

The reasons set forth above are not the only issues we see with regard to where the Brown Road extension gets located, but they are very significant to us. Other issues include, but are not limited to, our belief that placing the crossing at Fifth will provide for less traffic congestion on the extension itself, as it will allow cars to enter SW Boones Ferry Road further away from Wilsonville Road. Cars entering SW Boones Ferry Road from Fifth Street should also allow for greater traffic flow into Fred Meyers and into the soon to be built Subaru Dealership, again because there will be greater spacing between intersections feeding traffic onto SW Boones Ferry Road.

OrePac is happy to discuss these issues with the City. However, we would request that these concerns be taken into account and made part of the official record as the City considers this issue. Should you have any questions in this regard, please do not hesitate to call me. I can be reached directly at 503-685-5499.

Very truly yours,

**Brad Hart** 

President & CEO

DAR/kmb

#### **COMMENT #7:**

I apologize for not being able to attend tonight's meeting. For those of you who are unfamiliar with me, I became active in the Old Town Wilsonville community when my family moved here in 1987. In the location of what is now Lowries Marketplace Plaza, there was a very small shopping center, the post office, library, and Wilsonville Primary school. Wilsonville was just coming out of its rural existence.

Today, Wilsonville is a bustling suburban city, with traffic to go along with the growth. Do to growth in business, traffic has increased in Old Town. This situation was foreseen by the Wilsonville West Side Task Force, which lasted from 1994 to 1996. The work done by the Task Force led to the development of the West Side Master Plan. I was a member of the task force, along with Tim Knapp and Charlotte Lehan. One of the issues we tackled was traffic impact from development within the west side of Wilsonville, including development in Old Town.

We could only speculate as to what would be built on the site of Square 76, which is now occupied by Fred Meyer, other businesses, and the Bell Tower Apartments. The Bailey Street Apartments and the Subaru dealership are the only current businesses included in the original Square 76 plan; the primary school was predicted to be a continuous fixture.

As we explored different development models for Old Town and areas west of the railroad tracks, we tried to develop traffic models to address the different types of development that could possibly come to these areas of Wilsonville and especially Old Town.

We considered many options including a bridge over I-5. However, we eventually realized that routing heavy traffic through the intersection of Boones Ferry and 5th Street wasn't feasible. Due to the narrow intersection, and to accommodate additional traffic and sidewalks, Boones Ferry and 5th Street would need to be widened. There is not room for sidewalks on the east side of Boones Ferry Road without demolishing the historic Feed Store, Young's Garage, and the three historical buildings north of the feed store, two of which are over 50 years old and one of which is over 100 years old.

The other location the task force considered was the intersection of Boones Ferry Road and Bailey Street. Today, it is at Boones Ferry and Bailey where traffic backs up; it has become a choke point. Bailey was and is still considered the best option for a connector to Brown Road. In fact, when the Lowries property was developed, a road extension was included on the south end of the property.

The best option is to put a traffic light at the intersection of Boone Ferry Road and Bailey Street and to extend Bailey to Brown Road. It will benefit not only Old Town residents and businesses, but also future development along Wilsonville Road west of the railroad tracks. It was the best option we looked at in the 1990s, and it is the best option today.

As a resident of Old Town for 29 years, I have witnessed the growth of Wilsonville from a rural community to a suburban city. I participated in the West Side Planning Task Force to develop the best guidelines, based on the available information, to address future growth and development. Although much has changed, the Task Force's recommendation of connecting

Bailey Street to Brown Road has not, and it remains the best option for solving Old Town's traffic woes.

Notes:

WILSONVILLE WEST SIDE MASTER PLAN

https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/8775/Wilsonville\_West\_Side \_Subarea\_Plan.pdf?sequence=1

**RESOLUTION NO. 1597** 

http://www.ci.wilsonville.or.us/DocumentCenter/Home/View/4166

#### **COMMENT #8:**

As a long time resident of Wilsonville, Old Town, I was very disturbed by the news I heard of a proposed Extension of Brown Road connecting with 5<sup>th</sup> Street at Boones Ferry Road. My home is arguably the oldest essentially unchanged building in the city and that corner with my building and the Wagner property across the street is the only remaining visual Historic reference as to what the town used to look like. I would refer you to the photographic mural displayed in our Public Library.

Even the newer building construction across the street from me was designed and constructed in such a way as to reflect the charm of an older community. The businesses in Wilsonville also support the concept of "Old Town" with their support of a Trolley that circles through the area during the summer months to pick up passengers and take them throughout Wilsonville. It was no accident that they chose a means of transport that reflects the concept of an old neighborhood.

I am talking here of the visual aspect of this proposal but I feel there is something greater at stake here. The proposed Extension of Brown Road at 5<sup>th</sup> Street would also effectively divide Old Town in half, bisecting an existing neighborhood and bringing substantial traffic to a part of town already under siege with speeding busses and traffic. I invite you to sit on the bench under my front porch for a little while, let's say between 7:00 and 9:00 in the morning and witness the speeding traffic, and the noise, smells, pollution and dust that fill the air.

Perhaps a traffic survey could be done that would give us an informed opinion of the impact the increased traffic would be but I'm sure none of us needs a study to tell us what we already know, i.e. that it is an area of potentially high risk. One could say even dangerous because of the many children that "people" our town here. It is already a serious problem and will only get worse with the increase of traffic that would descend on the area. The School of Dance, the Day Care Center, and the children's school bus stop are all right there. Many children walk to the various bus stops and it always concerns me because of the existing traffic. Many feel that this would only be exacerbated by the proposed extension.

Would Bailey Street be a better solution? In some ways yes, it is a more natural border to the perimeter of the Old Town neighborhood. However I speak as advocate of the children there too. There are sidewalks that border the apartments and the Fred Meyer property and that is some help in insuring their safety but still the problem remains -- the traffic. Traffic and children do not mix.

I feel the solution is to not consider that Brown Road Loop at all and rather concentrate on constructing a parallel access road on the other side of the railroad tracks that would service any planned businesses in that area. I do not see why there has to be a connection from Brown Road to Bailey Street or 5<sup>th</sup> Street

anyway, other than make convenient a passage for folks coming off the hill and down Brown Road to get to Fred Meyers.

I speak for the livability of our neighborhood and feel that it is in great jeopardy with the consideration of these proposed extensions and feel further that the issue of safety and the quality of our environment is at stake as well. So I urge to you to hold these concerns close to your heart for in point of fact, your charge is to serve and protect not just the commercial concerns of the area but also the livability for its citizens.

Thank you for taking the time to read this letter. I am sorry that I cannot attend the meeting to present my views to you personally but I have been out of town taking care of my mother who has just passed away last week.

#### **COMMENT #9:**

Please find attached a rundown of my comments that relate to the listed Project Goals and Desired Outcomes.

In short, I am very opposed to this whole project. The on-line survey doesn't allow for any input of that type. The overall reason I am opposed to this project is that it doesn't really serve any purpose. Additionally, it severely compounds already problematic traffic issues along the commercial section of Boones Ferry Road, adds significant new traffic to the maligned intersection of Boones Ferry and Wilsonville Road, put more traffic on the section of Wilsonville Road to the freeway, and therefore just makes the existing issues with the I-5 on-ramps and freeway traffic even worse! The goals that the project put out are not met at all! In short, the only thing the project does is that it makes existing problems worse! For example: "Helps the economy" – by making existing problems bigger? Helps "quality of life" – for who? "Minimize environmental impact"? By the destruction and conversion of a riparian, gullied wild land into industrial use. That's a hard case to make! "Support existing businesses and residents" – that' a total falsehood!

If you have any questions, please feel free to contact me. Thank you for allowing me to provide input!

CITIZEN COMMENTS RELATED TO THE BROWN ROAD "Project Goals and Desired Outcomes." LISTED ON THE INTERNET SITE.

The first comment states that the project will "Create the foundation for a great place to live, work, and enjoy."

- 1) The comments under this heading are basically 'stock', current-day verbiage that do not really bring any light to the specific project. As such, the comment tries to make it sound like a really good thing but ends up not saying anything. They are words that can be picked up and used most anywhere in this kind of arena in an effort to make things sound good and positive, and needed.
- 2) While trying to sound good, it puts a pretty face on the project while simultaneously utterly ignoring the negative impacts on 50% of the project the east end!

3) It goes on to state "...that enhances Wilsonville's vibrant economy and quality of life." This paints a picture that this connector road will be a great (or "vibrant") asset to the area of Wilsonville around Costco, and the industrial area in NW Wilsonville, and to the area around the high school, and maybe even Frog Pond. OR maybe even the Ace Hardware area. Again, this is 'stock' language that is used solely for the purpose of making it sound flowery, fancy, and therefore automatically 'right on'! It is a totally erroneous statement used for City PR purposes only.

If it is referring to a "great place to live work and enjoy" as simply the new area I guess it could be said that ANY improvements would live up to that goal since there is nothing there now! Thus, it is pretty weak as it tries to focus the spotlight solely on the new area and very pleasantly ignores the havoc and issues it creates.

Next it says, "Support existing residents and businesses."

#### FIRST PARAGRAPH

1) The page says, "The Connector will serve and enhance the residential and commercial development in the Old Town neighborhood, east of the railroad tracks." Oh, boy – this one really can't be much further off base or it would be out in the Pacific Ocean! First of all, "Enhance the residential ...development in the Old Town neighborhood" – did the person writing this, or those who approved it, stop to think that there ARE NOT too many empty lots in Old Town left to "enhance"? And if there are no lots available, what is this statement trying to say? The reality clearly demonstrates that this statement is empty rhetoric, it says nothing, and that it is merely a PR wording-ploy to try to somehow put a pretty face on the project that the City has wanted to do for years. The City has been stymied for probably over 25-years because the whole thing ultimately serves very little to no purpose – outside of making the City map look good and spending a lot of our tax dollars.

It also brings0 in "...commercial development in Old Town". Does the City not look at its written records and codes? It was just a few years ago that the City itself helped Old Town residents put together a whole zoning package and development plan for Old Town. The purpose was to preserve what we have in the historical, original part of Wilsonville. We went through a whole process where we identified that we don't want sidewalks; we don't want smaller lots; we don't want gutters; etc. All this was put into City Code, and passed by City Council. For one person, I don't remember putting ANYTHING in there about enhancing commercial development in Old Town. Has anybody ever noticed that 90% (or probably more!) of Old Town is indeed RESIDENTIAL and NOT COMMERCIAL? There are, indeed, empty business store fronts in Old Town – and I'm sorry that they were put in along side of nothing but residential 'development'. I think that the city officials' thinking back then was that a lot of Old Town would be converted into commercial development. Thanks to the codes that are now in place we are not supposed to lose more Old Town to commercial development. So for the City to put the "purpose" of a project is to enhance the commercial development in Old Town doesn't go along with city code, neighborhood desires, or anything but either 1) empty rhetoric or 2) ongoing efforts of the City to overpower the Old Town residents desires.

IMPROVE ACCESS......what does this mean? Improve access for whom and for what? The project was originally titled, the OLD TOWN ESCAPE. I notice that the City has finally dropped that title because after 25 years it finally realized that what they wanted to build indeed was no 'escape' for Old Town residents. It took them that long to finally realize that the current traffic problems (and the past ones before Fred Meyer was built) are with Old Town traffic trying to get to the Freeway – not to NEWBERG!). Thus the whole concept of an 'ESCAPE' has been totally invalid from the beginning. It would take an idiot to think that that would a real option for Old Town residents!

Back to the improved access – the only improved access that this project is going to provide is for far eastside residents to get INTO the Old Town area to get to Fred Meyers, etc. Thus, the new project would ONLY SERVE TO BRING MORE/ADDITIONAL traffic into a quiet, residential area. That is not even close to any kind of picture that I would guess any Old Town residents would want!

Thus, the concept of 'IMPROVED ACCESS' is an utter misnomer to begin with and is thus useless, empty, and only serves as a PR ploy on the City's behalf.

ECONOMIC GROWTH.....As stated above, Old Town doesn't really offer much 'economic growth' potential to the City of Wilsonville being basically residential – residential with City codes in place to help keep it that way! I believe the residents like it that way and would want to keep it that way. I don't believe many Old Town residents would be in favor of bulldozing their homes to make way for some commercial ventures. So the concept of promoting 'economic growth' in Old Town is dead in its tracks before it even begins!

As for economic development on the west side of the tracks – granted, the proposed new road would probably encourage new businesses over there. This would be done at the expense of the existing woodland there, the current residents, the wildlife and 'four-legged critters' living there (that were pushed out with development of Fred Meyer and the newly developing car lot). There are a lot of environmental concerns that will have to be addressed, if not overcome to develop this area. There will be people that will be forced to relocate because of City wants more businesses to enhance City tax coffers in this area.

Of primary concern, however, is for the City to demonstrate that this statement (improve economic growth) can actually happen because of this costly new project. Permitting for anything put into this area (Arrowhead Creek Planning Area) may well be delayed like Fred Meyers was for many years – due to exactly the same issue/problem as they faced back then with Fred Meyers – the traffic at Wilsonville Road/Boones Ferry Road Intersection and the capacity of the street between there and the underpass itself, – as well as the capacity of the I-5 on-ramps which we all know is already a HUGE issue!) ALL TRAFFIC WILL STILL BE FUNNELED ONTO EXITING INFRASTURCTURE THAT IS ALREADY INADEQUATE! Old Town residents tried to bring this problem up back during the Fred Meyer approval process but everyone was enthralled by the little computer graphics of little lights representing proposed traffic. Sure, it looked good then because it satisfied the problem then, but it was not designed for even the CURRENT traffic – let alone adding considerable new traffic from the Arrowhead Creek Planning Area. The new traffic will ring a death bell to traffic regardless of whether it simply goes to Wilsonville Road in its efforts to get to the freeway (or to the eastside of town), or whether it

clogs Old Town streets and negatively affects further the bad infrastructure issues to get to Wilsonville Road via that commercial section of Boones Ferry!

So indeed, how does this project improve anything – let alone economic growth when it needs to be halted until some solutions are found? We are obviously still stuck with a traffic issue, that would only be made worse, with NO HELP ANYWHERE ON THE FARTHEST HORIZON. Old Town brought this up back in the process of clearing the way for Fred Meyer. The City didn't pay attention to resident input then – and it obviously isn't paying attention now by pushing this project again – and doing so apparently without any thought to the problems the project will create. This is part of the reason the whole concept hit the graveyard-of-ideas back when (meaning that the whole project was appropriately eliminated and take off the table totally). Nothing has changed since that time. However now we find that obviously some 'new blood' has looked at the surface of the project and brought it back like at "good idea" again and have simply tried to repackage it. However you dress up a dog, it is still a dog! And we are still left fighting the same old battle!

Why is it not totally obvious that "new economic development" in this area should NOT be even be encouraged until the issues with the State over I-5 connections, and the other intersection and street infrastructure issues, have been worked out so we don't automatically worsen the current problems by empty PR rhetoric about improving economic growth! Indeed, it could put a cloud on some of the economic viability of Wilsonville because of not really thinking this thing through before it started!

The third claim was to IMPROVE LIVABILITY..... Again, I ask WHO FOR? Greatly increased traffic into the Old Town area is supposed to INCREASE "our" livability? Further traffic issues added to the current ones in terms of getting out of our neighborhood are supposed to increase our livability - and maybe even property values? I don't think so!!!! Improve livability in terms of getting out of Old Town and getting on our way up/down the freeway – again I don't think so!!!!!! Improve the livability of the folks that currently live in the study area - I don't think so!!! Who would want to get rid of their isolation, quiet, and beauty with nearness of the city – all reason why they probably live there in the first place - to have a whole bunch of traffic trucks, cars, and whatever - going through their front yards? Improve the livability of folks EAST of the freeway – hey, no affect on them whatsoever – so wrong yet again. The single only group that this statement could possibly be good for would be the people who live on the far east side of the City wherein they would be given an extra method to get to somewhere they are already getting to anyway just fine! But they couldn't get to the freeway any quicker even if they used the new road - in fact it would probably increase their time. So this single benefit would be only for the convenience of Fred Meyer shoppers! Therefore, maybe if this project should proceed, Fred Meyers should be made to pay for their customers' convenience rather than the taxpayers of the whole City!!!!

So IMPROVED LIVABILITY would be ultra-restricted to a small minority of citizens for pretty minute reasons. I would question the advisability of spending all this kind of money simply for this reason alone!!!! That would be considered reckless use of public funds!!!!

Support existing residents and businesses.

1) "Existing residents" you say!!! What is there, 10 maybe 15 that live in the affected area? A large, multi-million dollar investment, at huge expense to ALL city residents, specifically designed to help a dozen or so residents? That seems rather extravagant! And, indeed, does it really help those few residents in any significant, real way? OR is it really an invasion into their homeland and property with some stock PR wording that is supposed to make it sound positive designed to get them off their property?

