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## TABLE OF CONTENTS

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	<u>Page</u>
4.13 HISTORIC AND ARCHAEOLOGICAL RESOURCES.....	4.13-1
4.13.1 Affected Environment.....	4.13-2
4.13.1.1 Overview of Cultural History and Resource Types.....	4.13-2
4.13.1.2 Resources Identified.....	4.13-3
4.13.2 Environmental Consequences.....	4.13-14
4.13.2.1 No Action Alternative.....	4.13-14
4.13.2.2 Effects Common to All Build Alternatives.....	4.13-15
4.13.2.3 Freeway Alternative.....	4.13-15
4.13.2.4 Tollway Alternative.....	4.13-19
4.13.2.5 Regional Arterial Alternative.....	4.13-23
4.13.2.6 Combined Alternative (Recommended Alternative).....	4.13-25
4.13.3 Suggested Mitigation.....	4.13-36
4.13.3.1 No Action Alternative.....	4.13-37
4.13.3.2 Freeway Alternative.....	4.13-37
4.13.3.3 Tollway Alternative.....	4.13-37
4.13.3.4 Regional Arterial Alternative.....	4.13-37
4.13.3.5 Combined Alternative (Recommended Alternative).....	4.13-37
4.13.4 Native American Consultation.....	4.13-38
4.13.5 Summary.....	4.13-39




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## LIST OF FIGURES

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		<u>Page</u>
Figure 4.13-1	NRHP-Eligible Historic and Archaeological Resources-Central Portion .....	4.13-6
Figure 4.13-2	NRHP-Eligible Historic and Archaeological Resources-Southern Portion .....	4.13-7

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## LIST OF TABLES

---

		<u>Page</u>
Table 4.13-1	NRHP-Eligible Historic and Archaeological Resources Identified In Association with Build Alternatives.....	4.13-4
Table 4.13-2	Effects Common to All Build Alternatives, Historic and Archaeological Resources.....	4.13-15
Table 4.13-3	Freeway Alternative Effects, Historic and Archaeological Resources .....	4.13-16
Table 4.13-4	Tollway Alternative Effects, Historic and Archaeological Resources .....	4.13-20
Table 4.13-5	Regional Arterial Alternative Effects, Historic and Archaeological Resources .....	4.13-23
Table 4.13-6	Combined Alternative (Recommended Alternative) Effects, Historic and Archaeological Resources .....	4.13-26
Table 4.13-7	Comparison of Alternatives' Effects to NRHP-Eligible Historic and Archaeological Resources .....	4.13-39



## 4.13 HISTORIC AND ARCHAEOLOGICAL RESOURCES

### INTRODUCTION

Historic and archaeological resources are tangible remains of past human activity and include archaeological artifacts, features, and sites, as well as historical buildings, structures, districts, and features, at least 45 years old. Generally, a 50-year age threshold is applied to properties to qualify them for consideration in environmental studies. A shorter 45-year age threshold was adopted for this complex transportation project to account for the prolonged time between initial environmental data collection and construction. Historic and archaeological resources are those that are listed or have been officially determined to be eligible for listing on the National Register of Historic Places (NRHP). To be considered important, historic and archaeological resources must possess sufficient integrity of location, design, setting, materials, workmanship, feeling, and association, and meet one or more of the following NRHP evaluation criteria, as specified in 36 CFR Part 60.6:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association *and*

- a) That are associated with events that have made a significant contribution to the broad patterns of our history; *or*
- b) That are associated with the lives of persons significant in our past; *or*
- c) That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; *or*
- d) That have yielded, or may be likely to yield, information important in prehistory or history.

Section 106 of the National Historic Preservation Act (NHPA) directs federal agencies to consider the effects of proposed federally sponsored or assisted undertakings on historic properties. FHWA and CDOT consulted with the State Historic Preservation Officer (SHPO) concerning delineation of an Area of Potential Effect (APE), and conducted appropriate resource identification and evaluation efforts including file searches and field surveys. FHWA and CDOT determined the NRHP-eligibility of all historic and archaeological resources and consulted with the SHPO to gain their concurrence on these findings. Local historic preservation organizations and governments were encouraged under Section 106 to participate as consulting parties. Federally recognized Native American tribes with an interest in the lands encompassed by the project were also invited to participate and to contribute information about sites of significance to the tribe (see **Section 4.13.4**). Such properties are referred to as “Traditional Cultural Properties.”

The Section 106 regulations also specify procedures that FHWA and CDOT followed for the assessment and resolution of effects to NRHP-eligible or listed properties. The “Criteria of Adverse Effect” in 36 CFR 800.5 guides federal agencies in determining what effect(s) would occur to historic and archaeological resources. Three outcomes are possible: (1) *adverse effect*, where it is determined that the undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion on the NRHP; (2) *no adverse effect*, where an analysis reveals that the undertaking would not cause such effects; and (3) *no historic properties affected*, where it is determined that either there are no important historic or archaeological sites in the area of an undertaking, or there is no effect to historic properties. FHWA and CDOT consult with the SHPO to obtain concurrence on determinations of effect with respect to undertakings such as the Northwest Corridor project.



Historic and archaeological resources are also protected under Section 4(f) of the Department of Transportation Act. This act directs the Secretary of Transportation to allow a project to use land from an NRHP-eligible or listed historic site or, more rarely, from an archaeological site that warrants preservation in place rather than data recovery, only if there is no prudent or feasible alternative that avoids the site. Section 4(f) requires FHWA and CDOT to do everything possible to avoid the use of such lands, and to incorporate all possible planning to minimize harm to historic and archaeological resources. A complete analysis of Section 4(f) use of historic and archaeological resources for all of the alternatives under review is presented (see **Chapter 5**).

For the Northwest Corridor project, CDOT's cultural resource staff acted on behalf of FHWA and coordinated the investigation of historic and archaeological resources with the SHPO and consulting parties. Local historic preservation organizations and agencies were invited to participate as formal consulting parties to the Section 106 process. CDOT sent letters of invitation on September 7–8, 2005, to the following groups:

Arvada Historical Society

Broomfield Historical Depot Museum

City and County of Broomfield

City of Golden Historic Preservation Board, Office of Planning and Development

Colorado Preservation, Inc.

Historic Old Towne Arvada

Jefferson County Historical Commission

Jefferson County Historical Society

Louisville Historic Preservation Commission

National Trust for Historic Preservation, Mountains/Plains Regional Office, Denver

Superior Historic Preservation Commission

Westminster Historic Landmark Board

Westminster Historical Society

Wheat Ridge Historical Society

The groups who accepted this invitation and are considered consulting parties include the City of Arvada, the City of Golden, the Town of Superior, and the City of Westminster. These municipalities responded to letters addressed to the historical societies, landmark boards, and historical commissions in their communities, as listed above. The City of Golden raised questions about the extent of the APE in Golden and the potential for indirect impacts to historic properties within Golden, which FHWA and CDOT have addressed.

Input was also solicited from the public at public meetings held in Golden, Arvada, and Broomfield. Only one concern was raised during this process, regarding an unmarked, possible pioneer cemetery located on the west side of Indiana Street north of SH 72. This cemetery was subsequently investigated and found to be a non-historic pet cemetery. No other public concerns about historic and/or archaeological resources were brought to light during the public involvement process.

### **4.13.1 AFFECTED ENVIRONMENT**

#### **4.13.1.1 OVERVIEW OF CULTURAL HISTORY AND RESOURCE TYPES**

The study area occupies portions of Boulder County, Broomfield County, and Jefferson County, and extends from Broomfield south to Golden, and extends from the Front Range foothills east to the ridges and valleys of the South Platte River watershed. The area is drained by a series of perennial streams, including Clear



Creek, Van Bibber Creek, Ralston Creek, and Leyden Gulch, all reliable water sources potentially utilized initially by Native Americans, followed by Euro-Americans. Based on archaeological data for the Platte River Basin summarized by Gilmore et al. (1999), the South Platte River watershed is known to have been occupied by prehistoric aboriginal groups extending back to the earliest (Clovis) stage of the Paleoindian period. The prehistory of the project area is detailed in an archaeological survey report prepared by Centennial Archaeology, Inc. (Centennial) for the Northwest Corridor project (Painter et. al., 2005).

Historical use of the study area commenced in the mid nineteenth century and is primarily associated with themes of settlement, agriculture, irrigation, and community development. Other relevant themes include transportation system development and coal and clay mining. These historical themes are discussed in existing narrative context documents, including the Colorado Plains Historic Context (Mehls, 1984), and the Colorado Engineering Context (King, 1984). The history of the study area is detailed in the historic architectural survey report prepared by Felsburg Holt & Ullevig (Marmor, 2005).

#### 4.13.1.2 RESOURCES IDENTIFIED

The Northwest Corridor Area of Potential Effects (APE) combines a 60-foot-wide archaeological survey corridor within which direct impacts could be expected to occur, and the parcel boundaries of properties containing features  $\geq 45$  years old as determined through field reconnaissance and review of County Assessor's property records. A total of 20 NRHP-eligible historic and archaeological sites were identified within the APE. All site numbers, site types, relevant NRHP criteria, and association with specific build alternatives are provided (see **Table 4.13-1**).

