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## **1.0 EXECUTIVE SUMMARY**

### **1.1 PURPOSE AND SCOPE**

The Nevada County Transportation Commission (NCTC) is proposing to improve overall traffic circulation in southern Grass Valley, Nevada County, California by providing a new east-west connector (i.e., Crestview Smith Connector) between La Barr Meadows Road and Allison Ranch Road with access to State Route (SR) 49, consistent with the City of Grass Valley's General Plan. The project proposes to add a grade-separated interchange along SR 49 to the south of McKnight Way and provide a connection between La Barr Meadows Road on the east and Allison Ranch Road on the west. A frontage road would also be extended on the west side of SR 49 from south of Taylorsville Road to the connector, however the exact alignment is not known. This Opportunities and Constraints Analysis has been prepared to examine two possible alignments for this proposed project, to identify any environmental "fatal flaws", and to provide a basis for comparison of the two viable Crestview Smith connectors. This document is a preliminary step in the process of selecting the best possible alignment.

#### ALTERNATIVE ALIGNMENTS

Mark Thomas & Company (MTCO) identified eight potential interchange locations and east-west alignments (A through H) that would provide an east-west connection from the proposed North Star development west of SR 49 to a new interchange in the vicinity of Smith Road and Crestview Drive eventually connecting to La Barr Meadows Road east of SR 49. Each of the alignments was evaluated by MTCO for topographic and environmental constraints, including right of way impacts. In addition, MTCO evaluated conceptual interchange geometrics at SR 49 and frontage road connections, including possible impacts on the proposed South Hill Village project. The various alignments were presented to the Project Development Team (PDT) for review and comment. MTCO and the PDT identified two alignments (A and E) for further analysis in this opportunities and constraints analysis.

#### SUMMARY OF FINDINGS

Based on the records searches, windshield surveys, and environmental review to date, no "fatal flaws" have been identified for either Alignment A or Alignment E. Alignment A would affect fewer properties and require acquisition of fewer parcels than Alignment E. In addition, Alignment A is estimated to affect fewer wetlands than Alignment E. Cultural resource investigations did not identify any significant differences in potential levels of impacts to archaeological and/or historical resources with either Alignment A or Alignment E.

### **1.2 ENVIRONMENTAL DOCUMENTATION**

The purpose of this report is to provide a preliminary level of environmental analysis of the two alignments identified for further analysis. The focus of the environmental documentation was to identify any potential significant resources and/or cultural constraints (or other features, such as historic mining operations) that may affect the feasibility of the alignments, i.e., a "fatal flaws" analysis. The preliminary analysis and determinations are based on the project description provided in this report, review of existing information, and limited field work. The conclusions provided are approximate and are based on cursory analysis of probable effects.

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The information contained in this report is intended to assist in the predesign phase of the project and is not intended to provide final baseline data for the environmental analysis. **Additional environmental documentation will be required if the project moves forward. The project will require environmental documentation to comply with the California Environmental Quality Act (CEQA), and may require environmental documentation to comply with the National Environmental Policy Act (NEPA) if federal funding, land acquisition, or federal permitting is required. The exact environmental documentation that may be required cannot be determined at this time.** Based on recent direction from Caltrans, the CEQA lead agency would be Caltrans. If federal funds are used, the NEPA lead agency would likely be the Federal Highway Administration.

At this time, the proposed project is anticipated to be 100% locally funded through a combination of mitigation of development impacts, exactions, and possibly the formation of a community facilities district or other appropriate financing technique.

Following is a list of potential agency involvement and permit requirements.

- An encroachment permit from Caltrans
- A streambed alteration agreement from the California Department of Fish and Game (CDFG)
- Section 401 water quality certificate, pursuant to section 401 of the Clean Water Act from the Central Valley Regional Water Quality Board (CVRWQCB)
- Section 404 permit from the U.S. Army Corps of Engineers (Corps)
- Section 7 Consultation with U.S. Fish and Wildlife Service, to be conducted by the U.S. Army Corps of Engineers (Corps) if any endangered species are discovered.
- Compliance with Section 106 of the National Historic Preservation Act and consultation with the State Office of Historic Preservation if any federal funding, permitting, or land acquisition from federal agencies is required.
- Coordination and consultation with the California Department of Toxic Substances and Control (DTSC) if any acquisition of property that may contain hazardous materials is required.

