HPP 0251-331 (16640)

I-25 and Dillon Drive/Eden-Platteville Boulevard Interchange Improvements

Environmental Assessment

Submitted Pursuant to:

42 U.S.C. 4332(2)(c), 49 U.S.C. 303, and 23 U.S.C. 138

by the

U.S. Department of Transportation

Federal Highway Administration

and the

Colorado Department of Transportation

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Environmental Assessment Availability

Copies of the Environmental Assessment are available in hard copy format for public review at the following locations and/or by request from CDOT Region 2.

Pueblo City/County Public Library – Pueblo West Branch
298 S. Joe Martinez Blvd
Pueblo West, CO 81007-2740
(719) 562-5660

CDOT Region 2
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City of Pueblo
City Clerk's Office
1 City Hall Place
Pueblo, CO 81003
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1.0 Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) summarizes the effects of a proposed project that would provide access from Interstate 25 (I-25) to Platteville Boulevard/Dillon Drive south of the existing Eden Interchange in Pueblo County, Colorado. (The discontinuous roadway network has resulted in the use of two names for this road, which is Platteville Boulevard west of I-25 and Dillon Drive east of I-25. The likely future naming convention would be "Dillon Drive" through the project area, with "Platteville Boulevard" applied to the road under construction extending west of the Eden Interchange, or north half of this proposed interchange.) Figure 1-1 shows the location of the Action Alternative and study area located just north of the City of Pueblo, which is in the Northeast Pueblo quadrangle map, Section 1, Township 20 South, Range 65 West.

This proposed new access to I-25 would require construction of a new bridge over I-25 at Platteville Boulevard/Dillon Drive and new on- and off-ramps to I-25 south of that bridge. These new ramps would replace the existing ramps at the south half of the Eden Interchange which would be removed. This configuration, called a "split diamond interchange," provides all of the movements of a typical "diamond" interchange except the freeway connections are split between two nearby roads. In this case, the connections would be from Platteville Boulevard/Dillon Drive and Eden Road. A new one-way frontage road east of I-25 and a two-way frontage road along the west side of I-25 would connect the south half of this interchange at Platteville Boulevard/Dillon Drive with the north half at Eden Road. Figures 2-1 and 2-2 show a diagram of this configuration.

This EA discusses the project purpose and need for making these changes, the alternatives that were evaluated, the existing socio/economic and natural environment and the impacts that would result from construction of the proposed changes, and any mitigation and permits that may be required. Measures to avoid and minimize negative effects have been incorporated into the Action Alternative and are also discussed in this EA.

The project is sponsored by the City of Pueblo, which retained a third party to prepare this EA. An EA is required because the project would use federal funds and would also include a change in access to the interstate system. Funding sources are described in Section 2.4.

The Federal Highway Administration (FHWA) controls all changes to the interstate and has oversight of the federal funds that would be used to build this project. As signatories, FHWA and the Colorado Department of Transportation (CDOT) must ensure that this project process complies with the National Environmental Policy Act (NEPA).

The NEPA process began in late 2008 when the City of Pueblo, CDOT and FHWA met to discuss modifying access to I-25, which had been proposed in prior City plans, as described in Chapter 2. The first public and agency meetings were held in December 2008 and September 2009, respectively, as described in Chapter 4.

1.2 Purpose and Need for this Project

The purpose of the project is to provide more direct access to I-25 from Pueblo West, and to accommodate traffic from existing and planned growth along Platteville Boulevard/ Dillon Drive west of I-25.

A connection of Platteville Boulevard/Dillon Drive to I-25 is needed to distribute traffic from this rapidly developing area of the City of Pueblo, Pueblo West, and Pueblo County to destinations along I-25. Platteville Boulevard/ Dillon Drive in the study area serves the growing commercial developments, as well as industrial business and small residential neighborhoods to the west, but does not provide an important direct connection to the interstate. This land use pattern of mixed development is expected to continue in the future, as reflected in the City of Pueblo Comprehensive Plan.

Currently, traffic to and from this busy area must use either the Eden Interchange at I-25 or the Eagleridge Interchange approximately 1.6 miles south of Eden. Both interchanges result in out-of-direction travel, and traffic is forced onto local streets to access area businesses and to access the interstate for commuting. As the area continues to grow, a direct connection to I-25 is needed to provide a more efficient flow of traffic. A diagram of these traffic patterns is shown in Figure 3-1.

Pueblo West is one of the fastest growing unincorporated areas in Pueblo County. The existing population of Pueblo West is approximately 33,000 and is projected by the Pueblo Area Council of Governments (PACOG) to increase to about 45,000 at build-out. By 2035, the population is projected to be nearing 40,000, with full build out to occur at some point in the future, depending on market conditions. Currently there are only three regional routes to I-25 for the large area of Pueblo West: U.S. 50 (approximately 2.5 miles south of the Eden Interchange), Platteville Boulevard/Dillon Drive, and Purcell Boulevard (approximately 4 miles north of the Eden Interchange), as shown in Figure 3-1. U.S. 50 and Purcell Boulevard have direct interstate access, while regional traffic on Platteville Boulevard/Dillon Drive is forced onto the local street network to access I-25 at the Eagleridge or Eden Interchanges. This requires out-of-direction travel for regional traffic and results in a traffic pattern that mixes local (typically traveling at slower speeds and making more frequent turns) and regional (typically traveling at higher speeds to destinations outside the immediate area) travelers.

As the area continues to grow and the transportation network west of I-25 expands to serve that growth, traffic on Platteville Boulevard/Dillon Drive is expected to increase from 3,200 vehicles per day in 2008, to 11,000 vehicles per day by 2035. This increase in traffic would require a more efficient and logical connection to I-25 than either the existing Eden or Eagleridge Interchanges. For additional information about traffic conditions and land use, refer to Sections 3.1 and 3.2, respectively.

This project would improve travel conditions in the project area by providing residents of Pueblo West with a more efficient, direct connection to the interstate.

The need for more efficient and direct access to I-25 has been recognized by the City and PACOG for many years. Several plans and previous studies have identified the need to enhance connectivity between Pueblo West and I-25. Chapter 2 describes the alternatives considered that led to the analysis and identification of the Action Alternative.

FIGURE 1-1
Project Location and Study Area

2.0 Alternatives Considered

This section discusses the alternatives evaluated to address the project's purpose and need. The need for better connectivity to I-25 has been recognized by several previous studies. The PACOG 2035 Long Range Transportation Plan (PACOG, 2008b), for example, includes a project for the connection of Platteville Boulevard/Dillon Drive to I-25, and will be amended to reflect the specifics of the Action Alternative as discussed in Section 2.1. The City of Pueblo 2001 Comprehensive Plan (PACOG, 2001) identifies the lack of access and street connectivity in the area as a community concern. The Pueblo Boulevard Feasibility Study (CDOT, 1999) recommended that the Eden Interchange be reconstructed into a split diamond interchange to improve the connectivity of Platteville Boulevard/ Dillon Drive to I-25 and to accommodate local land use plans.

The development and screening of alternatives was a collaborative process, involving input to the City, FHWA and CDOT from municipal officials and interested citizens. The screening criteria were based upon the project purpose and need and examined objectives for mobility, feasibility of design and construction, potential impacts to environmental resources, and community values. Comments received during the public meetings held as part of this project were considered in the alternatives screening process.

The majority of comments received during the public meetings were focused on changes to access for businesses adjacent to the Eden Interchange, and the additional turning movements that would be required for heavy trucks as part of the split diamond design.

The project team considered the comments during formation of the action alternative(s). Based on the results of the screening process, the Action Alternative was carried forward for evaluation in the EA document.

Details of the screening process are summarized in a technical memorandum included in Appendix C. The Action Alternative, No Action Alternative, and other alternatives considered but dismissed are discussed in this section.

2.1 Action Alternative

The Action Alternative consists of constructing a split diamond interchange at Platteville Boulevard/Dillon Drive and Eden Road. The split diamond would require construction of a new bridge over I-25 at Platteville Boulevard/Dillon Drive and new on- (southbound) and off-ramps (northbound) to I-25 south of that bridge. The new ramps would be approximately 2,000 feet long and consist of a 15-foot travel lane with a 4-foot inside shoulder and 6-foot outside shoulder. The south ramps at the existing Eden Interchange would be removed to meet current FHWA standards for separation between interchanges.

A two-way frontage road along the west side of I-25 and a one-way frontage road on the east side would connect the south half of the interchange at Platteville Boulevard/Dillon Drive with the north half at Eden Road. The two-way frontage road consists of two 12-foot lanes, two-foot shoulders, with a 14-foot turning movement lane in the center. The new northbound ramp between Platteville Boulevard/Dillon Drive and Eden would include a 15-foot travel lane with a 4-foot inside shoulder and a 6-foot outside shoulder.

Platteville Boulevard/Dillon Drive would include a 22-foot raised median. Irrigation and lighting features would be determined during final design.

Figures 2-1 and 2-2 illustrate the Action Alternative. No changes would be made to I-25 as part of the Action Alternative. Approximately 8.4 acres of property would be acquired for right-of-way. This property is undeveloped and privately owned.

The Action Alternative satisfies the purpose and need of the project as it provides a direct and efficient connection to I-25 for the quickly developing area along Platteville Boulevard/ Dillon Drive, thereby improving connectivity and traffic flow west of I-25. The Action Alternative is consistent with local and regional long range transportation plans.

2.2 No Action Alternative

Under the No Action Alternative, only maintenance and isolated safety-related repairs of the local roadway network and I-25 would occur.

The No Action Alternative would not improve traffic operations of the study area. This alternative would not address concerns related to improving access to I-25 or accommodating existing and planned growth along Platteville Boulevard/Dillon Drive recognized in local and regional planning documents.

Interchanges at Eagleridge Boulevard and Eden would continue to provide the only access to I-25 for businesses and traffic along Platteville Boulevard/Dillon Drive.

The No Action Alternative was eliminated from further consideration because it does not meet the purpose and need for the project. The No Action Alternative would be retained as a basis for comparing environmental impacts of the Action Alternative.