Furthermore, I might suspect that the current landowners/residents in the area might well prefer for a whole bunch of people to NOT be traipsing through their currently private abode. That's probably a huge reason they live there in the first place. On the other hand, maybe this is just a positive sounding PR approach by the City that nicely masks the City's genuine aim to actually oust the current residents from their homes so that the City can develop their property and thus enlarge the City coffers with new tax money?

If "EXISTING RESIDENTS" means Old Town – I think I've already explained above how that is an erroneous statement – additional traffic INTO Old Town and yet more problems for us to get out of Old Town along does NOT "Support existing residents

If "EXISTIING RESIDENTS" means the far east side residents — as explained above, I think such an expense for a road of questionable gain (except for maybe some Fred Meyer customers) is an expense that we do NOT NEED TO FUND!!!!!

As for EXISTING BUSINESSES-I'm not at all convinced how this new 'infrastructure' would really support them in ANY way! The major businesses all depend on traffic to and from the freeway – truck traffic, etc., up and down Wilsonville Road. How would a road into residential Old Town help them? They would still have to go through a maligned intersection, traverse a hugely crowded section of Wilsonville Road, and still use the same freeway underpass and existing freeway on ramps with existing freeway traffic! I really have no clue at all how this project "supports existing businesses"! And any NEW business resulting from this project will only serve to hinder the existing predicament even further!

IF "EXISTING BUSINESSES" means current Old Town businesses, then I'd like to see the studies where is show that the State Farm Insurance office business would be positively influenced with the addition to this new road. I really think that it would be hard to present any such convincing evidence that would change any minds.

So I don't see any real benefit to any existing business – and thus more points for the wording being nothing more than stock language used merely to promote City desires and not any real purpose!

"The alignment should provide mobility and access for trucks serving the existing businesses in the Industrial Way area." Is this referring to prospective north/south truck traffic between new businesses in the study area and existing businesses north of Wilsonville Road? It would be really interesting to see what this would be referring to. I can't imagine this scenario being really needed or occurring!

If this is referring to new truck traffic FROM the purported new businesses that will occur in the study area, then I have to ask -what route will they be taking to access I-5 to bring supplies to

their businesses or to conduct business with anybody outside of Old Town? With or without the millions of dollar for this new road, as stated above, ALL THIS NEW TRUCK TRAFFIC WILL STILL HAVE TO UTILIZE THE CURRENTLY EXISITNG UNDERPASS UNDER I-5, USE THE SAME ON/OFF RAMPS TO THE FREEWAY, DEAL WITH THE SAME FREEWAY TRAFFIC ISSUES, AND GO THROUGH THE SAME WILSONVIVLE ROAD/BOONSE FERRY ROAD INTERSECTION (and if it comes to Boones Ferry and heads north to get to the freeway WILL HAVE TO USE AN ALREADY OVERBURNDED COMMERCIAL SECTION OF BOONES FERRY)! They will still have to deal with EVERY ONE of those problems! So the result of any new business development in this area leads ONLY TO COMPOUND EXISTING PROBLEMS. From this perspective alone, I have to question the City's ongoing push (for 25-years) to build this worthless waste of taxpayer money!

The concept of providing mobility and access for trucks as a purpose of this project can be only described as statements made by city officials that have not ever really sat down and considered the issues they are creating with this boundoggle!

THE NEXT SECION IS .... "Multi-modal corridor."

This section adds nothing to the City's argument – outside of saying they are going to do it. What similar construction projects these days do not include this kind of stuff – these features are probably something simply required by some law for them to include. So no big deal here because of these wonderful, positive, meaningless PR words.

THE NEXT SECTION IS... "Accommodate redevelopment of the land according to the Comprehensive Plan."

I'm not sure what to say about this section. I know the City has wanted to gets its hands on this property for almost 3 decades. I would at least raise the question of whether 'industrial use' is the best plan for this property if indeed the City kicks the current owners off their land. Have any of the developers of this land actually left their air conditioned offices with their maps and their tables to actually see the land. With the rough topography of deep gullies that even this plan states will require two bridges to be built to accommodate this new project, maybe the area needs to be protected in some way for all to enjoy – rather than being destructed with industrial use and promotion of mobility of trucks! Indeed, with that topography, it should be an easy jump to wonder what percentage of the land there would even really be able to be 'industrially' developed anyway! Is that amount of land worth the destruction of the current owners lives, businesses, and existence as well as the entire current environment itself? I know that a park was once planned for the area north of the water treatment plant – new soccer fields, etc. Sounds like those plans have hit a death bed.

NEXT IT SAYS THAT THE PLAN WILL "Minimize environmental impacts."

Minimize impacts to Coffee Creek and other natural resources related to sensitive lands.

This is an interesting concept in terms of THE TOTAL CONVERSION a rugged riparian, gullied area into 'industrial' land! Minimize environmental impacts indeed!

Also, I would also bring up a question of this project and its necessary environmental study.

Does this study include only environmental impacts of the new street itself, or does it include Wilsonville Boones Ferry to Brown Road Corridor Connector Plan

Community Workshop and Survey Summary Report – October 2016

the potential environmental impacts of all the new development this new street will bring on this area that they are pushing to be developed? For example, with the new development of the new car lot next to the freeway, there has been a huge increase in the number of skunks and raccoons this summer in the Old Town area. As a result, I have chosen to NOT sleep outside or to allow my daughter to do so during the recent hot summer nights because of the skunks in the area. I'm sure that many animals have moved in recent years from the Fred Meyer and the new car lot areas into the study area – and are now living there along with those that were already there. There are a lot of simply environmental issues and questions this project creates.

The only thing I can see where this project can boast "Minimize environmental impacts" is via construction processes – which again is most likely required by various laws. Thus, yet again we have empty, polished words in an attempt to make things look good to the unthinking reader!

THE NEXT SECTION IS ... "Consider the Ice Age Tonquin Trail."

This, frankly, is the single only section that I can agree with. Several years ago this was proposed in some written material put on the internet – along with a proposal to connect the Wilsonville WES Station via Kinsman Road with the new bicycle pedestrian bridge. My salute to the people who included this concept into the plan!

However, I would also put out that the trail connections (from both the Tonquin Trail and the WES Train Station to the new bicycle pedestrian bridge) should NOT connect via EITHER 5th Street or Bailey. I totally support the written proposal on-line of a separated path through the same area to cross at Otto Lane underpass or indeed a totally new underpass south of Otto Lane. The trail traffic, too, should be kept OUT of the residential Old Town area. I firmly believe that the pedestrian bridge will be used more than anyone out there is really anticipating – and thus putting that kind of pressure on a residential section of an area is preposterous! This is especially so when such a great alternative is available! Any plan to include the trail connected to either 5th Street or to Bailey should be well vetted with local Old Town residents before putting anything 'in cement'! Sure, that would be the easy way – and no extra effort is therefore required to put it all in. But it also represents very "small thinking"!

In conclusion, I, for one, do NOT support this project in any way! Maybe years down the road when infrastructure issues OUTSIDE THE PLANNING AREA are adequately addressed (issues with ODOT and the freeway, as well as the Wilsonville Road/Boones Ferry Intersection) and when no MORE TRAFFIC would thus be added to Old Town, it might look different. But for now with the same issues facing it as the was facing the whole project when it was scrapped off the books totally – and with nothing really changed since that time, there is no way possible that this project should be proceeding!

We are just fighting the same battle as we did some years ago!

## Boones Ferry Road to Brown Road Connector Corridor Plan Stakeholder Interview Summary Report

Prepared by JLA Public Involvement August 31, 2016

#### **Summary Overview**

Between July 25<sup>th</sup> and August 23<sup>rd</sup>, 2016 JLA, Otak and the City of Wilsonville interviewed twelve key stakeholders identified by the project team. These stakeholders either own property, or manage businesses within the project area. Each individual or stakeholder group was asked the same set of questions. The main purpose of the interviews was to learn about their concerns and preferences for the planned corridor connection between Boones Ferry and Brown Road. The feedback received will be used to shape the evaluation criteria that will help narrow the corridor alignment alternatives to a preferred option.

This report is a compilation of individual responses. The first part of the report summarizes the key themes and most commonly heard comments. The second part of the report provides a list of individual responses from each stakeholder meeting.

#### Stakeholders interviewed:

- 1. Orepac (Alan Kirk and Darin Coder)
- 2. Tim Knapp
- 3. Wilsonville Concrete (David Bernert, Eric Vermillion and Angie Hannon)
- 4. Sheri Young
- 5. Bob Hartford
- 6. Old Town Neighborhood (Doug Muench and Monica Keenan)
- 7. Kim A. McAvoy, Timber Creek Village Apartments/KWDS LLC
- 8. Barbara Eave
- 9. Lynette Scheller
- 10. Curran Coil Spring (Chad)
- 11. Fred Meyer (Alisa Shaver and Pam Knuth)
- 12. Sherlock Self Storage (Amanda Johnson)

#### **Key Themes**

Several themes emerged. It is important to note that these themes are not universally accepted points of view, but simply those that were raised by multiple interviewees.

The summarized responses are organized into three main areas: *Key Points of Concern, Preferred Options, Future Opportunities, and Study Process and Next Steps*. The following paragraphs explain those key themes in more detail.

#### Key Points of Concern

There were many concerns raised in the conversations with stakeholders. Some of the most common points of view were:

- Provide a safe, reliable and efficient route for vehicular traffic, freight, and bicyclists and pedestrians.
- Preserve land for future industrial development.
- Preserve the Old Town neighborhood.
- Preserve access to residential and industrial properties.
- Minimize impacts to area businesses due right of way acquisition.

#### **Preferred Options**

When asked about the various alignment options, there was no clear favorite. Many of the concerns voiced about the route were centered on providing continuity of developable land parcels; not segmenting them. Several stakeholders indicated support for the southern alignment because they felt it preserved the most developable land. One person supported the "blue" middle alignment for the same reason. Another person showed support for the "yellow" middle alignment because it seemed the shortest and most direct route. A couple of stakeholders noted the increased cost of the creek crossing if the southern alignment was chosen.

In terms of the connection point at Boones Ferry Road, opinions were also divided; although more people seemed to favor the Bailey connection than the 5<sup>th</sup> Street connection. One of the most common reasons for supporting Bailey Street as the connection point seemed to be because it would provide the most direct route to retail services. Several stakeholders also voiced concerns about the adverse impacts to the neighborhood and businesses in the area if 5<sup>th</sup> Street was selected.

The most common reason for supporting 5<sup>th</sup> Street as the connection point seemed to be in the interest of keeping the existing public rail crossing which provides access to several homes in the area. If Bailey was chosen as the preferred route, the public rail crossing at 5<sup>th</sup> would be eliminated and residential access would have to be re-routed. It was also noted by two stakeholders that the process of transferring to the public rail crossing would be too costly and time consuming.

There was a lack of agreement on which option would best resolve congestion since both Bailey and 5<sup>th</sup> Street received support related to this issue. At least two stakeholders indicated that future traffic modeling data would be needed to determine which route would be best for alleviating traffic problems.

#### **Future Opportunities**

Nearly all of the stakeholders interviewed felt the project area would benefit from improved bike and pedestrian access through the area to reach nearby retail services, parks and trails. At least two stakeholders indicated the need to resolve potential conflicts with large freight trucks when planning bike and pedestrian facilities and to avoid Kinsman Road.

There was support for a new transit loop through the project area along the corridor connector. This transit loop could serve area businesses by providing employees with an alternate mode to get to and from work, as well as connect people to neighborhoods and other services.

One person stated that when completed, the Corridor Plan would provide the certainty that is needed for area property owners to be able to move forward with plans for their property.

At least two people indicated that the roadway, when built, could serve as a natural buffer between residential development and industrial development.

#### Study Process and Next Steps

Everyone interviewed was aware of the project and most indicated that they had been engaged in previous studies.

None of the stakeholders who were asked about the project area name and logo had any concerns about it, although most weren't familiar with Arrowhead Creek.

All of the stakeholders indicated that e-mail was the best way to keep them informed about the project.

A few people noted that there were other area stakeholders that should be consulted, such as the Grange Hall owner, Old Town Neighborhood Association, D&M Glass Shop and the Mini Storage.

In closing, several stakeholders noted that they would like to see the land south of the project area developed as residential or mixed use with residential rather than industrial development to take advantage of the river views and access.

#### Complete Summary of Input

The following is a full compilation of the comments received during the interviews, organized by interview question.

- 1. Were you aware of the plans for the Boones Ferry to Brown Road corridor connector project prior to me contacting you? If so, how did you hear about it? Do you have any questions about the project?
  - Aware of the project plans.
  - Aware of the project plans.
  - Yes, aware of the project.
  - Yes, aware of the project.
  - Yes, aware of the project.
  - Yes, aware of the project and didn't have any questions.
  - Yes, aware of the project. Inquired about the project timing in terms of construction and funding.
  - Yes, were aware of the project and didn't have any questions.
  - Yes, they were aware of the project and didn't have any questions.

#### 2. When considering the various alignment alternatives, which do you prefer?

- Prefer the "yellow" middle alignment because it seemed to be the most straightforward and direct route.
- No preference on the alignment options.
- Continuity of industrial land parcels identified for future development should be maintained; however, the Bailey Street connection is preferred.
- The "blue"/middle alignment is preferred since it avoids segmenting and devaluing industrial land parcels identified for future development. However, the "red" route would be best if the southern alignment is selected since it seems to have the least impact to property owners on the south side of the project area. The bridge/crossing at Coffee Lake Creek will also be more expensive with the southern alignment because the creek is wider further south.
- Prefer the southern alternative because it has the least impacts to private property –
  keeps parcels contiguous for the most part. The "pink, purple, green and blue"
  alignment options don't seem feasible based upon the decreased property value they
  would create by segmenting private property parcels.
- Prefer the southern alternative. Least impact to developable property.
- Alignment should optimize City owned property and not orphan private property parcels. Consider that the Coffee Lake Creek crossing (bridge) will be more expensive with the southern alignments than the northern alignment alternatives. Southern options also impacts private homes/property.
- Prefer the southern alternative.

## 3. Do you have a preference for a connection point for Boones Ferry Road; either at Bailey Street or 5th Street?

- Prefer the Bailey Street connection based upon previous studies and discussions. Bailey provides the most direct route to Fred Meyer and other retail operations on Boones Ferry and would better serve Wilsonville residents and alleviate congestion. Also have concerns about the impacts to businesses on 5th and Boones Ferry if 5<sup>th</sup> Street was chosen. However, will need to determine how local access would be achieved if Bailey is chosen.
- 5th Street would be the best connection because of the direct access/route to their property.
- Bailey is preferred as the connection because of the direct access it would provide to retail businesses and to alleviate current problems with congestion in that area. However, would like to see the future traffic analysis to determine the best route/connection to alleviate congestion.
- Bailey is preferred since it would enhance the current aesthetic condition of the road, but there are concerns about the potential impacts to area businesses (loss of the self-storage building due to railroad sight lines). Also concerned about the 5th Street connection and the impacts it could cause to property owners with the widening of the road.
- No preference between Bailey and 5th Street. Based upon the past discussions
  and information, it seemed to make the most sense to use Bailey as the
  connection due to the direct access it would provide to retail services. But
  knowing the constraints with the railroad, 5th might be a better alternative.

Brown Road will create major impacts with the apartments but that seems a long ways off from now. Widening will take away on street parking which isn't a huge issue since they didn't have it before and it's not really allowed, it's just not enforced. There are different options for accommodating the sidewalk. If the trees have to be removed, they won't be unhappy about it since they create maintenance issues.

- Bailey is the preferred connection due to the traffic impacts the 5th Street
  connection would create for the Old Town neighborhood. Bailey is identified in
  the Old Town Neighborhood Plan as the preferred connection. 5th Street
  would also create impacts to area businesses and historic buildings due to rightof-way acquisition. The turning radius needed for intersection would be
  problematic at 5th. Bailey provides better retail connection, traffic circulation.
- Bailey Street is the preferred connection for better access to retail (Fred Meyer) and because it would provide more relief of congestion on Wilsonville Road (since it's a shorter route). If Bailey is chosen and the public crossing at 5th is eliminated, a new access road, potentially Nutting, would have to be built for residents to the south. Sewer utilities would also need to be extended along Nutting or 2nd. This may create the need for a pump station. A connection at 5th would likely negatively impact businesses on that corner to due right-of-way acquisition (loss of on-street parking and planting strips).
- Prefer 5th street for safety reasons (sight line distance issues with Bailey) and for maintained access to private properties along 5th Street. Also the cost and potential complications/delay for creation of a new public rail crossing at Bailey seems problematic.
- 5th Street is preferred because the public access across the railroad is already at 5th Street and access to the residential properties to the south needs to be maintained. It would be less costly to provide sewer access as well.
   Abandoning the public rail crossing at 5th and establishing a new public crossing at Bailey would create a significant delay in the process.
- Prefer connection at Bailey because of existing easement owned by the City and this connection supports the redevelopment fees that were used for Fred Meyer. The connection at 5th Street is problematic due to the impact it would have to nearby property values. Nutting Road could provide access to residential properties to the south if Bailey served as the connection and the public crossing was removed at 5th.
- 5th Street is preferred since it would create the least amount of impact to private property parcels identified for future industrial development.