Of the 20 NRHP-eligible sites, only one prehistoric archaeological site was identified. The 19 eligible historic sites reflect the predominant agricultural character of the area crossed by the build alternatives. Six of these are late nineteenth to early twentieth-century farms, ranches, or farm/ranch buildings. Seven more sites are segments of three separate historic irrigation canals, the Welch Ditch, Farmers' High Line Canal, and Church Ditch. Two specialized buildings once serving the needs of this low-density agricultural community—an early twentieth-century grocery store and a church—were also among the sites identified. Other non-agricultural sites identified include the Golden Fire Brick Company Historic District (5JF3854), located near Golden, north of Golden Gate Canyon Road and west of SH 93, as well as three historic railroad segments. These include two segments of the historic Denver & Rio Grande Western Railroad, and one segment of the Colorado and Southern Railroad. These site locations, except for the archaeological site (the Brookes Stone Circle Site/5JF3195), which must be kept confidential to ensure its protection, are shown (see **Figure 4.13-1** and **Figure 4.13-2**).



**Table 4.13-1 NRHP-Eligible Historic and Archaeological Resources Identified In Association with Build Alternatives**

Site Name/Address	Site Number	Site Type	Applicable NRHP Criteria*	Associated Alternatives
Farmers' High Line Canal segment	5JF250.6	Historic Linear-Irrigation	A	Combined Alternative (Recommended Alternative)
Farmers' High Line Canal segment	5JF250.7	Historic Linear-Irrigation	A	Combined Alternative (Recommended Alternative)
Church Ditch segment	5JF267.1	Historic Linear-Irrigation	A	All Build Alternatives
Church Ditch segment	5JF267.8	Historic Linear-Irrigation	A	Combined Alternative (Recommended Alternative)
Colorado and Southern Railroad segment	5JF519.8	Historic Linear-Railroad	A	Combined Alternative (Recommended Alternative)
Welch Ditch segment	5JF848.5	Historic Linear-Irrigation	B, C	All Build Alternatives
Welch Ditch segment	5JF848.6	Historic Linear-Irrigation	B, C	All Build Alternatives
Pearce's Grocery Store 7851 Indiana Street	5JF994	Historic Commercial	A, C	Combined Alternative (Recommended Alternative)
Ralston Presbyterian Church 7400 Indiana Street	5JF1712	Historic Church	A, C	Combined Alternative (Recommended Alternative)
Denver & Rio Grande Western Railroad segment	5JF2346.6	Historic Linear-Railroad	A	All Build Alternatives
Denver & Rio Grande Western Railroad segment	5JF2346.7	Historic Linear-Railroad	A	Combined Alternative (Recommended Alternative)
Ramstetter Ranch 5399 SH 93	5JF2585	Historic Farm/Ranch	A, C	All Build Alternatives
Church/McKay Ranch 9600 Indiana Street	5JF2779	Historic Farm/Ranch	A, C	All Build Alternatives
Brookes Stone Circle Site	5JF3195	Prehistoric Occupation Site	D	All Build Alternatives
Golden Fire Brick Company Historic District	5JF3854	Historic Industrial	A	All Build Alternatives
14801-14803 W. 72 <sup>nd</sup> Avenue	5JF3873	Historic Farm/Ranch	C	Combined Alternative (Recommended Alternative)



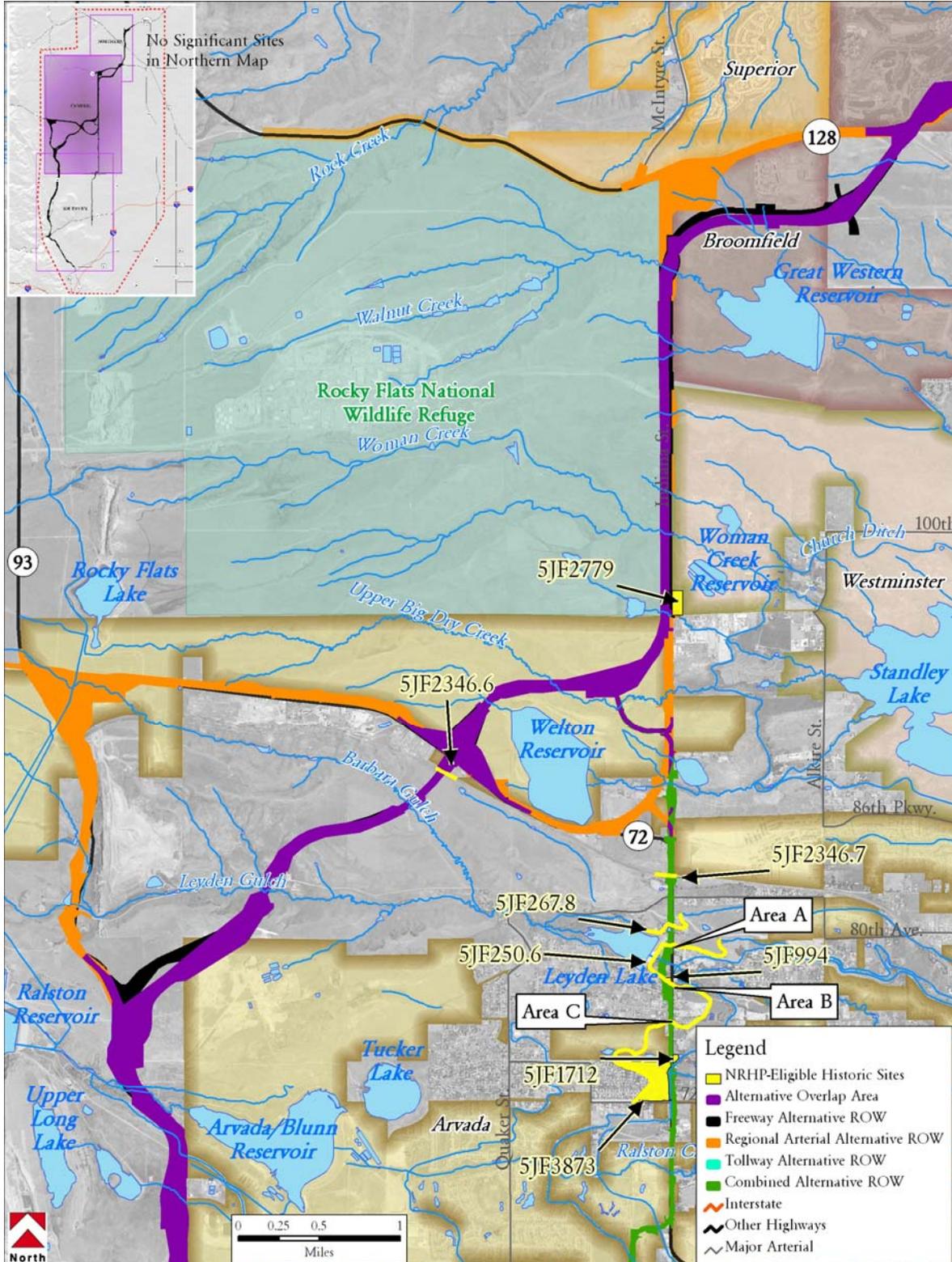
Site Name/Address	Site Number	Site Type	Applicable NRHP Criteria*	Associated Alternatives
5675 McIntyre Street	5JF3877	Historic Farm/Ranch	C	Combined Alternative (Recommended Alternative)
5440 McIntyre Street	5JF3880	Historic Farm/Ranch	C	Combined Alternative (Recommended Alternative)
5100 McIntyre Street	5JF3887	Historic Farmhouse	C	Combined Alternative (Recommended Alternative)
5075 McIntyre Street	5JF3888	Historic Farm/Ranch	C	Combined Alternative (Recommended Alternative)
5035 McIntyre Street	5JF3890	Historic Farm/Ranch	C	Combined Alternative (Recommended Alternative)

Note: \*NRHP evaluation criteria, as specified in 36 CFR Part 60.6.

