



Advisory Committee Agenda

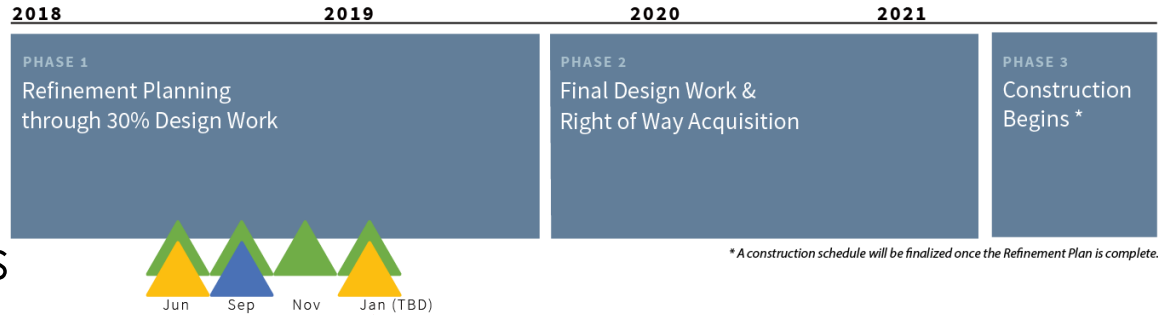
Introductions	<i>Cari Charlton</i>
Progress Report & Project Schedule Review	<i>Marc Butorac</i>
Concept Development Workshop Overview	<i>Marc Butorac</i>
Review Alternative Analysis Memorandum #6	<i>Marc Butorac</i>
Promising Alternatives Evaluation Exercise	<i>Group</i>
Discussion	<i>Group</i>
Public Comment	<i>Group</i>
Action Items	<i>Marc Butorac</i>

Progress Report

- Tech Memo #1-5 Previously Completed
- Advisory Committee Meeting #2 – Developed Concepts, Reviewed Existing and Future Conditions
- Concept Development Workshop
- Neighborhood Alliance Meeting

Schedule – Next Steps

- Business/Property Owner Meeting
 - December 18th (6 to 7:30 p.m.)
- Advisory Committee Meeting
- Public Open House
 - January 9th
 - Identifying Preferred Alternatives



SCHEDULED MEETINGS

- ▲ Advisory Committee Meeting
- ▲ Concept Development Workshop
- ▲ Public Meeting

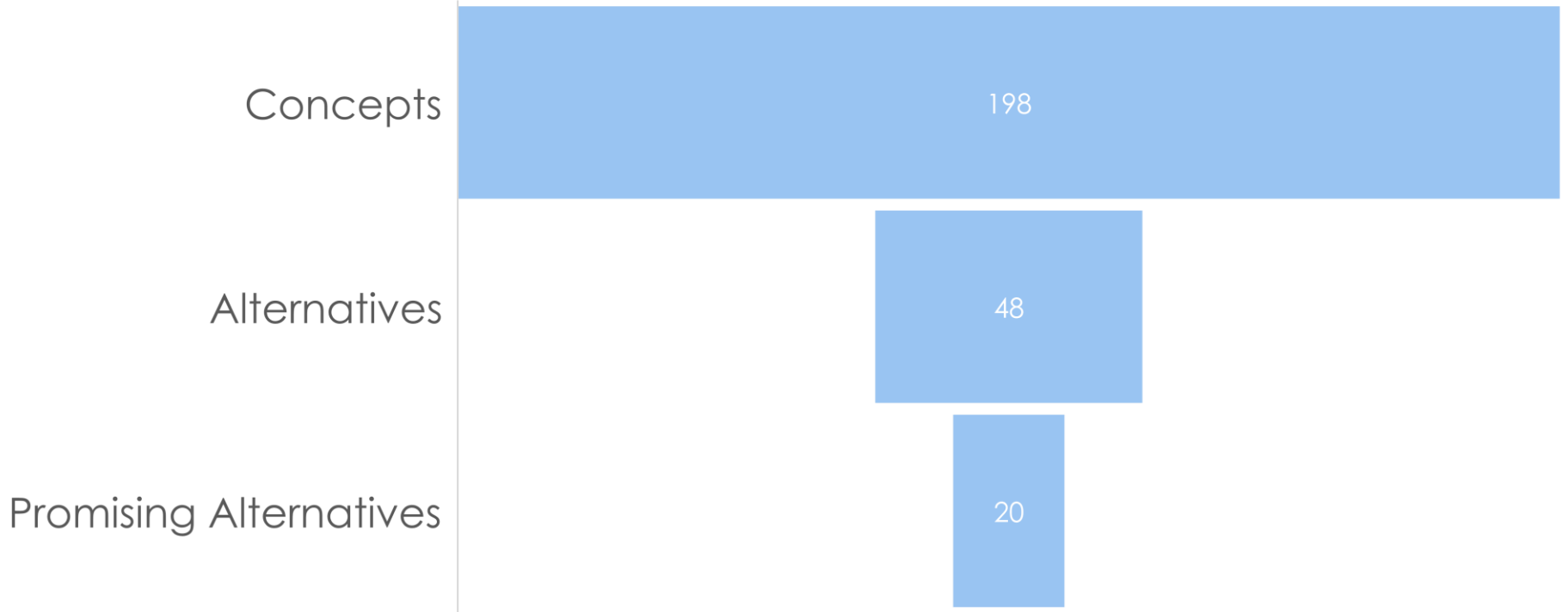
Next Steps

Concept Development Workshop Review

- Three Day Workshop
September 11th-13th
- Over 130 participants
- Concepts Developed
 - 64 Corridor Alignments
 - 102 Intersections
 - 32 Transitions