## 4. What are your thoughts about alternative modes of transportation, such as buses for access to retail and shopping on the east side of town?

- Not a lot of employees in the area currently use the bus, but there seems to be high ridership based upon the number of people seen at the stop on Boones Ferry.
- Transit it great and is widely used by apartment tenants.
- Transit it great having a new loop that changes the current route through Old Town would be advantageous.

- Transit (and infrastructure in general) is needed to support future development.
- SMART could benefit from a loop route option along the new corridor connection.
- A transit loop along the new corridor connection would be of value.
- It seems appropriate to establish a bus route through the area; some employees use the bus to get to work.
- 5. The City's master plans include the Tonquin Trail, a bike/ped pathway, through this area connecting residential areas and schools on the west side of Wilsonville to parks and businesses on the east side of Wilsonville and along Boones Ferry Road. What are your thoughts on how best to accommodate bicyclists and pedestrians through this area?
  - Improved bike/ped trails and overall connectivity would be a benefit to area retail businesses. No one currently bikes due to the unsafe conditions on Wilsonville Road.
  - Bike lockers are beginning to be a requirement at some apartment complexes, which provides a lot of advantages. The lockers encourage people to use their bikes by giving them added space for storage. Access to retail shopping, parks and trails via a pedestrian and bike paths in the project area would be another added bonus.
  - A bike/ped connection that travels south on Otto Lane and the 2nd Street underpass would be beneficial.
  - The Bailey connection and the middle alignment provides a better Bike/Ped route because its shorter and flatter. It's a more direct connection to retail services. The rail crossing does create an issue for bikes that would need to be addressed. Making a connection to the parks and the river to the south via Otto Lane and the 2nd Street undercrossing is a good idea.
  - Keep bike/ped paths on the south side to connect with the Tonquin Trail. Crossings should be made at a right angle for safety (prevent conflicts with truck traffic). Bike/ped connections to Fred Meyer and other retail on Boones Ferry (east side) need to be established. Need to keep bike/ped off Wilsonville Road and provide safe routes to school. Get people out of their cars.
  - Avoid conflicts with trucking operations on Industrial Way. Maintain bike/ped access on northern side of roadway and on Kinsman to avoid conflicts with trucks.
  - Would prefer to see a bike/ped trail south to Tonquin Trail to avoid conflicts with truck traffic. Keep bike/ped use off of Kinsman Road.
- 6. Do you think roundabouts could be a potential solution in this area? Why or why not?
  - Roundabouts are nice.
  - Roundabouts may not be functional in an industrial area (conflicts with truck traffic).
  - Roundabouts take out a lot of developable land but work well to minimize collisions.
  - Roundabouts wouldn't work because of the needed size (footprint) would take out too much developable land.
  - More information is needed, such as traffic counts to be able to determine if roundabouts are feasible.

# 7. What do you think are the key issues to be considered and that will need to be addressed when examining the alternatives?

- Preserve Old Town neighborhood and the transition to residential/housing by making the connection at Bailey rather than 5th. Also for safety reasons – there are daycare and dance lesson facilities on 5th and Boones Ferry Road.
- Look at intersections and access points for the property parcels when considering the alignments and connection at Boones Ferry.
- There are safety issues with sight distance and the grade for the rail road crossing at Bailey.
- Access to private property off of 5<sup>th</sup> Street must be maintained if Bailey becomes a public rail crossing rather than 5th Street.
- Impacts to businesses on 5th Street are a concern due to ROW acquisition, as well as any increased truck traffic— do not want it to be a truck route. Over-building the roadway will lead to it being a truck route. The corridor should be a neighborhood to neighborhood connection. Kinsman should be the truck route. 5th is the preferred connection, but minimize impacts to area businesses on both sides. On street parking should be maintained. Preserving the utility of residential and industrial land is critical. The Montebello Road connection is important for bike/ped access.
- There are issues with industrial uses and bike/ped conflicts currently, so this needs to be taken into consideration.
- Maintain truck access on Industrial Way to allow left hand turns for trucks with signalized intersections due to timing and spacing. Wilsonville Concrete business office access is also off of Industrial Way, which also needs to be maintained. Reconfiguring the parking lot at Wilsonville Concrete would be problematic.
- Having an adequate turn radius for trucks on Kinsman road is important.

### 8. What opportunities and benefits do you see for this project?

- The Corridor Plan, once completed, will provide some certainty for property owners to move forward with.
- Northern most alignment allows for SDCs to pay for construction on either side with residential development. The roadway could serve as a natural buffer between residential and industrial development.
- If the preferred alignment was adjacent to SRO zones (natural areas), the property to the north of Wilsonville Concrete could be developed as a park to provide an additional buffer between industrial and residential uses.

# 9. The project team has prepared a draft logo (refer to project fact sheet) and propose to refer to the general project area as the Arrowhead Creek Planning Area. How does that resonate with you?

- Arrowhead Creek planning area is fine. Didn't know Arrowhead Creek existed.
- Arrowhead Creek planning area is fine. No concerns with it.
- The name and logo didn't raise any red flags, but it wasn't familiar. Previously referred to the project as the section G planning area.

- No issues with the name "Arrowhead Creek". Previously referred to this area as Section G Planning Area. Although Arrowhead Creek is a drainage ditch that dries out and terminates at the cement plant.
- The name and logo didn't raise any red flags, but it wasn't familiar. Had previously referred to the project as the Brown Road Westside Bypass.

# 10. Are there any events, activities, plans, conditions, or anything else that we should be aware of?

- There is a gully at the Hartford property on 5th that should be looked at.
- Already queueing that takes place on Boones Ferry. Bailey won't accomplish the pressure relief.
- The deep gulley at the Hartford property doesn't have any water in it.
- Current interest with northern properties along Wilsonville Road is for high density residential development. All vacant lands are for sale.
- 6:30 to 7 a.m. is the peak traffic time for trucking operations at Wilsonville Concrete. Wilsonville concrete could potentially operate 24/7 in the future.
- The frequency and timing of rail cars in and out of Orepac is fairly unpredictable; more than 2 per month on average, sometimes more.

# 11. How can we best keep you informed throughout the project?

- E-mail
- E-mail
- E-mail
- E-mail. Can share information with the neighborhood through newsletters and upcoming block party.
- E-mail
- E-mail please invite to open houses and other public meetings.
- E-mail
- E-mail progress reports and other info.
- Email

# 12. Is there anyone one else you feel we should keep informed or we need to hear from?

- Grange owner
- Old Town neighborhood association
- D&M Glass shop
- Grange Hall
- Mini Storage

# 13. Do you have any parting thoughts you would like to share with me?

- Look at Old Town Master Plan to see desired uses for Boones Ferry Road. Pedestrian and human scale is important.
- The Grange building is currently a problem with cats and homeless people living there.
- Bailey seems to be the best option based on the direct access it provides to retail services; however would like to see future traffic modeling analysis.

- Would like to see railroad eliminate dinner stops in Old Town area. It's noisy
  because they keep the trains running. Would also like to see mixed use
  development south of 5th street to maximize river views and access rather than
  industrial development.
- Would like to see traffic modeling results for future growth projections to see if 5th or Baily would be better in terms of traffic routes (alleviating congestion on Wilsonville Road and Boones Ferry).
- Would like to see mixed use, including residential, to the south nearest the river. Should maximize the views and river use.
- Would like to see the southern parcels develop as residential due to the proximity to the river.
- Refer to planning area criteria included in Section G Planning Area document.
- Maintain access for trucking operations. Compatible uses near industrial operations is most important. Safety, minimizing truck and pedestrian/cyclist conflicts is most important.

# **Open House Summary Report**

# **Public Outreach Overview**

In October, 2016, the City of Wilsonville hosted a second public meeting to share information with the community about the Boones Ferry to Brown Road Corridor Connector Plan, evaluation process, and the alignment alternatives being considered. Input was gathered from the participants about the evaluation process and the alternatives being considered. Community feedback generated from the open house will be provided to the City Council to consider when deliberating a decision on the selection of a preferred alternative.

#### **Outreach Methods**

Community members were invited to attend the public open house in a number of ways, including:

- Announcement in Boones Ferry Messenger distributed on September 30.
- Postcard mailing sent to approximately 640 area residents and businesses on October 11.
- E-mail distributed to the project stakeholders list (72 people) on October 11.
- Posters distributed at City Hall on October 14.
- Announcement posted on the City's website on October 24.
- Press release distributed to local media on October 24.

# **Open House**

The City of Wilsonville held a public open house for the Boones Ferry Road to Brown Road Corridor Connector on Wednesday, October 26, 2016 from 5:00 to 6:30 p.m. at City Hall, located at 29799 Town Center Loop E, Wilsonville, OR. Approximately 40 people attended, as well as staff from the City and the consultant team.

The meeting was an open house format with a presentation beginning at approximately 5:15 p.m. The presentation provided an overview of the project alternatives being considered, the findings from the alternatives analysis, and the estimated project costs and timeline for completion. Following the presentation, members of the public had the opportunity to visit informational displays, review project handouts, and chat with the project team.

Attendees were encouraged to complete comment forms to provide written comments (one is included in this summary).

# **Summary of Public Input**

#### Overall

Nearly half of the open house attendees were from the Old Town neighborhood, most of which were in support of the Bailey connection over the 5<sup>th</sup> Street connection. Concerns raised by the Old Town residents centered on safety and increased traffic congestion.

Other questions were raised about the project design plans, cost, funding source and timeline for completion.

Public comments received via written comment forms and in person with staff at the public open house:

- Several comments were made about traffic congestion and unsafe turning movements at 5<sup>th</sup> Street in Old Town during church hours and that this was a concern that would need to be addressed if the connection was made at 5<sup>th</sup> Street. It was also noted that there were impaired sight lines at this location. Other concerns were noted related to noise, safety at crossing for children going to and from the daycare and dance studio. Some inquired how increased traffic into the Old Town neighborhood would be managed if the 5<sup>th</sup> Street alternative was selected.
- A few people had concerns about the Grange building and whether the 5<sup>th</sup> Street alternative
  would impact the building. Other comments were noted about the design plans, such as whether
  the road will be a 3-lane cross-section or 2-lane cross-section and how much right-of-way will be
  needed.
- Several comments were made about the need for sidewalks along Boones Ferry Road to improve safe pedestrian travel connections.
- One person felt that a connection at 5<sup>th</sup> Street wouldn't support the vision outlined in the Old Town Plan. For example, he indicated that the Old Town Plan called for no street improvements, such as curb cuts, gutters and sidewalks.
- A representative from Boones Ferry Village Apartments indicated their support for the Bailey Street connection.
- One person noted that having a stop sign at Bailey Street would cause additional back-ups and queueing along Boones Ferry. She added that it would be helpful if local businesses staggered business hours to alleviate traffic during peak hours.
- A former railroad executive was in attendance and indicated support for the 5<sup>th</sup> Street connection due to the huge cost impacts to create a public railroad crossing at Bailey Street. He felt the cost would be upwards of \$2 million for the new public crossing.
- At least one person asked whether at 5th Street undercrossing of I-5 been considered from Old
- Wilsonville Concrete has concerns about Phase 1 construction; traffic on Kinsman will compete with their concrete trucks.
- A few people inquired about City utility services to property west of the railroad tracks at 5th if Bailey is chosen.
- Bailey would work best for the extended road out of Old Town. 1st we don't' need or want additional traffic down into Old Town. On the intersections of 5th and Boones Ferry there is a dance studio and a childcare center. When parents arrive and park across the street, children see Mom and Dad and run to them, which may mean running across one or the other street and standing a chance of get hit and getting hurt or killed. Where Bailey is already wider and in a business area. OrePac owner was on the City Council for years and knew there was a chance an access road could go through there but now complains. He has purchased this property on the other side of Bailey and he would be concerned about his fork lift driver getting hit. Having several family members that still drive or were drivers of 18 wheelers. They delivered many times to businesses and were split by a street. It may cost a little more to put the access road through Bailey Street, but in the long run it would be the best option. Please let us keep our Old Town quiet and without additional traffic. Thank you.



ALASKA
CALIFORNIA
COLORADO
FLORIDA
MISSOURI
OREGON
WASHINGTON DC
WASHINGTON STATE
WISCONSIN

August 17, 2016

Mr. Allen Hendy, PE Otak, Inc. 700 Washington Street, Suite 401 Vancouver, Washington 98660

RE: DRAFT PRELIMINARY GEOTECHNICAL NARRATIVE BOONES FERRY ROAD TO BROWN ROAD EAST-WEST CONNECTOR CORRIDOR PLAN WILSONVILLE, OREGON

Dear Mr. Hendy:

This letter report presents the results of our preliminary review and conceptual geotechnical recommendations for use in planning the proposed Boones Ferry Road to Brown Road Connector Corridor project in Wilsonville, Oregon. The locations of the proposed alignment alternatives are shown on Figure 1, Site Plan. Our services are being performed under a Subconsultant Agreement between Otak, Inc. (Otak), and Shannon & Wilson, Inc. (S&W), dated June 6, 2016.

## SCOPE OF SERVICES

At the request of the City of Wilsonville, the Otak team is performing an alternative selection process and providing a final recommendation for the preferred alignment of an extension of Brown Road to either Bailey Street or 5<sup>th</sup> Street. The new roadway will cross Coffee Lake Creek. Shannon & Wilson's task is to summarize general soil conditions in the project area and provide conceptual foundation recommendations for the creek crossing structure.

# **EXISTING INFORMATION REVIEW**

# **Regional Geology**

The project site is located in the Willamette Lowland, at the northern end of the Central Willamette Valley (Gannett and Caldwell, 1998). The Willamette Lowland is a structural depression created by complex faulting and folding of Miocene (approximately 17 to 6 million

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 2 of 9

years old) Columbia River Basalt Group (CRBG) basalt flows and older underlying basement rock.

In the Willamette Valley, the CRBG is generally overlain by Upper Miocene (approximately 10 to 5 million years old) deposits consisting of fine-grained micaceous fluvial and lacustrine sediments derived from the Columbia and Willamette Rivers that are collectively termed the Sandy River Mudstone (Orr and Orr, 2000). The Sandy River Mudstone is described by Gannett and Caldwell as a micaceous arkosic siltstone, mudstone, and claystone. Overlying the Sandy River Mudstone is the Pliocene (approximately 5 to 1.8 million years old) Troutdale Formation, which is described as a quartzite-bearing basaltic conglomerate, vitric sandstone, and micaceous sandstone (Gannett and Caldwell, 1998). Composition and thicknesses of the two units vary with location. Mapping at the project location by Schlicker and others (1967) includes the Sandy River Mudstone with the Troutdale Formation and describes the overall unit as poorly indurated silt, clay, and silty sand with occasional pebble conglomerate beds. Locally, the Troutdale Formation is concealed beneath younger sediments and is exposed only in the bottom of steep ravines.

During the late stages of the last great ice age, between about 18,000 and 15,000 years ago, a lobe of the continental ice sheet repeatedly blocked and dammed the Clark Fork River in western Montana, which then formed an immense glacial lake called Lake Missoula. The lake grew until its depth was sufficient to buoyantly lift and rupture the ice dam, which allowed the entire massive lake to empty catastrophically. Once the lake had emptied, the ice sheet again gradually dammed the Clark Fork Valley and the lake refilled, leading to 40 or more repetitive outburst floods at intervals of decades (Allen and others, 2009). These repeated floods are collectively referred to as the Missoula Floods. During each short-lived Missoula Flood episode, floodwaters washed across the Idaho panhandle, through eastern Washington's scablands, and through the Columbia River Gorge. When the floodwater emerged from the western end of the gorge, it spread out over the Portland Basin and pooled to elevations of about 400 feet, depositing a tremendous load of sediment. Boulders, cobbles, and gravel were deposited nearest the mouth of the gorge and along the main channel of the Columbia River. Cobble-gravel bars reached westward across the basin, grading to thick blankets of micaceous sand and silt (Allen and others, 2009). Ma and others (2012) divided the Missoula Flood Deposits into four groups:

- Silt Colluvium consisting of sand and silt colluvium, generally along stream channels
- Fine-Grained Deposits consisting of sand and silt

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 3 of 9

- Coarse-Grained Deposits consisting mostly of gravel with cobbles and boulders
- Channel Deposits consisting of interlayered and variable silt, sand, and gravel

The Tonquin Scablands Channels, north of the Wilsonville area, constricted flows from the Missoula Floods, creating a high-energy water surge from the Tualatin Basin in the north emptying into the Central Willamette Valley to the south. The high-velocity water flowing through the gap entrained coarse gravels, cobbles, and boulders that were dropped out of suspension when the surge lost energy opening up into the Central Willamette Valley near the I-5 Boone Bridge in Wilsonville (Thompson, 2012). As a result, much of the Wilsonville area is underlain by coarse-grained Missoula Flood Deposits. In more recent times, rivers and streams, such as the Willamette River and Coffee Lake Creek, have deposited alluvial sediments in and along their channels and floodplains (Ma and others, 2012; Smith and Roe, 2015).