Sources: *Historic Architectural Resources Survey for the Northwest Corridor Transportation Project Alternatives, Jefferson, Broomfield, and Boulder Counties, Colorado (Marmor, 2005).*



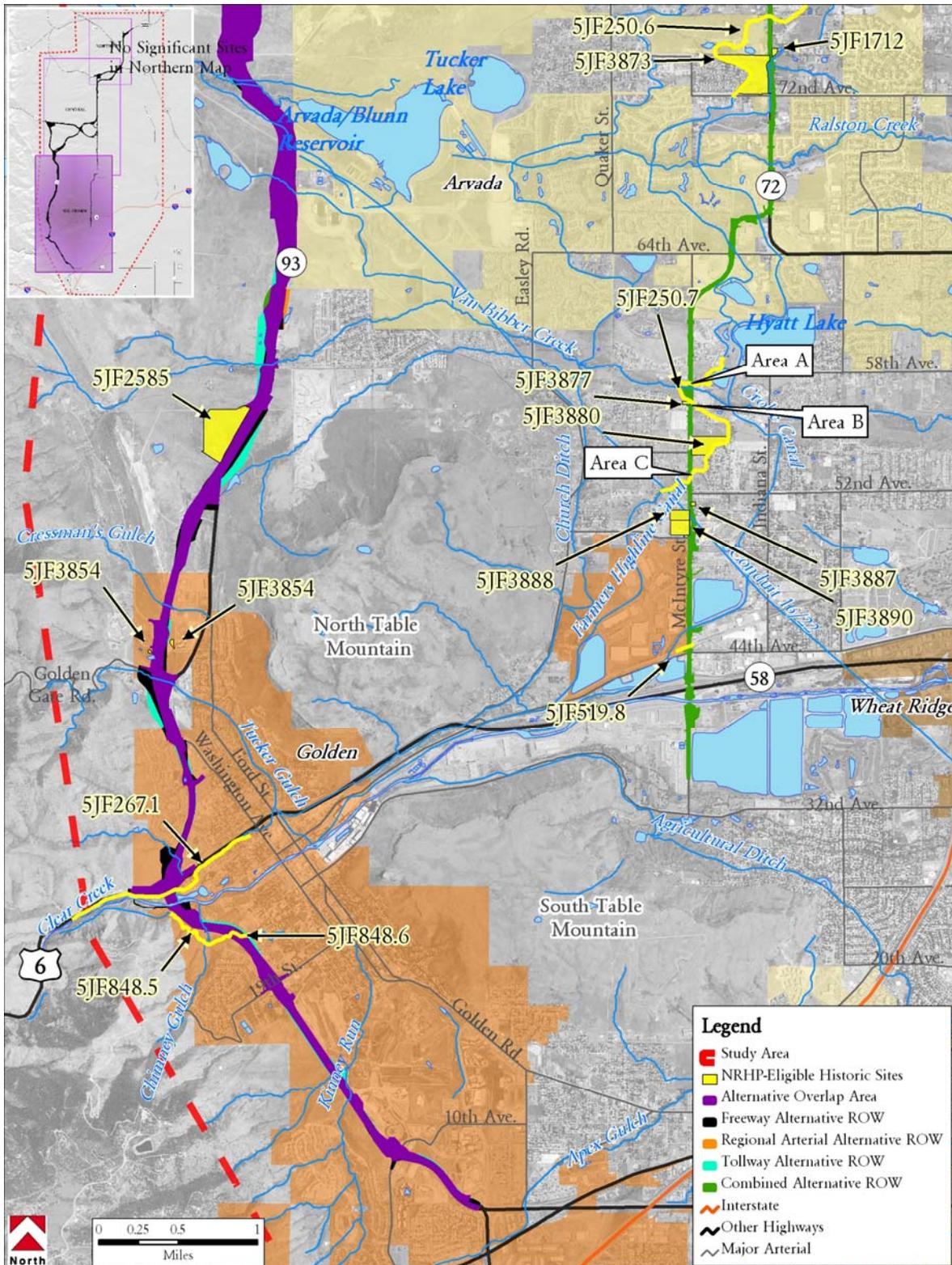
*Figure 4.13-1 NRHP-Eligible Historic and Archaeological Resources-Central Portion*



Source: Compiled by FHU, 2007.



*Figure 4.13-2 NRHP-Eligible Historic and Archaeological Resources-Southern Portion*



Source: Compiled by FHU, 2007.



### **FARMERS' HIGH LINE CANAL SEGMENT (5JF250.6)**

#### **Description**

This site is a 6,020-foot-long segment of the earthen Farmers' High Line Canal, which crosses Indiana Street three times within a half-mile stretch of the road. Field survey was limited to three localities, designated Areas A, B, and C, because they fall within the present project corridor (see **Figure 4.13-1**).

The earliest water appropriation date for this canal is 1860, which was adjudicated in 1884. The canal is associated with the Farmers' High Line Canal and Reservoir Company, which was organized in 1886. The 40-mile-long canal derives water from Clear Creek and is located in the Colorado Division of Water Resources Division 1, District 7. The decreed capacity for the canal is 5,705.682 cubic feet per second (cfs).

#### **Significance Evaluation**

The Farmers' High Line Canal has been in existence for over 100 years and was developed in response to agricultural settlement of the High Plains of Colorado. It continues to function as an agricultural water delivery system that is maintained in excellent working condition. Its important contribution to the historic development of farming, ranching, and irrigation in Jefferson County renders it eligible for the NRHP under Criterion A. This segment of the NRHP-eligible Farmers High Line Canal has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

### **FARMERS' HIGH LINE CANAL SEGMENT (5JF250.7)**

#### **Description**

This site is a 1,516-foot-long segment of the earthen Farmers' High Line Canal, which crosses McIntyre Street three times within a half-mile stretch of the road. Field survey was limited to the three localities, designated Areas A, B, and C, where the ditch crosses McIntyre Street (see **Figure 4.13-2**).

The earliest water appropriation date for this canal is 1860, which was adjudicated in 1884. The canal is associated with the Farmers' High Line Canal and Reservoir Company, which was organized in 1886. The 40-mile-long canal derives water from Clear Creek and is located in the Colorado Division of Water Resources Division 1, District 7. The decreed capacity for the canal is 5,705.682 cfs.

#### **Significance Evaluation**

The Farmers' High Line Canal has been in existence for over 100 years and was developed in response to agricultural settlement of the High Plains of Colorado. It continues to function as an agricultural water delivery system that is maintained in excellent working condition. Its important contribution to the historic development of farming, ranching, and irrigation in Jefferson County renders it eligible for the NRHP under Criterion A. This segment of the NRHP-eligible Farmers High Line Canal has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

### **CHURCH DITCH SEGMENT (5F267.1)**

#### **Description**

This site consists of a 2.7-mile-long segment of the Church Ditch. A 1.2-mile-long stretch of the ditch is earthen, while a 1.5-mile-long extension is concrete-lined (see **Figure 4.13-2**).

Records at the Office of the State Engineer, Division of Water Resources (DWR), indicate that the ditch derives water from Clear Creek at stream mile 221 and the decreed capacity is 1055.25 cfs. Water was first appropriated in 1860 and subsequently adjudicated in 1884. The ditch is located in DWR South Platte River Basin Division 1.

#### **Significance Evaluation**

This site was officially determined to be NRHP-eligible in 1992. This early irrigation ditch contributed to the agricultural development of the Golden area in the latter half of the nineteenth century and its eligibility under NRHP Criterion A was re-affirmed by FHWA and CDOT for the Northwest Corridor project. This segment of the NRHP-eligible Church Ditch has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.



### **CHURCH DITCH SEGMENT (5JF267.8)**

#### **Description**

The site is a 700-foot-long segment of the earthen Church Ditch, which crosses Indiana Street via a twin, corrugated steel culvert that is anchored at each end by concrete surrounds. The culvert and unlined ditch are in excellent condition and obviously well maintained. The ditch channel is approximately 16-foot-wide, with steep 6.5-foot-high banks (see **Figure 4.13-1**).

The Church Ditch draws water from Clear Creek west of Golden. The headgate is located at stream mile 221 in Colorado Division of Water Resources Division 1, District 7. The first water rights were appropriated in 1860 and subsequently adjudicated in 1884. The current decreed capacity for the ditch is 1055.25 cfs.

#### **Significance Evaluation**

The Church Ditch was previously determined to be NRHP-eligible by the SHPO under Criterion A. Although several homes are located in the vicinity of the segment reported here, the environment remains essentially rural and the original integrity of the unlined ditch is intact. This segment of the NRHP-eligible Church Ditch has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

### **COLORADO AND SOUTHERN RAILROAD SEGMENT (5JF519.8)**

#### **Description**

This railroad segment, now operated by the Burlington Northern Santa Fe Railway (BNSF) is identified by the Colorado Historical Society/Office of Archaeology and Historic Preservation (OAHP) as the historic Colorado and Southern Railroad (C&S). The site consists of a 700-foot-long segment of an active rail line crossing McIntyre Street (see **Figure 4.13-2**).

The Colorado Central Railroad built this railroad as a standard gauge line in 1870. In 1889, it became part of Union Pacific Denver & Gulf Railway, and in 1899 was acquired by the Colorado & Southern Railroad (C&S). C&S was merged into Burlington Northern (BN) in 1982 and in 1995 BN merged with the Atchison Topeka & Santa Fe Railway (ATSF) to become the Burlington Northern Santa Fe (BNSF). The line currently serves Coors Brewery, the largest BNSF customer in Colorado, along with several smaller local industries.