Concept Development Workshop Review



Alternatives Analysis-Promising Alternatives

- Promising Alternatives evaluated by project team

A Alignment

- A-4A Couplet
- A-5A - Five Lane

I Intersection

- I-5B - Restricted Crossing U-turn
- I-6A2 - Northbound Fly-under [Couplet]
- I-6A2 - Northbound Fly-under [5 Lane]
- SI-1A - Free Flow Couplet with B Avenue Two-Way
- SI-7A - Traffic Signal with 5-lane Section

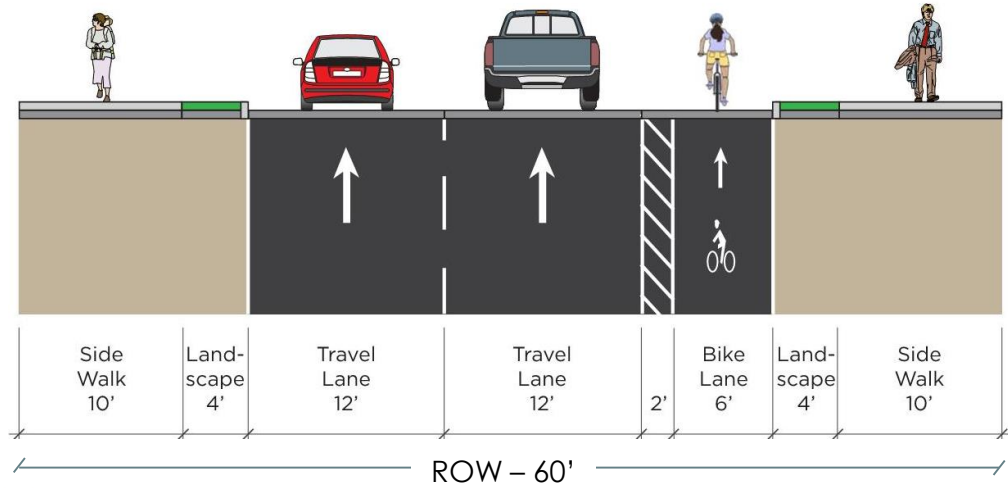
Alignments



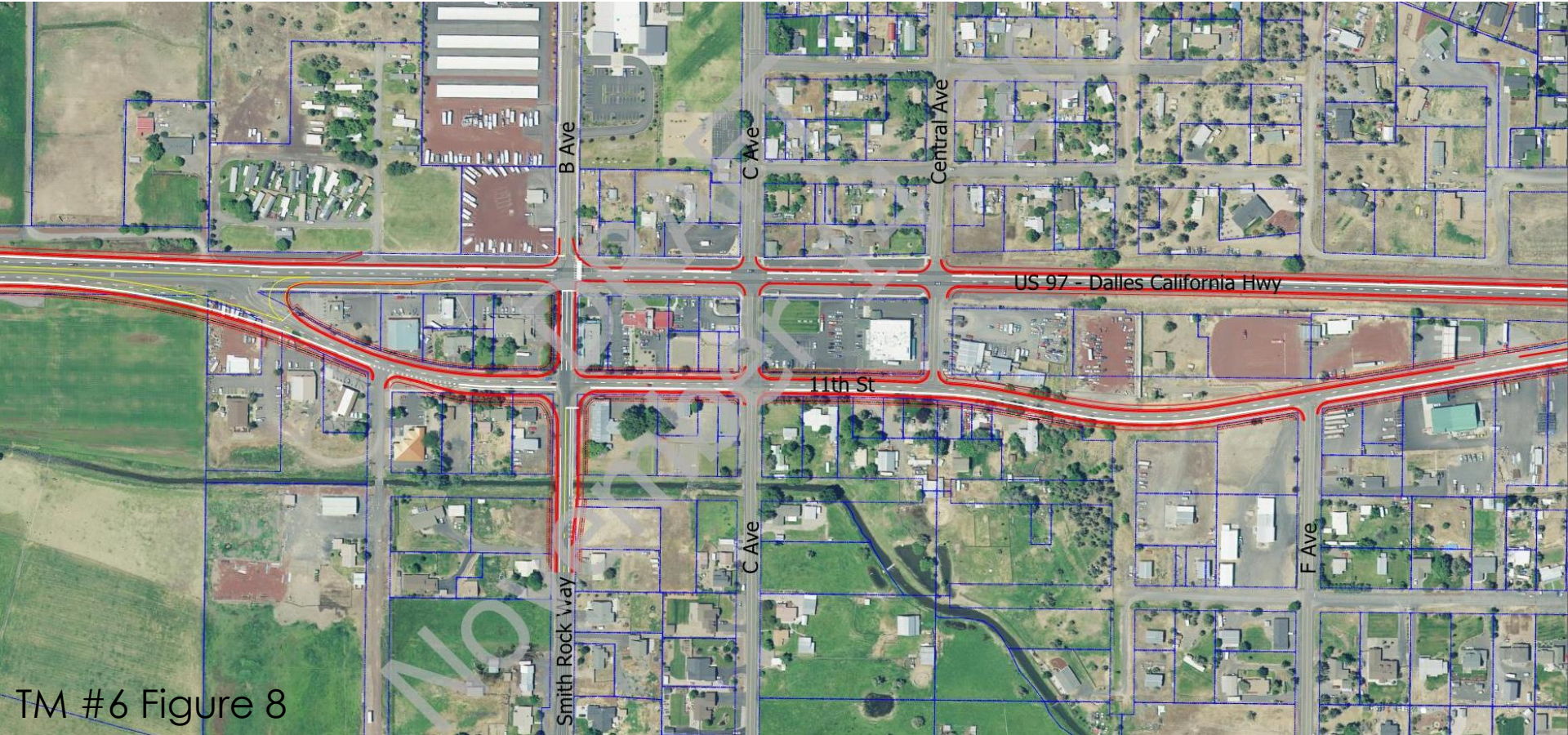
Alternatives Analysis: A-4A Couplet



- Two, one-way roads
 - US 97 southbound
 - 11th Street northbound
- 11th Street updated to highway standards