### **1.3 DOCUMENT CONTENTS**

- 1.0 Executive Summary – Provides an overview of the contents of this Opportunities and Constraints Analysis.
- 2.0 Project Description – Provides a description of the proposed project, including alignments analyzed in detail in this document and alignments considered and withdrawn.
- 3.0 Discussion of Technical Review – Examines Alignments A and E relative to specific criteria including biological resources, visual effects, water quality and erosion, cultural resources, etc.
- 4.0 List of Preparers – Identifies individuals responsible for components of this analysis.
- 5.0 References – Lists references cited in this document.

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## **2.0 PROJECT DESCRIPTION**

### **2.1 PURPOSE AND NEED**

The purpose of the proposed project is to improve overall traffic circulation in southern Grass Valley, Nevada County, California by providing a new east-west connector between La Barr Meadows Road and Allison Ranch Road with access to State Route (SR) 49, consistent with the City of Grass Valley's General Plan. The project is needed to reduce congestion at the SR 49/McKnight Way Interchange; to provide access to planned development; and to reduce the number of driveways and private road connections along this segment of SR 49.

### **2.2 DESCRIPTION OF WORK**

The project proposes to add a grade-separated interchange along SR 49 to the south of McKnight Way and provide a connection between La Barr Meadows Road on the east and Allison Ranch Road on the west. A frontage road would also be extended on the west side of SR 49 from south of Taylorsville Road to the connector, however the exact alignment is not known. All alignments and designs are strictly preliminary at this stage and will be modified throughout the development process.

### **2.3 ALTERNATIVE ALIGNMENTS**

Eight alternative alignment locations (A through H) were identified on SR 49 in the project area that could accommodate eventual development of an interchange and construction of an east-west connector between La Barr Meadows Road and Allison Ranch Road. The eight possible interchange locations were carried through a conceptual design phase to identify total length of the east-west connector corridor, preliminary right-of-way requirements, possible direct and indirect impacts to residences and parcels, and possible environmental impacts associated with biological and cultural resources. Based on the preliminary design, two alternatives (Alignment A and Alignment E) appear to be more feasible than the remaining six alternatives and the No Project Alternative. The following section describes these alternatives in detail. A summary of the alternatives considered and withdrawn (alignments B, C, D, F, G and H) is included later in this section.

Two alignments, referred to as A and E, are under consideration as part of this preliminary analysis. Where similar impacts would occur for both alternatives, they are generally described for each issue area. When there are differences in impacts between the two alternatives, they are discussed separately. The term "project area" is used to describe the general area of both Alignment A and Alignment E.

South Hill is a mixed commercial and residential development proposed on the east side of SR 49 between La Barr Meadows Road and SR 49. The North Star development is proposed on the west side of SR 49 south of McKnight Way.

