OFFSET INTERSECTIONS PRELIMINARY REALIGNMENT PLAN – WHITE PAPER

Date: January 11, 2011 Project #: 10633.7

To: Jim Olson, City of Ashland Cc: Project Management Team

From: Marc Butorac, PE, Matt Bell, and Erin Ferguson

Project: City of Ashland Transportation System Plan Update

Subject: Offset Intersection Preliminary Realignment Plan – White Paper

DIRECTION TO THE PLANNING COMMISSION AND TRANSPORTATION COMMISSION

Five sets of white papers are being produced to present information on tools, opportunities, and potential strategies that could help Ashland become a nationwide leader as a green transportation community. Each white paper will present general information regarding a topic and then provide ideas on where and how that tool, strategy, and/or policy could be used within Ashland.

You will have the opportunity to review the content of each white paper and share your thoughts, concerns, questions, and ideas in a joint Planning Commission/Transportation Commission meeting. Based on discussions at the meeting, the material in the white paper will be: 1) Revised and incorporated into the alternatives analysis for the draft TSP; or 2) Eliminated from consideration and excluded from the alternatives analysis. The overall intent of the white paper series is to explore opportunities for Ashland and increase the opportunities to discuss the many possibilities for Ashland.

OFFSET INTERSECTION WHITE PAPER INTRODUCTION

There are numerous offset intersections within the City of Ashland. Offset intersections are those where the minor street approaches are not directly aligned with each other. This characteristic can increase crashes and tends to increase delay at an intersection. The purpose of this white paper is to identify the offset intersections, the severity of the offset, the potential for realigning those intersections and opportunities/constraints at the intersections. This white paper also presents our recommendation for the ten intersections to be evaluated further by identifying realignment options and corresponding right-of-way and/or easement needs.

INVENTORY OF OFFSET INTERSECTIONS IN THE CITY OF ASHLAND

The existing street network within the City of Ashland's urban growth boundary (UGB) was reviewed to identify offset intersections. Offset intersections were restricted to intersections

including at least one street of neighborhood collector classification and higher. The reason for this is to focus investment on intersections serving higher traffic volumes and that are part of the City's major street network.