FIGURE 2-1
Action Alternative - North

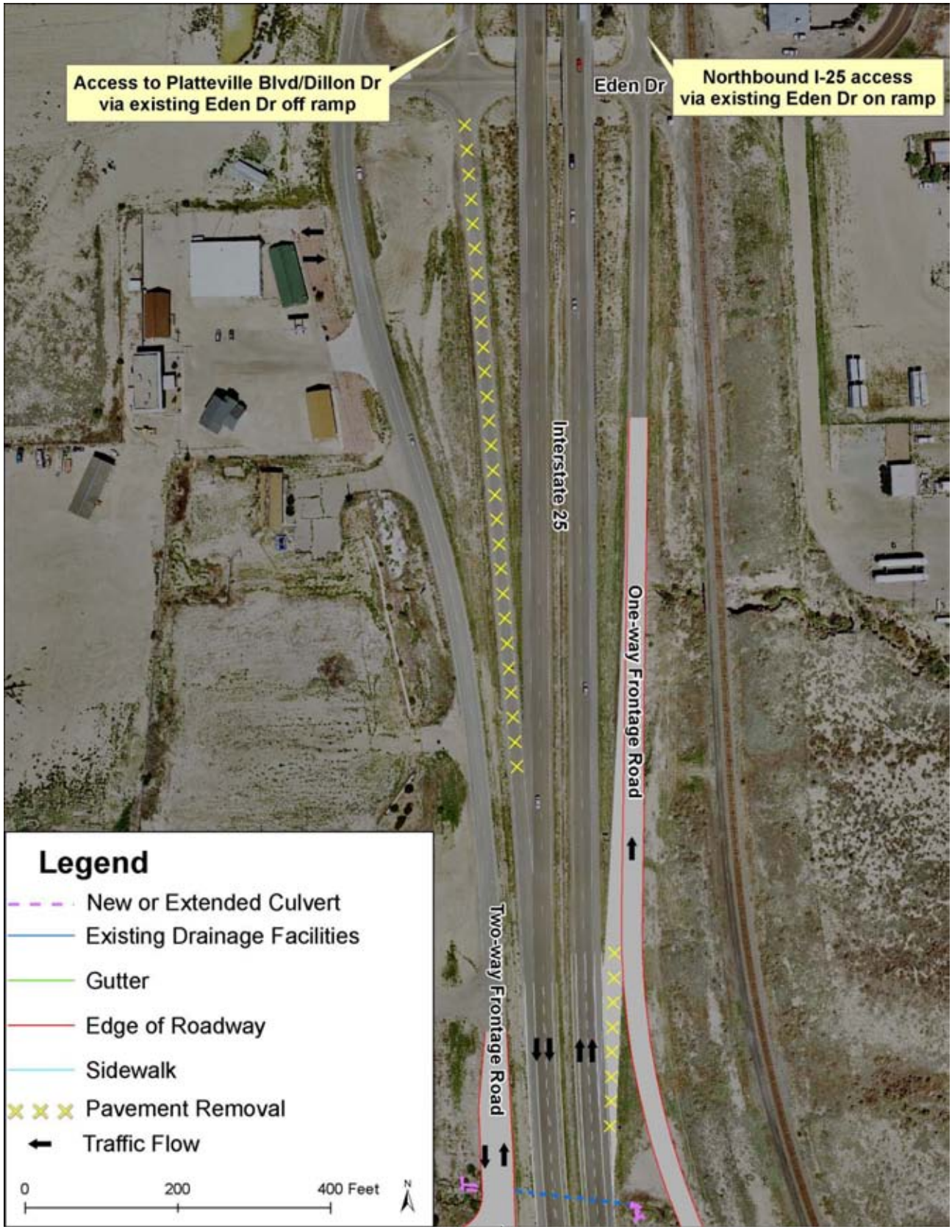
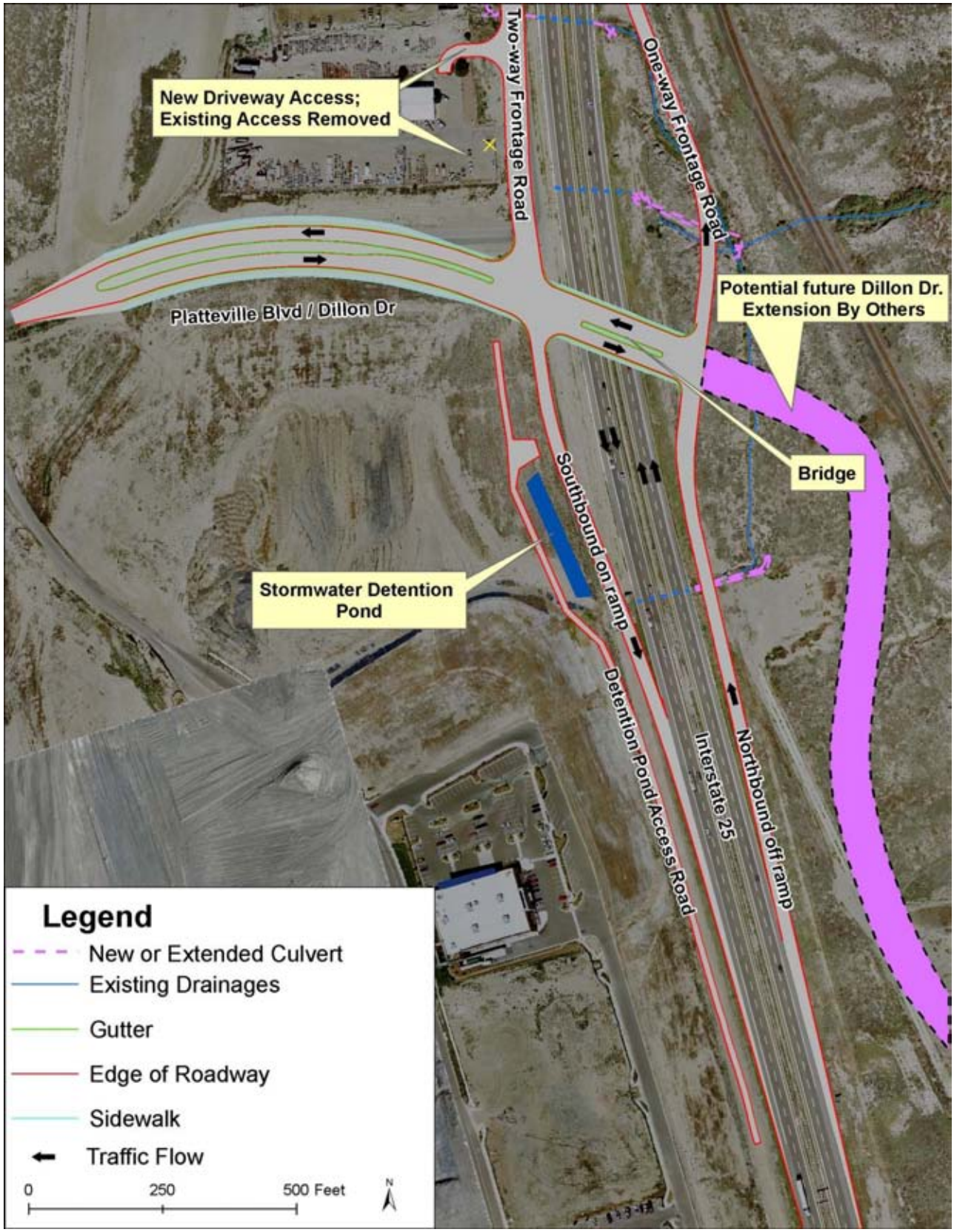


FIGURE 2-2
Action Alternative - South



2.3 Other Alternatives Considered but Dismissed from Further Analysis

2.3.1 Full Diamond Interchange at Dillon Drive

This alternative consists of constructing a full diamond interchange at Platteville Boulevard/Dillon Drive. The frontage road west of I-25 between Platteville Boulevard/Dillon Drive and the Eden Interchange would be relocated to the west as shown on Figure 2-3. As part of this alternative, the existing Eden Interchange would be demolished to allow for sufficient interchange spacing along I-25.

While this alternative satisfies the purpose and need for the project by providing better access to I-25, it would result in substantial right-of-way costs compared with the other alternatives due to relocating the frontage road. This alternative would also involve extensive changes of access for area businesses. Businesses located east of I-25 at the Eden Interchange would lose direct access to I-25 due to removal of the existing Eden Interchange ramps, with new access being provided at Platteville Boulevard/Dillon Drive via the relocated frontage road. In addition, several of the businesses along the existing frontage road would have their access moved to the west side of the properties to accommodate the relocated frontage road, resulting in increased out-of-direction travel for customers. As a result of the right-of-way and access issues, this alternative was eliminated from further consideration.

2.3.2 Full Diamond Interchange at Eden

Under this alternative, the existing northbound and southbound ramps at the Eden Interchange would be lengthened to provide improved traffic flow as shown in Figure 2-4.

A full diamond at Eden would not provide more efficient and direct access to I-25 for the businesses along Platteville Boulevard /Dillon Drive in the study area and for the residents of Pueblo West. This alternative was eliminated from further consideration as it does not meet the purpose and need for the project.

2.3.3 Split Diamond Interchange with One-way Frontage Roads

This alternative consists of constructing a split diamond interchange at Platteville Boulevard/Dillon Drive and Eden Road as shown on Figure 2-5. Whereas the Action Alternative includes a two-way frontage road west of I-25 and a one-way frontage road east of I-25, this alternative uses a pair of one-way roads located along both sides of I-25 to connect the split diamond as shown in Figure 2-4. The west frontage road is an existing two-way road that would be restriped; the east road is new construction.

While this alternative satisfies the project purpose and need, the one-way direction of the west frontage road restricts access and results in a circular flow of traffic around the split diamond interchange for motorists traveling to area businesses. The alternative also requires out-of-direction travel for access to businesses west of the frontage road, as motorists would be required to exit the interstate at Dillon, travel north to Eden, and then back south on the frontage road. As a result, this alternative was eliminated from further consideration.

FIGURE 2-3
Full Diamond Interchange at Dillon

FIGURE 2-4
Full Diamond Interchange at Eden

FIGURE 2-5
Split Diamond with One Way Frontage Roads

2.4 Project Funding

As shown in Tables 2-1 and 2-2, construction funds to implement the Action Alternative include a mix of several sources including federal (Safe, Accountable, Flexible, Efficient Transportation Equity Act [SAFETEA-LU] and Hiring Incentive to Restore Employment [HIRE]); state (Funding Advancement for Surface Transportation and Economic Recovery [FASTER] funds); Regional Priority Program transportation funds; and local City of Pueblo funds (a mix of Pueblo Urban Renewal Authority funds and City general funds).

Of the initial funding package of $5.5 million (composed of $4.5 million in federal earmarks and $1 million in matching local funds); $1.1 million has been used for planning and preliminary design. The remaining $4.4 million will be used in final design and construction.

Estimated costs to implement the Action Alternative are (in 2009 dollars):

- Planning and preliminary design – $1.1 million
- Final design and construction – $21.5 million

At the time of this EA, the details of the City's funding plan are still being finalized. The following two funding scenarios are being considered: 1) commit a larger amount of the City's FASTER funds revenue stream over more years so the entire interchange can be built as one phase in 2013 under one bond issuance; and 2) commit a lesser amount of the City's FASTER funds over fewer years so that the project would be constructed in two phases

In the "one phase" scenario, the entire project would be constructed in 2013. In the "two phase" scenario, the first phase would be constructed in 2013 and the second phase would take place in 2015. In either scenario, a fully functional interchange would be in place by 2013, providing for all movements to and from the interstate with the Dillon Drive and Eden/Platteville crossroads.

The selected funding scenario will be included in the decision document prepared for this EA.

Under either scenario, the City will issue municipal bonds to fund the difference between the $12.9 million currently available for construction (which includes the remaining $4.4 million in earmark-and-local funds and the $8.5 million in CDOT funds) and the remaining funds needed to complete

TABLE 2-1
Funding Scenario #1 (Action Alternative constructed in 2013)

Funding Entity	Funding Program	Funding Amount (Millions)	Funding Availability	Project Phase
Federal (Earmark)	SAFETEA-LU	$4.5	Fiscal Year 2008	1
City of Pueblo (Earmark match)	Local Funds	$0.2	Calendar Year 2008	1
City of Pueblo (Earmark match)	Local Funds	$0.8	Calendar Year 2009	1
CDOT Discretionary Funds	Federal/CDOT Funds	$8.5	Fiscal Year 2011	1
City of Pueblo (Bond)	Local Funds	$8.6	Calendar Yr 2013	1
Total Funding		$22.6		

SAFETEA-LU = Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users

TABLE 2-2
Funding Scenario #2 (Action Alternative constructed in 2013 and 2015)

Funding Entity	Funding Program	Funding Amount (Millions)	Funding Availability	Project Phase
Federal (Earmark)	SAFETEA-LU	$4.5	Fiscal Year 2008	1
City of Pueblo (Earmark match)	Local Funds	$0.2	Calendar Year 2008	1
City of Pueblo (Earmark match)	Local Funds	$0.8	Calendar Year 2009	1
CDOT Discretionary Funds	Federal/CDOT Funds	$8.5	Fiscal Year 2011	1
City of Pueblo (Bond)	Local Funds	$4.0	Calendar Yr 2013	1
City of Pueblo (Bond)	Local Funds	$ 5.6	Calendar Yr 2015	2
Total Funding		$23.6		

SAFETEA-LU = Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users

the project. Costs for bonding are not included in the current cost estimates and will be determined prior to bond issuance after the final design plans are complete and an accurate estimate of the cost of construction is known. At that time, the PACOG Transportation Improvements Program, Fiscally Constrained Long Range Transportation Plan (TIP) and Statewide Transportation Improvements Program (STIP) will be amended to reflect the total project costs.