**Table 1** below lists environmental resources that may potentially be impacted by this project.

**TABLE 1**  
**SUMMARY OF ENVIRONMENTAL RESOURCES POTENTIALLY IMPACTED BY ALIGNMENTS A AND E**

<b>Resource</b>	<b>Area of Impact</b>
Visual	Removal of trees and other vegetation would alter views for residents along both Alignment A and Alignment E between La Barr Meadows Road and Allison Ranch Road. The elevated interchange would alter views of SR 49 for highway motorists as well as for travelers on La Barr Meadows Road and potentially for residents in the vicinity of SR 49.
Water Quality	Six stream crossings will be required for Alignment A and three will be required for the Alignment E. Stream crossings and other construction activities have the potential to affect water quality.
Cultural	The area for both Alignment A and Alignment E is known to be sensitive for historic mining sites and features.
Biological	Dominant vegetation communities along both Alignment A and Alignment E include annual grassland, Aspen, Montane Chaparral, Montane Hardwood Conifer, Montane Riparian, and Ponderosa Pine. Removal of trees and vegetation will be necessary for both alignments. Additionally, one to three acres of seasonal wetlands would be impacted in association with Alignment A and impacts from two to five acres of fresh emergent and seasonal wetlands are anticipated in association with the Alignment E.
Right-of-Way	Right-of-way acquisition is expected for both Alignment A and Alignment E connecting La Barr Meadows and Allison Ranch Road as well as the interchange. A number of residential properties would require full or partial acquisition. Alignment E would affect more residential properties than Alignment A. However, Alignment A would also affect several existing land uses. Specifically a landscaping business and an automobile dismantling business on the east side of SR 49. The automobile dismantling business (junk yard) would require relocation, which could prove to be a difficult task. Utility relocation will also most likely be required.

## **2.4 Description of Alignments Carried Forward for Consideration**

### **Alignment A**

Alignment A is an alignment in which the new SR 49 interchange would be located approximately 0.8 mile south of the McKnight Way/SR 49 interchange, just north of Crestview Drive and extend approximately 3,000 feet east from La Barr Meadows Road west to Allison Ranch Road. This alignment would provide for an east-west connector from the northern portion of the proposed South Hill Village development (on the east side of SR 49) to the northern portion of the North Star development site (on the western side of SR 49).

## Alignment E

Alignment E is a southern alignment in which the new SR 49 interchange would be located south of Smith Road and extend from La Barr Meadows Road west to Allison Ranch Road. This alignment would provide an east-west connector from approximately the middle of the proposed South Hill Village development to a point south of the proposed North Star development.

### 2.5 Description of Alignments Considered and Withdrawn

As stated earlier, eight alternatives were considered during the preliminary design phase and six alternatives were withdrawn from further consideration. The following text describes the alternatives that were considered and withdrawn and presents the rationale as to why each alignment was withdrawn. A summary of the pros and cons of alignments B, C, D, F, G and H and the General Plan alignment is presented in Table 2.

**TABLE 2  
PROS AND CONS ASSOCIATED WITH ALIGNMENTS CONSIDERED AND WITHDRAWN**

ALIGNMENT	B	C	D	F	G	H	GP
<b>Pros:</b>							X
Minimal residential relocation							
Works well with topography of State Route 49	X		X	X		X	
Smooth alignment westerly	X						
Match existing intersection of King & Allison Ranch Roads	X	X					
Southern Limits of Study Area		X					
Reduced impacts to the South Hill Village development proposed on the east side of SR 49		X					
Extended length for better grades				X		X	
Use existing Crestview Drive right-of-way					X		
More northerly option, closer to General Plan					X	X	
Use existing Smith right-of-way							
<b>Cons:</b>							
Too steep (12% to 15%)	X	X	X				X
Bridge at Wolf Creek too high	X	X	X		X		
Excessive fill/cut slopes will cause right-of-way impacts	X	X	X	X	X	X	X
Connection to Allison Ranch Road further south than General Plan alignment	X	X	X	X		X	
Impacts numerous homes		X	X	X	X	X	
Portions extend outside City Planning Area		X		X		X	
Impacts residential development on the east side of SR 49			X				
Length of alignment = substantial cost increase				X		X	
Homes and driveways will "front" on the arterial					X		
Sharp curved alignment will reduce design speed and sight distance					X		X
Northbound exit ramp impacts to ponds and potential wetlands						X	
Homes and driveways will "front" on the arterial						X	

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## **ALIGNMENT B**

Alignment B integrates well with the topography of SR 49 and provides a smooth westerly alignment. This alignment matches the existing intersection of King Road and Allison Ranch Road. Flaws of this alignment include grades of 12 to 15 percent, the requirement of a high bridge at Wolf Creek, and excessive fill slopes which would cause right-of-way impacts. In addition, the connection to Allison Ranch Road is further south than the General Plan alignment.