# **Seismic Setting**

Earthquakes in the Pacific Northwest occur largely as a result of the collision between the Juan de Fuca plate and the North American plate. These two tectonic plates meet along a mega thrust fault called the Cascadia Subduction Zone (CSZ). The CSZ runs approximately parallel to the coastline from northern California to southern British Columbia. The compressional forces that exist between these two colliding plates cause the denser oceanic plate to descend, or subduct, beneath the continental plate at a rate of about 1.5 inches per year. This process leads to volcanism and contortion and faulting of both crustal plates throughout much of the western regions of southern British Columbia, Washington, Oregon, and northern California. Stress built up between the colliding plates is periodically relieved through great earthquakes at the plate interface (CSZ) (Goldfinger and others, 2012).

Within our present understanding of the regional tectonic framework and historical seismicity, three broad earthquake (seismogenic) sources have been identified. These three types of earthquakes and their maximum plausible magnitudes are as follows.

- ➤ Subduction Zone Interface Earthquakes originate along the CSZ, which is located 25 miles beneath the coastline. Paleoseismic evidence and historic tsunami studies indicate that the most recent subduction zone thrust fault event occurred in the year 1700, probably ruptured the full length of the CSZ, and may have reached magnitude 9.
- ➤ **Deep-Focus, Intraplate Earthquakes** originate from within the subducting Juan de Fuca oceanic plate as a result of the downward bending and contortion of the plate in the CSZ.

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 4 of 9

These earthquakes typically occur at a depth of 28 to 38 miles. Such events could be as large as magnitude 7.5. Examples of this type of earthquake include the 1949 magnitude 7.1 Olympia earthquake, the 1965 magnitude 6.5 earthquake between Tacoma and Seattle, and the 2001 magnitude 6.8 Nisqually earthquake. The highest rates of CSZ intraslab activity are beneath the Puget Sound area, with much lower rates observed beneath western Oregon.

➤ Shallow-Focus Crustal Earthquakes are typically located within the upper 12 miles of the continental crust. The relative plate movements along the CSZ cause not only east-west compressive strain, but dextral shear, clockwise rotation, and north-south compression of the leading edge of the North American Plate (Wells and others, 1998), which is the cause of much of the shallow crustal seismicity of engineering significance in the region. The largest known crustal earthquake in the Pacific Northwest is the 1872 North Cascades earthquake with an estimated magnitude of about 7. Other examples include the 1993 magnitude 5.6 Scotts Mill earthquake and 1993 magnitude 6 Klamath Falls earthquake.

Shallow crustal faults and folds throughout Oregon and Washington have been located and characterized by the United States Geological Survey (USGS). Mapped fault locations and detailed descriptions can be found in the USGS Quaternary Fault and Fold Database (USGS, 2006). The database defines four categories of faults, Classes A through D, based on evidence of tectonic movement known or presumed to be associated with large earthquakes during Quaternary time (less than 1.8 million years ago). For Classes A and B, there is geologic evidence that demonstrates the existence of Quaternary deformation. However, for Class B faults, evidence of Quaternary faulting or slip is more equivocal or may not extend deep enough to be a source of significant earthquakes.

According to the USGS Fault and Fold database, the closest Class A fault to the project site is the Canby-Molalla Fault. It is mapped approximately 4.5 miles east of the site and is believed to have deformed within the past 15,000 years. Additionally, the Newberg fault is mapped about 8.5 miles west of the site and the Mount Angel Fault is mapped about 11 miles southwest. The Newberg fault is believed to have deformed within the past 1.6 million years and the Mount Angel Fault within the past 15,000 years. The CSZ itself is approximately 130 miles west of the site, with a slip rate of approximately 40 millimeters (1.5 inches) per year and the most recent deformation occurring about 300 years ago (Personius and Nelson, 2006). Based on the mapped

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 5 of 9

fault locations from the USGS database, the potential for fault rupture or near-fault effects at the site is low.

# ANTICIPATED SUBSURFACE CONDITIONS

We reviewed published geologic maps and logs of explorations completed for previous projects in the vicinity of the proposed alignments. The locations of the past projects and the proposed alignments are shown on a geologic map in Figure 1. Based on this information, we expect that the western ends of the alignments will be underlain by at least 25 feet of Fine-Grained Missoula Flood Deposits consisting of nonplastic to low plasticity silt to fine silty sand. Moving east from the western end, we expect that this layer of fine-grained deposits will thin and that the majority of both alignments, including the crossing of Coffee Lake Creek, will be underlain by near-surface Coarse-Grained Missoula Flood Deposits. All explorations for previous projects that encountered Coarse-Grained Missoula Flood Deposits in this vicinity noted cobbles and/or boulders with a maximum reported dimension of 18 inches. The eastern ends of the alignments are mapped in or near either Missoula Flood Deposits, Channel Deposits (Ma and others, 2012) or Alluvium of Smaller Streams (Smith and Roe, 2015). Based on the logs for previous nearby test pits and borings, we anticipate that at the eastern ends of the alignments Coarse-Grained Missoula Flood Deposits will be overlain by a relatively thin (about 5 to 10 feet) layer of sandy silt and that cobbles and boulders will be encountered below this layer.

# **GEOLOGIC AND SEISMIC HAZARDS**

# **Slope Stability**

Based on a review of available LiDAR data for the project vicinity, about 300 linear feet of the proposed Alignment Alternative 2 east of SW Morey Lane appears to be at or near the top of the slope above Arrowhead Creek. We expect that this portion will be underlain by Fine-Grained Missoula Flood Deposits and that the static and seismic stability of the slope above the creek will be a concern.

# **Liquefaction and Lateral Spread**

We expect that the fine-grained sand and silt near the western ends of the alignments will be susceptible to wide-spread liquefaction and liquefaction-induced settlement. We also anticipate

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 6 of 9

that there may be layers of liquefaction-susceptible sand and silt interbedded with the Coarse-Grained and Channel Deposits.

Evaluations for lateral spread will be required for the slopes above Arrowhead Creek and Coffee Lake Creek. We expect that the fine-grained material along Arrowhead Creek will be more susceptible to lateral spread than the coarse-grained material along Coffee Lake Creek.

# CONCEPTUAL GEOTECHNICAL OPINIONS

Based on the local geology and anticipated subsurface conditions described above, Alignment 1 (A and B) is preferred from a geotechnical perspective because the alignment is further away from Arrowhead Creek and also because the majority of the alignment is within the area mapped as Coarse-Grained Missoula Flood Deposits.

We understand that the project may involve the construction of two new bridges: one for the SW Kinsman Road extension overcrossing Coffee Lake Creek, the other for the proposed Brown Road extension overcrossing Coffee Lake Creek. We have considered three foundation alternatives: spread footings, driven piles, and drilled shafts. The spread footing alternative may not be preferred because the spread footing construction may require overexcavation of near-surface fine-grained soil, dewatering, and temporary shoring, which may be more expensive than deep foundation construction costs. The bridges can be supported by deep foundations, including driven piles or drilled shafts. Due to the anticipated presence of shallow Coarse-Grained Missoula Flood Deposits, the deep foundations would be designed as end-bearing piles or shafts. The bearing resistances of the deep foundations are dependent on the pile or shaft diameters and embedment depths. In our current opinion, driven pile foundations may be the most cost-effective foundation alternative.

## **LIMITATIONS**

The conclusions and recommendations contained in this letter are based on the site conditions as they reportedly exist and assume that the subsurface conditions are not significantly different from those inferred from the published maps and previous explorations.

This letter report is prepared for the exclusive use of the Boones Ferry Road to Brown Road Connector Corridor project team. It should be made available for information of factual data only, and not as a warranty of subsurface conditions, such as those interpreted from published

SHANNON & WILSON, INC.

Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 7 of 9

maps and reports for nearby projects, and discussions of subsurface conditions included in this letter.

Please note that our scope of services did not include any environmental assessment or evaluation regarding the presence or absence of hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below the site.

Shannon & Wilson has prepared the attached, "Important Information About Your Geotechnical/Environmental Report," to assist you and others in understanding the use and limitations of our reports.

Sincerely,

SHANNON & WILSON, INC.

Aimee E. Holmes, PE, CEG Senior Engineer / Engineering Geologist Risheng (Park) Piao, PE, GE Vice President

AEH:RPP/

Enc: Figure 1 – Site Plan

Important Information About Your Geotechnical/Environmental Report

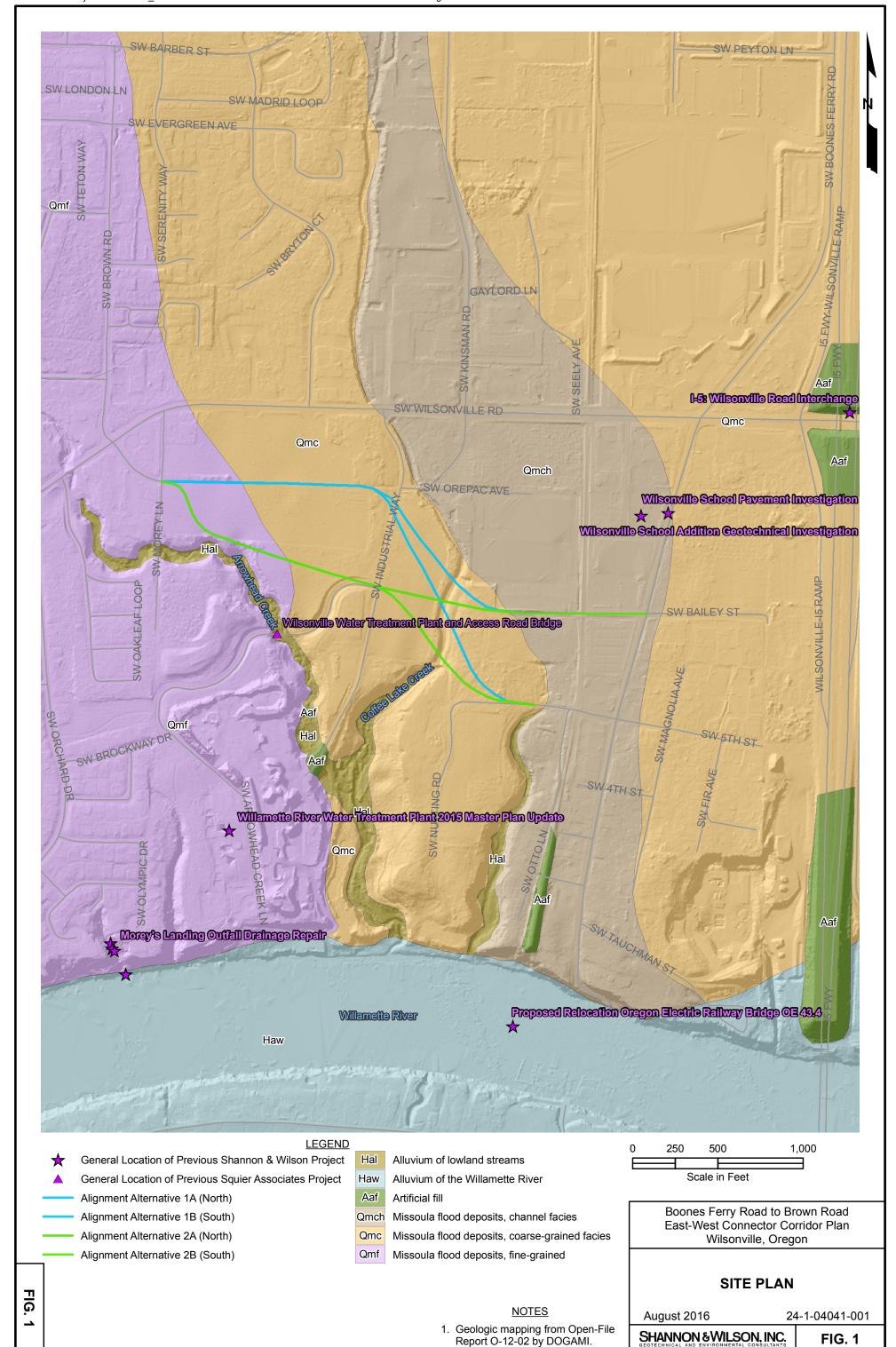
Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 8 of 9

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Mr. Allen Hendy Otak, Inc. August 17, 2016 Page 9 of 9

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# Resolution No. 2610- Attachment 2

# CONCLUSIONARY FINDINGS December 19, 2016 In support of Approval of Resolution No. 2610

Boones Ferry Road to Brown Road East-West Connector Corridor Plan Recommending the 5<sup>th</sup> Street Alignment

# APPROVAL AUTHORITY

# **Oregon Administrative Rules**

# OAR 660-012-0010 Transportation Planning

(1) As described in this division, transportation planning shall be divided into two phases: transportation system planning and transportation project development. Transportation system planning establishes land use controls and a network of facilities and services to meet overall transportation needs. Transportation project development implements the TSP by determining the precise location, alignment, and preliminary design of improvements included in the TSP.

**Response:** The 2013 Wilsonville Transportation System Plan (updated in 2016, "TSP") includes the Boones Ferry Road to Brown Road Connector ("Connector") as an approved future project. The TSP identifies two alternative alignments for the Connector and further provides a list of factors to consider when making the final determination of the Connector alignment. The Study and selection of the final alignment for Project RE-04A serves to implement the adopted policies, plans, and projects that are outlined in the adopted Wilsonville TSP. As such it is classified as "transportation project development." **This criterion is met.** 

### OAR 660-012-0050

- (3) Project development addresses how a transportation facility or improvement authorized in a TSP is designed and constructed. This may or may not require land use decision-making. The focus of project development is project implementation, e.g., alignment, preliminary design and mitigation of impacts. During project development, projects authorized in an acknowledged TSP shall not be subject to further justification with regard to their need, mode, function, or general location. For purposes of this section, a project is authorized in a TSP where the TSP makes decisions about transportation need, mode, function and general location for the facility or improvement as required by this division.
  - (b) Project development involves land use decision-making to the extent that issues of compliance with applicable requirements requiring interpretation or the

exercise of policy or legal discretion or judgment remain outstanding at the project development phase. These requirements may include, but are not limited to, regulations protecting or regulating development within floodways and other hazard areas, identified Goal 5 resource areas, estuarine and coastal shoreland areas, and the Willamette River Greenway, and local regulations establishing land use standards or processes for selecting specific alignments. They also may include transportation improvements required to comply with ORS 215.296 or 660-012-0065(5). When project development involves land use decision-making, all unresolved issues of compliance with applicable acknowledged comprehensive plan policies and land use regulations shall be addressed and findings of compliance adopted prior to project approval.

**Response:** Selection of the Connector alignment refines the TSP. Further, the Study recommendation to select 5th Street as the final alignment alternative for the Connector is not focused solely on transportation facilities, but also consideration of the alternatives involved, regulations protecting or regulating development within Goal 5, natural resource areas and application of local land use standards. Because, the Council's decision involves land use decision-making, it requires findings of compliance with "all unresolved issues of compliance with applicable acknowledged comprehensive plan policies and land use regulations shall be addressed and findings of compliance adopted prior to project approval." **This criterion is met.** 

# 2013 Transportation System Plan (updated in 2016)

Chapter 5, page 5-11 Higher Priority Projects: Two alternatives have been identified for the Brown Road Extension (RE-048), and a corridor study (RE-04A) will be required to determine the final alignment.

Chapter 5, page 5-15: From a transportation planning standpoint, both Brown Road extension alternatives would provide comparable benefits to the transportation network. Selection of an alignment should be made during or prior to the master planning process for the large area south of Wilsonville Road and west of the railroad tracks.

Response: The City has performed the corridor study and evaluated the alternative alignments for the Connector. The preferred final alignment for the Connector is to intersect with Boones Ferry Road at 5th Street. The Planning Commission discussed the Connector project at a work session and although the Planning Commission was not asked to make a formal recommendation to City Council, each member shared individual comments and recommendations for the record. The City Council has been provided with the minutes from this discussion. The City Council is the final local authority regarding the alignment decision, which will be made in consideration of the factors listed on page 5-15 of the TSP. The City Council's final decision will be adopted via Resolution to provide final direction on implementation of the alignment which best complies with the TSP for Project RE-04A. These criteria are satisfied.