2.4.1 Action Alternative Built as a Single Phase

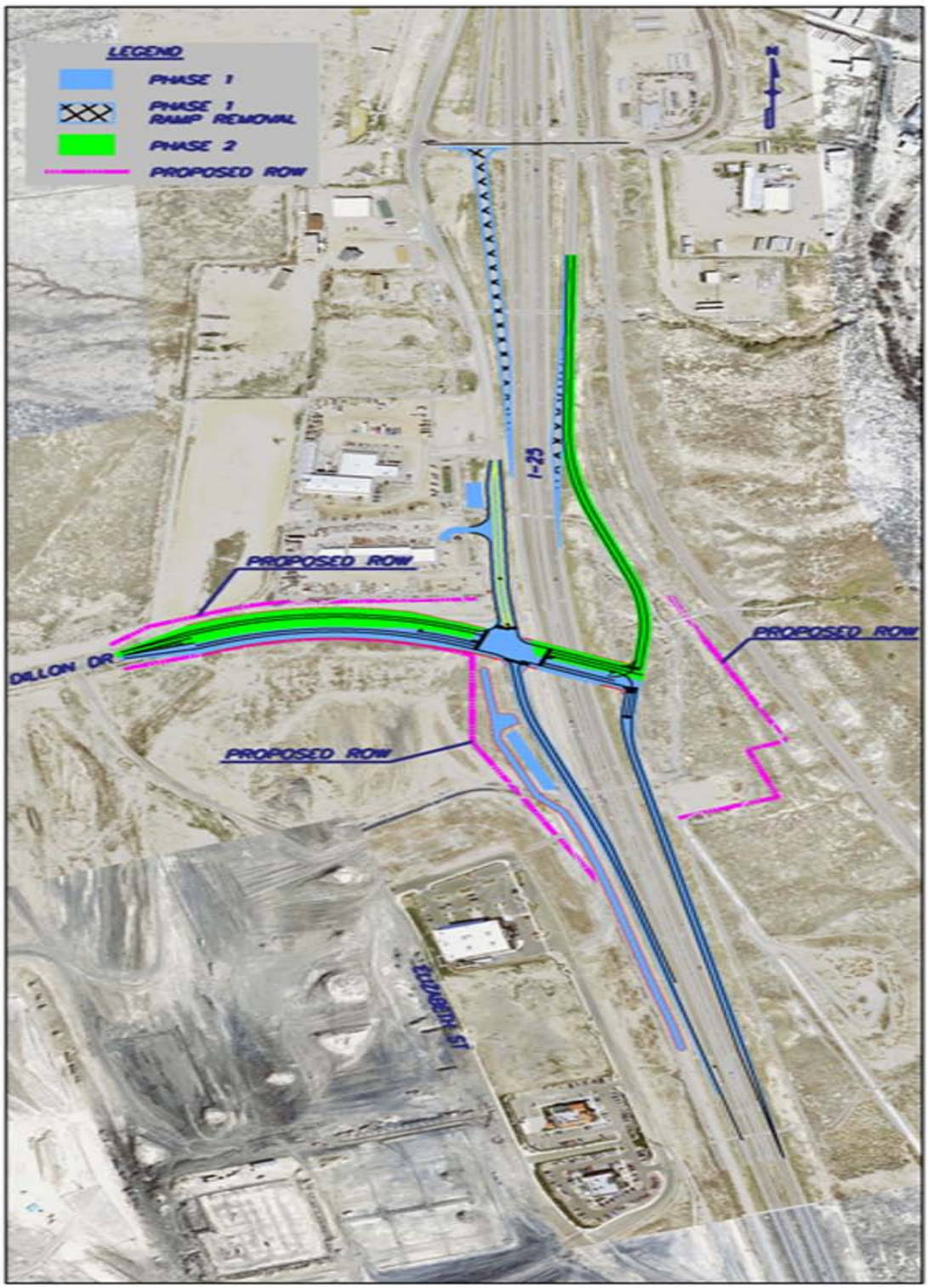
Under this scenario, the total project cost is estimated to be $22.6 million. This cost includes $21.5 million of final design and construction cost in addition to the $1.1 million already spent as part of preliminary design and environmental clearances. Under this scenario, the City will enter into a municipal bond contract to fund the remaining $8.6 million between currently available funding (approximately $12.9 million) and the estimated $21.5 million final design and construction cost. The City will pledge a portion of its FASTER fund revenues for approximately 8 years, along with the Pueblo Urban Renewal Authority funds, to fund construction and pay off the bonds. (See Table 2-1 for funding details.) This scenario completes all elements of the Action Alternative in a single construction project in 2013.

2.4.2 Action Alternative Built in Two Phases

Under this scenario, the total program cost is estimated to be $23.6 million with an estimated $22.5 million construction cost that includes final design and construction as well as an additional $1.1 million for mobilizing and demobilizing construction crews as part of the two phases.

Construction of the Action Alternative would occur in two phases, as shown in Figure 2-6. The interchange would be fully functional following Phase 1. Phase 2 improvements would expand the capacity of Platteville Boulevard/Dillon Drive and the interchange bridge.

FIGURE 2-6
Construction Phasing



For this funding scenario, the Pueblo City Council would pledge a lesser portion of the City's FASTER fund revenues over 3 years to pay off the bond, with Pueblo Urban Renewal Authority funds making up the balance needed to pay off the bonds. Proceeds from the bond refinancing would be used to fund the second phase of construction.

The preliminary phasing and funding plan are shown below (cost estimates are in 2009 dollars).

- Phase 1 - Construction of the south half of Platteville Boulevard/Dillon Drive, the new south ramps to I-25, bridge over I-25, removal of the existing south ramps at the Eden/I-25 Interchange, and improvements to the Frontage Road on the west side of I-25: $16.9 million, to be completed in 2013 and result in a fully functional interchange.
- Phase 2 - Construction of the remaining elements of the interchange, including the north half of Platteville Boulevard/Dillon Drive, the new ramp between Platteville Boulevard/ Dillon Drive and Eden on the east side of I-25, and the north half of the bridge: $5.6 million, to be completed in 2015.

3.0 Environmental Consequences

An important requirement of the I-25 and Dillon Drive/Eden-Platteville Boulevard Interchange EA process is to create an EA document that follows NEPA by concentrating on the issues that are truly relevant to the Action Alternative, rather than "amassing needless detail" (Title 40 of the *Code of Federal Regulations* Part 1500.1[b]).

The analysis presented in this chapter is organized to focus on important issues identified through the scoping process. Resources that helped shape the alternatives are analyzed first, as follow-on to the discussion of the project purpose and need and alternatives.

3.1 Transportation Resources

I-25 is the main north-south route through the study area. Currently there are only three regional routes to I-25 for the large area of Pueblo West: U.S. 50, Platteville Boulevard/ Dillon Drive, and Purcell Boulevard, as shown in Figure 3-1. U.S. 50 and Purcell Boulevard have direct interstate access, while regional traffic on Platteville Boulevard/ Dillon Drive is forced onto the local street network to access I-25 at the Eagleridge (approximately 1.2 miles south) or Eden (approximately 0.3 miles north) Interchanges. A two-way frontage road on the west side of I-25 provides access to these two interchanges, but both result in out-of-direction travel as traffic is forced onto local streets to access area businesses, increasing travel time. No transit or non motorized facilities are located in or near the study area.

Level of Service (LOS) is used to assess the movement of traffic as shown in Table 3-1. The existing system of interchanges and local streets accommodates existing traffic volumes (2008) and provides acceptable levels of service, as shown in Table 3-2.

Safety. The safety analysis conducted for this project indicates no existing safety problems that must be addressed by the Action Alternative. The Action Alternative would be designed in accordance with current design criteria of the City, CDOT and FHWA.

A detailed inventory of transportation conditions and local and regional traffic analyses are documented in *Traffic Operations and Safety Analysis* (Short Elliott Hendrickson, Inc., 2010) included in Appendix C.

3.1.1 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, the out-of-direction travel required to access I-25 from areas west of the interstate would continue and the inadequate regional roadway connections would remain.

Traffic operations at the Eden Interchange would operate acceptably in the future, even as traffic volumes increase from existing conditions.

FIGURE 3-1
Regional Roadway Network

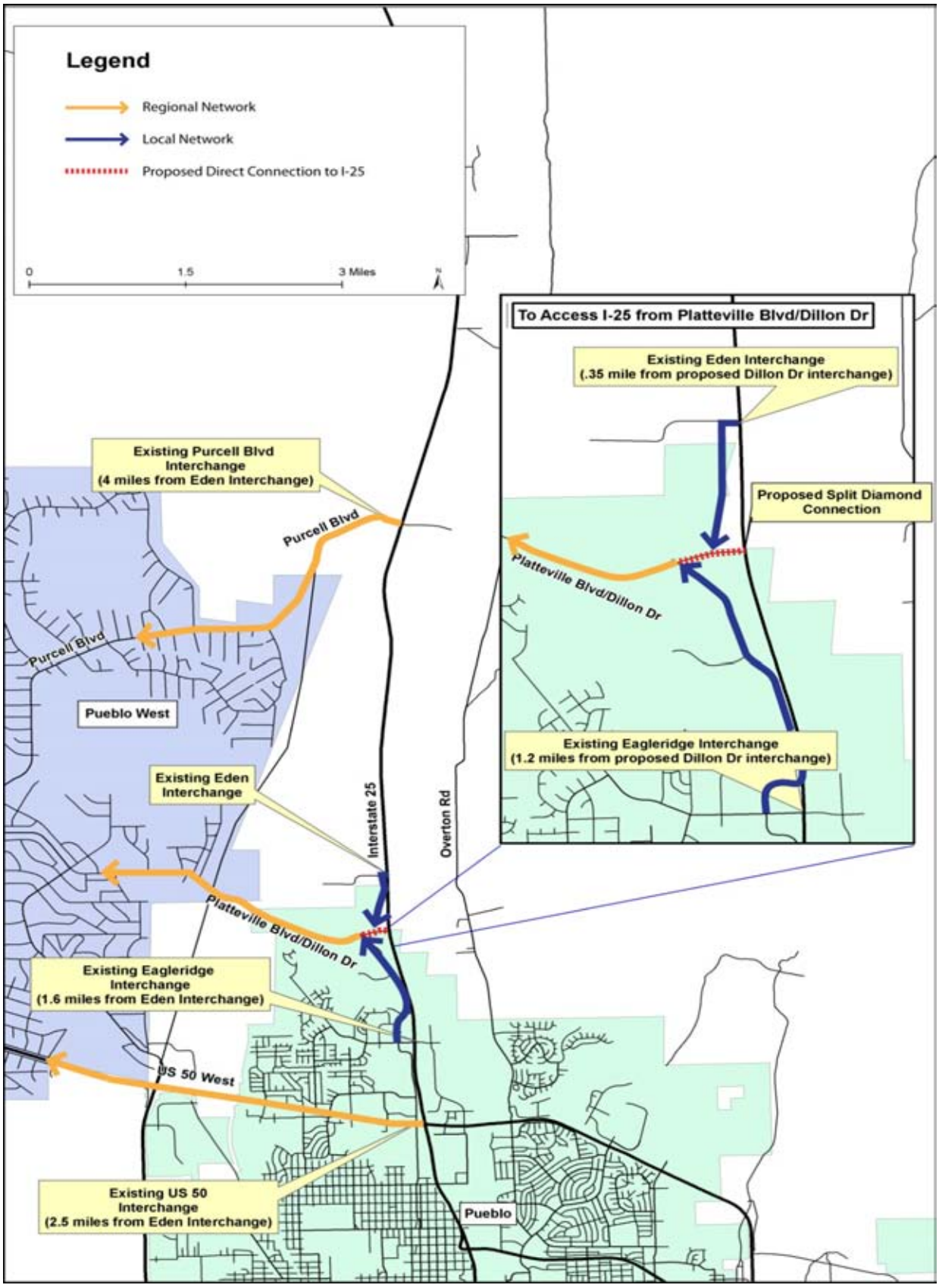


TABLE 3-1
LOS Definitions

LOS	Traffic Flow
A	Best operating condition considered free flow Drivers are unaffected by presence of others
B	Reasonably free-flowing conditions Some influence by other drivers
C	Constrained constant flow below speed limits Additional attention required by drivers to maintain safe operations Comfort levels of drivers decline noticeably
D	Approaching unstable flow High passing demand, limited passing capacity An unacceptable condition of arterial and collector roadways in the community
E	Unstable flow near capacity LOS E often changes to LOS F quickly because of disturbances in traffic flow
F	Worst conditions with heavily congested flow, traffic demand exceeding capacity Poor travel time, low comfort, convenience

TABLE 3-2
Traffic Operations

Location	Existing 2008	Implementation Year 2017		Design Year 2035	
	Existing	No Action	Action	No Action	Action
Eden Interchange					
Average Daily Traffic[1]	3,000	4,700	5,500	10,500	14,800
Level of Service[2]	A/B	A/B	A/B	A/D	A/D
Platteville Boulevard/Dillon Drive[3]					
Average Daily Traffic[1]	2,000	5,800	6,000	12,800	12,700
Level of Service[2]	A/A	A/B	A/B	A/C	A/C
Eagleridge Interchange					
Average Daily Traffic[1]	13,200	16,900	17,000	26,800	27,500
Level of Service[2]	A/B	A/C	A/C	B/F	A/F

Source: Short Elliott Hendrickson, Inc., 2010

Notes:
[1] Includes sum of average daily traffic on all four ramps
[2] Figures shown are the range of Level of Service at interchange ramp connections to I-25 and local streets (AM/PM)
[3] Includes average daily traffic Platteville Boulevard/Dillon Drive west of I-25

3.1.2 Environmental Consequences of the Action Alternative

Under the Action Alternative, the split diamond configuration would provide a direct connection to Platteville Boulevard/Dillon Drive and would eliminate both the out-of-direction travel in the area and the need for regional traffic to use the local road network. The Action Alternative would increase connectivity between the City of Pueblo, Pueblo West, and Pueblo County via I-25 and would improve overall access in the area.