## **ALIGNMENT C**

Alignment C is located in the southern limits of the study area. This alignment would avoid impacts to the proposed South Hill Village development proposed on the east side of SR 49. Similar to Alignment E, this alignment would match the existing intersection of King Road and Allison Ranch Roads. Flaws which lead to the elimination of this alignment included steep grades (12 to 15 percent), the need for a high bridge at Wolf Creek, and excessive fill slopes which will cause right-of-way impacts. This alignment would also affect numerous homes and its connection to Allison Ranch Road would be further south than the alignment proposed in the General Plan. Lastly, portions of this alignment extend outside of the planning area.

## **ALIGNMENT D**

This alignment integrated well with the topography of SR 49. However, the alignment involved areas with steep grades (12 to 15 percent), construction of a high bridge over Wolf Creek and excessive fill slopes that would cause right-of-way impacts. Similar to Alignment C, this alignment would impact numerous homes and impact residential development on the east side of SR 49. This alignment would also result in a connection to Allison Ranch Road further south than proposed in the General Plan.

## **ALIGNMENT F**

Alignment F integrates well with the topography of SR 49 and its length avoids excessively steep grades. Problems with the alignment include excessive fill/cut slopes that will affect right-of way, impacts to numerous homes, and substantial costs associated with the length of the alignment. Similar to Alignment C, portions of the Alignment F extend outside the City Planning Area and the connection of Allison Ranch Road would be further south than the alignment shown in the General Plan.

## **ALIGNMENT G**

This alignment would use the existing Crestview Drive right-of-way and more closely represents the alignment depicted in the General Plan. Flaws of Alignment G include homes and driveways fronting on the alignment and potential safety hazards (sharp curve). This would require reduced design speed and sight distance. Similar to Alignments C, D and F, Alignment G would impact numerous homes and require excessive fill/cut slopes which will cause right-of-way impacts.

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## **ALIGNMENT H**

Alignment H works well with the topography of SR 49. The length of this alignment results in less steep grades and enables use of the existing Smith right-of-way. However, this alignment was eliminated because of its excessive fill slopes, which will cause right-of-way impacts, northbound exit ramps which will impact ponds and potential wetlands, and the fronting of homes and driveways on the alignment. Similar to Alignments C through G, Alignment H would impact numerous homes. In addition it would align with Allison Ranch Road further south than the General Plan alignment and portions of the alignment would extend outside of the City Planning area. The length of this alignment would also result in a substantial increase in cost.

## **GENERAL PLAN ALIGNMENT**

In addition to the six alignments that were considered and withdrawn, MTCO analyzed the feasibility of the Crestview Smith Connector as identified on the City of Grass Valley General Plan. It should be noted that the General Plan alignment would result in minimal impacts to existing homes and businesses and follow the existing property lines. However, it would result in severe curves and speed reductions at State Route 49, constrain local road intersections and does not consider topography; consequently, this alignment would result in extensive cuts and fills to maintain roadway design grades.

## **NO PROJECT**

This alternative would not construct an above-grade intersection with an on- and off-ramp connecting La Barr Meadows Road east of SR 49 to Allison Ranch Road west of SR 49. Existing conditions would remain unchanged. This alternative is required to be analyzed in the environmental document to be prepared to comply with CEQA.

## **3.0 DISCUSSION OF TECHNICAL REVIEW**

The purpose of the preliminary environmental review is to provide an initial resource evaluation of the proposed alignments in sufficient detail to identify environmental constraints that may affect project design and feasibility. Information in this section is based on review of existing environmental documentation, windshield surveys of the project area, and discussions with knowledgeable individuals. Access to the project area was limited in several areas. No attempt was made at obtaining rights of entry to all parcels potentially affected by the project and no surveys were conducted on parcels or roads that were identified as private property.