Alternatives Analysis: A-4A Couplet



TM #6 Figure 8

Promising Alternative Evaluation



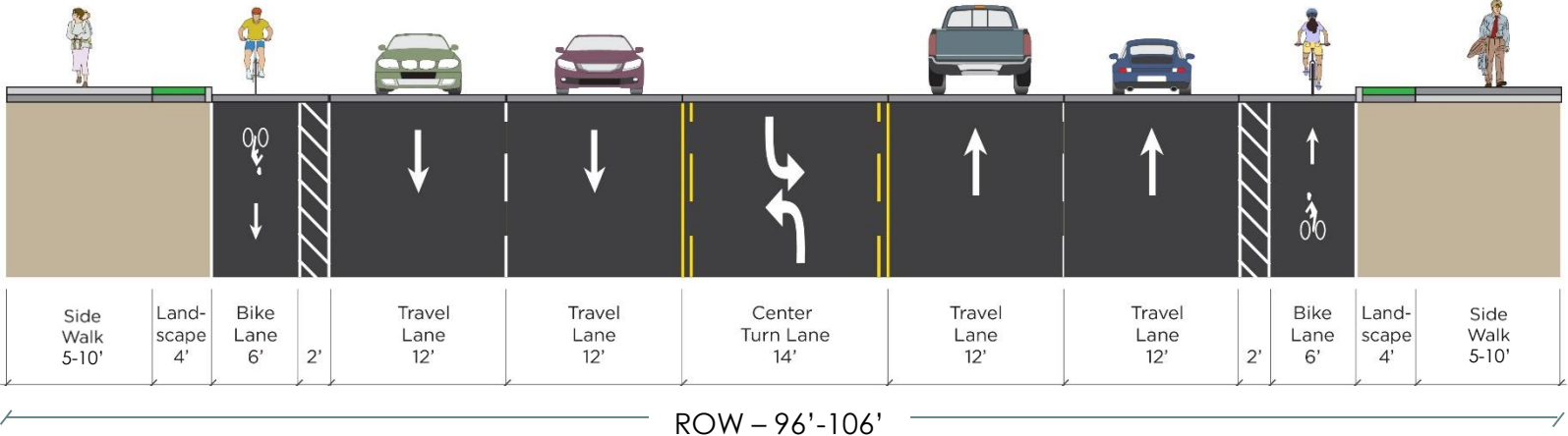
A-4A Couplet

Criteria	Notes
Operations	Meets operational standards
Constructability	Full reconstruction of 11 th Street, preserves sidewalk and water/drainage from Central Avenue to 11 th Street
Right-of-Way Impacts	Potential impacts to properties on the SW and SE corners of Smith Rock Way/B Avenue.
Access Management	Properties on 11 th Street north of Central Avenue must use U-turn for southbound movements