Access to all businesses and properties would be maintained, although in some cases it would be modified slightly. Removal of the south ramps at the Eden Interchange would result in a minor increase in travel time for northbound drivers using the south ramps. Under the Action Alternative, drivers would travel approximately the same distance but on a frontage road rather than I-25, with one additional stop or yield sign. There would be no change for drivers using the north ramps at Eden. Businesses at the south end of the frontage road west of I-25 would benefit from a more direct connection to the interstate.

Traffic operations at the new interchange would operate acceptably in the future, even as traffic volumes increase from existing conditions. The Action Alternative would also result in a slight improvement in traffic operations at both the Eagleridge and Eden interchanges, but more importantly provide the needed direct connection to I-25.

Minor traffic disruptions would occur during construction.

3.1.3 Mitigation

Construction and other activities will be planned to minimize the impact to the traveling public and area residents and businesses. Any lane closures during construction will comply with CDOT's Lane Closure Strategy. Advance notice will be provided for extended lane closures. Detours will be identified by adequately signing to minimize out-of-direction travel.

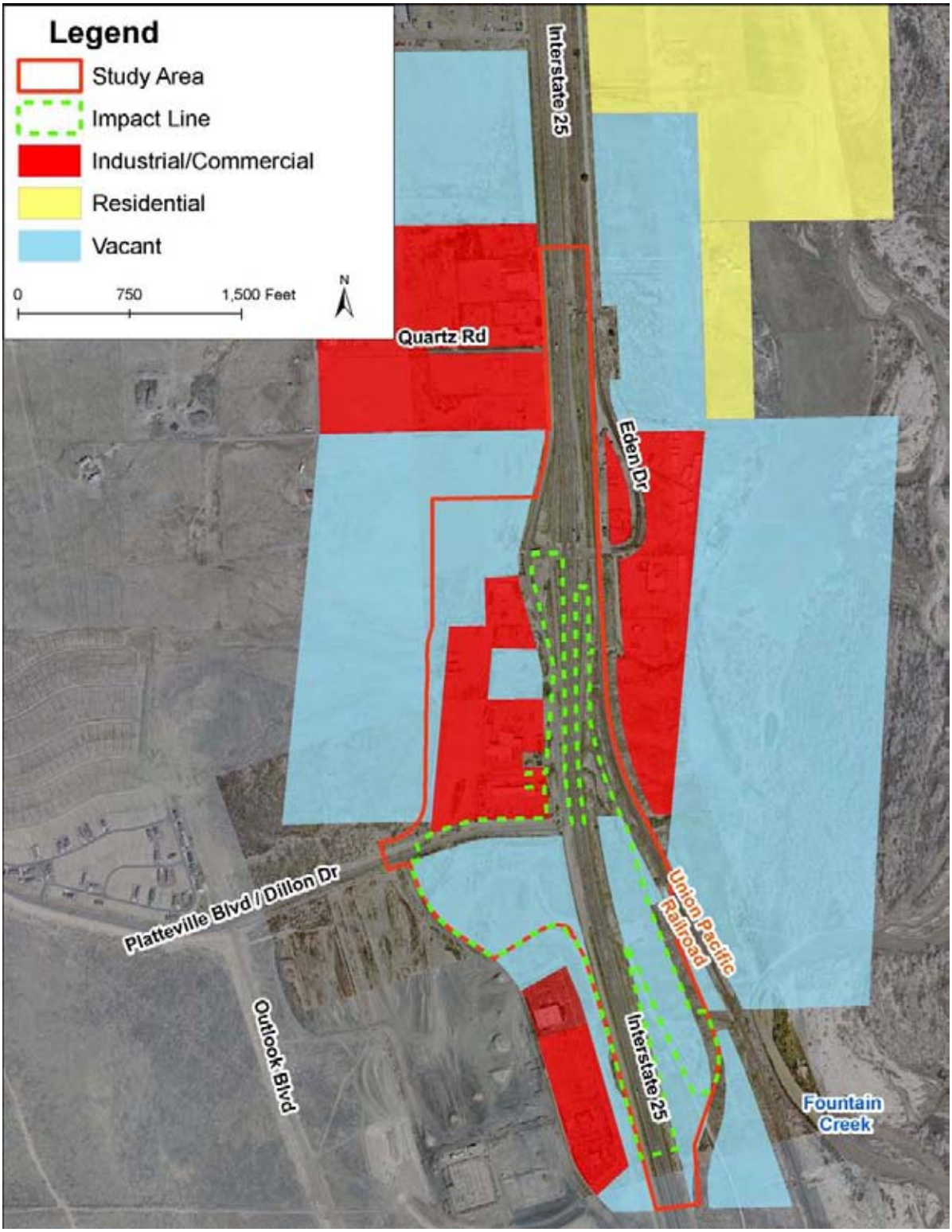
Existing interstate access to businesses west of I-25 is provided by the Eden Interchange to the north and the Eagleridge Interchange to the south. Both interchanges require motorists to use the local street network and frontage roads to reach businesses adjacent to Dillon Drive. Businesses immediately adjacent to the Eden Interchange have direct access to I-25 via the interchange's ramps.

3.2 Land Use

Current zoning in the study area is predominately light industrial and commercial, as shown in Figure 3-2 (Pueblo County, 2010). Pueblo Crossing, a new retail center with big box anchor stores, is located south of Dillon Drive west of I-25. West of I-25 are equipment rental, construction, or construction supply businesses. East of the interstate are businesses that sell propane, a modular home manufacturer and a trucking company. The nearest residential areas are along Platteville Boulevard, approximately ½ mile west of the study area, and a very low density residential area northeast of the Eden Interchange.

The study area is located in a developing area where land use along I-25 is currently evolving to more commercial purposes. The *Pueblo Regional Development Plan: Pueblo Comprehensive Plan* shows future land use around the study area on both sides of the interstate as being "Arterial Commercial Mixed Use." Both the *Comprehensive Plan* and the *Pueblo Regional Transportation Plan* identify the Platteville Boulevard/Dillon Drive Interchange as being needed to accommodate anticipated future growth.

FIGURE 3-2
Land Use



3.2.1 Environmental Consequences of the No Action Alternative

The No Action Alternative does not accommodate the planned growth and development in the study area. This alternative would be inconsistent with the land use plans and many of the primary goals relevant to the study area. While land use likely would evolve to more commercial purposes given the City's growth patterns, the pace of change may be slower than under the Action Alternative because of the lack of direct interstate access.

3.2.2 Environmental Consequences of the Action Alternative

The Action Alternative would result in the direct conversion of approximately 8.4 acres of currently undeveloped land to transportation uses. The Action Alternative would be consistent with the adopted land use plans by providing regional connectivity to I-25 to accommodate the existing and planned development in the area. No businesses would be relocated and no zoning changes would be required.

Temporary impacts during construction would include the removal and transport of fill material from the borrow areas south of Platteville Boulevard/Dillon Drive along both sides of I-25. Approximately 16.1 acres of temporary easement would be required during construction.

3.2.3 Mitigation

No mitigation would be required.

3.3 Right-of-way

The study area includes a mix of private property and city- and state-owned right–of-way. The City of Pueblo owns right-of-way along Platteville Boulevard/Dillon Drive and along Eden. CDOT owns the right-of-way corridor along I-25 including the frontage road west of I-25. Private property surrounds the city- and state-owned right-of-way (Pueblo County, 2010).

3.3.1 Environmental Consequences of the No Action Alternative

Under the No Action Alternative, no privately or publicly owned property would be acquired.

3.3.2 Environmental Consequences of the Action Alternative

Under the Action Alternative, property would be required from one privately owned parcel as shown on Table 3-3 and Figure 3-3. The parcel is currently undeveloped and located south of Dillon Drive along both sides of I-25. Full acquisitions would not be required. No new right-of-way would be required north of Dillon Drive. A temporary construction easement would be required to realign the access to Drury Brother Roofing from the frontage road. No right-of-way would be required from this property.

TABLE 3-3
Right-of-way

Parcel	Acquired Right-of-Way
501000045	8.4 acres

FIGURE 3-3
Right-of-Way Acquisition

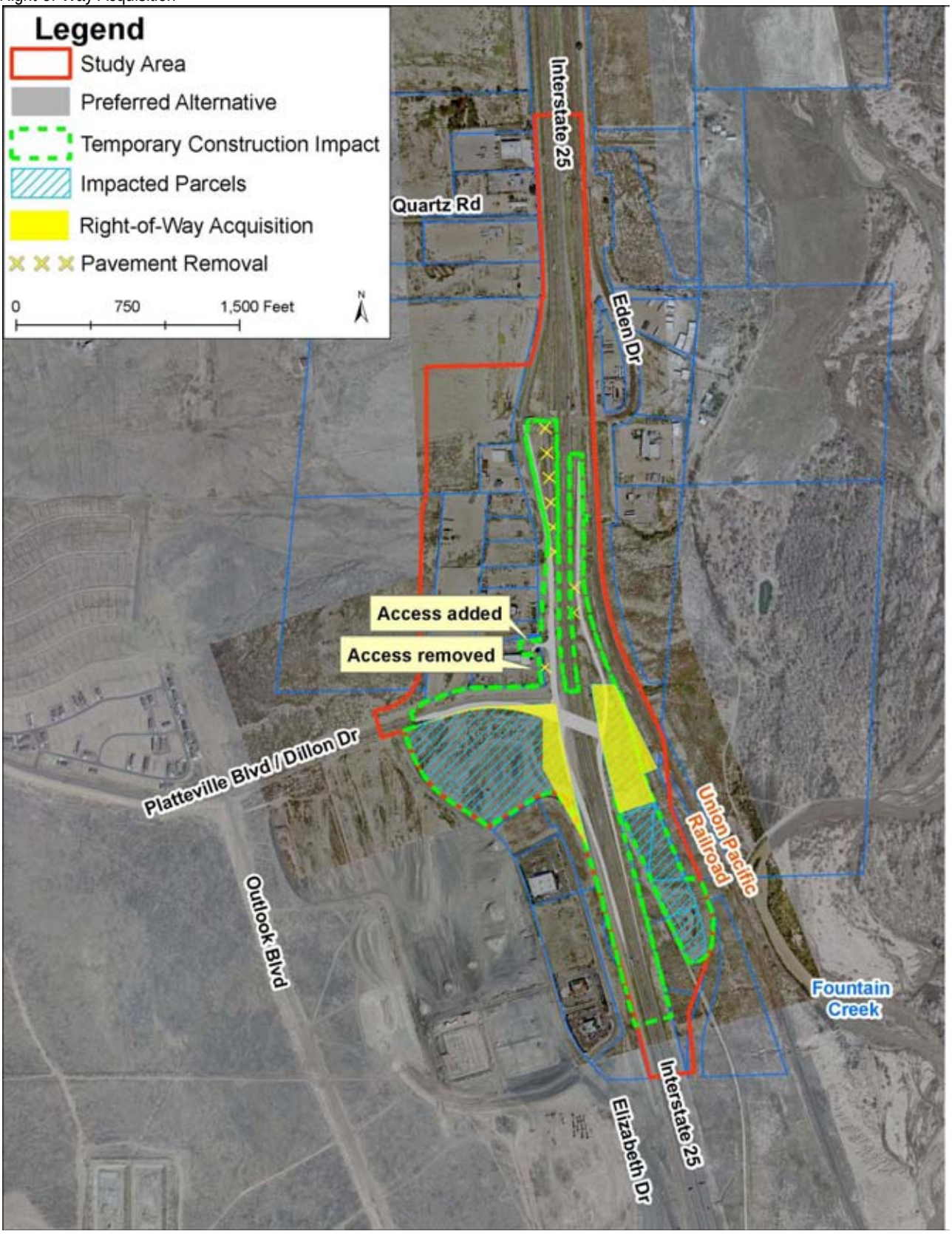
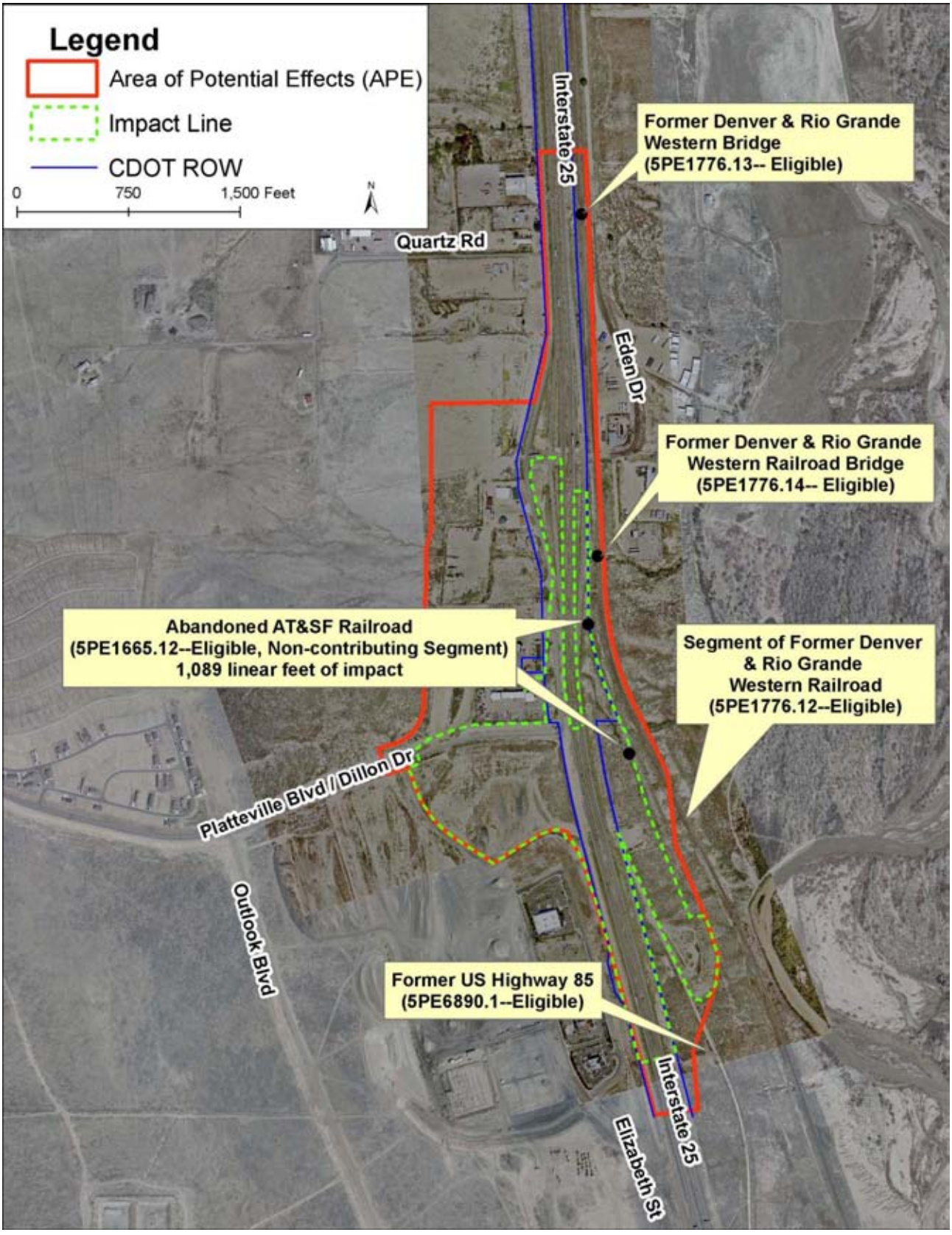