### **PRELIMINARY IMPACT ANALYSIS:**

#### **3.1 BIOLOGICAL RESOURCES**

The biological resource analysis was conducted by Gallaway Consulting, Inc. (May, 2004) and can be found in Appendix A of this document. Prior to conducting the windshield surveys, Gallaway Consulting, Inc. developed a list of potentially occurring special-status wildlife and plant species occurring within the Biological Survey Area. A preliminary biological and botanical survey, including a preliminary wetland delineation,

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was prepared for the both Alignments A and E by Gallaway Consulting, Inc. The results of these surveys are depicted in **Figures 1** and **2** for Alignment A and E.

For the purposes of this survey, special-status species are those that fall into one of the following categories:

- Designated as rare, threatened, or endangered by state or federal governments (ESA, 50 CFR 17.12 for listed plants and various notices in the Federal Register, California Endangered Species Act (CESA), 14 CCR 670.5);
- Designated as Species of Concern and/or Special Concern by state or federal governments;
- Proposed for rare, threatened, or endangered designation by state and federal governments;
- Included on the California Native Plant Society (CNPS) List as 1A, 1B, and 2 (Skinner and Pavlik, 2001);
- Plants and wildlife that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (State CEQA Guidelines, Section 15380).

A database search of the California Natural Diversity Database (CNDDDB) via Rarefind (2004) was performed and the USFWS was consulting to create a list of sensitive plant taxa, a list of special-status wildlife species, and sensitive natural communities potentially occurring within the biological study area. On May 4, 2004, a botanist, a wildlife biologist, and an environmental scientist performed a pedestrian survey of the accessible portions of the project area as well as a windshield survey of those areas accessible by road.

#### Consultation to Date

The National Oceanic and Atmospheric Administration, Fisheries Division (NOAA Fisheries) was contacted on May 13, 2004 for information regarding the potential occurrence of special-status anadromous fishes within the project area. Michael Tucker, senior fisheries biologist with NOAA Fisheries, reported that both Wolf Creek and Critter Creek flow in a southerly direction to confluence with the Bear River and eventually into Camp Far West reservoir. According to Mr. Tucker, this system is not an anadromous fishery and therefore, the proposed project will not impact special-status anadromous fish or their habitat.

Representatives from the County of Nevada were contacted on 13 May 2004. The County regulates impacts of development on major deer migration corridors, critical winter and summer ranges, and critical fawning areas, as well as development impacts on landmark trees, landmark groves, and heritage trees and groves through Chapter II, Article 4 of the County Zoning Regulations.

Gallaway Consulting Inc. made several attempts to contact California Department of Fish and Game (CDFG) representatives to consult on potential impacts to deer herd migration and other potential project impacts. Phone calls to CDFG were not returned upon issuance of this report.

#### Environmental Setting

Habitat types found within the biological survey area, as defined by Mayer and Laudenslayer (1988), include ponderosa pine, montane hardwood-conifer, montane

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chaparral, montane riparian, wet meadow, fresh emergent wetland, urban, barren, and small components of aspen, annual grassland, and orchard-vineyard. Several perennial and seasonal streams are located within the biological survey area. Wolf Creek flows from north to south approximately midway through the survey area. Critter Creek, shown on topographic maps but not directly observed, flows from the northeastern portion of the survey area in a southwesterly direction to eventually meet with Wolf Creek in the southern portion of the survey area. Wetland features and riparian habitat associated with perennial and seasonal streams were located throughout the survey area.