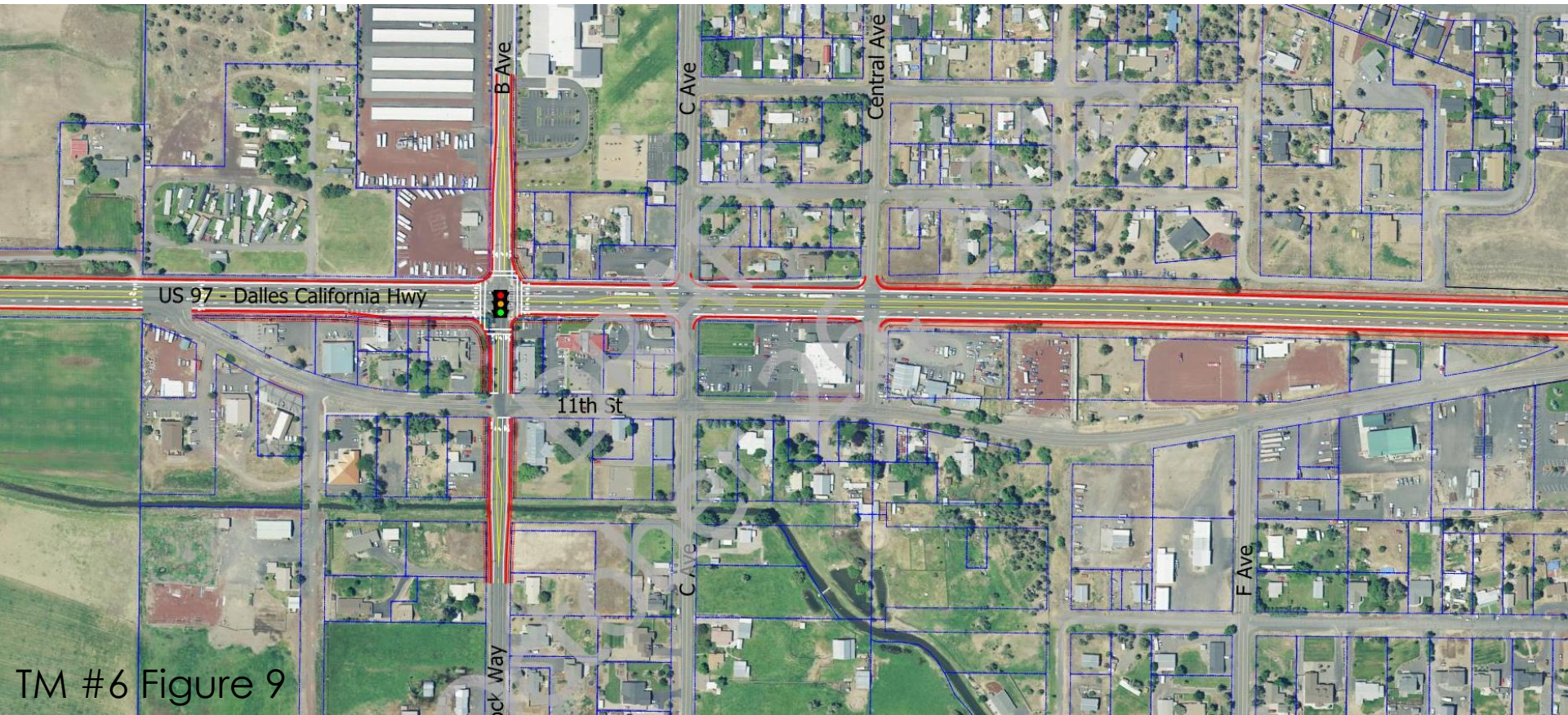
Alternatives Analysis: A-5A Five Lane



- Redevelop existing US 97 alignment
 - Two northbound lanes
 - Two southbound lanes
 - Center Turn Lane



Alternatives Analysis: A-5A Five Lane



TM #6 Figure 9

Promising Alternative Evaluation



A-5A Five Lane

Criteria	Notes
Operations	Increase delay and capacity issues at unsignalized intersections
Constructability	Significant grades between Central Avenue and Lower Bridge Way, challenging staging
Right-of-Way Impacts	Primarily uses existing ROW south of Central Ave, may need to relocate water/drainage along corridor, requires ROW for south and north intersection improvements
Access Management	Increase in conflict points (vehicular and multimodal) due to second lane, queues may extend beyond upstream driveways and intersections

Intersections – North

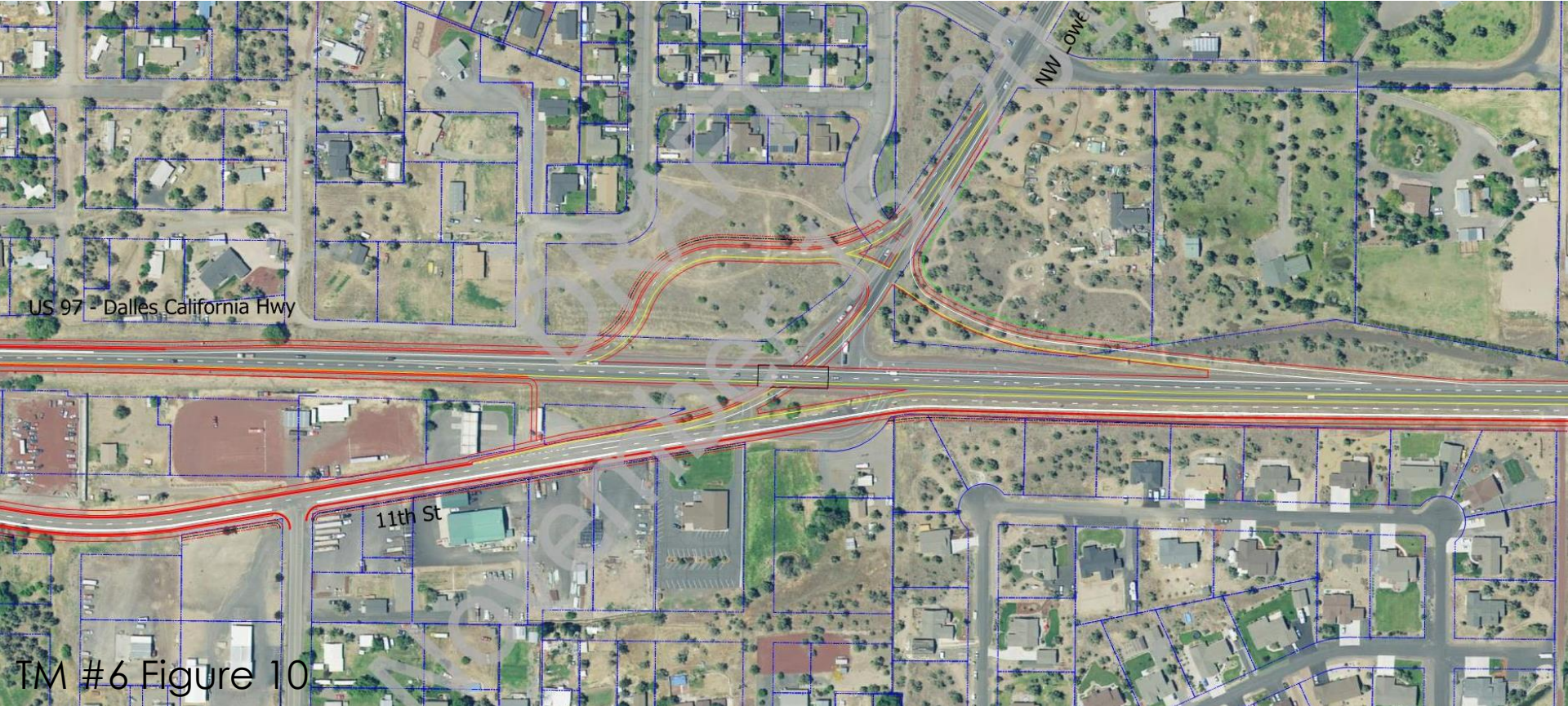




Alternatives Analysis: I-6A2 Couplet Flyunder

- Free flow for through US 97 movements
- Grade separated undercrossing for northbound left
- Westbound left movement required to make U-turn at Central Avenue