# Section 4.033. <u>Authority of City Council.</u>

- (.02) When a decision or approval of the Council is required, the Planning Director shall schedule a public hearing pursuant to Section 4.013. At the public hearing the staff shall review the report of the Planning Commission or Development Review Board and provide other pertinent information, and interested persons shall be given the opportunity to present testimony and information relevant to the proposal and make final arguments why the matter shall not be approved and, if approved, the nature of the provisions to be contained in approving action.
- (.03) To the extent that a finding of fact is required, the Council shall make a finding for each of the criteria applicable and in doing so may sustain or reverse a finding of the Planning Commission or Development Review Board. The Council may delete, add or modify any of the provisions pertaining to the proposal or attach certain development or use conditions beyond those warranted for compliance with standards in granting an approval if the Council determines the conditions are appropriate to fulfill the criteria for approval.

<u>Response:</u> Following the Planning Commission work session, the Planning Director scheduled a public hearing before the City Council at which time the Council will review the findings and recommendations. **At conclusion of the public hearing process, these criteria will be satisfied.** 

# STATEWIDE PLANNING GOALS

**Statewide Planning Goal #1 - Citizen Involvement (OAR 660-015-0000(1)):** To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

**Response**: Work sessions were held with both the Planning Commission and City Council throughout the project. Staff conducted two public meetings (a workshop and an open house), met in small groups or individually with 12 key stakeholders (while reaching out to 72 individual stakeholders), and distributed one electronic survey. A project web page was created and maintained to inform interested parties about the study, encourage participation and feedback, and provide access to documents and analysis that informed the content of the plan. The City of Wilsonville has provided notice of public hearings before the City Council consistent with the Planning and Land Development Ordinance requirements. Such notices were posted in the newspaper, and were provided to 645 property owners or residents, a list of interested agencies, emailed to 72 interested parties, and were posted in three locations throughout the City and on the City's website. The City has conducted an extensive public involvement process. Stakeholders and members of the community have shown interest in the study by participating in public meetings and the survey, and submitting comments in writing to the City's project manager. At the upcoming public hearing, the public will be afforded an opportunity to provide testimony to the City Council (please see Appendices M, N, and O of Attachment 1 to Resolution 2610, the Alternatives Alignment Final Report, for detailed reports on the project's citizen involvement process). This goal is met.

Statewide Planning Goal #5 – Natural Resources, Scenic and Historic Areas, and Open Spaces (OAR 660-015-0000(5)): To protect natural resources and conserve scenic and historic areas and open spaces.

<u>Response:</u> This goal is implemented through the applicable Park/Recreation/Open Space Goals and Policies in the Public Facilities and Services section of the Comprehensive Plan. The City code contains specific review criteria for uses within a Significant Resource Overlay Zone (Development Code Section 4.139.00, SROZ Ordinance) to ensure that designated Goal 5 resources are appropriately considered when development is proposed.

Goal 5 resources were considered as part of the alternatives analysis that is included in Appendix D of Attachment 1to Resolution 2610, the Alternatives Analysis Final Report.

Further environmental permitting will be required at the time of project development pursuant to applicable federal, regional, and local regulations. **This goal is met.** 

**Statewide Planning Goal #9 – Economic Development (OAR 660-015-0000(9)):** To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

Response: The recommended 5<sup>th</sup> Street alignment would support existing and planned industrial development. The majority of available land for development between Kinsman Road and the railroad tracks is zoned for industrial uses. Both alternatives provide development opportunity of this vacant industrial land. However, the Bailey Street option significantly impacts the ability of the industrial parcels owned by OrePac to be developed in a contiguous manner. The Bailey Street alternative bisects the large industrial parcels and will create future access challenges when the land is developed. The 5th Street alternative allows for full contiguous development of this industrial land and provides opportunities for safe operations of the existing use of the OrePac property. The Bailey Street alternative would greatly reduce the functionality and development potential of the large industrial properties at the east end of the project area. **This goal is met.** 

**Statewide Planning Goal #11** – **Public Facilities and Services (OAR 660-015-0000(11)):** It is the purpose of Goal 11 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. Cities are required to develop public facilities plans for their UGBs.

**Response:** Adopting the 5<sup>th</sup> Avenue alignment for the Connector will enable the City to proceed with project implementation, ensuring that transportation facilities will be available to support the planned uses in the Arrowhead Creek Planning Area, consistent with other local economic development goals. Transportation facilities are considered a primary public facility in the City. The 5th Street connection provides the parcels to the

south of 5th Street direct access to a collector street. Bailey Street would require a new local road extension of Nutting Road to provide access to a collector.

Goals and policies are part of the TSP (TSP Chapter 2). Goals address cost-effectiveness and compatibility (Goals 4 and 5), and policies address land development coordination and agency coordination (Policies 15-21). **This goal is met.** 

**Statewide Planning Goal #12 – Transportation (OAR 660-015-0000(12)):** *To provide and encourage a safe, convenient and economic transportation system.* 

**Response:** The TSP establishes City transportation policy related to multimodal transportation, access and mobility, safety, equity, economy, health and the environment, and goods movement. These policies and associated implementation measures guided the development of the TSP, the development of standards, and the selection of the recommended improvements.

The TSP identified the need for an east-west connector south of Wilsonville Road between Boones Ferry and Brown Road, named in the TSP the "Brown Road Extension." The TSP articulates the goal of increasing connectivity for all modes of travel, and specifically identified the study area as an "Area of Special Concern." On page 5-15, the TSP calls out this corridor for alternatives analysis, listing the following factors for consideration:

- Access
- Bicycle and pedestrian network connections
- Environmental impacts
- Freight benefits/impacts
- Future development plans and land-use changes in both areas most impacted by the roadway extension: (1) west of the railroad tracks south of Wilsonville Road and (2) in Old Town, specifically along Boones Ferry Road
- Motor vehicle capacity
- Neighborhood/commercial connectivity
- Private property impacts
- Project costs
- Public input
- Railroad crossings
- Small business impacts
- Timing
- Traffic diversion
- Water and sewer utility issues

Both connection options, at 5th Street and Bailey Street, are included in the TSP and are identified as Project RE-04A. The TSP indicates that the Boones Ferry Road to Brown Road Connector will provide north-south street connections at both Kinsman Road and Montebello Drive. It will be a two-lane roadway and classified as a collector. The TSP

Resolution 2610– Attachment 2 Conclusionary Findings Page 5 cites the importance of the new roadway because it will provide a parallel route to Wilsonville Road that will relieve congestion (particularly at the Wilsonville Road/Boones Ferry Road intersection), provide a secondary access to Old Town, and accommodate new development in the Arrowhead Creek Plan Area.

The study recommending adoption of the 5<sup>th</sup> Street alignment is consistent with direction provided by the TSP. Following the alignment decision by the Wilsonville City Council, the City will be positioned to move forward with alignment design, permitting, and construction of the project's first phase. **This goal is met.** 

# **COMPREHENSIVE PLAN**

GOAL 1.1 To encourage and provide means for interested parties to be involved in land use planning processes, on individual cases and City-wide programs and policies.

Policy 1.1.1 The City of Wilsonville shall provide opportunities for a wide range of public involvement in City planning programs and processes.

**Response:** As noted under the response to Statewide Planning Goal 1, two public meetings, numerous stakeholder meetings, and an on-line survey were conducted during the course of the project (please refer to Resolution 2610 – Attachment 1, the Alternatives Alignment Final Report, Appendices M, N, and O). Interested parties also had the opportunity to view documents related to the study and provide feedback via a Consultant-hosted project web page.

The City Council conducted work sessions to discuss project updates on the alternative alignment process. These work sessions were open to the public. Public notice of the public hearing was mailed to 645 property owners as well as to agencies and interested individuals. The above criteria are supported by the project planning process.

Implementation Measure 1.1.1.e Encourage the participation of individuals who meet any of the following criteria:

- 1. They reside within the City of Wilsonville.
- 2. They are employers or employees within the City of Wilsonville.
- *They own real property within the City of Wilsonville.*
- 4. They reside or own property within the City's planning area or Urban Growth Boundary adjacent to Wilsonville.

<u>Response</u>: Through the public meetings, work sessions, public notification, and public hearing schedule, the City has encouraged the participation of a wide variety of individuals addressing the groups listed above. **This criterion is met.** 

Implementation Measure 1.1.1.f Establish and maintain procedures that will allow any interested parties to supply information.

**Response:** The established procedures, public notification process and enhanced City web site notifications all allow interested parties to supply information. Many stakeholders submitted comments and questions directly to the City's project manager. The City's Citizen Request Module (CRM) provides another venue for citizens to comment on projects. **This criterion is met**.

GOAL 1.2: For Wilsonville to have an interested, informed, and involved citizenry.

Policy 1.2.1 The City of Wilsonville shall provide user-friendly information to assist the public in participating in City planning programs and processes.

**Response:** Through the open houses, work sessions, public meeting notices, available City Council meeting minutes and project-related materials and announcements on the City website, Council liaison reports and Boones Ferry Messenger articles, the City has informed and encouraged the participation of a wide variety of individuals. **This criterion is met**.

GOAL 3.1: To assure that good quality public facilities and services are available with adequate, but not excessive, capacity to meet community needs, while also assuring that growth does not exceed the community's commitment to provide adequate facilities and services.

Policy 3.1.1 The City of Wilsonville shall provide public facilities to enhance the health, safety, educational, and recreational aspects of urban living.

**Response:** The draft? 2012 Old Town Neighborhood Plan (has this been adopted?)states that providing a new connector for Old Town access and emergency egress will be "critical." The Plan discusses two collector connectors between both 5th Street and Bailey Street west to Brown Road and does not identify either as a preferred for a new connector.

As a result of the technical study and evaluation of the alternative alignments and input from the public, the preferred final alignment for the Connector is to intersect with Boones Ferry Road at 5th Street. With the 5th Street connection to Boones Ferry Road, a primary design consideration will be to address the traffic concerns expressed by many in the Old Town neighborhood. It is important to note that the Connector is a vital component to complete the City's transportation system - a system that provides essential community connectivity for all via multiple travel modes and for emergency responders. While there will be changes to Old Town, these changes can be mitigated and are outweighed by the more complex permitting, industrial property, construction staging, intersection spacing and long term transportation network risks posed by the Bailey Street alternative. **The plan supports the above criteria.** 

Goal 3.2 To encourage and support the availability of a variety of transportation choices for moving people that balance vehicular use with other transportation modes, including walking, bicycling and transit in order to avoid principal reliance upon any one mode of transportation

Resolution 2610– Attachment 2 Conclusionary Findings Page 7 **Response:** The 2009 Bicycle Pedestrian Master Plan and the TSP include new connections for walking and biking through the study area, both along the Connector and connecting Kinsman Road to the Ice Age Tonquin Trail and the City's Water Treatment Plant Park. The Connector alignment will in part determine the final alignment of the Ice Age Tonquin Trail in this part of Wilsonville.

The Connector roadway will provide safe and comfortable facilities for walking and biking, both along the roadway, on a separated multiuse trail, and through intersections. **The plan supports the above criteria.** 

# Section 4.177. <u>Street Improvement Standards</u>.

This section contains the City's requirements and standards for pedestrian, bicycle, and transit facility improvements to public streets, or within public easements. The purpose of this section is to ensure that development, including redevelopment, provides transportation facilities that are safe, convenient, and adequate in rough proportion to their impacts.

D. Dead-end Streets. New dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection. A central landscaped island with rainwater management and infiltration are encouraged in cul-de-sac design. No more than 25 dwelling units shall take access to a new dead-end or cul-de-sac street unless it is determined that the traffic impacts on adjacent streets will not exceed those from a development of 25 or fewer units. All other dimensional standards of dead-end streets shall be governed by the Public Works Standards. Notification that the street is planned for future extension shall be posted on the dead-end street. [Amended by Ord. # 674 11/16/09]

**Response:** No dead-end streets will be created by the phased implementation of the Connector. **This criterion is met.** 

- E. Corner or clear vision area.
  - 1. A clear vision area which meets the Public Works Standards shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. However, the following items shall be exempt from meeting this requirement:
    - a. Light and utility poles with a diameter less than 12 inches.
    - b. Trees less than 6" d.b.h., approved as a part of the Stage II Site Design, or administrative review.
    - c. Except as allowed by b., above, an existing tree, trimmed to the trunk, 10 feet above the curb.
    - d. Official warning or street sign.

- e. Natural contours where the natural elevations are such that there can be no cross-visibility at the intersection and necessary excavation would result in an unreasonable hardship on the property owner or deteriorate the quality of the site.
- F. Vertical clearance a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives.

**Response:** One of the concerns with the Bailey Street alternative is the safety risks posed by the intersection of the Connector and the railroad tracks, where the existing self-storage facility building adjacent to the tracks would block the clear vision area for approaching vehicles. By selecting the 5<sup>th</sup> Street alternative, the City is ensuring this standard can be met without requiring the costly removal or modification of existing buildings. Final design of the Connector will take into considerations these design elements and the criterion will be met. **This criterion is met.** 

- (.03) <u>Sidewalks</u>. Sidewalks shall be provided on the public street frontage of all development. Sidewalks shall generally be constructed within the dedicated public right-of-way, but may be located outside of the right-of-way within a public easement with the approval of the City Engineer.
  - A. Sidewalk widths shall include a minimum through zone of at least five feet. The through zone may be reduced pursuant to variance procedures in Section 4.196, a waiver pursuant to Section 4.118, or by authority of the City Engineer for reasons of traffic operations, efficiency, or safety.

**Response:** The recommended alignment includes sidewalks on the north side of the street. **This criterion is met.** 

(.04) <u>Bicycle Facilities</u>. Bicycle facilities shall be provided to implement the Transportation System Plan, and may include on-street and off-street bike lanes, shared lanes, bike boulevards, and cycle tracks. The design of on-street bicycle facilities will vary according to the functional classification and the average daily traffic of the facility.

**Response:** The recommended alignment includes buffered bicycle lanes on both sides of the street. **This criterion is met.** 

- (.05) Multiuse Pathways. Pathways may be in addition to, or in lieu of, a public street. Paths that are in addition to a public street shall generally run parallel to that street, and shall be designed in accordance with the Public Works Standards or as specified by the City Engineer. Paths that are in lieu of a public street shall be considered in areas only where no other public street connection options are feasible, and are subject to the following standards.
  - A. Paths shall be located to provide a reasonably direct connection between likely pedestrian and bicyclist destinations. Additional standards relating to entry points, maximum length, visibility, and path lighting are provided in the Public Works Standards.

B. To ensure ongoing access to and maintenance of pedestrian/bicycle paths, the City Engineer will require dedication of the path to the public and acceptance of the path by the City as public right-of-way; or creation of a public access easement over the path.

**Response:** The recommended alignment includes a multiuse trail generally on the south side of the street, and presumes that the intersection of the Connector with Kinsman Road and Boones Ferry Road will be designed to ensure safe separation of trail users and vehicles accessing industrial properties. **This criterion is met.** 

# GENERAL CONCLUSIONARY SUMMARY OF FINDINGS

- The project is consistent with applicable Statewide Planning Goals.
- The project is consistent with the applicable Comprehensive Plan goals and policies and the Planning and Land Development Ordinance.
- The Boones Ferry Road to Brown Road Connector Study carried out a multifaceted analysis of the study area to develop a range of alternative alignments and understand the costs and potential impacts related to each viable alternative that met the purpose and need of the project. The Study included an analysis as required by the TSP to determine the final alignment for the Connector.

As is evidenced by the staff report and findings contained herein, the proposal to select the 5th Street alignment as the final alignment for TSP project RE 04A is consistent with the applicable statewide planning goals, and the criteria contained in the Comprehensive Plan and Planning and Land Development Ordinance.

# Resolution No. 2610 - Attachment 3

# PLANNING COMMISSION WEDNESDAY, NOVEMBER 9, 2016 6:00 P.M.

Wilsonville City Hall 29799 SW Town Center Loop East Wilsonville, Oregon

Draft Minutes for approval at Dec. 14, 2016 PC Meeting

#### Minutes

#### I. CALL TO ORDER - ROLL CALL

Chair Greenfield called the meeting to order at 6:00 p.m. Those present:

Planning Commission: Jerry Greenfield, Eric Postma, Peter Hurley, Phyllis Millan, Kamran Mesbah, Simon

Springall, and City Councilor Charlotte Lehan. Al Levit arrived shortly after Roll Call.

City Staff: Bryan Cosgrove, Nancy Kraushaar, Chris Neamtzu, Miranda Bateschell, Amanda Guile-

Hinman, Steve Adams, and Kim Rybold.

### **PLEDGE OF ALLEGIANCE**

The Pledge of Allegiance was recited.

**II. CITIZEN'S INPUT -** This is an opportunity for visitors to address the Planning Commission on items not on the agenda. There was none.

### III. CITY COUNCIL LIAISON REPORT

Commissioner Levit arrived during Councilor Lehan's report.