A historic mine site is located west of La Barr Meadows Road and east of SR 49 in the vicinity of the Alignment E. In addition to barren areas, this vicinity supports a well established area of fresh emergent wetlands and montane riparian areas and appears to be a historic meander channel. The historic meander channel supports wetland habitat in the northeastern vicinity of the survey area as well. Topography is relatively flat to slightly sloping along the eastern portion of the survey area. Elevations range from approximately 2,480 feet along La Barr Meadows Road in the northern vicinity of the survey area to approximately 2,420 feet along SR 49. In the southeastern portion, elevations range from approximately 2,420 feet along La Barr Meadows Road and slope in a westerly direction where water appears to pond for a longer duration in the vicinity of the well established fresh emergent wetlands, existing at an elevation of approximately 2,340 feet. In the southeastern portion of the survey area, the fresh emergent wetland and montane riparian habitat gives way to montane chaparral as the elevation increases to approximately 2,450 feet and flattens out at a ridge top to the west. An area of montane hardwood conifer exists west of the ridge top with a small area of aspen habitat located along SR 49. Elevations between SR49 and Allison Ranch Road in the southern portion of the project area range from approximately 2,380 to 2,240 feet. This area could not be directly viewed during the survey but, based on observations in surrounding areas, aerial photographs, and topographic maps, likely supports montane riparian, montane hardwood conifer, ponderosa pine, fresh emergent wetlands, urban and barren habitat types. The northern portion of the project area between SR49 and Allison Ranch Road ranges in elevation from 2,360 to 2,300 feet and supported montane riparian and wet meadow habitat along Wolf Creek and associated tributaries. Areas of ponderosa pine, montane hardwood-conifer, urban and barren habitat types were observed throughout, with small areas of annual grassland and orchard vinyard found near a farm located west of SR49.

#### Special Status Species

Oak titmouse (*Baeolophus inornatus*), identified as a species of local concern by USFWS, were observed foraging on property within the biological survey area. A species of local concern that does not require mitigation however, should it become listed prior to completion of the project, consultation and mitigation may be required. No additional federal or state endangered, threatened, or sensitive species were observed within the project area during the May 2004 surveys. A 5-mile radius CNDDDB search identified no documented occurrences of special-status species within the survey area; however numerous occurrences were identified in the surrounding area (**Figure 3**). Based on the documented occurrences of six special status species, Brandegees clarkia (*Clarkia biloba* ssp. *brandegeae*), Stebbins's morning-glory (*Calystegia stebbinsii*), Follett's monardella (*Monardella follettii*), Scadden Flatt checkerbloom (*Sidalcea stipularis*), brownish beaked-rush (*Rhynchospora capitellata*), Pine Hill flannelbush (*Fremontodendron decumbens*), within 5-miles of the survey area, as well as suitable habitat observed within the BSA, species specific surveys will be required. Additionally,

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high potential for yellow-legged frog and willow flycatcher to occur onsite exists based on suitable habitat observed within the BSA. Therefore, protocol level surveys should be conducted for these species as well.

### Sensitive Natural Communities

As described above, habitat types found within the survey area include ponderosa pine, montane hardwood-conifer, montane chaparral, montane riparian, wet meadow, fresh emergent wetland, urban, barren, and small components of aspen, annual grassland, and orchard-vineyard. Wetlands and riparian habitat are considered sensitive natural communities by the County of Nevada and CEQA and were identified within the survey area. A formal delineation of Waters of the United States will be required prior to construction. The other community types are not considered sensitive natural communities by CDFG or USFWS, however, the project will be required to comply with the County of Nevada environmental regulations regarding impacts to deer habitat and trees. No other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFG or USFWS, including designated critical habitat were observed, or are expected to occur within the project area. While portions of the project area could not be accessed, based on surrounding conditions, it is likely that impacts to these resources would be roughly equivalent for both alternatives.

### 3.2 WETLANDS

A preliminary biological and botanical survey, including a preliminary wetland delineation, was prepared for the both Alignments A and E by Gallaway Consulting, Inc. The results of these surveys are depicted in **Figures 1** and **2** for Alignment A and E. Wetlands and riparian habitat were identified within the survey area. A formal wetland delineation has been performed for the South Hill Village development and has been reviewed and verified by the Corps. A formal delineation of Waters of the United States will be required to determine the extent of various jurisdictional features and the nature of potential impacts to these resources. Preliminary estimates are provided below for each alternative. The impact estimates are for the direct footprint of the roadway and do not reflect impacts from fill slopes and indirect impacts.