Alternatives Analysis: I-6A2 Couplet Flyunder



TM #6 Figure 10

Promising Alternative Evaluation



I-6A2 Couplet Flyunder

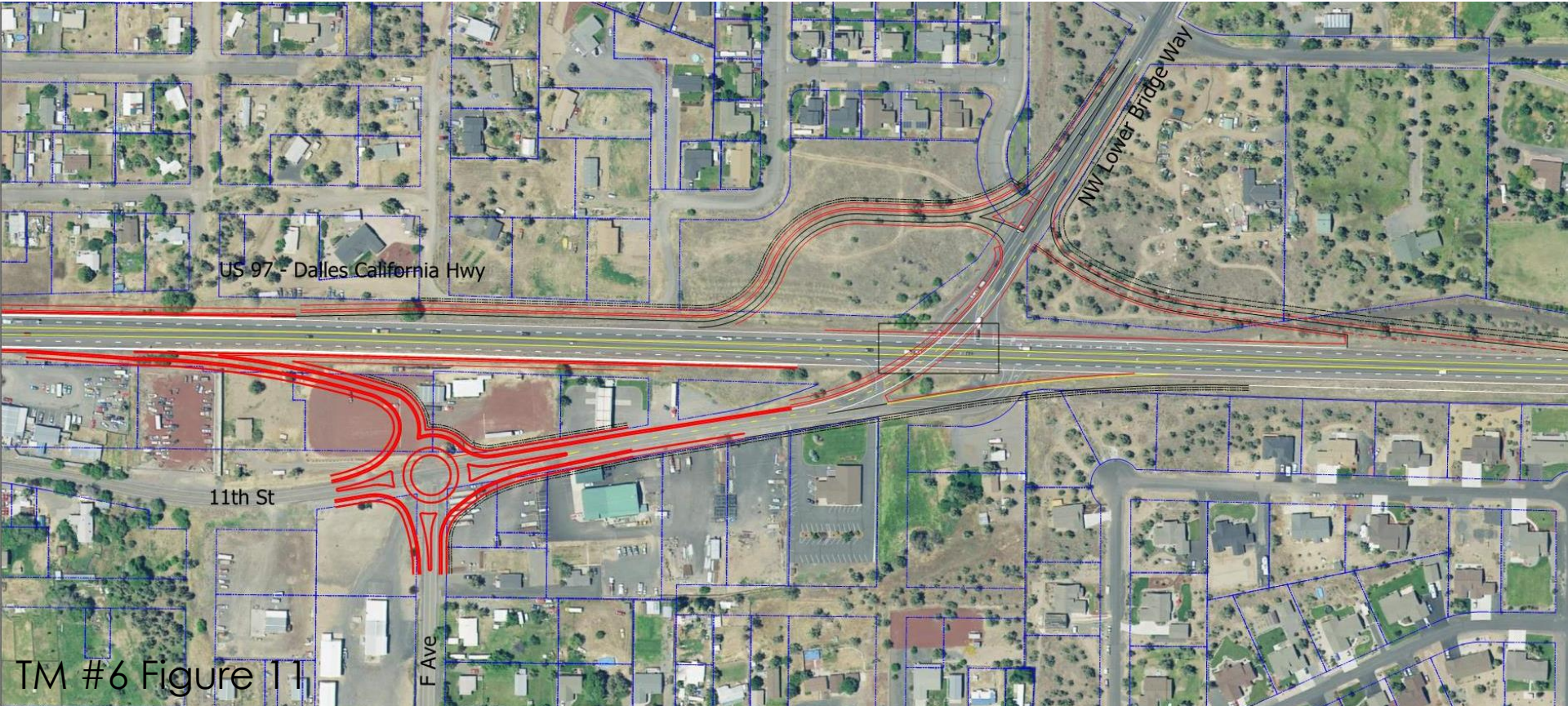
Criteria	Notes
Operations	Meets mobility standards
Constructability	Potential high earthwork costs
Right-of-Way Impacts	Impacts to NW and SW quadrants at Lower Bridge Way
Access Management	Wayfinding issues using southbound U-turn at Central Avenue, access refinements to properties east of Lower Bridge Way



Alternatives Analysis: I-6A2 5 Lane Flyunder

- Free flow movements for through US 97 movements
- Grade separated undercrossing for northbound left
 - Requires “off ramp” of US 97 northbound
 - Roundabout at 11th Street/F Avenue