FIGURE 3-4
Cultural Resources



3.3.3 Mitigation

Right-of-way acquisitions will be determined during final design. Impacts to properties will be further minimized whenever feasible during final design. All property acquisition and relocation shall comply fully with federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

3.4 Historic Properties and Native American Consultation

Under Section 106 of the National Historic Preservation Act (36 CFR Part 800), Federal agencies are required to evaluate the effects of their undertakings on historic properties. Section 106 is a procedural law that involves identifying historic properties, evaluating effects to historic properties, and mitigating adverse effects to properties. In compliance with Section 106, a cultural resource field survey of the study area was completed in December 2008.

Five historic properties were identified within the area of potential effect (APE), including three linear resources and two railroad bridges. These include a segment of the former US Highway 85, the former Denver & Rio Grande Western Railroad (currently Union Pacific), and a segment of the abandoned Atchison, Topeka, and Santa Fe (AT&SF) railroad. There are also two railroad bridges associated with the Denver & Rio Grande Western as shown in Figure 3-4. All five resources were determined eligible for the National Register of Historic Places (NRHP).

No NRHP-eligible archaeological resources were identified within the study area.

FHWA contacted six federally recognized tribes with an established interest in Pueblo County, and provided them the opportunity to participate in the project as consulting tribes under Section 106 of the National Historic Preservation Act. None of the tribes elected to reply. Therefore, FHWA has fulfilled its obligations for tribal consultation under federal law and no further actions in this regard are necessary. No responses were received. A complete copy of the correspondence is included in Appendix C.

3.4.1 Environmental Consequences of the No Action Alternative

The No Action Alternative includes maintenance and safety repairs to the local roadway network and I-25. Based on this, there are no effects to historic properties.

3.4.2 Environmental Consequences of the Action Alternative

Under the Action Alternative, the proposed roadway improvements would impact a 1,089-foot segment of the AT&SF Railway located within the APE. The SHPO concurred with FHWA/CDOT's determination that the segment of the AT&SF railway does not support the overall eligibility of the entire linear resource. Based on the SHPO concurrence with the determination of No Adverse Effect on March 8, 2010, a *de minimis* Section 4(f) finding was signed by FHWA on April 8, 2010. The City of Pueblo Historic Preservation Commission was also afforded an opportunity to review the project but had no comments. Correspondence with the SHPO, the consulting parties, and a copy of the cultural resources survey are included in Appendix C. The Action Alternative would not impact the former U.S. Highway 85.

3.4.3 Mitigation

In the event that new cultural deposits are discovered during construction, the City will follow CDOT's standard practice of ceasing work, consulting with the CDOT archaeologist, and evaluating materials in consultation with the SHPO to determine if mitigation is required.

3.5 Visual

The study area is characterized by intermittent urban development, including a mix of commercial and retail land uses. The topography of the study area is relatively flat, with little variation as the terrain gently slopes downward to Fountain Creek. The viewshed from I-25 currently consists of mature deciduous trees that line the banks of Fountain Creek, blocking views of the creek. The highway is the prominent feature in the study area because of the flat topography and lack of vegetation. Additionally, soil disturbance and excess fill from construction projects are visible throughout the study area. In general, the overall level of visual quality of the study area is low, per FHWA qualifications described in the *Visual Impact Assessment for Highway Projects* (FHWA, 1988).

3.5.1 Environmental Consequences of the No Action Alternative

Since no construction activities would occur, no visual impacts are expected under the No Action Alternative.

3.5.2 Environmental Consequences of the Action Alternative

The Action Alternative would introduce a new bridge over I-25 at Platteville Boulevard/Dillon Drive and new on- and off-ramps to I-25 south of that bridge. The roadway network would become a more prominent feature of the landscape. The addition of the bridge over the interstate would not block views of the trees surrounding Fountain Creek, so vividness would remain unchanged from the existing conditions. The bridge could serve as a unifying visual element between the landscapes west and east of I-25. The removal of the ramps at Eden would be offset by the construction of the one-way frontage road. Visual impacts would not be perceptible as a result of this change. Overall, the project would not change the visual quality of the area and there would be no impact to visual resources.

3.5.3 Mitigation

Aesthetic elements will be incorporated during final design, including landscaping and architectural or aesthetic treatments for the bridge.

3.6 Water Quality and Resources

The study area is located in the West Fountain Creek Major Basin. Fountain Creek has been found to have no total maximum daily load requirements or other impairments according to both the U.S. Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE). Runoff flows toward I-25 from the west pass under the interstate through a series of culverts and eventually flows into Fountain Creek. Several of these culverts have become clogged with sediment and debris, resulting in periodic flooding along I-25. In addition, a retention basin west of the Drury Brothers Roofing Company frequently fills with sediment, resulting in flooding in the parking and equipment storage areas of the property. No specific water quality concerns exist at the Eden Interchange aside from periodic flooding along I-25 due to the clogged culverts.

The study area is included under CDOT's Municipal Separate Storm Sewer System (MS4), which includes stormwater discharges along I-25. Stormwater discharges outside of CDOT right-of-way are regulated under the City of Pueblo's MS4 program.

Additional information about the water quality and drainage patterns in the study area is included in the *Drainage Report* Short Elliott Hendrickson, Inc., 2009) in Appendix C.

3.6.1 Environmental Consequences of the No Action Alternative

The No Action Alternative would not construct any additional impervious surface or cause additional stormwater runoff. This alternative also would not address current flooding that occurs along I-25 and at Drury Brother Roofing Company.

3.6.2 Environmental Consequences of the Action Alternative

The Action Alternative would result in a one percent increase (approximately 4 acres) in the impervious surface in the study area and provide 100 percent of the water quality capture volume required for impervious surfaces in order to meet the post-construction requirements of the Colorado Discharge Permit System. The proposed roadway improvements would include two roadway inlets on Dillon Drive at the low point with an associated storm sewer, improved drainage at the Drury Brothers Roofing property, one water quality pond, roadside ditches, and driveway culverts. The proposed drainage modifications effectively maintain historic drainage patterns and improve the existing water quality in the study area by capturing and treating water that is not being captured today.

During construction, soil-disturbing activities would expose surfaces subject to erosion. Although construction activities also have the potential to release water contaminants, the use of construction BMP's would prevent the contaminants from reaching Fountain Creek.

3.6.3 Mitigation

Permanent water quality treatment features including a sediment basin, water quality control pond, and the use of grass swales will be included in the final design to filter roadway runoff associated with the Action Alternative and improve water quality for receiving waters. A stormwater management plan will be developed and implemented during construction. During construction, the project will adhere to the January 2009 Water Quality Consent Decree issued by the CDPHE to CDOT. A detailed summary of mitigation measures is included in Appendix B.

3.7 Hazardous Materials

The study area contains a mix of light industrial, commercial, and vacant land uses. A database search of the study area identified one Leaking Underground Storage Site (LUST) that was determined to be a recognized environmental condition (RECs). Cleanup at the site, located west of I-25 and north of Dillon Drive, was completed in 1999.

The analysis of potential RECs included a database search, regulatory agency files, historical information, and a site reconnaissance. Additional information is included in the *Hazardous Materials Phase I Environmental Site Assessment* (Pinyon, 2010) included in Appendix C.

3.7.1 Environmental Consequences of the No Action Alternative

Since no construction activities would occur, the No Action Alternative would have no effects on known RECs.

3.7.2 Environmental Consequences of the Action Alternative

The Action Alternative could potentially encounter contaminated soils or water through construction near a former LUST site. It is unlikely that the installation of curb and gutter, sidewalks, electric conduits, or roadway pavement would encounter impacted soil or groundwater as the soil disturbance for these activities would be limited to the upper foot of soil.

3.7.3 Mitigation

Based on the results of the Modified Phase 1 Environmental Site Assessment (ESA), mitigation measures will not be required for the ramp removal at the Eden Interchange, nor for any other roadway or utility construction aside from those protective measures listed below. A full Phase I (ESA) will be completed before property acquisition. Phase II ESAs will be required to characterize, manage, and remediate contaminated properties identified in the Phase I ESA. Protective measures will be taken before, during, and after roadway construction to minimize the risk of encountering petroleum products and petroleum-contaminated soils. During construction, the project will follow the CDOT 250 Specification from the Colorado Highway Specifications manual. A detailed list of additional mitigation measures is included in Appendix B.

3.8 Cumulative Impact Analysis

Cumulative impacts result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. A key component of the analysis is the discussion of past, present, and reasonably foreseeable future actions that incrementally impact resources affected by the Action Alternative. The time frame established for the analysis extends from the 1960s (when Pueblo's steel industry developed) to 2035 (date of PACOG current planning document).

Cumulative impacts analysis focuses on specific resources that are directly or indirectly affected by the Action Alternative. If the Action Alternative has no direct or indirect effect on a resource, then it would not contribute to cumulative effects on that resource, regardless of the effects of other past, present, or future projects. In this case, the Action Alternative has minor positive or adverse effects to the following resources, and cumulative effects to these resources would be assessed:

- Transportation
- Land Use
- Water Quality
- Global Climate Change

3.8.1 Past, Present, and Future Actions

Pueblo was incorporated in the late 1800s and has since that time been a business and trade center for southeastern Colorado. Population and employment growth have been sporadic, rising and declining in response to manufacturing and industrial development. A boom occurred in the 1950s and 1960s, as Pueblo became a center for steel production in the west. With the decline of the steel market, Pueblo was forced to diversify, and by the 1980s, services, retail, and wholesale businesses began to replace manufacturing and government employment. More recently, large construction projects and the expansion of regional medical facilities have provided area employment (University of Colorado, 2010).