**Alignment A.** Approximately one to three acres of seasonal wetlands will be impacted as a result of construction of Alignment A. In addition, it is estimated that a total of six stream crossings will result from implementation of this alternative.

**Alignment E.** Approximately two to five acres of fresh emergent and seasonal wetlands are estimated for construction of the Alignment E. In addition it is estimated that two stream crossings will result from implementation of this alternative.

### 3.3 WATER QUALITY AND EROSION

Cutting and excavation would be required to install either alignment. Hillsides that are disturbed would be especially vulnerable to erosion. Although measures to minimize erosion can be used successfully, some erosion of cuts, fills, roadside drains and downstream areas could occur. Erosion impacts can be lessened through appropriate construction management practices and construction timing. Section 7-1.01G of Caltrans' Standard Specifications outlines the provisions that the contractor must follow to eliminate or reduce the adverse impacts of construction activities on water quality.

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**Alignment A.** Alignment A is located in an area with varying topography which generally trends to the west towards Wolf Creek. The proposed connector between La Barr Meadows Road and Allison Ranch Road would follow the sides of several hills. The anticipated maximum grade for this alignment is 10%. There would be a high potential for water quality impacts during construction. Alignment A would involve a total of six stream crossings.

**Alignment E.** Alignment E is located in an area with relatively steep slopes to the west of SR 49 and slopes to the north on the east side of SR 49. Hillside cuts would be required to construct this alignment which could result in impacts to water quality. The anticipated maximum grade for this alignment is 12% to 15%. There would be a high potential for water quality impacts during construction. Alignment E would involve two stream crossings.

### 3.4 FLOODPLAIN

The entire planning area for Grass Valley is located within the Wolf Creek drainage basin. Both alignments extend west towards the South Fork of Wolf Creek.

**Alignment A.** Alignment A would be located entirely outside of the floodplain for Wolf Creek.

**Alignment E.** The western extent of Alignment E may encroach into the Wolf Creek floodplain. Further study would be necessary to confirm the extent of encroachment.

### 3.5 CULTURAL RESOURCES

The cultural resources investigation included the following tasks:

- a records search at the North Central Information Center at California State University, Sacramento for the area and a ¼-mile radius surrounding it;
- a sacred lands search and identification of a list of Native American contacts for the project area;
- consultation with the Native American community; and
- initial field reconnaissance (windshield surveys) of alternative alignments.

The records search identified 4 previous surveys in the project area, 1-recorded site; 1-unrecorded site near the east end of Alignment E; Allison Ranch Road as a recorded site; and isolated mining features either within or near the project area. The previous surveys primarily encompass the east and west ends of the proposed road alignments for the project. Consequently, a large portion of the alignments are not surveyed, and these areas are considered sensitive for historic mining sites and features.

The initial field reconnaissance identified a number of private residences in the project area, but did not identify any cultural resources. Based on the windshield survey, none of the structures are anticipated to be over 50 years old.

Cultural resources investigations completed to date did not identify any archaeological or historical issues related to the proposed project that would require redesign of either alternative. Indeed, current cultural resources investigations did not identify any significant differences in potential levels of impacts to archaeological and/or historical resources associated with either Alignment A or Alignment E. Regardless, large areas of

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the project are not surveyed and the project area is sensitive for historic mining sites and features. Therefore, there is a possibility that archaeological and/or historical resources may be identified during future cultural resources investigations.

### 3.6 NATIVE AMERICAN COORDINATION

The Native American community has been consulted as part of preliminary cultural resources investigations. In addition, a sacred lands search and a list of Native American contacts for the project area were requested as part of preliminary cultural resources investigations. The sacred lands search did not identify any significant Native American cultural resources either within or near the alignments. PMC cultural resources staff has received one comment, to date, in response to consultation with the Native American community. The United Auburn Indian Community of the Auburn Rancheria responded and requested that a survey be completed of the project area and that they be informed of the results.