Alternatives Analysis: I-6A2 5 Lane Flyunder



US 97 - Dalles California Hwy

NW Lower Bridge Way

11th St

F Ave

TM #6 Figure 11

Promising Alternative Evaluation

I-6A2 5 Lane Flyunder

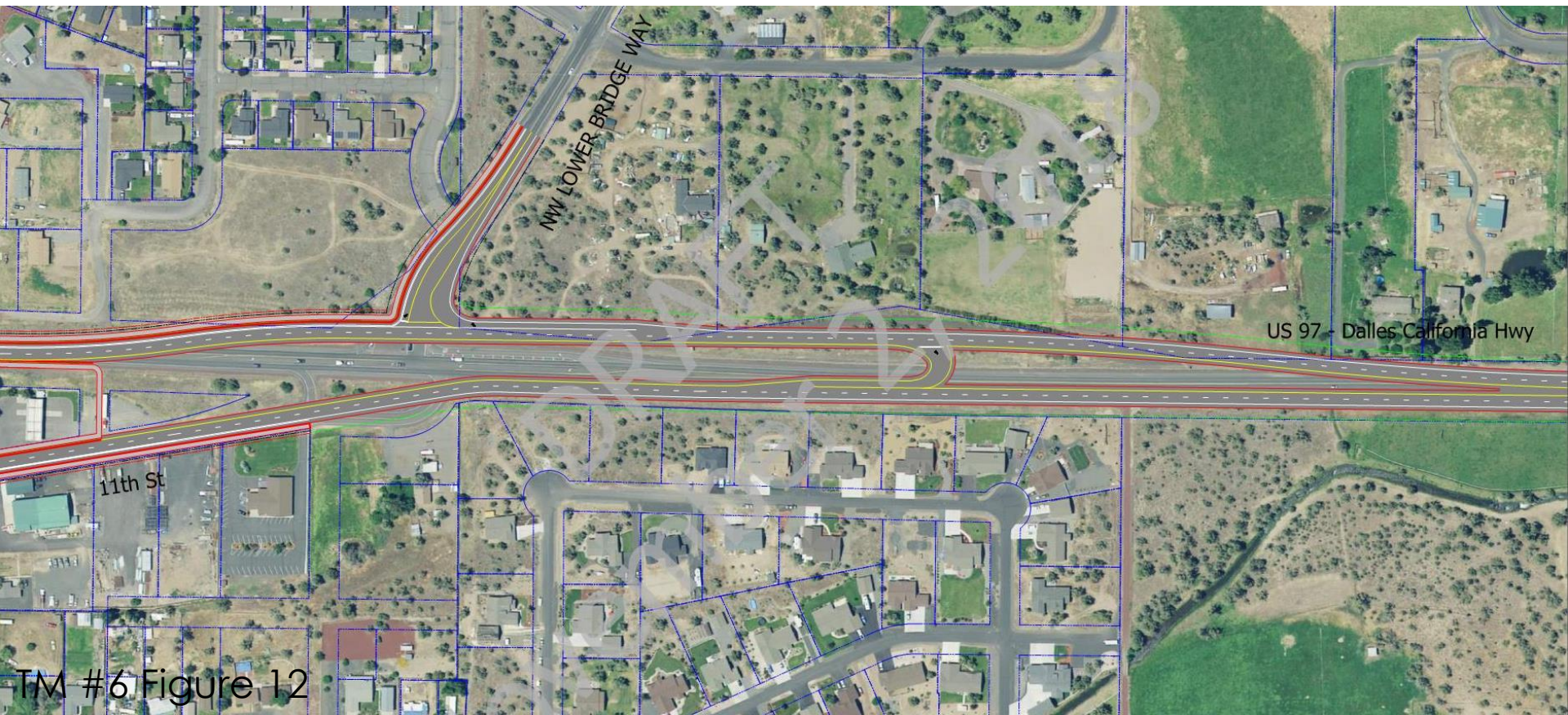
Criteria	Notes
Operations	Meets mobility standards
Constructability	Retaining walls between US 97 and 11 th Street, potential high earthwork costs
Right-of-Way Impacts	Impacts to NW and SW quadrants at Lower Bridge Way, impacts to properties between US 97 and 11 th Street near F Avenue
Access Management	Wayfinding issues using roundabout at 11 th Street/F Avenue

Alternatives Analysis: I-5B R CUT



- Side-street through and left turn movements provided via U-turns
- Northbound U-turn north of Lower Bridge Way
- Southbound U-turn at Central Avenue

Alternatives Analysis: I-5B R CUT



Promising Alternative Evaluation

I-5B R CUT

Criteria	Notes
Operations	Does not meet mobility standards
Constructability	Requires realignment of US 97 north of Lower Bridge Way
Right-of-Way Impacts	Substantial ROW needed for northbound U-turn
Access Management	Wayfinding issues using southbound U-turn at Central Avenue