#### **Significance Evaluation**

As with most railroads in Colorado, the C&S is directly associated with the early growth and commercial development of the state. Representing over 130 years of relatively continuous use of this route, the site serves as a dynamic visual reminder of Colorado's important railroading heritage. For these reasons the historic C&S Railroad has been determined eligible for the NRHP under Criterion A. This railroad segment has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

### **WELCH DITCH SEGMENT (5JF848.5)**

#### **Description**

This site is an approximately 0.5-mile/2,534-foot-long segment of the earthen Welch Ditch, which derives water from Clear Creek west of Golden. The recorded segment is located at the mouth of Clear Creek Canyon (south wall) and is cut into the north-facing slope of a steep hill. It follows a sinuous southeasterly course around the hillside, and closely parallels US 6 before entering a modern concrete culvert extending beneath the roadway to a continuation of the open ditch on the east side of the highway (see **Figure 4.13-2**).

#### **Significance Evaluation**

The recorded ditch segment is eligible for the NRHP under Criterion B for its association with Charles Welch, a prominent early resident of Golden. The ditch is also eligible under Criterion C as an outstanding example of water system engineering, as demonstrated by its successful location at midslope of a steep hill and the incorporation of stepped spillways built to aid in the control of overflow and sedimentation. This segment of the NRHP-eligible Welch Ditch has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.



### **WELCH DITCH SEGMENT (5JF848.6)**

#### **Description**

This site is an 82-foot-long segment of the earthen Welch Ditch located on the east side of US 6 within the project corridor. The Welch Ditch derives water from Clear Creek west of Golden. The ditch segment includes a tunnel excavated through a sandstone outcrop (see **Figure 4.13-2**).

#### **Significance Evaluation**

This segment of the Welch Ditch was first recorded in 2001 by URS Corporation, at which time it was evaluated as eligible for the NRHP. Both the ditch and associated tunnel are in good, original condition and exhibit integrity of design, materials, and workmanship. The site was re-evaluated as NRHP-eligible under Criterion B for its association with Golden-area pioneer Charles Welch and under Criterion C as an important example of early irrigation engineering in the Clear Creek Valley. This segment of the NRHP-eligible Welch Ditch has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

### **PEARCE'S GROCERY STORE, 7851 INDIANA STREET (5JF994)**

#### **Description**

This former rural grocery store is located on the west side of Indiana Street, just north of a crossing of the Farmers' High Line Canal (5JF250.6, Area B). The site contains a wood frame false-front commercial building and several historic outbuildings (see **Figure 4.13-1**).

The Pearce Grocery Store building was erected circa 1913 by merchant Henry Pearce, and supplied the mining community of Leyden and area farmers with groceries and general merchandise until 1948.

#### **Significance Evaluation**

This site is a very well-preserved example of a relatively rare property type (neighborhood grocery store) and architectural style (false-front commercial). The property also served an important function as a source of groceries and general merchandise for this rural area of Jefferson County in the early twentieth century. For these reasons, the site is reevaluated as eligible for the NRHP under Criteria A and C.

### **RALSTON PRESBYTERIAN CHURCH, 7400 INDIANA STREET (5JF1712)**

#### **Description**

This small, front-gabled, historic brick church, now converted to commercial use, is located on the east side of Indiana Street just north of the Croke Canal. Built in 1910, the Ralston Presbyterian Church served the Ralston Creek agricultural community and housed the Enterprise Grange from 1911 to 1931 (see **Figure 4.13-1**).

#### **Significance Evaluation**

The building's significance was reevaluated for the Northwest Corridor project. Available information indicates that the Ralston Presbyterian Church served an important function as a community gathering place in this agricultural area of Jefferson County between circa 1910 and 1963. The church not only served as a house of worship, but also provided a place for important ceremonial functions such as weddings and funerals. The local farmers' grange used it during a time when agriculture was the mainstay of the local economy. The church building is also a relatively well-preserved example of small-scale rural ecclesiastical architecture in Colorado. For these reasons, the church is evaluated as eligible for the NRHP under Criteria A and C.

### **DENVER & RIO GRANDE WESTERN RAILROAD SEGMENT (5JF2346.6)**

#### **Description**

This railroad segment, now operated by the Burlington Northern Santa Fe Railway (BNSF) is identified by the Colorado Historical Society/Office of Archaeology and Historic Preservation (OAHP) as the historic Denver & Rio Grande Western Railroad (D&RGW). The site consists of a single 600-foot-long, standard gauge railroad track and its legal right-of-way that traverse the project corridor. The ballasted bed is elevated about 3 feet above ground level. The railroad is currently active and thus the tracks and grade are well maintained (see **Figure 4.13-1**).



This railroad segment is part of a line built in 1903 by the Denver, Northwestern & Pacific Railway Company. In 1913 the line was acquired by the Denver & Salt Lake Railroad Company (D&SL), which operated it until 1926. From 1927 to 1947 the line was owned and operated by the D&RGW. The line is currently owned by the UPRR.

### **Significance Evaluation**

The D&RGW and its predecessors are directly associated with the early growth and commercial development of the state. In addition, the historic railroad route is intact and traverses an area where the original design, setting, and feeling remain strong. Representing over 100 years of continuous use, this route serves as a dynamic visual reminder of Colorado's important railroad transportation heritage. For these reasons the railroad segment is assessed as eligible for the NRHP under Criterion A. This segment of the NRHP-eligible D&RGW railroad has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

## **DENVER & RIO GRANDE WESTERN RAILROAD SEGMENT (5JF2346.7)**

### **Description**

This site is a 600-foot-long segment of the former Denver & Rio Grande Western Railroad (D&RGW) line located east of segment 5JF2346.6 discussed above. The rail line is now operated by the BNSF. This segment of the railroad grade is carried over Indiana Street (SH 72) by a previously recorded railroad bridge (5JF2247) that was reevaluated for the Northwest Corridor project as NRHP-ineligible. The railroad is active and the tracks, ties, and ballasted bed are well maintained and in excellent condition (see **Figure 4.13-1**).

This railroad segment is part of a line built in 1903 by the Denver, Northwestern & Pacific Railway Company. In 1913 the line was acquired by the D&SL, which operated it until 1926. From 1927 to 1947 the line was owned and operated by the D&RGW. The line is currently owned by the UPRR.

### **Significance Evaluation**

The D&RGW and its predecessors are directly associated with the early growth and commercial development of the state. In addition, the historic railroad route is intact and traverses an area where the original design, setting, and feeling remain strong. Representing over 100 years of continuous use, this route serves as a dynamic visual reminder of Colorado's important railroad transportation heritage. For these reasons the railroad segment is assessed as eligible for the NRHP under Criterion A. This segment of the NRHP-eligible D&RGW railroad has been determined to retain sufficient integrity to support the overall eligibility of this linear resource.

## **RAMSTETTER RANCH, 5399 STATE HIGHWAY 93 (5JF2585)**

### **Description**

The 38.5-acre site known as the Ramstetter Ranch contains a grouping of ten associated historic agricultural buildings and structures situated north of Golden on the west side of SH 93, south of Van Bibber Creek and 58<sup>th</sup> Avenue. These features include a large 1.5-story wood-frame farmhouse built in 1909, a barn, two clay-tile silos, and a number of other specialized utilitarian buildings associated with animal husbandry (see **Figure 4.13-2**).

### **Significance Evaluation**

For the Northwest Corridor project, CDOT reevaluated the property and determined that it is NRHP-eligible under Criteria A and C. It is a very well preserved and extensive livestock ranch building complex from the early twentieth century, which effectively reflects the agricultural heritage of northern Jefferson County. The assemblage of historic structures—a house and specialized outbuildings—is remarkably intact, and together constitute an excellent example of a livestock ranch in Jefferson County.



### **CHURCH/McKAY RANCH, 9600 INDIANA STREET (5JF2779)**

#### **Description**

This well-preserved historical farmstead occupies a 5.8-acre rectangular parcel located on the northeast corner of Indiana Street and West 96<sup>th</sup> Avenue. The site includes seven intact historic agricultural structures, including a Vernacular Wood Frame farmhouse erected circa 1895, as well as a shop, granary, silo, loafing shed, and two cow barns, all of which were reportedly erected circa 1935 (see **Figure 4.13-1**).

#### **Significance Evaluation**

The Church/McKay Ranch was initially inventoried by Cathleen Norman during a survey of unincorporated Jefferson County sponsored by the Jefferson County Historical Commission (Norman, 2000). The site was re-evaluated for the Northwest Corridor project, and was found to be unchanged. The Church/McKay Ranch is eligible for the NRHP under Criteria A and C. The ranch complex retains excellent integrity. It is NRHP-eligible under Criterion A for being representative of early twentieth-century cattle ranching in Jefferson County, an important historic land use that was once widespread over the rolling plains of northern Jefferson County. The ranch site also qualifies under Criterion C as an outstanding example of an early twentieth-century cattle ranching operation with its specialized buildings and structures. The Church/McKay Ranch is also officially designated as a Jefferson County Historic Landmark.

### **BROOKES STONE CIRCLE SITE (5JF3195)**

#### **Description**

The Brookes Stone Circle Site (5JF3195) comprises 100 complete and approximately 20 partial stone circles occupying a 62-acre area. The specific location of this site is not disclosed to protect it from unauthorized entry and disturbance. The age of the site is unknown due to the lack of temporally diagnostic artifacts and no subsurface testing or data recovery has been conducted. At the time of the field survey for the present project, the Brookes Stone Circle Site was close to, but did not fall within, the defined study area boundaries. Nonetheless, due to its proximity the site was reevaluated and found to be intact and relatively undisturbed since its original documentation.