Councilor Lehan reported City Council had a light agenda at its last meeting, reviewing the actions and discussion items as follows:

- City Council received a report from Metro Councilor Craig Dirksen, conducted a work session on the
  development of a parking permit program to address nonresident parking, and viewed the Boones Ferry to
  Brown Road Connector presentation before the Commission tonight.
- City Council passed the time, place, and manner restrictions for retail marijuana sales voters lifted the ban.
   However, since the ban was still in place, it was a moot issue. She noted the bond measure for the Aquatic Center had failed.
- Council received input from a citizen about tree cutting at the Park at Merryfield and asked Council to consider strengthening the City's Tree Ordinance as a neighbor had cut more trees than the number allowed by the Code. Council needed to discuss the consequences for cutting down trees without a permit or in excess of the number allowed, as well as how to address the removal and/or replacement of trees plantings required as a condition of approval for development. Another topic for future discussion regarded follow up and enforcement of conditions of approval, such as parking requirements, dumpster placements, etc. These issues would be addressed in a future work session.

Chris Neamtzu, Planning Director, introduced new Associate Planner Kim Rybold, who previously worked in Fairfax County, VA and graduated from Ohio State University.

Kim Rybold, Associate Planner, briefly described her professional background, adding she was excited to be working in Wilsonville and looked forward to contributing her experience.

#### IV. CONSIDERATION OF THE MINUTES

A. Consideration of the October 12, 2016 Planning Commission minutes The October 12, 2016 Planning Commission minutes were accepted as presented.

### V. WORK SESSION

A. Boones Ferry to Brown Road Connector (Adams/Kraushaar)

The following handouts were distributed to the Planning Commission:

- Multi-page packet including Attachments R, S, and T
- One-page handout titled, "Project Alternatives Map—Comments"

Chris Neamtzu, Planning Director, introduced the Project Team as Allen Hendy of Otak, Katie Mangle of Alta Planning & Design, Scott Mansur of DKS Associates, and Steve Adams, Community Development Engineering Manager. He recalled that this project stemmed from earlier work on the Transportation Systems Plan (TSP) when different connections in the community were evaluated. The TSP included several special pages addressing the alignment options in the Old Town area. A lot of testimony had been received from property owners in the area over the years and the Project Team had worked through a number of important issues. The Team used previous work on the TSP and other planning efforts, conducted a couple open houses, and did a tremendous amount of design work. The packet included a compilation of the analysis done to date. The Planning Commission's feedback about the Connector Plan would be provided to City Council as part of the record completed to this point. The Project Team would be presenting the corridor plan to Council, who would choose the alignment for the Brown Rd to Boones Ferry Road Connector Corridor Project.

Steve Adams stated he was the designated Project Manager for the Boones Ferry to Brown Road Connector Corridor Plan and would also carry the project forward through design and construction. After consideration of the TSP for a number of years, the City looked forward to identifying an alignment and building the project. The Project Team had met with the major stakeholders in the vicinity, including all the major land owners adjacent to the two proposed routes, Old Town Neighborhood Association members, business managers and owners, the managers and owners of both apartment complexes, located on Bailey St and Brown Rd. A public workshop was held in September 2016 with about 25 people in attendance and an open house was held in October 2016, both were attended by Planning Commissioners. Results of an online survey were summarized in the packet. A summary of this work was presented to City Council in September and again on November 7th.

- He clarified that Tim Knapp was in the report as a business owner and not as mayor or in any relation to his role as mayor. The list of Stakeholders Interviewed on Page 44 of 121 should identify Tim Knapp as "Small Business Owner, Old Town Village". Some citizens had expressed concern about Mr. Knapp's role, and he assured that all communications with Mr. Knapp related to this project were through his business email account and his personal phone.
- He noted three additional attachments to the packet were distributed to the Commission, as well as a one-page handout "Project Alternatives Map—Comments" that was provided for easier reading.

The Project Team presented the Boones Ferry Road to Brown Road Connector Corridor Plan via PowerPoint, which included a review of the project background and two proposed alternatives, the traffic numbers, project summary, evaluation criteria and cost summary used to recommend a preferred alternative, as well as next steps.

Comments and feedback from the Planning Commission and responses to Commissioner questions were as follows:

Access to the water treatment plant on Arrowhead Creek Ln would remain the same with a new connection
point added to the chosen alternative. Everything west of the Kinsman Road Extension was part of Phase 2
and was not being funded at this time, so during the design phase, the team would need to reconnect
Arrowhead Creek Ln to the Kinsman Road Extension.

- Mr. Adams believed Arrowhead Creek Ln would become the west leg of one of the two intersections.
   In the future, when the extension reached Brown Rd, it would be connected to the extended road at another location.
- The current plan was to extend the stub-out on Wilsonville Rd for Montebello Dr into the residential area to provide access for the neighborhood when it developed. Montebello Dr would likely connect through to the east-west connector, but as a local access only.
  - The other stub-out west of Montebello Dr did not meet spacing standards on Wilsonville Rd and was not needed. The intention was to eliminate the stub-out.
- The future Ice Age Tonquin Trail ended just past the bridge over Arrowhead Creek, partly due to the agreement regarding the permitting of the treatment plant development which indicated the City had agreed not to connect the trail through to Industrial Way or other points east-west until it could be done at a signalized or controlled intersection. During the TSP process a few years ago, the official alignment for the Ice Age Tonquin Trail was adjusted, eliminating the trail portion along the Willamette River to focus the trail on the east-west connector and to separate bike and pedestrian traffic from industrial uses of that property.
  - The recently completed Jobsey Ln Trail was a local trail, not a regional trail like the Ice Age Tonquin Trail.
- One benefit of the Bailey St connection would be the predominate east-west traffic not only due to drivers avoiding traffic backed up on Boones Ferry Rd, but also with traffic accessing the Fred Meyer shopping center and Subaru dealership. With the Bailey St connection, the east-west traffic across Boones Ferry Rd would be more than just local access as indicated on Slide 5. No "local access only" signage was proposed due to traffic likely accessing the shopping center and dealership.
- For the 5th St alternative, a variety of design elements could be used to discourage nonlocal traffic through the neighborhood, as well as "No Outlet" rather than "Dead End" signs, since traffic could still turn onto Magnolia Ave to exit the neighborhood. No repeat traffic by those not purposefully headed into the residential area was unlikely to occur since no I-5 onramp access existed.
- Two homes were being built on the east side of Boones Ferry Rd north of 5th St. The Old Town Plan envisioned the east side of Boones Ferry Rd as being commercial; however, the Comprehensive Plan and zoning indicated it being predominantly residential at this point, so rezoning and a Comprehensive Plan change would be required to carry out the Old Town Neighborhood Plan. This action had not been taken by any of the property owners.
- The Traffic Study estimated that 1,800 trips per day would be diverted to the east-west connector roadway in 2020, the year the connector would open. About half of the 1,800 trips would be new traffic diverted from Wilsonville Rd, including traffic from Villebois using Kinsman Rd or Brown Rd. The remaining trips would be traffic that already existed within the neighborhood on that leg of 5th St from the commercial development
  - In 2019, Kinsman Rd would be completed up to Boeckman Rd which might draw traffic from Boeckman Rd to the proposed connector as well.
- Slide 10 of the PowerPoint highlighted how each alternative met the evaluation, but was missing the column for the 5<sup>th</sup> St alignment. Attachment O on Page 115 of the packet included the missing information.
- Concern was expressed about trains blocking either 5<sup>th</sup> St or Bailey St and backing up traffic on Boones Ferry Rd and Wilsonville Rd. The short distance between Bailey St and Wilsonville Rd was another complicating factor and a Bailey St connection would only exacerbate the problem.
  - Both intersections being considered for the connector road were heavily evaluated. The existing signal at the Fred Meyer parking lot was less than 400 ft from Bailey St, while the distance to 5th St was about 1,100 ft. Currently, a stop sign on the east and west legs was proposed at the Bailey St intersection rather than a traffic signal or mini-roundabout because the distance from the existing signal at Fred Meyer was too short. The long term analysis showed the stop signs worked very well. The existing signal creates nice gaps, allowing traffic to go east and west.
  - Of the 1,800 daily trips, only about 10 percent would be PM Peak Hour traffic, so significant traffic queues were not anticipated when trains blocked the roadways, which was allowed for about 20

minutes. Some significant queuing could occur if trains were switching or being used at OrePac, but that would also occur on Wilsonville Rd.

- Having the connector road at 5<sup>th</sup> St instead of Bailey St would provide more spacing to move the bottleneck and traffic congestion away from Wilsonville Rd and the signal at Fred Meyer.
- The 1,100 ft spacing to 5th St would allow the option of installing a traffic signal in the future, whereas no future signal could be installed at Bailey St.
- Mr. Adams reported that OrePac received train shipments two to four times each month, depending on
  the time of year, and could be more frequent as the company planned to expand. Blockage of the
  road during those train shipments was generally between 10 and 20 minutes and there was no way to
  control what time of day the train would come through.
- Depending upon the length of the train, a stalled train could block either connector road alternative, but the 5th St option provided an additional 800 ft to potentially avoid blocking the 5th St railroad crossing.
- Mr. Adams noted Mr. Neamtzu had located an email from ODOT regarding the 2013 TSP which specified an ODOT policy of no new at-grade railroad crossings as bridges or underpass were wanted. Neither of the connector road options allowed for a bridge or underpass, but since a crossing already existed at 5th St, it would be easier to apply for an improved crossing at 5th St than to get ODOT approval for a new at-grade crossing at Bailey St, which was not guaranteed and if a new public crossing at Bailey was allowed hen ODOT would close the 5th St railroad crossing.
- The right-of-way column in the Cost Summary (Slide 12) was a summary of the acquisition costs and the estimates for Phases 1 and 2 of the Bailey St alternative included a small amount of compensation to OrePac; however no operational damages were included.
  - Based on meetings with OrePac executives, these additional compensation costs, which center on rebuilding both the OrePac parking lot and the rail line, were expected to be a minimum of \$400,000 and up to \$1 million, depending on how OrePac's operations would be altered.
    - The Bailey St option would require rebuilding the spur going into OrePac which would prevent trucks from delivering OrePac's rail product. One railroad car equaled 4.5 truckloads and most products came from the east coast. OrePac did a lot of business which would have to be farmed out to other areas and additional trucking costs would be associated with getting items to OrePac and out to their distribution network.
  - The 5th St option involved no economic damages as it would not impact OrePac's operational footprint.
- Mr. Adams noted that in September, OrePac purchased a 17-acre parcel formerly owned by the Young and Bernert families, located west of Coffee Creek, east of Industrial Way, and extending south to the treed property and east to the railroad on the south side of OrePac's existing property. OrePac intended to expand its operations to the approximately 3-acre farm parcel south of OrePac, so a Bailey St connection would make that expansion difficult. A 5th St connection would leave a larger footprint available for an industrial use, whereas a Bailey St connection would result in two smaller parcels.
- The land south of the Bailey St connection was planned for industrial use and the land west of Industrial Way up to Wilsonville Rd was intended for residential (Slide 4).
  - The Comprehensive Map designation for the area south of Arrowhead Creek to the Willamette River was zoned for industrial use. The area north of Arrowhead Creek to Wilsonville Rd was zoned residential.
  - Over the years, there had been many ideas about changing the zoning along the river, but nothing concrete or substantive had been proposed.
- No OrePac buildings would need to be torn down for the Bailey St connection, but about 300-ft of the
  railroad track would need to be rebuilt, regraded, and raised. All of OrePac's storage and truck-turning
  movements in that area would need to be reorganized or moved.
  - The northerly Shurgard Storage building on the Bailey St would create a sight distance concerns for the railroad and may need to be moved with the Bailey St option.

- Attachment N addressed cultural resources and mentioned a preference for the Bailey St alternative; however, no readily-apparent cultural resources were noted with either option, though some could be found. There was a high probability of finding culturally-sensitive artifacts near Arrowhead Creek during the construction phase. Cultural resources were a consideration for the project as a whole given the project's proximity to Arrowhead Creek and the Willamette River.
- Kinsman Rd would function as the main freight access with freight traffic traveling from Arrowhead Creek
  Ln at the water treatment plant and eventually up to Boeckman Rd. The intent was to limit east-west freight
  traffic. The City did not want big trucks on Boones Ferry Rd, which was busy enough and handled
  residential and commercial traffic. If needed, the connector road could be signed with 'No Through Trucks'
  or "Local Access Only".
- ODOT had no plans for any improvements to Interstate 5 (I-5) or the Boone Bridge, which was the principal bottleneck of the system. Because the southbound I-5 entrance ramp was approaching capacity, backups were occurring as traffic diverted onto city streets when traffic congestion and incidents occurred on I-5 and I-205. The City was considering widening the southbound I-5 ramp to store additional vehicles; making improvements to Wilsonville Rd to add capacity and store additional vehicles; restriping the north leg of Boones Ferry Rd to add additional storage for southbound to eastbound left turn vehicles; and removing the bump-out at the Fred Meyer signal to increase queuing and capacity. Further design was needed to consider how to best relocate the bike lane if the bump-out was removed.
- In both connector alternatives, Kinsman Rd would be the main collector arterial running north-south through the area. Montebello Dr would eventually connect to the new connector road once the hazelnut orchard was developed. With either connection option, Montebello Dr would come through as a local street only to serve the new residential neighborhood.
- The traffic study numbers expected to come into Old Town through the new connector road as well as the
  current and future traffic volumes expected on Wilsonville Rd from the west coming into town seemed much
  lower than personal experience would suggest.
  - Current traffic volumes were actually slightly lower than those estimated in the traffic study done for Fred Meyer by approximately 5 to 10 percent. Standard trip-generation estimates used in traffic studies were typically pretty conservative.
    - Follow up counts had been done for Argyle Square, now at full build out, and traffic volumes were also 5 to 10 percent lower than estimated in the original traffic study.
    - Mr. Adams added that in 2009, the traffic counts in the Fred Meyer traffic study for on the leg of Wilsonville Rd between Boones Ferry Rd and Kinsman Rd were about the same as the counts performed in December 2015 and Spring of 2016. He believed the Barber Street Extension, which opened in September 2015, and the recent reconstruction of Boeckman Rd were taking much of the additional east-west traffic that would have otherwise used Wilsonville Rd.
- The Boones Ferry/Wilsonville Rd intersection was currently at level of service (LOS) D, which was standard for that type of intersection. According to the TSP, the intersection would continue to meet the City's LOS D standard through 2035; however, that assumed all the projects the City would build within the financially-constrained model. Some of those projects included this east-west connector, which would remove traffic volume from the Boones Ferry/Wilsonville Rd intersection.
  - Another network improvement project in the TSP was improving the Boeckman Rd overpass to five lanes
    in the future, which would also carry more east-west traffic and take volume from that intersection.
    Continuing to build these network connectivity projects and other east-west capacity in the city would
    allow the Boones Ferry/Wilsonville Rd intersection to continue to meet the LOS D standard.
  - The intersection would still meet LOS D with the Subaru dealership recently approved by the DRB and now being constructed. The new connector road was not being built to serve just Subaru or anything else.
- While there were 3,900 to 4,000 trips during the day, nothing explained how the connector would alleviate traffic during PM Peak Hour. The time difference saved through the intersection or along Wilsonville Rd was likely to be very negligible.
  - The statement "Eastbound travel time would be improved by 13 seconds versus westbound travel time by 7 seconds" regarded the PM Peak for east-west traffic on Wilsonville Rd.