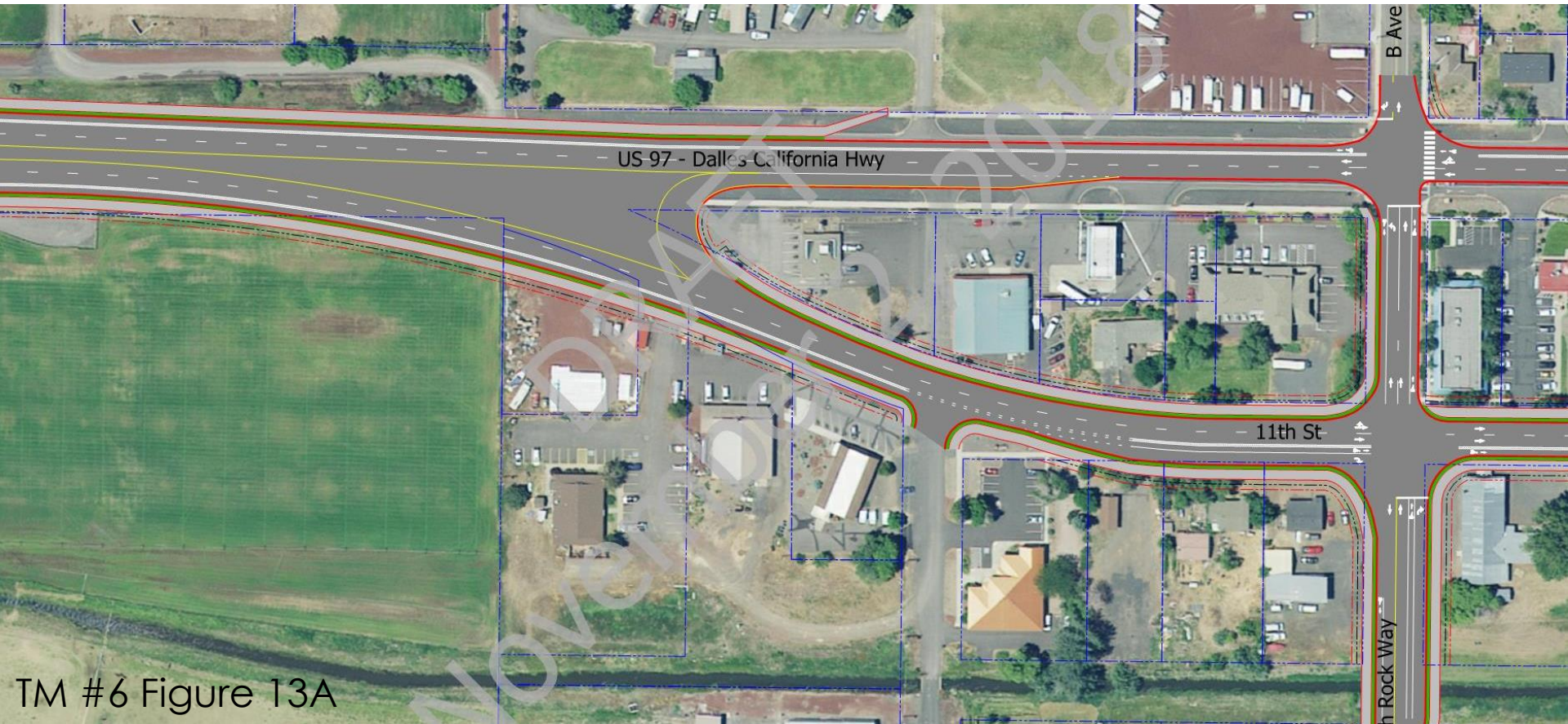
Intersections – South



Alternatives Analysis: SI-1B Couplet B Ave

- Couplet with restricted eastbound movements at US 97/B Avenue
- Stop-controlled side-street movements
- Southbound U-turn at US 97/11th Street

Alternatives Analysis: SI-1B Couplet B Ave



TM #6 Figure 13A

Promising Alternative Evaluation

SI-1B Couplet B Ave



Promising Alternative Evaluation

SI-1B Couplet B Ave

Criteria	Notes
Operations	Meets mobility standards
Constructability	Minimum staging impact
Right-of-Way Impacts	Impacts at US 97 southbound U-turn, impacts to properties east of 11 th Street near Smith Rock Way
Access Management	Wayfinding issues for Eastbound traffic at “B” Avenue/US 97 using U-turn at Central Avenue, reduces conflict points at intersections

Alternatives Analysis: SI-1B Signal B Ave



- Signalized intersection at US 97/B Avenue
- Maintain existing stop-control at 11th Street/Smith Rock Way

Alternatives Analysis: SI-1B Signal B Ave



US 97 - Dalles California Hwy

B Ave

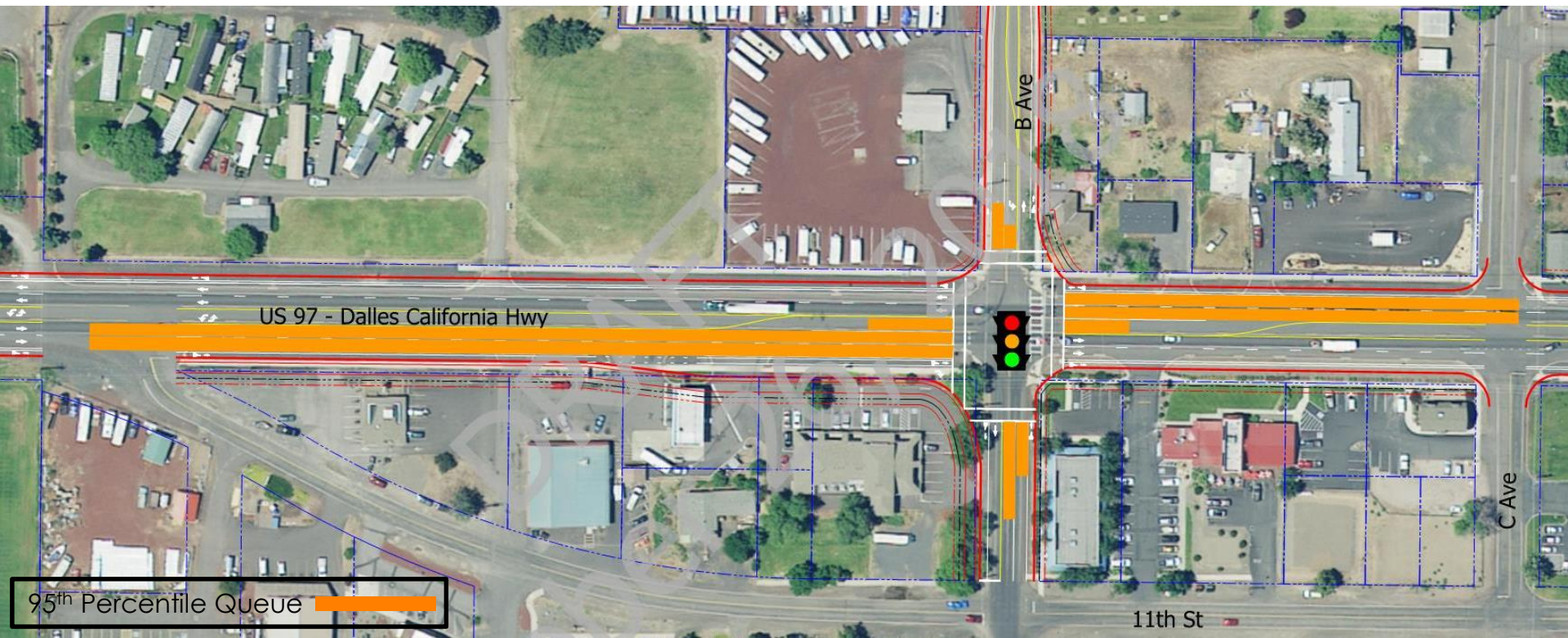
C Ave

11th St

Smith Rock Way

Promising Alternative Evaluation

SI-1B Signal B Ave



US 97 - Dalles California Hwy

B Ave

C Ave

11th St

95th Percentile Queue

Promising Alternative Evaluation

SI-1B Signal B Ave

Criteria	Notes
Operations	Does not meet mobility standard in existing configuration, substantial queuing on mainline
Constructability	Drainage impacts, large crossing distances for pedestrians
Right-of-Way Impacts	Impacts to SE corner at US 97/B Avenue, impacts to corners due to design vehicle needs
Access Management	Queues during peak periods will extend beyond upstream driveways and intersections