#### **Significance Evaluation**

Site 5JF3195 was determined eligible for listing on the NRHP under Criterion D in 2003. FHWA and CDOT agree with this assessment and assert that the site is of interpretive value warranting preservation in place. The SHPO concurred with this determination (see **Appendix C**).

### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

#### **Description**

The Golden Fire Brick Company Historic District site is a discontinuous historic district containing two spatially separate contributing features: the former Manager's House, built in 1889, and the Office/Garage, built in 1927. These are the only intact features that remain from the plant, which manufactured a wide range of architectural bricks from locally quarried clay at this location between circa 1890 and 1950. A curvilinear boundary line encompasses the Manager's House and the surrounding mature trees. The boundary of the Office/Garage is an amorphous line encompassing the main building, the rear boiler room, the truck scale, a swath of mature trees between the building and the modern batch plant, and the wide asphalt-paved driveway extending south of the building. The kilns, brick drying sheds, and brick storage sheds, all no longer extant, were located between the Manager's House and Office/Garage in the area more recently occupied by a concrete batch plant (see **Figure 4.13-2**).

#### **Significance Evaluation**

The Manager's House and the Office/Garage are eligible under NRHP Criteria A and C. The Manager's House is eligible under Criterion A in the area of industry for its association with the Golden Fire Brick Historic District, and under Criterion C as a good representative example of the Italian Renaissance style and for use of molded bricks made at the plant. The Office/Garage is eligible under Criterion A in the area of industry for its association with the Golden Fire Brick Company Historic District and under Criterion C as a good example of workmanship with regard to the use of decorative bricks made at the brick plant.



### **14801–14803 W. 72<sup>ND</sup> AVENUE (5JF3873)**

#### **Description**

This site is a historic 26-acre farm/livestock ranch situated on the northeast side of Indiana Street and W. 72<sup>nd</sup> Avenue. Contributing features include a well-preserved and unaltered Minimal Traditional-style farmhouse built in 1930, a gambrel-roofed barn with a concrete block-walled addition, an equipment shed, possible chicken coop, well house, and pasture lands. Modern non-contributing features include a Ranch-style brick house (built in 1967), a large modern L-shaped hay storage structure, and two small sheds placed at the edge of a corral (see **Figure 4.13-1**).

#### **Significance Evaluation**

Although no evidence was found indicating that this farm contributed to the early agricultural heritage or development of Jefferson County, several of the farm buildings represent good examples of early twentieth century agricultural architecture in Jefferson County. The 1930 farmhouse is an excellent example of Minimal Traditional-style domestic architecture. The site therefore qualifies for the NRHP under Criterion C.

### **5675 MCINTYRE STREET (5JF3877)**

#### **Description**

This site, located on the northwest corner of McIntyre Street and W. 56<sup>th</sup> Place, is a rectangular, 0.675-acre portion of a 6.5-acre farm property, containing a historic one-story Craftsman-style farmhouse with Rustic-style elements, open land, and an unpaved driveway. Since the site is evaluated as NRHP-eligible only under Criterion C, the western and northern portions of the larger farm property are excluded since they contain non-contributing structures or open land that do not reflect the architectural significance of the site (see **Figure 4.13-2**).

#### **Significance Evaluation**

This small farm or livestock ranch contains an unmodified brick farmhouse that appears unmodified and exhibits many characteristic traits of the Craftsman style of residential architecture, including a full-width open front porch with massive piers and closed rail; very low-pitched roof with wide, overhanging eaves; an exterior chimney, and sash-and-transom windows with multi-light sashes. The dwelling also features Rustic-style elements occasionally used on Craftsman bungalows, including river cobbles covering the porch piers, closed porch rail, and exposed basement wall. As an excellent example of a Craftsman bungalow built during the style's heyday (late 1910s), the farmhouse is eligible for the NRHP under Criterion C. The site is limited to the farmhouse itself and a small portion of the agricultural setting extending to McIntyre Street; none of the outbuildings on the property appear old enough to be considered historic.

### **5440 MCINTYRE STREET (5JF3880)**

#### **Description**

Located on the east side of McIntyre Street, this 13-acre farm contains a very well-preserved 1.5-story, wood-frame Craftsman-style farmhouse, associated outbuildings, and pasture land. The house was reportedly built around 1908. The dwelling is in very good condition and exhibits many character-defining traits of Craftsman-style domestic architecture, including a side gable roof with wide overhanging eaves; decorative scroll-sawn brackets installed on the gable ends; a wide shed dormer on the façade; walls clad with square-cut wood shingles; a projecting, enclosed and glazed front porch; and a very tall rustic cobblestone masonry exterior chimney (see **Figure 4.13-2**).

The property also contains several outbuildings, at least one of which (a large detached wood frame garage) is of historic age.

#### **Significance Evaluation**

This farm, which once supported orchards, was one of many small agricultural operations in rural Jefferson County in the early twentieth century. The very well-preserved Craftsman farmhouse is an excellent example of the style, and demonstrates its popularity in rural as well as urban contexts. Because of its architectural qualities, this property qualifies for the NRHP under Criterion C.



### **5100 McINTYRE STREET (5JF3887)**

#### **Description**

This property consists of a small, square plan, 1-story wood frame farmhouse with a pyramidal hipped roof and centrally placed fireplace/chimney. The dwelling was reportedly built in 1906, two years after the creation of the New Hampshire Gardens subdivision. New Hampshire Gardens was platted in February 1904 by James McKean and John Austin Snodgrass, and contained fifteen agricultural lots, each encompassing ten to fifteen acres. This property is now part of a large commercial tree nursery (Green Acres Nursery), which surrounds it on the south and east sides (see **Figure 4.13-2**).

#### **Significance Evaluation**

This well-preserved modest farmhouse is a very good example of a distinct form of simple small-scale vernacular domestic architecture built in large numbers throughout Colorado in the very early twentieth century: the wood frame “hipped box.” The property therefore qualifies for inclusion on the NRHP under Criterion C.

### **5075 McINTYRE STREET (5JF3888)**

#### **Description**

This 4.95-acre property contains a wood frame farmhouse erected circa 1900, along with two historic wood frame outbuildings and associated farmland. The small 1-story Folk Victorian-style farmhouse features a steeply pitched roof, a gabled dormer, and a wraparound open porch with turned spindle posts and a balustrade railing. Outbuildings include a front-gabled, wood frame detached garage and a large two-story Dutch Colonial style dwelling that was reportedly moved onto the property in 1988 to be converted into a garage. It is not known if that conversion has taken place (see **Figure 4.13-2**).

#### **Significance Evaluation**

The property was determined eligible under Criterion C because the farmhouse is a good representative example of the hall-parlor house type featuring Folk Victorian elements.

### **5035 McINTYRE STREET (5JF3890)**

#### **Description**

This site contains a large, historic American Foursquare-style house built in 1904, a huge, historic gambrel-roofed barn, and a small shed, all located on a 7-acre agricultural parcel on the northwest corner of McIntyre Street and West 50<sup>th</sup> Avenue. The property is located in a rural area containing remnants of old farms and smaller agricultural and equestrian properties (see **Figure 4.13-2**).

#### **Significance Evaluation**

This property has not been previously recorded or evaluated for significance. The immense wood frame barn and American Foursquare-style house are excellent examples of agricultural architecture from the early twentieth century, and the site therefore qualifies as eligible for the NRHP under Criterion C.

## **4.13.2 ENVIRONMENTAL CONSEQUENCES**

The following sections explain the anticipated effects to NRHP-eligible historic and archaeological resources under each of the project alternatives. Official determinations of effect made by FHWA and CDOT will be submitted to the SHPO and the Section 106 consulting parties for review.

### **4.13.2.1 NO ACTION ALTERNATIVE**

Under the No Action Alternative, the NRHP-eligible privately owned historic and archaeological resources identified would remain in their present state into the near future. Most of these resources are in rural to semi-rural areas where buildings are frequently adapted or added to support agricultural activity. Major historic canals and ditches would continue to function and be periodically maintained as water conveyance structures necessary for sustaining agriculture and the drinking water supply. One exception is the **Welch Ditch** on the west side of Golden, crossing US 6. This portion of the canal includes segments **5JF848.5** and **5JF848.6**. The City of Golden abandoned the canal after the 2005 season.



#### 4.13.2.2 EFFECTS COMMON TO ALL BUILD ALTERNATIVES

Three NRHP-eligible historic sites are subject to effects from all of the proposed build alternatives. These effects are summarized in **Table 4.13-2** in north to south order and discussed in greater detail below.