- With 4,000 trips throughout the course of the day, about 10 percent was expected to be PM Peak traffic
  though it could be a bit more. The connector would be more attractive when congestion was heavy on
  Wilsonville Rd. The engineer's typical rule-of-thumb was that the Peak Hour was about 10 percent of the
  average daily traffic, so with 4,000 trips, about 400 vehicles would be removed from that intersection.
- Although the Boones Ferry/Wilsonville Rd intersection was a bit of an anomaly, the 10 percent was pretty solid because it was modeled. The Metro and City of Wilsonville travel model that was used was based on a PM Peak Hour, and that PM Peak Hour projection was used to forecast the Average Daily Bi-Directional Traffic Volumes (ADTs).
- Comparing the no-build option to the two connector alternatives, which would have similar traffic flow during peak hours, the no-build showed 180 trips turning from Brown Rd onto Wilsonville Rd heading eastbound. However, the two connector options showed 230 or 235 at that same turn. It actually looked like more traffic was being diverted onto Wilsonville Rd rather than alleviating traffic on Wilsonville Rd at that intersection, for instance.
  - Mr. Mansur stated Figure 3 of the East-West Connector Existing and Future Conditions Analysis (Attachment J, Page 77 of 121 of the packet) showed the 2035 no-build option. He noted the traffic volumes at Boones Ferry Rd without the east-west connector and directed the Commission to the traffic counts in Figure 2 of the Connector Alternatives Analysis (Attachment K) on Page 81, showing the connector would really help the east-west traffic.
    - Northbound movements from Boones Ferry Rd in Figure 3 with the no-build were 195 left-turn, 155 through, and 450 right-turn trips. In Figure 2, the left and through trips decreased from 195 to 75 and from 155 to 75, respectively. The traffic coming south to Boones Ferry Rd or traffic that was on Wilsonville Rd had been removed from Wilsonville Rd and through that intersection, and was now using Kinsman Rd and Brown Rd in the future.
    - Additionally, the eastbound right turn on Boones Ferry Rd dropped from 100 to 65 trips. The
      left-turn traffic leaving Boones Ferry Rd had really high delays. The model showed a much
      bigger reduction in traffic leaving the site to head west because the right-turn traffic had less
      delay coming eastbound from Villebois or Wood Middle School, making it much easier so not as
      much traffic was diverting to the east-west connector.
  - The concern was there seemed to be no traffic alleviation, particularly on eastbound traffic on Wilsonville Rd at PM Peaks. There was some negligible alleviation on Boones Ferry Rd, but what about Brown Rd? Was there much of a diversion from people on that side of town actually using the connector to get to Boones Ferry Rd as an alternative to get over the freeway.
    - Mr. Mansur explained the gravity model allowed traffic to take the path of least resistance. The east-west connector might carry 4,000 vehicles per day, but by taking that traffic off, other traffic might use other facilities because it was a quicker path. It was not an apples-to-apples comparison; all 4,000 trips would not necessarily be from Wilsonville Rd. As the connector was added into the network in the model to carry the volume, other traffic could have filled in that system.
  - It was disappointing that the connector would only have a negligible decrease on eastbound Wilsonville Rd traffic between Brown Rd and I-5 between 5:00 and 6:00 pm on weekdays, which was the City's biggest need. That fact raised questions about whether building the road would truly getting the City much alleviation for the money. Removing a more significant amount of traffic from Wilsonville Rd to the new facility would be more assuring.
  - Much of the connector's benefit was to avoid critical events. Considering the tradeoffs and benefits, in
    those extreme conditions of I-5 where Wilsonville Rd was shut down, the connector would provide an
    alternative access for residents to use to move throughout the city.
  - The connector would be an alternative eastbound or northbound access, but not a realistic alternative to go westbound or access I-5; it just put people in a different spot of gridlock.
  - For both west and east Wilsonville, the Kinsman Road Extension to Boeckman Rd would provide a great way for traffic to get around the I-5 interchange when there was congestion.

- The frustration was that the eastbound traffic was not really being alleviated by the connector. When critical issues occur, the entire model blows up; none of this would matter when there was an accident on the other side of the Boone Bridge because nothing could be done about that. What the connector achieved during non PM Peaks in non-critical conditions was disappointing.
- While the connector would allow for better circulation within Wilsonville in critical conditions, the actual
  outcome expected was very disappointing. Adding trains to the mix and siphoning a bunch of traffic
  through a residential neighborhood on narrow roads would only divert gridlock through places where it
  did not exist. Nothing could be done about it; the hope was to see much more bang for the City's buck.
- The PM Peak Hour counts were done between 4:00 and 6:00 pm, but the modeling was done on the highest hour within that time period.
- The new middle school being built should cut down on a substantial amount of cross-town traffic in the am, but those numbers did not show up in any of the analyses because the counts were done in the pm. Some middle school PM Peak Hour trips were related to after-school and sports activities which would also be reduced in the model.
- 5<sup>th</sup> St was four blocks from Boones Ferry Park where Boones Ferry Rd dead ended, the existing bike-ped connection south of the sewer treatment plant, near the mobile home park property, already connected to Memorial Park and would be improved in phases over the next few years.
- Mr. Adams confirmed that with the Kinsman Road Extension, Industrial Way would not exist in the future. The north end of Industrial Way where it connected to Wilsonville Rd did not have adequate spacing for the arterial classification of Wilsonville Rd. The plan was to cut off the Industrial Way connection to Wilsonville Rd. The team considered keeping part of the asphalt as a bike-ped path connection from Wilsonville Rd and connecting it into the Ice Age Tonquin Trail somewhere.
  - With the lower half that goes toward the water treatment plant near Arrowhead Creek Ln, the goal is to
    eventually make a trail triangle, allowing people to go north to the Industrial Way connection or farther
    east and follow the trail out to Boones Ferry Rd.
  - A trail connection would probably be built with Phase 1 rather than waiting for the Kinsman Road
    Extension to be completed. The gap was only a couple hundred feet, so it made sense. The City would
    know the permanent location of the Ice Age Tonquin Trail, so the connection would be built and then
    modified when Phase 2 occurred.
  - The bike path, called Old Haull Road or Jobsey Lane that approaches Wilsonville Rd, would stay as
    another north-south bike path. It did not get used much, but it would likely remain and another bike-ped
    connection would be added. The bike path stopped at Wilsonville Rd next to the new, 12-unit apartment
    complex.
  - Mr. Neamtzu explained Council had not asked for anything specific from the Commission and was not
    looking for an endorsement or recommendation. All of tonight's dialogue would be typed up in extensive
    minutes, which would round out the public record and provide background for the Council's consideration.
    The dialogue would help Council with their decision-making and think of questions they might not have
    thought of otherwise. Allowing each Commissioner to make comments about their opinions was perfectly
    appropriate as part of the process.

Chair Greenfield stated he was impressed with the amount and depth of citizen input, particularly the email communications that had been received. He attended and was also impressed with the public open houses. Personally, he had been very torn on which alternative was better; there was nothing decisive either way. It seemed some very powerful business considerations were being balanced against some powerful community sentiments. Sometimes they aligned, sometimes they did not.

• Looking simply at the map and with a view to future possibilities for planning south of Wilsonville Rd, he would prefer the 5th St alignment, but he realized there were some inelegancies involved, particularly with traffic at the intersections. However, the opening the 5th St connector would give to recreational and residential, particularly development below this connector, seemed a very important future consideration apart from access to businesses and to the community in Old Town. The Commission and City Council needed to be sensitive to those future possibilities as much as to present circumstances and pressures.

- Driving around the subject area, it was clear that Bailey St was the obvious route if someone was concerned
  with the Fred Meyer development. The shopping center was an important commercial entity of Wilsonville.
  On the other hand, there would be considerable hardship to OrePac, another major commercial industrial
  citizen of Wilsonville. He did not know how to balance or weight those two interests.
- Taking a long view of Wilsonville's growth, development, and lifestyle, it seemed the area not being
  discussed was the area south of this connector toward the river, which was an important area that needed to
  be carefully considered and protected, and provided for with access to the rest of town. This was not simply
  an Old Town consideration; it was a Wilsonville consideration. He believed the southern connector was
  probably more amenable to that kind of consideration.

The following items were added to the record:

- Letter dated 11/9/16 from The Old Town Steering Committee
- Written statement from Michele Dempsey, a resident of Old Town.

Chair Greenfield called for public comment.

Amanda Hoffman, Old Town resident, said she did not necessarily want to give her opinion about the alternatives, but wanted the safety issues at Bailey St and Boones Ferry Rd addressed. Regardless of which alternative was chosen, turning left at Bailey St south onto Boones Ferry Rd was already very dangerous even without people trying to get from Fred Meyer to Villebois. She made that turn all the time and it was really scary. Even driving north on Boones Ferry Rd, she has had somebody turn left in front of her. It was very hard to see and the cars go fast. With either alternative, there would be additional traffic moving north on Boones Ferry Rd as well as additional traffic turning left on Bailey St. These turning movements needed to be addressed because it was definitely a safety issue.

- The stop sign on Boones Ferry Rd with Bailey Street Apartments on the right was back a ways and the apartment complex was to the left. It was really hard to see cars unless one pulled out pretty far. Then, cars were turning left onto Bailey St to go to the apartment complex or Fred Meyer, so drivers did not want to pull out too far. It was a very awkward spot and very unsafe.
- She lived south of  $5^{th}$  St and was concerned about how the  $5^{th}$  St alternative would impact the train, and if the train would blow its horn additionally or not.
- She asked if the bus would be impacted if additional improvements were made on the east side of 5<sup>th</sup> St, because the bus turned there. If the bump-out was built, would the bus be able to make the turn?

Commissioner Levit agreed with Ms. Hoffman's safety concerns at Bailey St and Boones Ferry Rd.

Monica Keenan, 9460 SW 4th St, stated she was representing Old Town and the Old Town Plan developed for the area. She wanted to address some possible confusion in the PowerPoint presentation on Slide 7 and reviewed a one-page letter from the Old Town Steering Committee dated November 9, 2016, which was provided for the record, with these additional comments:

- The Old Commercial/Residential Character was in the Old Town Plan to support the adaptive reuse of some of the historic structures on the east side of the street and address some old structures that had already converted to a semi-commercial use. It was not intended to dictate how those blocks were to be redeveloped.
  - Years ago in the development of the Old Town Plan, some people owned another home farther north,
    the first house just south of the apartments on Boones Ferry Rd. At that time, they believed they were
    going to do some adaptive reuse of that home. However, the home had been sold again as a residential
    home.
- The Main Street concept mentioned earlier was not the intent of the final assessment. The few Boones Ferry Rd blocks south to 5th St were called Neighborhood Commercial, which allowed for adaptive reuse.
- The neighborhood was concerned about the 5<sup>th</sup> St intersection due to the two historic structures on the east corners. It was a very narrow street with a lot of church traffic on Sundays and a lot of bus traffic. Those buildings would be severely impacted.

- It did not seem as if the requests or guidelines set forth in the Old Town Plan were really considered in the heavy evaluation of the 5th St connection. The Old Town residents asked that the Commission take the time necessary to evaluate this crossing. Everyone knew ODOT could be challenging and permits could be challenging, but as much as everyone would appreciate having this connector, they wanted to see if it could be moved to Bailey St, even if the cost might be a bit more at this time. The City should really evaluate it for the servicing of the retail district and to minimize the impact in the lower sections of the neighborhood, which was still to date and would always be an inclusive, dead-end neighborhood bordered by the river, railroad crossing, and I-5.
- In response to some comments and questions she heard, she added the following comments:
  - With the 5<sup>th</sup> St option, removing the existing parking spots currently allocated to businesses that were already developed would reduce their parking.
  - Narrowing 5<sup>th</sup> St would not only impact the two-way traffic, but the historic structures sat right on the road. There was no setback. The right-of-way went into their living rooms and the front of their businesses. This needed to be considered as these properties were just as important as other properties in town.
  - The connector would help when there was a critical event because the Old Town neighborhood was locked in. Residents could not get to their homes and could not get out. It was very difficult.
  - The goal of the neighborhood was to not have the buses go around the one block in the middle of the neighborhood anymore. The residents hoped that with whatever connection was established that SMART buses would be routed north around the commercial buildings and not in the middle of the neighborhood.

Commissioner Postma asked if the neighborhood, in general, wanted the east-west connector. As mentioned, he was disappointed in what it was not alleviating.

• Ms. Keenan replied she had just had this discussion with another neighbor from Old Town. One goal of the Old Town Plan was to have a secondary emergency route out.

Commissioner Springall asked if the illustrations on Slide 7 represented the vision of the Old Town Plan between  $5^{th}$  St and Bailey St, that there are sidewalks at least as far as  $5^{th}$  St going south.

- Ms. Keenan replied there was discussion that sidewalks would potentially be added on the east side of Boones Ferry Rd north of 5th St, but the request was always for the sidewalks to be more integrated into the road, or less curb/gutter and bump-outs and more representative of a historic type neighborhood. The residents had always been satisfied with no sidewalks on both sides. She believed that knowing this was a future plan, they knew there might be potential for adaptive reuse on that section north of 5th St, that some sidewalks lower in profile would be acceptable. Also many considerations in the Plan were that no designated bike lanes be south of 5th St; it was a shared road.
  - She added that with the development of Boones Ferry Park along the river, Old Town residents did
    expect some additional park traffic that would come from the south and north on Boones Ferry Rd.
    Traffic moved at a pretty feisty pace on that road coming out of the park, including the trucks leaving
    the waste water treatment plant.

Commissioner Hurley asked about traffic stacking northbound on Boones Ferry Rd. He did not envision a lot of stacking occurring at  $5^{th}$  St or Bailey St since the majority of traffic going northbound simply came from the neighborhood. Regardless of the connection option, people needing to get to other parts of Wilsonville could go up Kinsman Rd and so forth.

- Ms. Keenan agreed, noting her experience was that stacking tended to stay closer to the Bailey St end of Boones Ferry Rd because people tended to get queued out enough to go right, and many times, people take the Albertson's bypass to get out, and queueing occurred there, too. It was a rare event, and long-term event on I-5, if there was stacking down Boones Ferry Rd into that block north of 5th St.
  - She added that having clear signage was important when a long-term, critical event occurred, because people do whip through the neighborhood clamoring for an out anywhere. That would also be when

- some additional stacking could occur, but with other egresses, the residents should be fine. People felt like trapped rats. Google Maps said people could get across the river, but that would not work.
- She noted semis were an issue and would still be an issue, even with the connector, as they came down Boones Ferry Rd trying to get around 4<sup>th</sup> St, Magnolia Ave, and getting out on 5<sup>th</sup> St. Regardless of signage, it still happened multiple times a week; The narrowing of 5<sup>th</sup> St was not of assistance either.

Michele Dempsey, 30999 SW Boones Ferry Rd, Wilsonville, OR, said she has lived in the Old Town area her entire life and had a strong preference for the Bailey St connector. She read her written statement, which was entered into the record.

Alan Kirk, OrePac Building Products, stated OrePac had an easement to use Industrial Way, a private road owned by Wilsonville Concrete, et al. OrePac's trucks came in and out of Industrial Way down to Ore Pac Ave, across OrePac's bridge on OrePac Avenue. He indicated the property owned by OrePac, adding the company had acquired all the land south of OrePac to 5<sup>th</sup> St as well as the property west to Industrial Way for OrePac's expansion needs.

Glenn Hart, OrePac Founder, stated he had been working in Wilsonville since 1972. His first City Council meeting was in a little house at a park when OrePac had decided to come from Portland to Wilsonville. Through that period, the business, which was privately-owned by his family, had grown. His sons were in the business, and just recently, one of his grandsons joined the business. It was he and his wife's plan and commitment as a family and local community business to perpetuate the business for the benefit of their family, the community, and their employees. There were 220 employees or families being supported by the operation today. Most long-time residents realized OrePac was kind of protected by the location of the business. Other than traffic, the business dealt with all the same issues everyone else did. He believed OrePac fit very well as a good citizen in the community.

- He asked what the future development would be of all the property south of the proposed 5<sup>th</sup> St extension.
   He believed most of it was zoned industrial, as was the new property OrePac bought. It seemed logical for access and future growth, which hopefully the City endorsed, that 5<sup>th</sup> St would be an obvious choice.
- Specifically, the Bailey St option would put OrePac's operation and future growth, which has been
  considerable, in jeopardy. It was pretty impractical to try to operate or expand a business across a street.
  OrePac handled all types of building materials and the two-year construction period would be quite
  disruptive to what they do. Its future was to sell things today and deliver them tomorrow and the company
  ran day and night crews in its operation.
- OrePac has made a significant commitment to the new property that could grow the business, realizing there
  would be other industrial businesses as neighbors before this was over. OrePac had also made quite a
  financial commitment. It would not serve OrePac to relocate the business. They appreciated all the
  consideration and planning that had gone into the process.
- As an observer, he believed that long-term, 5<sup>th</sup> St actually did make the best escape route, even for people
  in the Old Town area. The congestion that developed on Boones Ferry Rd was obviously considerable now
  and would grow.
- It was very important to OrePac to be able to expand its business and serve its customers statewide. It would be very exclusionary for OrePac if Bailey St was selected for the road, to say nothing of the complication with the company's rail access and service to the business.

Darin Coder, OrePac Chief Financial Officer, clarified the cost that was thrown out from \$400,000 to \$1 million was an estimated cost just for the disruption for that rail crossing at Bailey St, and what it would do OrePac because the rail spur came up to the southeast corner of the northern most along Ore Pac Ave. There was a scale there and all trucks would have to be taken off-site for probably a month just with building that additional crossing and reinforcing and bringing the rail spur up the required 20 inches. Those damage estimates did not take into account the disruption of Bailey St running along the south side of the property.

Mr. Kirk believed that last year, City Council purchased a trailer park to convert into a park, adding bike lanes and improving under the freeway so people could go from the west side of town very easily without getting on Wilsonville Rd and end at Memorial Park or farther east.

He believed the traffic studies showed 1,800 trips in the current year. Phase 1 would take probably two
years to build, and Phase 2, maybe five to seven years to build, but most of the traffic would use Kinsman Rd
to go west, providing the escape route much asked for by the Old Town residents.