Promising Alternative Cost Estimate

South Segment

Intersection Element	Preliminary Cost Estimate
Free flow Couplet with B Avenue One-Way Westbound (SI-1B)	\$5.5M
Traffic Signal with 5-lane Section (SI-7A)	\$3.6M

North Segment

Intersection Element	Preliminary Cost Estimate
Couplet Restricted Crossing U-Turn (I-5B)	\$6.1M
Couplet Northbound Left Fly-under (I-6A2)	\$12.5M
5-Lane Northbound Left Fly-under (I-6A2)	\$17.3M

Promising Alternative – 5 Lane



Promising Alternative – Couplet



Promising Alternative Cost Estimate

Couplet and 5-Lane

Intersection Elements	Preliminary Cost Estimate
Free flow Couplet with B Avenue One-Way Westbound (SI-1B)+ Northbound Left Fly-under (I-6A2)	\$18M
Traffic Signal with 5-lane Section (SI-7A) + Northbound Left Fly-under (I-6A2)	\$20.9M

Promising Alternative Evaluation

- Evaluation Matrix created based on operations, constructability, right-of-way impact, access management, and cost
- Scored based on meeting, not meeting, or somewhat meeting the goals, objectives, and evaluation criteria

Promising Alternative Evaluation – Break Out Session

- In groups of 3, score each intersection control based on goals, objectives, and evaluation criteria
- Report out to the group

Table 7: Comparing the Goals, Objectives, & Evaluation Criteria to Future Alternatives

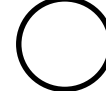
Goal	Objective	Evaluation Criteria	Baseline No. Build	Intersection Evaluation				
				South		North		
				1 Lane (No Signal @ 8 Axis)	One Way Couplant	Fly Under (8-Lane)	Fly Under (Couplant)	8-CLT
Community & Livability: Provide for a high-quality of life by balancing US 97 mobility needs with community values and interests.	<ul style="list-style-type: none"> • Increase transportation choices on US 97 by adding or improving, upgrading and pedestrian routes, crossing, and connections to transit, or adding a crossing at US 97 & Street which serves as a critical crossing and access bike crossing. • Use improved road design to help attractors and US 97, such as shopping, schools, industrial areas, and other community destinations. • Provide a transportation network that encompasses local, statewide, and region traffic, including freight movements along US 97. 	<ul style="list-style-type: none"> • Does the proposed project connect some people that live, work or send/visit Terrebonne? • Are there any significant barriers to or impacts that would result from the proposed project element, such as the presence of significant natural resources or require acquisition of property contaminated by the site? • What are the right of way impacts of the proposed project element - of all businesses impacted, impacts to recreational properties impacted, impacts to public facilities, etc. 						
Mobility: Provide a safe and efficient transportation system for all modes of transit, including local trips, through trips on the highway, emergency and freight.	<ul style="list-style-type: none"> • Include all potential US 97 alternatives, such as maintaining the existing US 97 alignment, creating a right-of-way couplant with 11.5 feet street front or rear of the existing alignment, identify and evaluate all potential at-grade or grade-separated 	<ul style="list-style-type: none"> • Does the proposed project element meet mobility objectives (US 97)? • Does the proposed project element represent an investment that works toward the long-term solution for the corridor? • Does the proposed project element maintain or improve the carrying and dimensional capacity for statewide freight movement? 						



Meets



Somewhat Meets



Does Not Meet

Promising Alternative Evaluation – Break Out Session

Questions



Concerns



**Desired Pedestrian
Crossing Locations**



Evaluation Matrix - Discussion

- Do you agree with the scoring? If not, what would you change and why?

Discussion

- Do you think the concepts adequately address the issues in Terrebonne?



Deschutes County TSP Language

There is one location where the four-phased approach will not be followed. Deschutes County and ODOT have agreed US 97 will remain a three-lane cross-section in Terrebonne. The reason is due to significant residential development on both sides of the highway, the elementary school on the west side, commercial development along the flanks of US 97, and the observed high demands to cross the highway. Traffic calming and pedestrian safety are more important than through traffic movement. Improvements to US 97 in the Terrebonne area will focus on non-widening options such as access management, a couplet, traffic signals, or a bypass. The intersection of Lower Bridge Way/US 97 will have either a simple overpass or a grade-separated interchange. The time of delay of driver trying to get through Terrebonne is insignificant to the overall travel time along the corridor.

ODOT and Deschutes County will conduct a refinement plan for Terrebonne based on the goals and objectives of the adopted Terrebonne Community Plan, the goals and objectives of the Oregon Highway Plan, and additional public input and outreach. From a County planning perspective, this is a high priority project.

Upcoming Meetings & Events

- Tech Memo #6 Comments due Friday, December 14th
- Business and Property Owner Meeting December 18th, 2018, 6:00-7:30pm
 - Location: The Grange
- Advisory Committee Meeting January 9th, 2019, 3:00-5:00pm
 - Location: Terrebonne School
 - Topic: Identifying Preferred Alternatives
- Public Open House January 9th, 2019, 6:00-8:00pm
 - Location: Terrebonne School
 - Topic: Identifying Preferred Alternatives

Public Comment

THANK YOU!