*Table 4.13-2 Effects Common to All Build Alternatives, Historic and Archaeological Resources*

Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Church/McKay Ranch 9600 Indiana Street	5JF2779	No	Yes—possible minor noise increase	No
Welch Ditch segment	5JF848.5	Yes—approximately 300-feet of abandoned ditch to be removed for new retaining wall	No	No
Golden Fire Brick Company Historic District	5JF3854	No	Yes—visual, noise	No

*Source: Compiled by FHU, 2007.*

#### **CHURCH/McKAY RANCH— 9600 INDIANA STREET (5JF2779)**

The historic Church/McKay Ranch at 9600 Indiana Street (5JF2779) may experience an increase in traffic noise over time due to construction of a new, higher capacity transportation facility to supersede Indiana Street.

#### **WELCH DITCH SEGMENT (5JF848.5)**

All of the build alternatives include a new divided roadway that would extend west of existing US 6 and result in removal of a portion of the abandoned historic **Welch Ditch (5JF848.5)**, which is currently conveyed by a culvert beneath existing US 6 near Golden. For all build alternatives, the affected portion of the segment is similar in length (approximately 300 feet).

#### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

All of the build alternatives will produce visual and noise effects to the **Golden Fire Brick Company Historic District (5JF3854)**. These effects are the result of moving the new roadway alignment west of existing US 93 to pass between the two historic buildings that are the district’s discontinuous elements. Although the integrity of the historic brick manufacturing plant has been severely reduced by modern development and the removal of kilns and brick plant buildings, the introduction of a new roadway between these two features will change the visual appearance of the landscape as well as increase noise levels.

#### 4.13.2.3 FREEWAY ALTERNATIVE

Eight NRHP-eligible historic and archaeological resources occur along the alignment of the Freeway Alternative, five of which are subject to possible effects (see **Table 4.13-3**). These sites are listed north to south in **Table 4.13-3**. Sites subject to effects include a **segment of the Denver & Rio Grande Western Railroad (5JF2346.6)**; the **Church/McKay Ranch at 9600 Indiana Street (5JF2779)**; the **Ramstetter Ranch at 5399 SH 93 (5JF2585)**; and **two segments of the Welch Ditch (5JF848.5 and 5JF848.6)**.



*Table 4.13-3 Freeway Alternative Effects, Historic and Archaeological Resources*

Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Church/McKay Ranch 9600 Indiana Street	5JF2779	No	Yes—possible minor noise increase	No
Denver & Rio Grande Western Railroad segment	5JF23463.6	Yes—new roadway would cross the railroad via new underpass. Approximately 1,000 feet of railroad to be temporarily realigned south to allow construction of the underpass structure. Once construction is completed, the temporary realignment would be removed, and the historic (current) railroad alignment would be maintained. Requires a permanent easement for a 280-foot-long by 150-foot-wide (0.96 acre) swath of railroad right-of-way	Yes—visual, noise	Yes—1000 feet of railroad moved during construction of new underpass and bridge
Brookes Stone Circle Site	5JF3195	No	No	No
Ramstetter Ranch 5399 SH 93	5JF2585	No	Yes—visual	No
Golden Fire Brick Company Historic District	5JF3854	No	Yes—visual, noise	No
Church Ditch segment	5JF267.1	No	No	No
Welch Ditch segment	5JF848.5	Yes—approx. 300 feet of abandoned ditch destroyed to accommodate new retaining wall	No	No
Welch Ditch segment	5JF848.6	No	No	No

*Source: Compiled by FHU, 2007.*



### **CHURCH/McKAY RANCH—9600 INDIANA STREET (5JF2779)**

With respect to the NRHP-eligible historic Church/McKay Ranch at 9600 Indiana Street (5JF2779), the proposed new 6-lane divided freeway would run parallel to and west of existing Indiana Street. Indiana Street would remain as a frontage road and access to the property from Indiana Street would remain unchanged. No property acquisition would be necessary.

The Church/McKay Ranch may also experience an increase in traffic noise over time due to construction of a new freeway west of Indiana Street. However, the probable increase in traffic over time may be offset by the increased distance of this new roadway from the historic ranch relative to existing Indiana Street. CDOT and FHWA have determined that the Freeway Alternative will not substantially diminish the characteristics that render the site eligible for the NRHP, and will cause *no adverse effect* to the resource.

### **DENVER & RIO GRANDE WESTERN RAILROAD SEGMENT (5JF2346.6)**

The proposed Freeway Alternative will cross a segment of the NRHP-eligible Denver & Rio Grande Western Railroad (5JF2346.6) just south of SH 72. SH 72 will be relocated northward in the vicinity of existing commercial development to provide local access to businesses. The Freeway Alternative is planned to be excavated beneath the existing railroad and would require construction of a new railroad bridge. The railroad would essentially remain at grade. Approximately 1,000 feet of the railroad would be temporarily realigned south of the existing railroad alignment to allow construction of the underpass structure while maintaining the operability of the rail line. Once construction is completed, the temporary realignment would be removed, and the historic (current) railroad alignment would be maintained. Construction of the new underpass structure would require a permanent easement for a 280-foot-long by 150 foot wide (0.96 acre) swath of railroad right-of-way to accommodate the underpass and railroad bridge structure.

The railroad segment may also experience indirect visual and noise effects. Construction of a new freeway across the railroad south of SH 72 will introduce a feature into the landscape in the vicinity of the railroad segment, although this effect will be greatly minimized by the use of an underpass to carry traffic beneath the existing railroad grade.

Since the railroad is a linear facility that must be crossed by the new freeway, avoidance of impacts is impossible. Despite the changes noted above, which affect a very small portion of the overall rail line, CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Freeway Alternative will cause *no adverse effect* to the resource.

### **BROOKES STONE CIRCLE SITE (5JF3195)**

The Freeway Alternative was intentionally routed as far away as possible from this exceptionally significant archaeological site. The edge of the proposed transportation improvements under the Freeway Alternative will be no closer than 272 feet from the boundary of the stone circle site. The edge of right-of-way for the Freeway Alternative at its closest point is 85 feet from the edge of the stone circle site. The construction plans would include stipulations to ensure that all construction activity is kept within the proposed right-of-way to prevent any disturbance to the site. Given these caveats, CDOT and FHWA have determined that the Freeway Alternative will not substantially diminish the characteristics that render the site eligible for the NRHP, and will result in a finding of *no historic properties affected* with respect to this resource.

### **RAMSTETTER RANCH-5399 SH 93 (5JF2585)**

The NRHP-eligible Ramstetter Ranch at 5399 SH 93 (5JF2585) would not be directly affected by the alternative. No new right-of-way would be acquired from the property, and existing SH 93 in the vicinity of the site would become a short frontage road providing property access. The proposed new 6-lane divided freeway would pass to the east of the site, roughly parallel to existing SH 93. Access to the historic farm from the new frontage road (SH 93) would be controlled by the new freeway configuration. This remnant of SH 93 would be accessible from the southbound freeway at the proposed new 64<sup>th</sup> Parkway Interchange, or from the northbound freeway at the proposed new Golden Gate Canyon Interchange.



The Ramstetter Ranch may also experience visual effects due to construction of an elevated extension of SH 93 and grade separation structure over the proposed freeway just south of the site. SH 93 will remain in use as a frontage road directly in front of the ranch complex, but toward the south end of the property the roadway will rise as a bridge approach and will be bordered on the west by a new retaining wall. The new grade separation structure south of the site will alter the setting of the property somewhat, although the setting has already been diminished by construction and a high volume of traffic along SH 93. Furthermore, the freeway alignment would be shifted to the east of existing SH 93 thus removing traffic and traffic noise away from the property. CDOT and FHWA have determined that the Freeway Alternative will not substantially diminish the characteristics that render the site eligible for the NRHP, and will cause *no adverse effect* to the resource.

#### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

The Golden Fire Brick Company Historic District (5JF3854) will not be directly affected by the Freeway Alternative. The proposed freeway will pass between the two separately delineated areas that comprise the historic district, one containing the former Manager's House, and the other containing the Office/Garage and associated features.

This alternative will result in noise and visual effects to the Golden Fire Brick Company Historic District (5JF3854). Visual impacts may be slightly greater with the Freeway Alternative as compared to the Tollway Alternative and Regional Arterial Alternative, since it will include interchange ramps to allow access to Golden Gate Canyon Road. The proposed new freeway (edge of pavement) would pass no closer than 95 feet from the historic Office/Garage building and no closer than 135 feet from the historic Manager's House. Indirect effects to the property from the Freeway Alternative will be generally similar to those anticipated from the Combined Alternative (Recommended Alternative) per our previous consultation for effect. In terms of visual effects, a new, wider freeway facility will be introduced between the historic buildings, through what was originally part of the brick manufacturing plant but has since lost all integrity. The brick plant structures (kilns, drying and storage sheds, etc.) formerly located between the two extant buildings have been removed and the new freeway will impact a modern concrete batch plant and construction equipment storage yards not associated with the historic brick plant. The new freeway will be at grade, and will likely be visible to some extent from each of the historic buildings. However, at present the brick plant manager's house and 1927 office/garage are not visible from one another; therefore, the new freeway will not disrupt an existing view that reveals the relationship between the two buildings.