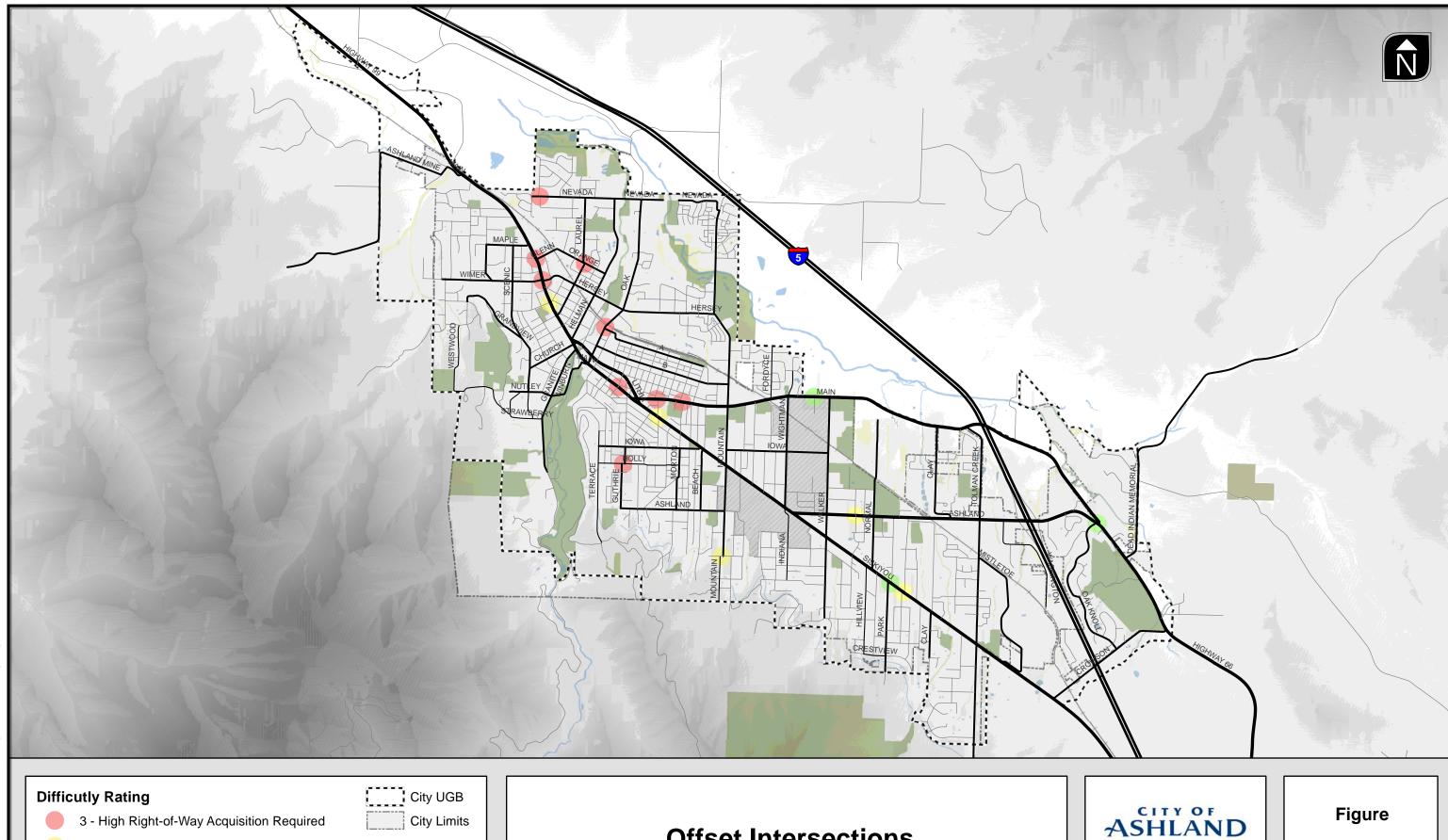
Figure 1 illustrates the offset intersections identified in the City of Ashland. Table 1 summarizes:

- Offset intersections identified;
- Distance the minor streets are offset;
- ADT on the major street;
- Crash frequency reported from 2000 through 2009;
- Ease of realigning the intersecting minor streets; and
- Opportunities and constraints at the location.

Each of these attributes was used to develop a preliminary priority list of ten intersections to study in more detail. *Attachment A* contains a series of exhibits with an aerial view of each offset intersection identified.

The column in Table 1 titled "Ease of Realignment" is an initial assessment of the relative difficulty in realigning each offset intersection. A rating system of 1 through 3 is used to rate each intersection. A rating of "1" indicates near-term potential for realignment with minimal right-of-way acquisition required and no buildings impacted. A rating of "2" indicates moderate potential with some right-of-way and/or easements required with potential relocation of a building(s). A rating of "3" indicates high right-of-way acquisition requirements, taking of one or more buildings and in some instances topographical challenges.