Up until the 1970s, nearly all (82 percent) of Pueblo's population lived and worked in the city. By the 1980s, this pattern began to shift, with more of the County's population commuting outside the county for work, and new housing and retail developments occurring outside the city center. Today, approximately one-third of Pueblo County's workforce commutes outside the county for work; 10 percent of the population commutes to El Paso County. Although downtown Pueblo has received investment in redevelopment projects, the city continues to experience a population shift away from the city center to emerging population centers, including Pueblo West. The Pueblo Area Council of Government projects that by 2030, only 62 percent of the county's total

population would reside in the city and that two-thirds of all housing development would occur outside the city (Pueblo Area Council of Governments, 2002).

Table 3-4 lists relevant past, present, and future projects in the Pueblo area that could, along with the Action Alternative, contribute to cumulative environmental or social effects. The list reflects the expected development trends associated with population and employment shifts outside of the city center. It was compiled by CDOT along with local stakeholders, including the City of Pueblo, as part of a larger review of potential improvements to the I-25 corridor through Pueblo.

TABLE 3-4
Past, Present, and Future Projects in the Study Area

Transportation Projects		
Elizabeth Street Extension	Past	Extend Elizabeth Street from Eagleridge Blvd. to Dillon Drive
I-25/US 50/SH 47 Interchange	Past	Interchange improvements in 2002 to US 50/SH 47, includes extension of Dillon Drive, improvements to Eagleridge, Gateway, 29th Street Interchanges; improved stormwater conveyance
SH 47 Extension	Past	Regional connection for northeastern Pueblo. Construction of SH 47 from I-25 to Bonforte 1971; Bonforte to US 50/SH 96 1979; US 50/SH 96/ SH 47 Interchange 1982
SH 96	Past	Re-routed south in 1971 to accommodate Pueblo Reservoir
Pueblo Transit Center	Past	Transportation hub constructed in downtown Pueblo in 2004
US 50B	Past	Construction of US 50 expressway bypass
4th Street Bridge Replacement	Present	Safety improvements and replacement of existing bridge, expected in 2011
Defense Access Roads (DAR) to Chemical Agent Destruction Pilot Plant	Present	Widening and overlay of existing facilities, construction of new roadway to complete DAR, expected in 2011
Platteville Blvd. Extension	Present	Extend Platteville from Pueblo Boulevard to Eden Interchange
Dillon Drive Extension	Future	Extend Dillon Drive from the new interchange south to Eagleridge Blvd.
US 50 West Congestion Relief	Future	Expansion of US 50 from 4 lanes to 6 lanes between Morris Avenue and Baltimore Avenue, expected in 2013
I-25 “The New Pueblo Freeway” Reconstruction	Future	Reconstruct 7 miles of I-25 from Pueblo Boulevard north to US 50, including improvements to the interstate, 11 interchanges, bridges, stormwater drainage, and other features
Other Projects		
Pueblo Crossing Shopping Center	Past, Present, Future	Construction in and southwest of study area starting in 2008, of major retail center
Pueblo HARP	Past, Present, Future	Urban renewal project consisting of commercial and residential along the historic location of the Arkansas River; Construction began 1996. Recent project includes redevelopment of historic Ice House warehouse

TABLE 3-4
Past, Present, and Future Projects in the Study Area

Pueblo West	Past, Present, Future	Establishment of the unincorporated community of Pueblo West in 1969; development and expansion of community (current population of about 32,000)
Southern Colorado State College (today Colorado State University-Pueblo)	Past, Present	College relocated from its Orman campus downtown to its current campus at SH 47 and Bonforte; 275 acres, 5,000 students currently; Crestone residence hall constructed 2009 (253 student capacity); Greenhorn and Culebra residence halls to open Fall 2010 (500 student capacity)
Eagleridge Shopping Center	Past	Original construction in 1997 of regional shopping center at the Eagleridge/I-25 Interchange
Fountain Creek Channelization	Past	Project to narrow Fountain Creek floodplain
Pueblo Mall	Past	Original construction in 1976 of 561,000 sq ft of enclosed retail
Pueblo Memorial Airport	Past	Pueblo Army Air Base becomes City-owned for commercial flights
Saint Mary-Corwin Medical Center	Past	250,000 sf expansion of the Saint Mary-Corwin Medical Center in 2008
GCC (Grupo Cementos de Chihuahua) Cement Plant	Present	New cement plant located eight miles south of Pueblo is the second-largest producer of cement in Colorado.
Parkview Medical Center	Present	92,000 sf expansion of the Parkview Medical Center
Pueblo Chemical Agent Destruction Pilot Plant	Present	Construction in 2010 of facility to destroy the chemical weapons stockpile currently in storage at the US Army Pueblo Chemical Depot
Vestas Towers	Present	Construction in 2010 of 600,000 sq ft facility for the production of wind energy towers; administrative offices open with production workers to be added by end of 2010 (employs 400-500)
North Vista	Future	New 1,200 acre mixed-use development near Colorado State University-Pueblo
North Vista Annexation	Future	1,178-acre planned mixed use development adjacent to the Walking Stick Golf Course north of the Colorado State University Pueblo campus
Pueblo Springs Ranch Annexation	Future	24,000 acre planned community of approximately 70,000 homes at the north end of Pueblo (annexation application in process)
Seranto	Future	New 1,100 acre mixed-use development north of Pueblo
South Pointe	Future	New 1,800 acre planned mixed use development (20 to 30 year build out) south of SH 45 on the west side of I-25

Source: University of Colorado, 2010; CDOT, 2010

3.8.2 Cumulative Impacts Assessment

The Action Alternative has minor positive or adverse impacts to the following resources.

Transportation

Regional growth – particularly in Pueblo West and the commercial areas along I-25 north of US 50 described in Chapter 1 and Section 3.2 – has led to the need for improvements to the regional transportation system. Growth patterns are expected to heighten the need to improve the regional transportation network, as unincorporated and undeveloped areas become developed. The Action Alternative would benefit the

regional connections, meeting a need for east-west mobility through the city and providing alternative access to the emerging areas west of I-25.

Other planned transportation projects also would contribute to a better functioning transportation network. Of the actions listed in Table 3-4, several past projects directly improved travel in the study area, including the extension of Elizabeth Street, improvements to the interchange at I-25/US 50/SH 47, and the extension of SH 47. Future projects that would directly benefit travel in the study area include the extensions of Dillon Drive to the south and Platteville Boulevard to the west.

Other planned land use developments would add to traffic volumes and pressure the transportation network, and could overload areas of the network if development occurs ahead of transportation improvements. The Action Alternative would not contribute to these pressures, however.

Land Use

The Action Alternative is consistent with and supports future land uses in the study area and larger region. Of the actions listed in Table 3-4, several past projects directly affected land use in the study area, including the development of Pueblo West, and construction of the Pueblo Crossing and Eagleridge shopping centers. Future projects that would directly affect land use in the study area include the continued development of Pueblo Crossing and Pueblo Springs Ranch Annexation, which could increase traffic north of the city. These projects would convert currently undeveloped land to residential and commercial uses.

By providing another east-west access, the new interchange would complement planned development and support the larger land use policies and goals of the region to promote interconnectivity, minimize traffic congestion, and integrate land use and transportation.

Water Quality

The Action Alternative would result in increased impervious surface in the study area. Impervious surfaces can collect contaminants—such as petroleum products—and sediment which can be carried into surface waters during storm events.

Past development in the area has resulted in an increase in impervious surface. Some of this development occurred prior to the establishment of current water quality control requirements and may have increased the presence of pollutants and sediment in area surface waters following storm events unless proper water quality control measures were implemented.

The Action Alternative includes water quality treatment ponds to collect stormwater runoff and treat it before discharging it into area waterways. The project includes treatment for both the new impervious surface and for the existing pavement within the drainage area. As such, the Action Alternative would result in a net decrease in contaminants entering surface water. Other planned transportation and other developments also would be required to provide water quality treatment for new development. Therefore, although planned developments would likely increase the amount of impervious surface area in the region, they would include water quality treatment to reduce the impacts on water quality, resulting in no adverse cumulative impact to water quality and perhaps some benefit.

Global Climate Change

The issue of global climate change is an important national and global concern that is being addressed in several ways by the federal government. The transportation sector is the second largest source of total

greenhouse gases (GHGs) in the U.S. and the greatest source of carbon dioxide (CO_2) emissions—the predominant GHG. In 2004, the transportation sector was responsible for 31 percent of all U.S. CO_2 emissions. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (98 percent) of transportation-sector emissions result from the consumption of petroleum products such as gasoline, diesel fuel, and aviation fuel.

Recognizing this concern, FHWA is working nationally with other modal administrations through the U.S. Department of Transportation Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases—particularly CO_2 emissions—and to assess the risks to transportation systems and services from climate changes.

At the state level, there are also several programs underway in Colorado to address transportation GHGs. The Governor's *Climate Action Plan*, adopted in November 2007, includes measures to adopt vehicle CO_2 emissions standards and to reduce vehicle travel through transit, flex time, telecommuting, ridesharing, and broadband communications. CDOT issued a Policy Directive on Air Quality in May 2009. This policy directive was developed with input from a number of agencies, including the CDPHE, the EPA, the FHWA, the Federal Transit Administration, the Denver Regional Transportation District, and the Denver Regional Air Quality Council. This policy directive addresses unregulated mobile source air toxics (MSATs) and GHGs produced from Colorado's state highways, interstates, and construction activities.

As a part of CDOT's commitment to addressing MSATs and GHGs, some of CDOT's program-wide activities include the following:

1. Developing truck routes/restrictions with the goal of limiting truck traffic in proximity to facilities, including schools, with sensitive receptor populations
2. Continue researching pavement durability opportunities with the goal of reducing the frequency of resurfacing and reconstruction projects
3. Developing air quality educational materials, specific to transportation issues, for citizens, elected officials, and schools
4. Offering outreach to communities to integrate land use and transportation decisions to reduce growth in vehicle miles traveled (VMT), such as smart growth techniques, buffer zones, transit-oriented development, walkable communities, and access management plans
5. Committing to research additional concrete additives that would reduce the demand for cement
6. Expanding transportation demand management efforts statewide to better use the existing transportation mobility network
7. Continuing to diversify the CDOT fleet by retrofitting diesel vehicles, specifying the types of vehicles and equipment contractors may use, purchasing low-emission vehicles such as hybrids, and purchasing cleaner burning fuels through bidding incentives where feasible, likely using incentivizing as a vehicle
8. Exploring congestion and right-lane only restrictions for motor carriers

TABLE 3-5
Projected Highway Emissions

Global CO_2 emissions, 2005, million metric tons (MMT)[1]	Colorado highway CO_2 emissions, 2005, MMT[2]	Projected Colorado 2035 highway CO_2 emissions, MMT[2]	Colorado highway emissions, percent of global total (2005)[2]	Project corridor VMT, percent of statewide VMT (2005)
27,700	29.9	31.3	0.108 percent	0.002 percent

Notes:
[1] EIA, International Energy Outlook 2007
[2] Calculated by FHWA Resource Center

9. Funding truck parking electrification (note: mostly via exploring external grant opportunities)
10. Researching additional ways to improve freight movement and efficiency statewide
11. Committing to incorporating ultra-low sulfur diesel for non-road equipment statewide before June 2010, likely using incentives during bidding
12. Developing a low-volatile-organic-compound emitting tree landscaping specification

Because climate change is a global issue and the emissions changes due to project and the emissions changes due to project alternatives are very small compared to global totals, the GHG emissions associated with the alternatives were not calculated. Because GHGs are directly related to energy use, the changes in GHG emissions would be similar to the changes in energy consumption. The relationship of current and projected Colorado highway emissions to total global CO_2 emissions is presented in Table 3-5. Colorado highway emissions are expected to increase by 4.7 percent between now and 2035. The benefits of the fuel economy and renewable fuels programs in the 2007 Energy Bill are offset by growth in VMT; the draft 2035 statewide transportation plan predicts that Colorado VMT would double between 2000 and 2035. This table also illustrates the size of the project corridor relative to total Colorado travel activity (see Table 3-5).

3.9 Other Resources

After consideration of data obtained from literature and field reviews, the following resources are not evaluated in detail in this EA because they either are not present in the study area, would not be affected by the Action Alternative, or would experience negligible impacts: wetlands, vegetation and noxious weeds, wildlife and threatened and endangered species, air quality, farmlands and soils, socioeconomics, environmental justice, floodplains, noise, and utilities. A brief background on these resources is included in the following paragraphs.

3.9.1 Wetlands

A field review of the study area was conducted in November 2008, which identified three water features: a stormwater retention basin and two ephemeral drainages. The retention basin is located west of I-25 and south of Dillon Drive and receives surface runoff from the commercial development located southeast of the study area. The ephemeral drainages are located east of I-25 and are severely eroded. The soils have been highly eroded and lack hydrophytic features and the vegetation consisted of mostly invasive and non-wetland species. None of the water features met the wetland criteria based on an analysis of the soils, hydrology, and vegetation.