Existing noise levels at the western portion of the historic district (1889 plant manager's house) are 48-49 dB. Computer modeling indicates that the Freeway Alternative will yield a higher noise level of 70 dB (net increase of 21-22 dB). Existing noise levels at the eastern portion of the historic district (1927 office/garage) are 52-53 dB, and computer modeling indicates that the Freeway Alternative will result in a noise level of 69 dB (net increase of 16-17 dB). Auditory impacts from the Freeway Alternative will be greater here as compared to the Tollway Alternative and Regional Arterial Alternative due to the introduction of interchange ramps that will provide access to and from Golden Gate Canyon Road.

While noise levels will markedly increase at 5JF3854 following construction of the Freeway Alternative, changes to the auditory aspect of the industrial property's setting will not substantially diminish the characteristics that render the site NRHP-eligible. The brick yard was a manufacturing facility and its operation undoubtedly generated considerable noise from material handling, firing, and transportation of raw materials and finished bricks. Due to the lack of direct effects and minor nature of indirect effects, CDOT and FHWA have therefore determined that the Freeway Alternative will cause *no adverse effect* to the resource.

#### **CHURCH DITCH SEGMENT (5JF267.1)**

One segment of the Church Ditch (5JF267.1) crossing existing US 6 will not be directly affected by the Freeway Alternative. The ditch currently passes beneath existing US 6 in a box culvert. The proposed Freeway Alternative footprint is shifted to the east of the existing alignment of US 6, and the existing box culvert will be left in place. Just east of this culvert, the open ditch will be spanned by a bridge structure supporting the northbound off ramp from US 6 to the US 6/SH 93/SH 58 interchange. The historic setting



in the vicinity of the ditch segment has already been compromised by construction of existing US 6, and the proposed Freeway Alternative off ramp will not substantially diminish the integrity of the ditch segment. Consequently, CDOT and FHWA have determined that the Freeway Alternative will result in a finding of *no historic properties affected* with respect to this resource.

#### **WELCH DITCH SEGMENT (5JF848.5)**

One segment of the Welch Ditch (5JF848.5) on the west side of US 6 near Golden would be directly affected by construction of a new 6-lane divided freeway. The construction of retaining walls to accommodate the new freeway would require filling of an estimated 300 feet of the abandoned ditch.

This impact represents 0.14 acre or less than 1 percent of the 12.8-mile-long Welch Ditch. This portion of the ditch is located within the existing CDOT right-of-way that was purchased in 1950 for the original construction of US 6. Since the ditch is no longer in use, no culvert is necessary to maintain the flow of water to the east side of US 6. Drainage from the abandoned ditch will have to be re-routed through a drainage structure placed near the west edge of the freeway right-of-way, which would direct collected water into a natural drainage—Chimney Gulch. It may be necessary to fill in the abandoned Welch Ditch between this drainage structure and the new retaining wall, to prevent the collection of water with no outlet. Avoidance of direct impacts to the ditch segment is impossible under the Freeway Alternative due to the geometrics of the roadway template and alignment traversing existing US 6. No significant engineering features, such as those found farther upstream, will be impacted. CDOT and FHWA have determined that the undertaking will result in *no adverse effect* to this linear resource.

#### **WELCH DITCH SEGMENT (5JF848.6)**

Another segment of the Welch Ditch (5JF848.6) on the east side of US 6 would not be directly affected. Under the Freeway Alternative, no expansion of the roadway template will occur on the east side of existing US 6 in the vicinity of this historic ditch segment. Additionally, the proposed transportation improvements will not substantially change the visual characteristics of the setting that currently exists in proximity to the ditch segment. For these reasons, CDOT and FHWA have determined that the Freeway Alternative will result in a finding of *no historic properties affected* with respect to this resource.

#### **4.13.2.4 TOLLWAY ALTERNATIVE**

Eight NRHP-eligible historic and archaeological resources occur along the Tollway Alternative alignment, five of which are subject to possible effects (see **Table 4.13-4**). Sites subject to effects (from the north to south) include the **Church/McKay Ranch at 9600 Indiana Street (5JF2779)**; **a segment of the historic Denver & Rio Grande Western Railroad (5JF53.3)**; the **Ramstetter Ranch at 5399 SH 93 (5JF2585)**; and **two segments of the Welch Ditch (5JF848.5 and 5JF848.6)**.



*Table 4.13-4 Tollway Alternative Effects, Historic and Archaeological Resources*

SiteName/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Church/McKay Ranch 9600 Indiana Street	5JF2779	No	Yes—possible minor noise increase	No
Denver & Rio Grande Western Railroad segment	5JF2346.6	Yes—new roadway would cross the railroad via new underpass. Approximately 1,000 feet of railroad to be temporarily realigned south to allow construction of the underpass structure. Once construction is completed, the temporary realignment would be removed, and the historic (current) railroad alignment would be maintained. Requires a permanent easement for a 280-foot-long by 150-foot-wide (0.96 acre) swath of railroad right-of-way	Yes—visual, noise	Yes—1000 feet of railroad moved during construction of new underpass and bridge
Brookes Stone Circle Site	5JF3195	No	No	No
Ramstetter Ranch 5399 SH 93	5JF2585	No	No	No
Golden Fire Brick Company Historic District	5JF3854	No	Yes—visual, noise	No
Church Ditch segment	5JF267.1	Yes—150-foot-culvert extension needed on east side of existing US 6	No	No
Welch Ditch segment	5JF848.5	Yes—approximately 300 feet of abandoned ditch destroyed to accommodate new retaining wall.	No	No
Welch Ditch segment	5JF848.6	Yes— approximately. 45 feet of abandoned ditch destroyed to accommodate new retaining wall.	No	No

*Source: Compiled by FHU, 2007.*

**CHURCH/McKAY RANCH—9600 INDIANA STREET (5JF2779)**

The Church/McKay Ranch would not be directly affected by the proposed Tollway Alternative. The 4-lane divided tollway would run parallel to and west of existing Indiana Street, at or below the existing grade. Indiana Street would remain in its current configuration and access to the historic property would remain unchanged. The Church/McKay Ranch may experience an increase in traffic noise over time, due to construction of a new tollway west of Indiana Street. However, the probable increase in traffic over time may



be offset by the increased distance of this new tollway from the historic ranch relative to existing Indiana Street. CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Tollway Alternative will cause *no adverse effect* to the resource.

#### **DENVER & RIO GRANDE WESTERN RAILROAD SEGMENT (5JF2346.6)**

One 600-foot-long segment of the historic Denver & Rio Grande Western (D&RGW) Railroad (5JF2346.6) west of Indiana Street and just south of SH 72 would be subject to direct impacts from the Tollway Alternative. The effects to this resource are identical to those described above for the Freeway Alternative. CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Tollway Alternative will cause *no adverse effect* to the resource.

#### **BROOKES STONE CIRCLE SITE (5JF3195)**

The Tollway Alternative was intentionally routed as far away as possible from this archaeological site. The edge of the proposed transportation improvements under the Tollway Alternative will be no closer than 585 feet from the boundary of the stone circle site. The edge of right-of-way for the Tollway Alternative at its closest point is 334 feet from the edge of the stone circle site. The construction plans would include stipulations to insure that all construction activity is kept within the proposed right-of-way to prevent any disturbance to the site. Given these caveats, CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Tollway Alternative will result in a finding of *no historic properties affected* with respect to this resource.

#### **RAMSTETTER RANCH—5399 SH 93 (5JF2585)**

The Ramstetter Ranch would not be directly affected by the Tollway Alternative. No new right-of-way would be acquired from the property, existing SH 93 would be left in place, and access to the historic property will remain unchanged. The proposed new 4-lane divided tollway, as it approaches the site from the south, would be conveyed over existing SH 93 via a new bridge structure south of the Ramstetter Ranch, to a new alignment east of existing SH 93. Just north of the site, the tollway facility would be carried over and re-cross to the west side of existing SH 93 via another new bridge structure. The new bridges appear to be far enough away from the historic property that they do not cause an adverse visual effect. The proposed Tollway alignment would be shifted to the east of existing SH 93, thus moving traffic and traffic noise away from the property. CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Tollway Alternative will result in a finding of *no historic properties affected* with respect to the resource.

#### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

The Golden Fire Brick Company Historic District will not be directly affected by the Tollway Alternative. The proposed tollway will pass between the two separately delineated areas that comprise the historic district, one containing the former Manager's House, and the other containing the Office/Garage and associated features.

This alternative will result in noise and visual effects on the Golden Fire Brick Company Historic District (5JF3854). The proposed new tollway (edge of pavement) would pass no closer than 50 feet from the historic Office/Garage building and no closer than 135 feet from the historic Manager's House. Indirect effects to the property from the Tollway Alternative will be generally similar to those anticipated from the Combined Alternative (Recommended Alternative) per our previous consultation for effect. In terms of visual effects, a new, wider tollway facility will be introduced between the historic buildings, through what was originally part of the brick manufacturing plant but has since lost all integrity. The brick plant structures (kilns, drying and storage sheds, etc.) formerly located between the two extant buildings has been removed and the new tollway will impact a modern concrete batch plant and construction equipment storage yards not associated with the historic brick plant. The new tollway will be at grade and will likely be visible to some extent from each of the historic buildings.