### 3.7 FARMLANDS

The project area is located south of McKnight Way in the City of Grass Valley. The Farmland Mapping and Monitoring Program (FMMP) map for Nevada County indicates that land within the project area is classified as "Other Lands." This category of land does not meet the criteria of "Prime," "Unique", or "Statewide Importance." As a result, no impacts to farmlands would occur for either Alignment A or Alignment E.

### 3.8 SOCIO-ECONOMIC AND COMMUNITY EFFECTS

The project could affect several residences and businesses that are located along the proposed alignments.

**Alignment A.** The conceptual design of Alignment A would directly impact approximately four residences located west of SR 49. Two businesses; Kilroy's Auto and Rare Earth Landscaping, on the east side of SR 49 would be directly impacted. .

**Alignment E.** The conceptual design of Alignment E would directly impact approximately 16 residences on the west side of SR 49 and would directly impact the Southhill Village project site on the east side of SR 49.

### 3.9 AIR

The project is included in the Regional Transportation Plan (RTP) approved in December 2001 by the Nevada County Transportation Commission (NCTC).

### 3.10 NOISE

Construction and operation of a new interchange and associated frontage improvements and east-west connector would create increased noise levels near those improvements.

**Alignment A.** Alignment A would be located to the north of the majority of residences in the area. Frontage road improvements may extend south closer to those residences.

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**Alignment E.** Alignment E is located south of Alignment A and would bring roads and traffic closer to more residences.

### 3.11 HAZARDOUS WASTE/MATERIALS

An Initial Site Assessment (ISA) has not been performed. However, an ISA will be required to address the potential for hazardous waste associated with mines in the area for both Alignment A and Alignment E. A known historic mine site is located west of La Barr Meadows Road and east of SR 49 in the vicinity of the Alignment E. In addition, previous and existing land uses may have resulted in hazardous concerns in the project area that will be identified in the ISA.

### 3.12 VISUAL EFFECTS

Drivers along the segment of SR 49 south of McKnight Way currently have unobstructed views of the highway and adjacent lands in the area. Residents in the area currently have views of surrounding hillsides. Most residents, even those relatively close to SR 49, are screened from the highway by vegetation and intervening topography. This segment of SR 49 on which the alignments are located is not an officially "State Designated Scenic Highway", but is considered "Eligible for Scenic Designation."

**Alignment A.** An above-grade interchange) is not likely to be visible to homes located west of SR 49 for Alignment A. Intervening vegetation and topography provide screening. However, removal of trees would change existing views for residents near the east-west connector alignment. Specifically, four residences to the west of SR 49 would experience substantial alteration of views due to the proximity of the alignment of the connector between Allison Ranch Road and La Barr Meadows Road. The business on the east side of SR 49 and another on the east side of La Barr Meadows Road would also be subject to altered views with the addition of an above-grade interchange. The existing businesses between SR 49 and La Barr Meadows Road would also have views altered through the addition of the connector, which would front on the property's southern boundary.

**Alignment E.** Homes on the west side of SR 49 along Alignment E are well screened and would most likely not be able to view the above-grade interchange. However, several homes along the connector alignment between La Barr Meadows Road and Allison Ranch Road would experience altered views resulting from tree removal and the introduction of a two-lane roadway.

### 3.13 RIGHT-OF-WAY RELOCATION OR STAGING AREA

Right-of-way information is still preliminary as designs are only conceptual at this stage. Detailed right-of-way and staging areas will be determined later in the process after an alignment has been selected.

**Alignment A.** Alignment A would affect approximately seven properties along the proposed east-west alignment. These properties would require full acquisition (at least three parcels) and partial right-of-way acquisition.

**Alignment E.** Alignment E would affect approximately 19 properties along the proposed east-west alignment. It is estimated that full right-of-way acquisition would be required

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for at least eight to 14 parcels properties with partial acquisition required for the remaining parcels

#### **4.0 LIST OF PREPARERS**

- Che McFarlin, Environmental Project Manager - PMC
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