Coordination with the U.S. Army Corps of Engineers (USACE) confirmed that no jurisdictional wetlands or waters of the U.S are present in the study area. Additional information is included in the *Wetlands and Waters of the U.S. Technical Memorandum* (Pinyon, 2009b) in Appendix C.

3.9.2 Vegetation and Noxious Weeds

A field review of the study area was conducted in November 2008. A short grass prairie community was identified east of I-25 and included a mixture of both native and nonnative species. A site visit by a qualified botanist during the flowering period for the five rare plants species (as identified in the CDOT Short Grass Prairie Initiative http://environment.fhwa.dot.gov/strmlng/comoa.asp) shall be performed prior to construction to confirm that rare plants are not located in the project area. The remainder of the study area consists of disturbed vegetation dominated by nonnative species and bare soil. Noxious weeds occur throughout the study area, but are primarily located west of I-25 where urban development has disturbed the soil surface. Additional information is included in the *Vegetation and Noxious Weeds Technical Memorandum* (Pinyon, 2009a) in Appendix C. Natural vegetation and noxious weeds would be disturbed during construction of the Action Alternative. The City will develop and implement a noxious weeds management plan during construction to reduce the introduction and spread of noxious weeds in and near the project area. Specific mitigation measures are included in Appendix B.

3.9.3 Wildlife and Threatened and Endangered Species

A field review of the study area was conducted in November 2008. The study area is within a developed environment and has been fragmented by existing roads. What little habitat that remains in the study area is degraded and of low quality. Common wildlife species found in developed environments include coyote, red fox, raccoon, black-tailed prairie dog, mule deer, white-tailed deer, and jackrabbit. Additional information is included in the *Wildlife and Threatened and Endangered Species Technical Memorandum* (Pinyon, 2009c) in Appendix C.

Federally threatened, endangered, or candidate species, state threatened and endangered species, and state species of special concern are either not present or are unlikely to occur in the study area. Limited habitat for the federally listed and majority of the state-listed species exists within the study area. Species with the highest potential to occur in the study area include the black-tailed prairie dog and the burrowing owl. Although neither species was observed in the study area, a prairie dog colony was observed adjacent to the southern project boundary, east of I-25, and may provide potential habitat for the burrowing owl.

Impacts to wildlife during construction would be limited to habitat loss as a result of vegetation removal. A preconstruction survey for migratory birds and prairie dogs will be conducted by a project biologist. If prairie dogs or burrowing owls are found in the study area, CDOT's Black Tailed Prairie Dog Policy will be implemented and the Colorado Division of Wildlife burrowing owl protocols will be followed.

3.9.4 Air Quality

The Action Alternative would not result in long-term or permanent adverse effects to air quality. The project is included in PACOG's *2035 Long Range Transportation Plan* (PACOG 2008b) and the first phase of the project is included in the *2008-2013 Transportation Improvement Program* (PACOG 2008a).

The purpose of the project is to provide regional connectivity to I-25 by constructing a split diamond interchange. This project has not been linked with any special MSAT

concerns. As discussed in Section 3.1, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the No Action Alternative.

Moreover, EPA regulations for vehicle engines and fuels would cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with the EPA's MOBILE 6.2 model forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSAT from 1999 to 2050 while VMT is projected to increase by 145 percent (FHWA, 2009). This would both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Air pollutants would increase temporarily during construction as a result of the operation of heavy equipment and lower traffic speed, earth excavation, and paving activities. These impacts will be addressed by the implementation of best management practices (BMPs) during construction.

3.9.5 Geology and Soils

Review by a CDOT staff paleontologist did not reveal the presence of any paleontological resources in the study area. The CDOT Paleontology clearance letter is included in Appendix C.

The Natural Resources Conservation Service (NRCS) map of Pueblo County indicates the study area is not located in an area of prime or unique farmlands of either statewide or national importance (NRCS, 1979).

3.9.6 Socioeconomics

The Action Alternative would not negatively affect the population, employment, and community resources in the area. Improved access in the area would likely lead to faster growth for area businesses. The project area is mostly vacant land and includes several commercial uses west of I-25. The Action Alternative would not result in the relocation of any businesses, and there are no residences within the study area. There are no schools, churches, hospitals, police, or fire stations within 1 mile of the study area. In addition, no parks or recreational facilities exist in the study area.

To avoid disruption during construction, the City will provide advance notice to emergency service providers, the community, and residents regarding road delays, access, and special construction activities. Access to all properties will be maintained. The project would result in temporary impacts to the overall community from increased dust, dirt, noise, traffic, and access disruptions during the construction process. These impacts would be short term and will be mitigated with BMPs for construction such as limiting work to daytime hours, covering trucks when transporting materials, and providing the community with advanced notification for activities that are likely to result in traffic disruptions.

3.9.7 Environmental Justice

Impacts associated with the Action Alternative would be distributed across the community and would not result in disproportionately high and adverse impacts to minority or low-income populations. There would be no displacement of minority or low-income residents, businesses, or employees.

Minority and low income populations were identified using Census 2000 data at the block group level and compared to the City of Pueblo and Pueblo County. The block group captures the complete study area and the surrounding neighborhoods within northern Pueblo. Approximately 23 percent of the block group is composed of a minority population, which is comparable to the City of Pueblo at 24 percent and slightly higher

than Pueblo County at 21 percent. The percentage of low-income households (20 percent) is considerably lower than both the City of Pueblo (43 percent) and Pueblo County (37 percent) (Census, 2000).

3.9.8 Floodplains

A review of Federal Emergency Management Agency (FEMA) floodplain mapping indicated that the study area is located outside the 100-year floodplain of Fountain Creek and would not cross any other floodplains (FEMA, 1989). A copy of the FEMA map is included in Appendix C.

3.9.9 Noise

The study area includes a combination of commercial uses and undeveloped land and does not contain any noise sensitive locations such as residences, schools, or churches. Although noise levels are currently at or above the impact threshold at several of the commercial properties, with levels expected to increase slightly (up to 3 dBA) in the future, noise barriers were not evaluated because area businesses expressed their desire to maintain their visibility from the interstate. Noise contours were developed to aid in future land use planning and are contained in the *Dillon Drive Noise Analysis* (CH2M HILL, 2010) in Appendix C.

Noise levels may be increased during construction, and will be mitigated by using well maintained equipment, including muffler systems.

3.9.10 Utilities

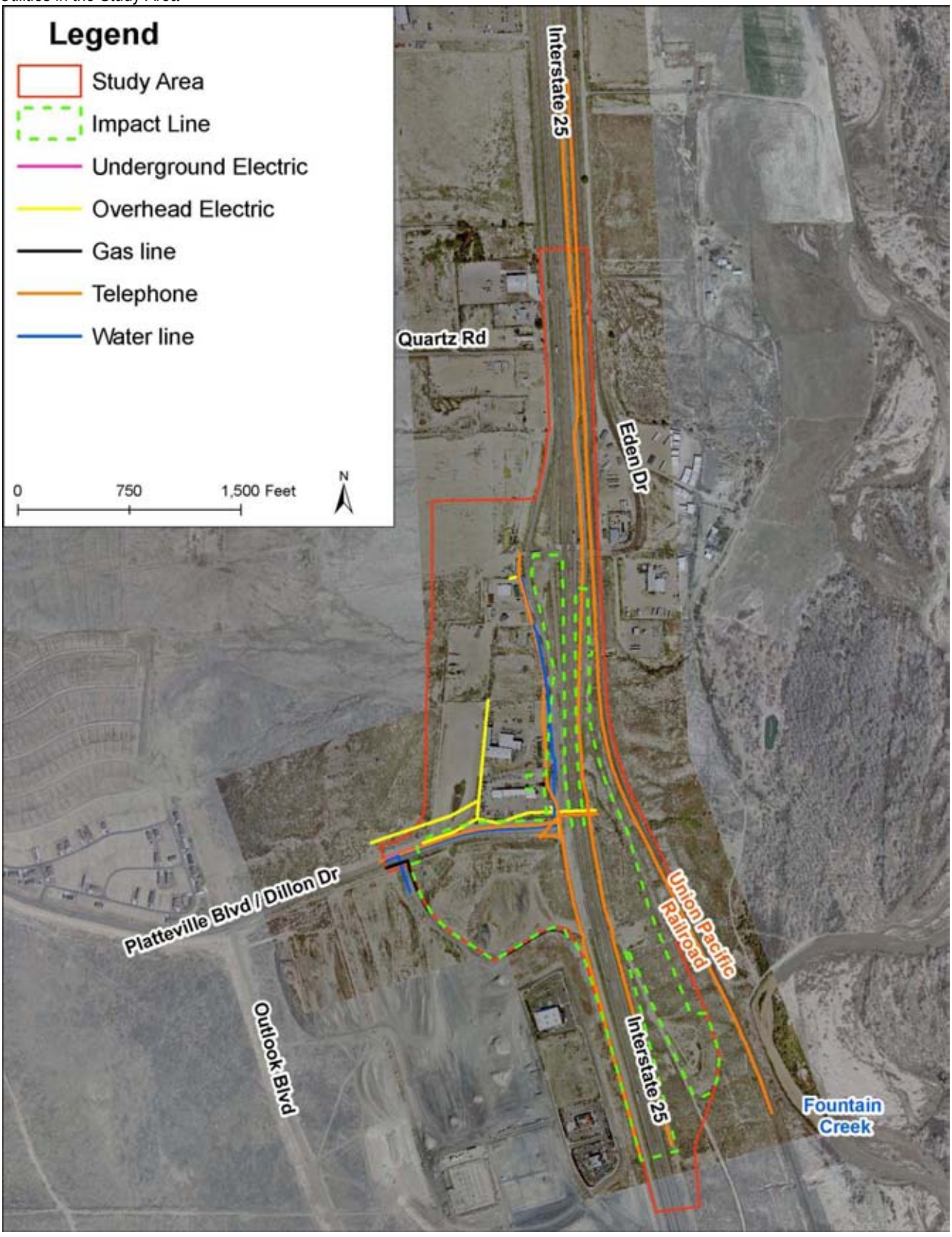
A review of existing utilities was conducted comparing the current proposed design to the existing utility data/mapping. Utilities in the study area include fiber-optic lines; buried communication; and overhead and underground electric, gas, lighting, water, and sanitary sewer line as shown on Figure 3-5. The Action Alternative design has been reviewed, potential conflicts with known utilities have been identified, and utility relocation costs have been included in the conceptual cost estimate for the Action Alternative.

During final design, utilities will be avoided through design modifications, or, where conflicts cannot be avoided, utilities will be relocated. Impacts to buried utilities may be avoided by protecting them with encasements. The City will coordinate utility impacts with other public and private utility providers throughout project design and construction. Additional information about utilities in the study area is included in the *Preliminary Utility Summary* (Goodbee, 2010) in Appendix C.

3.9.11 Section 4(f)

Section 4(f) was created by the U.S. Department of Transportation Act of 1966. It is codified at Title 49 United States Code (U.S.C.) Section 303 and Title 23 U.S.C. Section 138. Section 138 which states: "The Secretary [of Transportation] shall not approve any program or project (other than any project for a park road or parkway under Section 204 of this title) which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use."

FIGURE 3-5
Utilities in the Study Area



Land will be considered permanently incorporated into a transportation project, or used when it has been purchased as right-of-way or sufficient property interests have been otherwise acquired for the purpose of project implementation. For example, a "permanent easement" which is required for the purpose of project construction or that grants a future right of access onto 4(f) property, such as for the purpose of routine maintenance by the transportation agency, would be considered a permanent incorporation of land into a transportation facility.

For historic sites, *de minimis* impact means that the Administration has determined, in accordance with 36CFR part 800, that no historic property is affected by the project or that the project will have "no adverse effect" on the historic property in question.

As discussed in Section 3.4, the proposed roadway improvements would impact a segment of the AT&SF Railway located within the APE. The SHPO concurred with FHWA/CDOT's determination that the segment of the AT&SF railway does not support the overall eligibility of the entire linear resource. Based on the determination of No Adverse Effect, a *de minimis* Section 4(f) finding was signed by FHWA on April 8, 2010 and is contained in Appendix C.

4.0 Agency Coordination and Public Involvement

4.1 Agency Coordination

The City of Pueblo, the sponsor of this project, has coordinated closely with FHWA and CDOT while developing this EA document. The coordination has included individual meetings and work sessions with transportation planners, roadway designers, environmental specialists, right-of-way specialists, and others from local, state and federal transportation agencies.

Resource and regulatory agencies have been consulted as part of the agency coordination process. Records of communications with each agency can be found in Appendix C.