City of Ashland Transportation System Plan Update December 2010



Offset Intersections

Figure

3 - High Right-of-Way Acquisition Required

1 - Low Right-of-Way Acquisition Required

2 - Moderate Right-of-Way Acquisition Required

City Limits

Table 1 Offset Intersections in the City of Ashland

Intersection	Off-Set (feet)	Major Street ADT ¹	Crash Freq. ¹	Ease of Realignment	Opportunity/Constraint based on Adjacent Land Use/Characteristics
OR 99 (North Main Street/East Main Street/Siskiyou Boulevard)					
Coolidge St - Glenn St	45	17,500	6	3	Historic buildings in the NE corner; other buildings present
Wimer St - Hersey St ³	30	17,500	42	3	Historic buildings in the NW and SE corners; other buildings present
Manzanita St - Skidmore St	15	17,500	17	2	Historic buildings in SW corner; surface parking lot in NW corner
2 nd St	30	9,500	19	3	National registered historical buildings in SW corner; additional historic buildings in NE and NW corners
Sherman St	55	16,500	13	2	Historic buildings in SE and SW corners; surface parking lot in NE corner
Park St	135	6,000	13	1	Vacant land adjacent to SE corner of intersection
Terra Ave - Faith Ave	90	6,000	7	2	Residential and commercial properties adjacent to intersection
OR 66 (Ashland Street)					
Lit Way	35	12,000	1	2	Surface parking adjacent to NE corner of intersection
Oak Knoll Dr - E Main St ³	45	14,000	14	1	Vacant land adjacent to NW corner of intersection
E Main Street					
Sherman St - 5 th St	105	8,000	6	3	Historic buildings in NW and SW corners; other buildings present
Morton St - 7 th St	105	8,000	2	3	Historic buildings/properties in NW and SW corners (includes cemetery)
Campus Way - Observatory	45	8,000	2	1	Vacant land adjacent to NE, NW, SE corners of intersection
Other					
A St - Van Ness Ave/Oak St	95	3,200	11	3	Historic buildings/properties in SW and NE corners; other buildings present
Mountain Ave/Prospect St	90	700	2	2	Residential properties adjacent to intersection
Laurel St/Orange Ave	50	n/a	1	3	Residential properties adjacent to intersection
Cambridge/Nevada St	45	1,550	0	3	Residential properties adjacent to intersection
Guthrie St - Gresham St /Holly St	90	n/a	2	3	Residential properties adjacent to intersection

¹ADT estimated from study intersection traffic counts; n/a indicates traffic data for the major streets near that intersection is not currently available.

²Total number of crashes reported from 2000 through 2009.

³These intersections were identified for further study in the Technical Memorandum #4: Existing Conditions due to their higher than expected crash rates.

Based on the initial review of offset intersections in Ashland, we recommend the following ten intersections to be studied further to develop realignment options and identify specific easement and right-of-way needs. Several of these intersections are adjacent to buildings and/or properties that are designated as historical resources within Ashland with some of these properties on the Federal National Registry. The presence and preservation of these historical resources would be incorporated into the more detailed study while developing realignment options and/or mitigations. *Attachment A* denotes the historical buildings and properties.

- 1. Oak Knoll Drive E Main Street/Ashland Street (OR 66)
- 2. Wimer Street Hersey Street/North Main Street (OR 99)
- 3. Manzanita Street Skidmore Street/North Main Street (OR 99)
- 4. Park Street/Siskiyou Boulevard (OR 99)
- 5. A Street Van Ness Avenue/Oak Street
- 6. Sherman Street/Siskiyou Boulevard (OR 99)
- 7. Terra Avenue Faith Avenue/Siskiyou Boulevard (OR 99)
- 8. Sherman Street 5th Street/East Main Street
- 9. Coolidge Street Glenn Street/North Main Street (OR 99)
- 10. 2nd Street/East Main Street (OR 99 SB)