#### Commissioner Postma:

- Noted OrePac's letter indicated the need to purchase significantly more property for the Bailey St
  alternative and asked if that was due to the access road through to Nutting Rd, or did something else require
  more land acquisition.
  - Mr. Kirk replied that was correct, the City would have to buy OrePac property. Nothing would be required from OrePac's property with the 5<sup>th</sup> St alternative. The 5<sup>th</sup> St alignment would align OrePac's property.
  - Mr. Hendy clarified the 5<sup>th</sup> St alignment would not miss OrePac's on the southwest side, but the right-of-way already existed on the very south side.
  - Mr. Kirk noted where the red line indicating the 5<sup>th</sup> St alignment curved to the northwest (Slide 4) would impact OrePac's property. The project team was determining the best route across Coffee Creek.

Commissioner Hurley asked what OrePac's intended layout was.

- Mr. Kirk replied they have not gotten that far yet, but noted the southern part of the existing site was non-covered inventory, and OrePac would most likely connect the two covered warehouses to the non-covered storage and move the covered storage south. The non-covered yard area would move south and the expanded building would basically be where Bailey St was shown.
- Mr. Hart confirmed that at this time, OrePac only planned to build a building where the existing open storage was on the south portion of the site. OrePac had tried to expand to the south for several years for lumber and trucking operations. It had been a difficult negotiation. Now, there was actually more land than OrePac needed, but they did not intend to occupy all of it.
  - He clarified that the nursery would continue indefinitely, until the City or somebody else wanted to use it. OrePac owned the land, but the Bernerts operated the nursery.
- Mr. Kirk stated years ago, OrePac tried to acquire the north acreage from Mrs. Lee, but someone else bought it, filed bankruptcy and the bankruptcy laws allowed them to outbid OrePac. He confirmed that the land would be developed as industrial.

Commissioner Springall asked if OrePac planned on any creek crossing at this stage.

- Mr. Kirk replied no additional creek crossing was needed. He indicated where Kinsman Rd would connect, and where OrePac's traffic would access Wilsonville Rd from Kinsman Rd, which was short of having to cross the creek. An existing bridge currently serviced only OrePac.
- Mr. Hart noted OrePac would forfeit the bridge to the City so the Kinsman Road Extension could go through.

Commissioner Millan asked if the two historic buildings on the corner of 5<sup>th</sup> St were actually designated as historical buildings. The plans did not seem to accommodate them.

- Mr. Neamtzu replied the buildings were not on any kind of official register; however, they were some of the oldest buildings in the city and did have historic significance.
- Mr. Adams noted Councilor Lehan had pointed out that the historic building on the northeast corner had been misnamed (Slide 6); it was a feed store, not a Grange. Their only Grange in town was in Frog Pond. The difficulty was that 100 years ago, the building was surveyed incorrectly, and the west and south corners of the building were in the public right-of-way, which was one reason for the tight corner there.
  - The City had not fully investigated and did not know whether the footing was good or the building had good foundational strength. Many people have mentioned the lack of visibility around the building.

- If the Council chose the 5<sup>th</sup> St connection, the City would pay to see if the building could be moved and what the cost impacts might be to see if Council would want to spend the extra money for that.
- The building on the southeast corner of the intersection was the old Wagner Woodworking store. He was not sure about the current or future intended use of the building.

# Commissioner Springall:

- Noted concern during public testimony about the removal of parking on 5<sup>th</sup> St and its potential impact on businesses. He asked if there was sufficient parking associated with the businesses, noting the City did not want any business-related parking moving into the neighborhood.
  - Mr. Adams replied there was quite a bit of parking behind both businesses, as well as parking in front of the building on the northwest corner, which included the dance studio. Most of the parking tended to be behind the buildings. Tim Knapp's company owned both of the buildings and he had seen the same slide showing no parking on the street. About eight parking stalls would be removed on the street, but Mr. Knapp was not overly concerned about it when the project team first talked to him last summer at a stakeholder meeting. Though not pleased about parking being eliminated, Mr. Knapp had not expressed any concerns about it being a negative impact to the businesses since that time.
- Noted on street parking was very minimal along Boones Ferry Rd, perhaps only four or five spots, and only
  on the west side of the road. He was unsure how much parking there was behind the buildings.
  - Mr. Adams stated parking faced the railroad tracks the entire length of the buildings, both north and south of 5<sup>th</sup> St. He believed it was currently used mostly for the business owners and that patrons tended to park out front. The lots behind the buildings were paved.

Commissioner Postma recalled some businesses only front along  $5^{th}$  St, so removing the parking would create a weird dilemma for those businesses as to where they were going to park.

Commissioner Levit said he had never had a problem parking south of 5th St.

Commissioner Hurley countered that for the last six years, he had spent a large amount of time in the parking lot of the dance studio on the northwest corner. At 4:00 pm, all of the on street parking on the north and south sides of 5<sup>th</sup> St was taken. All the businesses were open. Even when businesses were closed, the dance studio had about 40 to 60 cars coming in and out every hour, on the hour. Traffic was so bad, even at 7:00 or 8:00 pm when all the residents were at home, that parents would park on either side of Boones Ferry Rd, and the kids dart out in the middle of the dark street to get picked up. Taking the off-street parking away would be a nightmare.

- He also noted there was no room by the two old buildings. The feed store homeowner parked on the side of the feed store as there was no room to park in front on the street because the asphalt went right in front of it. It was the same situation for what used to be the cabinet shop on the southeast corner, and the parking in front of the insurance company was taken this afternoon as well.
- He estimated that at least a dozen or more parking spaces would be removed which was a lot of parking to lose. The dance studio could turn into a mini-mart or hair salon, but if the dance studio stayed, adding the existing traffic with the connector traffic would be a nightmare.

### Chair Greenfield:

- Asked if the residences west of the tracks on 5<sup>th</sup> St were connected to City water and sewer.
  - Mr. Adams replied they were hooked up to City water, but not sewer; they were on septic. The
    residences had a private water line that ran under the railroad tracks and accessed the public water
    lines on the east side of the tracks.
- Asked what was anticipated for that in the future.
  - Mr. Adams explained if 5<sup>th</sup> St crossed the tracks, the City would run water and sewer lines under the railroad tracks to service the properties on that side and that line would continue over and up Kinsman Rd to service all of the undeveloped land there.
- Recalled seeing a possible need for a pump station and asked if that was correct.

- Mr. Adams said the need for a pump station would depend where the gravity sewer line ran across. If it ran at 5<sup>th</sup> St, it would service a pretty good-sized area, adding that the land rises going north. The area near 2<sup>nd</sup> St where the little 12-ft culvert went under the tracks was pretty low and he did not believe it would be serviceable with a 5<sup>th</sup> St gravity line, but not all the engineering had been done yet.
  - If the area were developed in the future, one option was for the City to extend a sewer line from the main in Boones Ferry Rd and go under the tracks to service the area, or that area could develop and have its own pump station to pump the sewage up to 5th St or Bailey St, wherever the sewer line came across.
  - He clarified that servicing the properties below 5<sup>th</sup> St was not part of the Cost Summary. The development would have to figure out how to service its properties. Obviously, it would be better to have the utilities in 5<sup>th</sup> St. If Bailey St was the crossing, the City could still work with the railroad to get a water and sewer crossing underneath the gravel road on the far side of 5<sup>th</sup> St. This option had not been investigated yet, but would probably be part of the construction phase.

Mr. Adams addressed the questions about bus routes and future bus routes, stating that right now, the bus route came down Boones Ferry Rd, turned onto  $4^{th}$  St, then up Magnolia Ave, across  $5^{th}$  St and back out. He had talked with Transit Director Stephan Lashbrook if SMART preferred a particular option and would actually use the connection, coming from Wilsonville Rd, down Kinsman Rd and around. Mr. Lashbrook had stated there were too many unknowns at this time, and he was unwilling to make a commitment if he would use one route or the other. If the  $5^{th}$  St connection was done, Mr. Lashbrook was also unwilling to commit to removing the current bus loop route that went down Boones Ferry Rd to  $4^{th}$  St and Magnolia, because it went through a residential neighborhood. Mr. Adams understood one regular rider there took the bus all the time and would have to walk two more blocks, but Mr. Lashbrook was noncommittal about what possible future bus routes would be seen in the area.

#### Commissioner Hurley:

- Did not believe that sat well with the residents when the bus was supposed to turn around in Fred Meyer.
  - Mr. Adams clarified SMART was given access to Fred Meyer, but the buses were not supposed to turn
    around in Fred Meyer. When Fred Meyer opened, the buses turned right on Bailey St, went through the
    Fred Meyer parking lot, picked up people at Fred Meyer's door, and went back out to Boones Ferry Rd.
    He did not recall that ever being a plan to eliminate the bus service south of Bailey St because the bus
    service was intended to cater—
- Responded getting the bus out of the neighborhood was definitely part of the Fred Meyer Plan.
  - Mr. Adams stated he was told people in the neighborhood who rode the bus, even though some people did not like it.

The Commissioners offered the following comments regarding the Connector Corridor Plan alternatives.

Commissioner Springall stated that similar to Chair Greenfield, the decision was a conflict. He did tend to lean to the 5<sup>th</sup> St connection for the benefit, not only of the cost, but the traffic, and the opportunity to reduce the potential backlog of traffic south of Wilsonville Rd with a bit more space from 5<sup>th</sup> St. The distance from Bailey St to the Fred Meyer outlet and Wilsonville Rd itself was very short. Any blockage could quite easily jam up the entire junction, and therefore, there was still no escape from Old Town.

- The way 5<sup>th</sup> St went east of the railroad tracks was a lot more beneficial because it matched the parcels as well as the residential and industrial designations without having to divide up some of the lots into much smaller parcels, which it might not be appropriate.
- He did recognize the Old Town residents were reluctant to have traffic coming down to the corner, especially
  adjacent to the old buildings. There were also parking and circulation issues with the Old Town businesses.
  However, he did not believe these challenges were insurmountable. The City might have to ask the businesses
  or landowner to do something about the circulation within that property in addition to parking.
- It was certainly not a slam dunk, but he was leaning toward the 5th St as the better connection.

Commissioner Levit concurred. He originally believed Bailey St would be the best option because of the straight-across shot to the commercial area, but it was too close to Wilsonville Rd. If the decision was 5<sup>th</sup> St, he would like to provide some access for the parking and really consider the safety of many factors there. It was not just the dance studio, a daycare was also in the same building, so there would be activity around the building all day long, not just at night. He believed that would be the biggest consideration there.

 He agreed that whichever crossing was selected, some factors would need mitigating, but Bailey St could not be moved, it was still too close.

Commissioner Hurley stated according to the comments in the packet, it appeared the preference was a 60/40 split for Bailey St over  $5^{th}$  St.

- The Commission also had to consider the old, long, thought out Old Town Neighborhood Plan, which had always wanted Bailey St and not 5<sup>th</sup> St. There were two very old buildings on the east side of the 5<sup>th</sup> St intersection, and the 5<sup>th</sup> St option would require removal of parking. Perhaps the dance studio would move if the 5<sup>th</sup> St option was approved, so small children running around would not be an issue. If it were his business, he would probably move the dance studio.
- The cost considerations showed a 6 percent increase for Bailey over 5th St. On major projects, it was easy to see a 30 to 100 percent cost overrun in major construction. A 6 percent increase to put something where the citizens of Wilsonville and the Old Town Plan had always wanted it seemed penny-wise versus pound-foolish.
- Bailey St was a much larger intersection and was already upgraded. Traffic went in and out of Fred Meyer
  there and he reiterated that only the Old Town residents would be stacking northbound on Boones Ferry Rd.
  People stacking northbound could still get into a left turn lane and take Bailey St to get out if they wanted.
- He had always believed Bailey St was the one putting the extra dog-leg in there and just looking at the
  facts laid out before the Commission. No disrespect to OrePac, but OrePac had a lot of land; nothing said
  they had to do a north-south expansion.
- He obviously did not own stock in OrePac and did not live in Old Town, but he believed the residents of Old
  Town should have their wishes considered since they dealt with this on a daily basis. If the financial piece was
  6 percent, that was not a lot to do what Old Town residents have asked for a long time.

Commissioner Millan stated she could not make up her mind, and had kept reading about it and had gone to the public meeting. Bailey St instantly seemed like the logical choice. She heard the permitting issue and wondered if it was even a possibility because the railroad could be so difficult to work with.

• With the perception of what the 5<sup>th</sup> St crossing would look like, she asked if the City had considered some way to adapt the plan to address the parking problems. There were some great planners at the City. She thought this had been pushed ahead with, "This is how we're going to do it" and maybe the City should take in the fact that if 5<sup>th</sup> St was the choice versus Bailey St, the Old Town group would not feel like they had been heard, and then the City would just ignore the parking issues and some of the other considerations. Maybe that intersection could be redesigned to meet the needs better. She was trying to look at some ways to respect that they had thought long and hard about this connector. Bailey St had some real drawbacks, but maybe the City planners could come up with some redesign alternatives to what had already been proposed.

Commissioner Postma said he struggled with the competing interests of—he would not call them promises to those in Old Town, so much as a long-standing understanding about how Old Town was going to improve and develop over time. That gave him some real pause because there were many long-term residents who had owned property for many years with the understanding of what it would look like down the road. He believed the City was turning on a dime on them and that really bothered him.

However, he tempered that with the fact that there was a 40-some odd year business that had been a long-standing member of the community and hoped to be a continuing long-standing member of the community.
 Their expansion plans and future employment and business to the city would be affected by where the connector was placed, which really weighed on him.

- With all due respect to Commissioner Hurley, he was very skeptical of the 6 percent number. Maybe it was
  because he had handled condemnation cases that said those numbers were tough to predict. He was trying to
  do the math in his head of what was not on paper which was terrifying. He believed the 6 percent number
  was probably drastically lower than what was anticipated.
- He has looked at both choices from both sides and was unsure he really had a preference, other than to
  again, express his disappointment about not seeing a lot more traffic alleviation from the project than he was
  actually seeing.
- He knew the connector was a necessity for the Old Town community. What scared him more than anything
  was the real big problem there, which was getting fire trucks in and out during a critical event. He would
  hate to hear a story about a medical emergency there when the roads were jammed because there was just
  no way to get through. There were not even sidewalks to drive on. He reiterated the connector was a
  necessity.

Commissioner Mesbah stated he could not speak to this mainly because it looked like it was trying to solve problems resulting from decisions that were made a long time ago with regard to Fred Meyer. He was not familiar with that enough to wrap his brain around it. However, it seemed that more work was needed before either option could be decided on; the parking had been mentioned. He hoped City staff would also sit down with OrePac to see if any other site design alternatives would work for them. Some design solutions might be available for OrePac. He would not necessarily put the onus on City staff to come up with that solution, but he hoped the City would work with an industrial and commercial citizen to make sure their concerns and needs were met if growing south was not going to work. There seemed to be an option, even though the zoning was not right, so the City would need to come up with solutions no matter what.

- He hoped some of those answers were available before a final decision was made because it could make a
  difference, either for OrePac or for Old Town residents who were worried about parking and traffic, etc. A
  lot of design solutions could ameliorate some of the concerns that had been raised. He was not seeing
  solutions that were available or analyzed enough.
- Cost would be another thing. In his experience, tricky development sometimes resulted in expensive solutions afterwards. There were parcels in any city that would require expensive infrastructure in order to get to them and develop them. He noticed developable land was a premium around this part of the country. The City had to expect to spend more money to access and provide infrastructure for these people, whether it was 6 percent or 100 percent more. This might be the cost the City had to pay as part of doing the Fred Meyer development.

#### VI. OTHER BUSINESS

A. 2016 Planning Commission Work Program

Chris Neamtzu, Planning Director, noted lots of things were happening on the Work Program, which was outdated as soon as he published. He noted December looked very busy with work sessions on the Transit Master Plan in preparation for a January public hearing; the Frog Pond Master Plan to work through a couple more topics, and the Town Center Redevelopment Plan Public Involvement Plan. In January, there would be another work session on Frog Pond and Civil Engineer Zach Weigel would update the Commission about the work on the French Prairie Bridge. The Frog Pond hearing had been pushed out to February as more work was needed, including on infrastructure finance. The Commission would see the draft Frog Pond Master Plan in January in preparation for the February public hearing.

Commissioner Postma noted the agenda listed the work session as starting at 6:30 pm, but they actually started at 6:10 pm. The agendas seemed to be front-end loaded with the notion that considering the minutes would take 5 to 10 minutes when everyone knew it did not take that long. Consequently, the work session started 15 to 20 minutes before some people arrived to hear about it and address it. This was probably the third time he had seen this, and it bothered him a bit. He would like to see that treated better. He noted the Commission was doing it during hearings, too, which really bothered him.

Mr. Neamtzu stated Staff could absolutely do better on that, adding it was better to estimate the times the other way. He appreciated the feedback.

# VII. ADJOURNMENT

Chair Greenfield adjourned the regular meeting of the Wilsonville Planning Commission at 9:05 p.m.

Respectfully submitted,

By Paula Pinyerd of ABC Transcription Services, Inc. for Tami Bergeron, Administrative Assistant - Planning