Formal consultation with the Colorado SHPO has been conducted to fulfill the requirements of Section 106 of the National Historic Preservation Act. Coordination has included consultation on the boundaries of the APE, which resulted in no objections from the SHPO; submittal of the determination of eligibility of historic resources, which resulted in concurrence from the SHPO; and submittal of the determination of effects to historic resources, which also resulted in concurrence from the SHPO.

Formal consultation with USACE has been conducted to fulfill the requirements of Section 404 of the Clean Water Act. The consultation with USACE determined that no waters of the U.S. are located within the study area.

4.2 Public Involvement

Two public meetings were held to provide residents, business owners, and the general public an opportunity to voice questions or concern about the project. A public Scoping Meeting was held on December 18, 2008, at the La Quinta Hotel near the study area. The meeting was an open house format, with poster boards displayed and with the project team available to answer questions. Information on the project area, draft Purpose and Need, environmental considerations, conceptual project alternatives, criteria for evaluating the alternatives, and project timeline were presented. Thirty-seven members of the public attended this meeting, and 14 written comments were received. In general, comments received were supportive of the project.

A second public meeting was held on September 23, 2009, at the Pueblo Convention Center. The purpose of the meeting was to provide an update on the EA, review the alternatives evaluated, and present the Action Alternative to the public in attendance. Similar to the first public meeting, the meeting was an open house format, with poster boards displayed. The project team was available to answer questions and address specific concerns. Approximately 25 members of the public attended, and the project team received 10 written comments.

A number of comments were made by business and property owners expressing concern about the problems the Action Alternative configuration would cause by increasing the number of turn movements by heavy trucks traveling northbound between the interstate and businesses east of the Eden Interchange and the resulting delays that would occur.

As a result, the concept design was refined to include a one-way frontage road on the east side of I-25. This change provides the ease of movement for northbound travelers via the proposed Dillon Drive Interchange and for southbound travelers via the Eden Interchange.

Individual meetings with affected property owners were also conducted to address specific concerns related to changes in access or potential right-of-way acquisition.

The project has been, and will remain, in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

4.3 Remaining Agency and Public Involvement

FHWA, CDOT, and the City of Pueblo are providing this EA for agency and public comment. A public hearing will be held at the Pueblo Convention Center, Ballroom C-East, 320 Central Main Ave, Pueblo, CO, 81003, on February 22nd from 4 to 7 pm. Newsletters announcing the public hearing will be sent to all individuals on the mailing list, and the public hearing also will be advertised in local newspapers. Interested individuals can attend the public hearing to provide comments or learn more about the EA study and its recommendations. Comments can be provided in person at the public hearing, or via mail, fax, or e-mail to:

Mickey Beyer, P.E.
Assistant Director Public Works
City of Pueblo
211 East D Street
Pueblo, CO 81003
719-553-2276 (phone)
719-553-2294 (fax)
mbeyer@pueblo.us

Reviewing agencies will be provided a copy of the document, and individual meetings with agency representatives will be held if requested.

After the review period ends, all comments will be addressed in a formal response, which will be issued with the final decision document on the project.

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APPENDIX A

Glossary

APPENDIX A

Glossary

The following terms and acronyms may be encountered in technical reports, plans, data, informational materials, or conversations about the Interstate (I) 25 and Dillon Drive/ Eden-Platteville Boulevard Interchange Environmental Assessment.

Access: Driveways, median openings, and intersections on a road that provide a means from the roadway to enter property with a motor vehicle. Entrance and exit ramps on a freeway.

Area of Potential Effect (APE): The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic or cultural properties, if any such properties exist.

Arterial: A major road in a city or urban area that collects traffic and may be connected to the freeway system.

Best Management Practices (BMPs): Good and proven construction methods and techniques, activities, prohibitions, and practices that protect or maintain the quality of a variety of resources during and after a construction project.

Capacity: The maximum flow rate at which vehicles can be expected to move on a given road segment, measured in vehicles per hour or passenger cars per hour.

Curb and Gutter: A curb is the raised edge built along the edge of a road. It connects with a gutter, which is the low area that carries water to the storm sewer.

Diamond Interchange: The most common interchange design, usually consisting of four ramps (two entrance ramps and two exit ramps). Diamond interchanges have a diamond shape when viewed from the air.

Environmental Assessment (EA): A public document produced as part of the federal National Environmental Policy Act (NEPA) process that evaluates potential impacts of transportation projects in order to determine whether an Environmental Impact Statement (EIS) is necessary.

Floodplain: An area adjacent to a stream or river that is inundated periodically by high flows. Floodplains are regulated by the Federal Emergency Management Agency.

Frontage Road: A road that parallels a major transportation facility such as a freeway. It serves to collect and distribute local traffic adjacent to the major facility without impeding traffic flow on the facility. Frontage roads are also referred to as "access," "feeder," and "service" roads.

Hazardous Materials: Materials that pose a risk to human health or the environment.

Interchange: A grade-separated (bridge) junction of a freeway and another road used to provide access connectivity.

Level of Service: A qualitative term used by transportation engineers to indicate that traffic is moving at ideal, average, or poor efficiency and measured on a grade scale of "A" through "F".

Mainline: The primary through road or freeway, as distinct from ramps, auxiliary lanes, and collector-distributor roads.

Median: A painted or raised area in the center of a road that separates opposing travel lanes and consolidates left turns.

Mobility: The ability of traffic or other travel modes to move unimpeded through a highway or other transportation facility.

NEPA: The National Environmental Policy Act, established by Congress in 1969, requires a federal agency to document the environmental impact of its actions, including an evaluation of alternatives.

Permanent Easement: A nonpossessory permanent interest to use property in possession of another person for a stated purpose. Permanent easements are required for CDOT to conduct ongoing maintenance after construction.

Recognized Environmental Concern (RECs): The presence or likely presence of any hazardous substance or petroleum product from an existing, past or threatened release of these materials.

Right-of-Way: The land owned by CDOT for the purpose of operating and maintaining a highway.

Scoping: A process initiated at the beginning of a study to solicit public and agency input on the scope of the study.

Shoulder: A portion of the road at the outside or inside of the travel lanes that accommodates stopped vehicles and emergency use.

Temporary Easement: A nonpossessory temporary interest to use property in possession of another person for a stated purpose. Temporary easements are required for CDOT to access properties during construction.

Transportation Demand Management: A general term for actions that encourage a decrease in the demand for the existing transportation system.

Wetland: An area sufficiently inundated by surface or groundwater to support a predominance of vegetation adapted for life in saturated soil conditions.

APPENDIX B

Impacts and Mitigation Summary

APPENDIX B

Impacts and Mitigation Summary

Impacts of the No Action Alternative	Impacts of the Action Alternative	Mitigation Measures for the Action Alternative
Transportation		
Out-of-direction travel required to access Interstate (I)-25 from areas west of the interstate would continue and the inadequate regional network connections would remain.	Eliminate both the out-of-direction travel in the area and the need for regional traffic to use the local road network	Construction and other activities will be planned to minimize the impact to the traveling public and area residents and businesses.
	Increase connectivity between the City of Pueblo, Pueblo West, and Pueblo County via I-25 and would improve overall access in the area	Any lane closures during construction will comply with the Colorado Department of Transportation's (CDOT's) Lane Closure Strategy.
Access would remain unchanged.	Improve access to areas west of I-25 by providing a more direct connection to the interstate via Dillon Drive	Advance notice will be provided to emergency service providers for extended lane closures. Detours will be identified by adequately signing to minimize out-of-direction travel.
	Removal of south ramps at Eden Interchange would result in minor increase in travel time for northbound drivers	
	Temporary lane closures during construction, access to all businesses would be maintained	
Land Use		
Alternative does not address transportation needs in the corridor and would not accommodate the planned growth and development in the study area.	Consistent with the goals and objectives identified in adopted land use plans	No mitigation will be required.
Alternative is inconsistent with many of the primary goals of the land use plans relevant to the study area.	Provides regional connectivity to I-25 and accommodates the existing and planned development in the area	
	No zoning changes would be required.	

Impacts of the No Action Alternative	Impacts of the Action Alternative	Mitigation Measures for the Action Alternative
Right-of-way		
No privately or publicly owned property would be acquired.	Right-of-way required (8.4 acres) from one parcel. No businesses would be relocated.	Right-of-way acquisitions will be determined during final design. Impacts to properties will be further minimized whenever feasible during final design.
		All property acquisition and relocation shall comply fully with federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, amended (Uniform Act).
Historic Properties		
Continued development could further deteriorate the integrity of the cultural resources in the study area.	Impact segment of the Atchison, Topeka, and Santa Fe Railroad, National Register of Historic Places (NRHP) eligible. A de minimis 4(f) finding was prepared by CDOT and signed by the Federal Highway Administration (FHWA) on April 8, 2010.	In the event that cultural deposits are discovered during construction, CDOT will follow its standard practice of ceasing work, consulting with the CDOT archaeologist, and evaluating materials in consultation with the Colorado State Historic Preservation Officer (SHPO) to determine if mitigation is required.
Visual		
No impacts would occur.	No impacts to the visual character would occur.	Aesthetic elements will be incorporated during final design, including landscaping and architectural treatments for the bridge.

Impacts of the No Action Alternative	Impacts of the Action Alternative	Mitigation Measures for the Action Alternative
Water Quality		
No additional impervious surface or additional stormwater runoff.	A 4 acre (1%) increase in the impervious surface.	Permanent water quality treatment features will be included in the final design to filter roadway runoff associated with the Action Alternative and improve water quality for receiving waters.
	Improvements would include new drainage structures including stormwater inlets, improved drainage at the Drury Brothers Roofing property, one water quality pond, roadside ditches, and driveway culverts.	The project will comply with the requirements of CDOT's and the City of Pueblo's MS4 permits. A Colorado Discharge Permit System—Stormwater Construction Permit will be required for this project. A Stormwater Management Plan will be developed in accordance with the conditions of this permit.
	Drainage modifications effectively maintain historic drainage patterns and improve water quality.	Erosion and sediment control best management practices (BMPs) will be implemented in accordance with CDOT Standard Specifications for Road and Bridge Construction and the revised provisions for water quality outlined in the 2009 Consent Order with the Colorado Department of Public Health and the Environment (CDPHE) and incorporated into Section 107.25 (Water Quality) and Section 208 (Erosion Control).
		Sediment traps, check dams, sediment basins, or other BMPs will be installed to control sedimentation during construction of drainage improvements in gulches. Specific BMPs will be determined during final design. A permanent water quality pond will be constructed to prevent sedimentation of culverts.

Impacts of the No Action Alternative	Impacts of the Action Alternative	Mitigation Measures for the Action Alternative
Hazardous Materials		
There would be no effect on known hazardous material or waste sites.	Construction activities (ground disturbance) would occur adjacent to 1 property with potential environmental contamination.	Protective measures will be taken before, during, and after construction to minimize the risk of encountering petroleum products and petroleum-contaminated soils. A full Phase I Environmental Site Assessment (ESA) according to ASTM International 2005 standards will be completed before any total property acquisition. Phase II ESAs will be conducted to characterize, manage, and remediate contaminated properties identified as concern in Phase I ESAs. A Materials Handling Plan will be prepared to address contaminated soil and groundwater that may be encountered as directed by the findings of Phase I assessments. The plan will be prepared according to CDOT 250 Specification from the Colorado Highway Specification Manual.
Cumulative Impacts		
Because no action would be taken under the No Action Alternative, effects of its actions cannot combine with other projects to create cumulative effects. Other foreseeable projects would be implemented.	Beneficial cumulative impacts to transportation, land use, hazardous materials, and water quality from the project combined with other development/ redevelopment in the study area.	No mitigation necessary.
Vegetation and Noxious Weeds		
Existing conditions would remain unchanged.	Natural vegetation and noxious weeds would be disturbed during construction.	The City will develop and implement a noxious weeds management plan during construction. A site visit by a qualified botanist during the flowering period for the five rare plants species (as identified in the CDOT Short Grass Prairie Initiative http://environment.fhwa.dot.gov/strmlng/comoa.asp) shall be performed prior to construction to confirm that rare plants are not located in the project area.

Impacts of the No Action Alternative	Impacts of the Action Alternative	Mitigation Measures for the Action Alternative
Wildlife and Threatened and Endangered Species		
Existing conditions would remain unchanged.	Limited habitat loss would occur as the result of vegetation removal.	A preconstruction survey for migratory birds and prairie dogs will be conducted by a project biologist. If prairie dogs or burrowing owls are found in the study area, CDOTs Black Tailed Prairie Dog Policy would be implemented and the CDOW burrowing owl protocols would be followed.

APPENDIX C

Supporting Documents

(Documents can be found on attached CD)