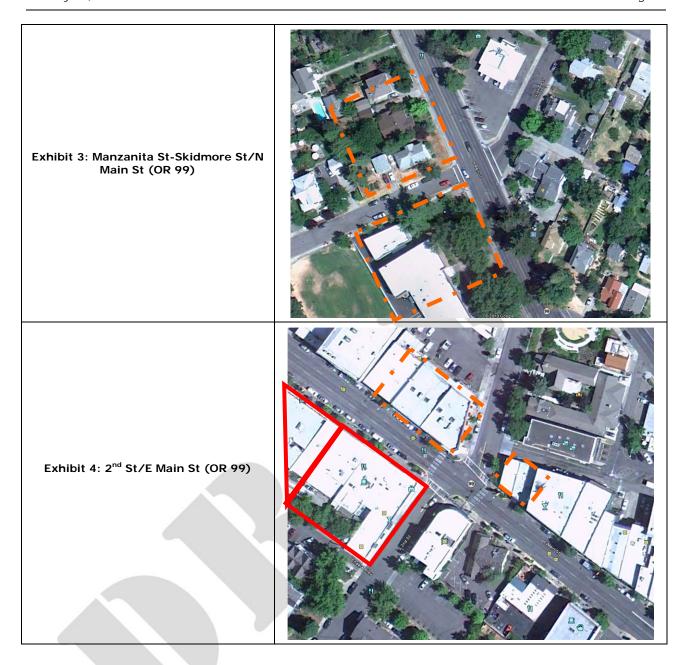
The ten intersections above were selected based on their crash history, the major street traffic volumes and ease of realignment rating. The top two intersections are two of the study intersections previously identified (see Technical Memorandum #4: Existing Conditions) as having higher than expected crash rates based on their traffic control and the vehicle traffic volume. The 2nd Street/East Main Street (OR 99 SB) was given a lower ranking despite the relatively high number of crashes at the intersection, because those types of crashes may be more effectively mitigated through other treatments such as road diets. However, the intersection is still on the offset intersection realignment plan list for long-term consideration. To further refine the above priority list and identify potential realignment options, additional information related to the historical properties near these study intersections as well as intersection traffic volume counts should be collected.

OFFSET INTERSECTIONS PRELIMINARY REALIGNMENT PLAN – WHITE PAPER

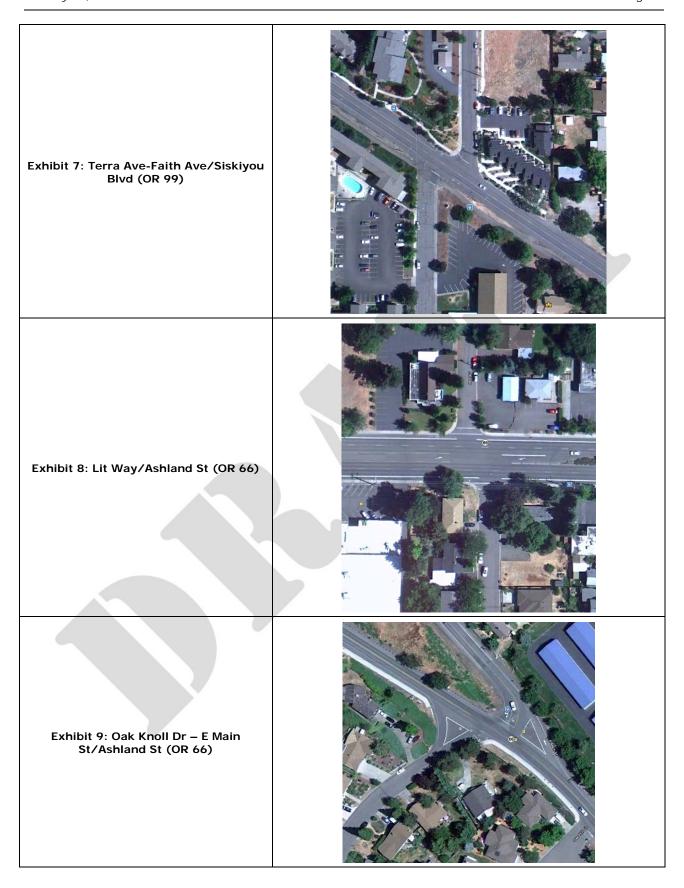
Attachment A

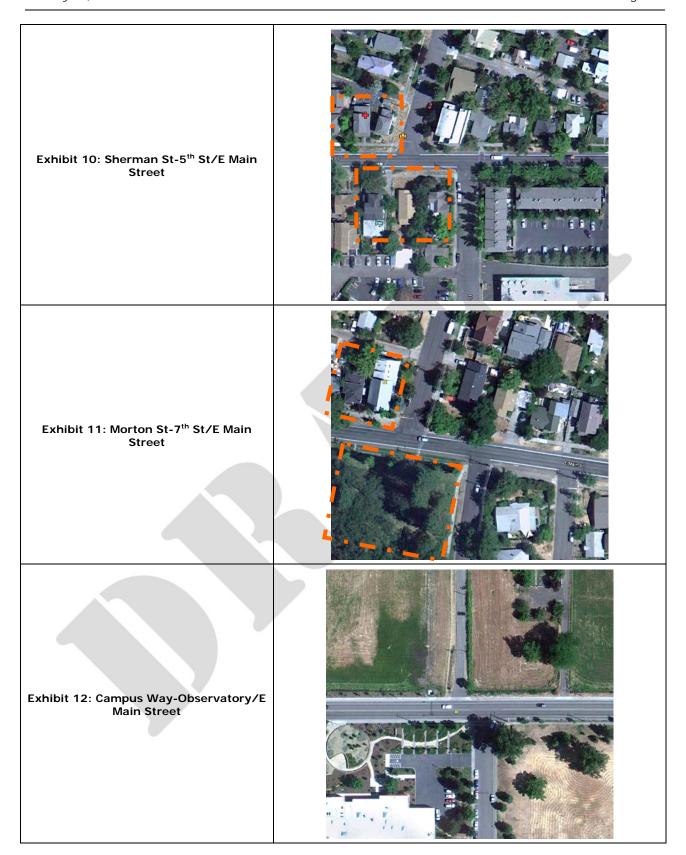
Exhibits 1 through 17 contain aerial views of each offset intersection identified in Table 1. Buildings outlined with solid redlines are nationally registered historical buildings. Buildings outlined in dashed orange lines are primary contributing historic resources within a designated historic district, but are not nationally registered. Preserving these historic resources would be part of the additional investigation into alternatives for realigning the offset intersections below.











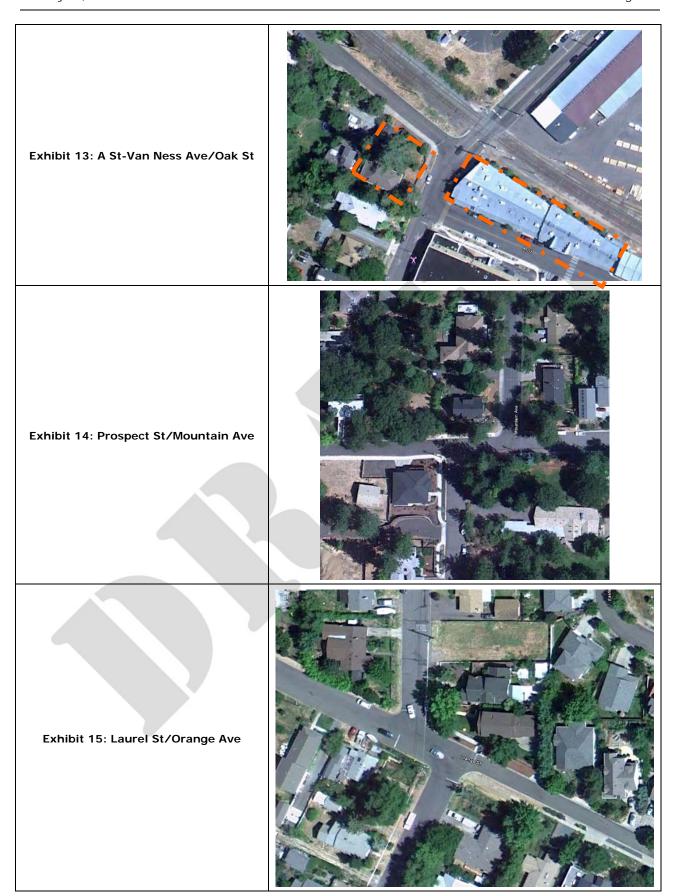




Exhibit 16: Cambridge St/Nevada St



Exhibit 17: Guthrie St-Gresham St/Holly St