However, at present the brick plant manager's house and 1927 office/garage are not visible from one another; therefore, the new tollway will not disrupt an existing view that reveals the relationship between the two buildings.

Existing noise levels at the western portion of the historic district (1889 plant manager's house) are 48-49 dB. Computer modeling indicates that the Tollway Alternative will yield a higher noise level of 68 dB (net increase of 19-20 dB). Existing noise levels at the eastern portion of the historic district (1927 office/garage) are 52-53 dB, and computer modeling indicates that the Tollway Alternative will result in a noise level of 65 dB (net increase of 12-13 dB).

While noise levels will markedly increase at 5JF3854 following construction of the Tollway Alternative, changes to the auditory aspect of the industrial property's setting will not substantially diminish the characteristics that render the site NRHP-eligible. The brick yard was a manufacturing facility and its operation undoubtedly generated considerable noise from material handling, firing, and transportation of raw materials and finished bricks. CDOT and FHWA have therefore determined that the Tollway Alternative will cause *no adverse effect* to the resource.

#### **CHURCH DITCH SEGMENT (5JF267.1)**

This historic ditch currently passes beneath existing US 6 in a box culvert. The proposed Tollway Alternative footprint extends east of the existing alignment of US 6, and the ditch will be routed through a new box culvert extension on the east side of the existing box culvert. Just east of this new culvert, the open ditch will be spanned by a bridge structure supporting the two northbound through lanes. At another location west of this point, the same Church Ditch segment and Clear Creek will be spanned by a new bridge structure providing access from US 6 to the Canyonside Condominiums and a private residence on the south bank of Clear Creek. The historic setting in the vicinity of the ditch segment has already been compromised by construction of existing US 6, and the proposed Tollway Alternative will not substantially diminish the integrity of the ditch segment. Consequently, CDOT and FHWA have determined that the Tollway Alternative will result in a finding of *no historic properties affected* with respect to this resource.

#### **WELCH DITCH SEGMENT (5JF848.5)**

This ditch segment on the west side of US 6 near Golden would be directly affected by construction of a new 4-lane divided tollway. The construction of retaining walls to accommodate the new tollway would require filling of an estimated 300 feet of the abandoned ditch. This impact represents 0.14 acre or less than 1 percent of the 12.8-mile-long Welch Ditch. This portion of the ditch is located within the existing CDOT right-of-way that was purchased in 1950 for the original construction of US 6. Since the ditch is no longer in use, no culvert is necessary to maintain the flow of water to the east side of US 6. Drainage from the abandoned ditch will have to be re-routed through a new drainage structure placed near the west edge of the tollway right-of-way, which would direct collected water into a natural drainage—Chimney Gulch. It may be necessary to fill in the abandoned Welch Ditch between this drainage structure and the new retaining wall, to prevent the collection of water with no outlet. Avoidance of direct impacts to the ditch segment is impossible under the Tollway Alternative due to the geometrics of the roadway template and alignment traversing existing US 6. No significant engineering features, such as those found farther upstream, will be impacted. CDOT and FHWA have determined that the Tollway Alternative will result in *no adverse effect* to this linear resource.

#### **WELCH DITCH SEGMENT (5JF848.6)**

This segment of the NRHP-eligible Welch Ditch (5JF848.6) is located on the east side of US 6 near Golden. Under the Tollway Alternative, construction of retaining walls to accommodate the new roadway template will necessitate filling in 45 linear feet of the abandoned ditch. This impact represents 0.02 acre or less than 1 percent of the 12.8-mile-long Welch Ditch. CDOT and FHWA have determined that the Tollway Alternative will result in *no adverse effect* to this resource.



#### 4.13.2.5 REGIONAL ARTERIAL ALTERNATIVE

Eight NRHP-eligible sites occur along the Regional Arterial Alternative alignment, although only four are subject to possible effects. These sites are listed in north to south order (see **Table 4.13-5**). Sites subject to effects (from the north to south) include the **Church/McKay Ranch at 9600 Indiana Street (5JF2779)**; **one segment of the Denver & Rio Grande Western Railroad (5JF2346.6)**; the **Golden Fire Brick Company Historic District (5JF3854)**; and one segment of the Welch Ditch (5JF848.5).

*Table 4.13-5 Regional Arterial Alternative Effects, Historic and Archaeological Resources*

Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Church/McKay Ranch 9600 Indiana Street	5JF2779	No	Yes—probable noise increase	No
Brookes Stone Circle Site	5JF3195	No	No	No
Ramstetter Ranch 5399 SH 93	5JF2585	No	No	No
Golden Fire Brick Company Historic District	5JF3854	No	Yes—visual, noise	No
Church Ditch segment	5JF267.1	No	No	No
Welch Ditch segment	5JF848.5	Yes—approximately 300 ft of abandoned ditch destroyed to accommodate new retaining wall	No	No
Welch Ditch segment	5JF848.6	No	No	No

*Source: Compiled by FHU, 2007.*

#### **CHURCH/McKAY RANCH—9600 INDIANA STREET (5JF2779)**

The Church/McKay Ranch will not experience direct effects from the proposed Regional Arterial Alternative. The proposed new 4-lane divided regional arterial would replace existing Indiana Street and extend into the buffer zone along the east edge of Rocky Flats National Wildlife Refuge. Unlike the Freeway Alternative and Tollway Alternative, existing Indiana Street north of West 96<sup>th</sup> Avenue would not be retained as a separate facility/frontage road. Access to the property from Indiana Street would remain unchanged. No property acquisition would be necessary. The Church/McKay Ranch may experience a moderate increase in traffic noise due to introduction of a larger new transportation facility along the west side of the property in place of Indiana Street. CDOT and FHWA have determined that the undertaking will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that the Regional Arterial Alternative will cause *no adverse effect* to the resource.

#### **BROOKES STONE CIRCLE SITE (5JF3195)**

The Regional Arterial Alternative was intentionally routed as far away as possible from this archaeological site. There will be no direct impacts to the site, and it is far enough from the proposed regional arterial that no substantial changes in visual character or noise would occur. CDOT and FHWA have determined that the Regional Arterial Alternative will not substantially diminish the characteristics that render the site eligible for the NRHP, and will therefore result in a finding of *no historic properties affected* with respect to this resource.



### **RAMSTETTER RANCH—5399 SH 93 (5JF2585)**

The Ramstetter Ranch would not be directly affected by the Regional Arterial Alternative. No new right-of-way would be acquired from the property. The proposed new 6-lane divided regional arterial would be placed along the existing alignment of SH 93 in the vicinity of the historic farm/ranch. A wide, existing shoulder/truck parking area along the east edge of the property/SH 93 would be eliminated by the new regional arterial. The existing driveway from SH 93 would remain but would be accessible only from southbound lanes. No substantial indirect (visual, noise) effects are expected to occur at the Ramstetter Ranch. The existing PM noise level at the Ramstetter Ranch is 60 dBA. Under the Regional Arterial Alternative the PM noise level is expected to increase only slightly, by 2 dBA (62 dBA). The new alignment will be wider, but not higher than the current SH 93, thus minimizing visual effects. CDOT and FHWA have determined that the Regional Arterial Alternative will not substantially diminish the characteristics that render the site eligible for the NRHP, and find that it will result in a finding of *no historic properties affected* with respect to this resource.

### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

The Golden Fire Brick Company Historic District will not be directly affected by the Regional Arterial Alternative. The proposed regional arterial will pass between the two separately delineated areas that comprise the historic district, one containing the former Manager's House, and the other containing the Office/Garage and associated features.

Indirect effects from the Regional Arterial Alternative are identical at this location to those associated with the Combined Alternative (Recommended Alternative). This alternative will result in noise and visual effects on the Golden Fire Brick Company Historic District (5JF3854). The proposed new regional arterial (edge of pavement) would pass no closer than 220 feet from the historic Office/Garage building and no closer than 215 feet from the historic Manager's House. Indirect effects to the property from the Regional Arterial Alternative will be generally similar to those anticipated from the Combined Alternative (Recommended Alternative) per our previous consultation for effect. In terms of visual effects, a new, wider regional arterial facility will be introduced between the historic buildings through what was originally part of the brick manufacturing plant but has since lost all integrity. The brick plant structures (kilns, drying and storage sheds, etc.) formerly located between the two extant buildings have been removed and the new regional arterial will impact a modern concrete batch plant, and construction equipment storage yards not associated with the historic brick plant. The new regional arterial will be at grade and will likely be visible to some extent from each of the historic buildings. However, at present the brick plant manager's house and 1927 office/garage are not visible from one another; therefore, the new regional arterial will not disrupt an existing view that reveals the relationship between the two buildings.

Existing noise levels at the western portion of the historic district (1889 plant manager's house) are 48-49 dB. Existing noise levels at the eastern portion of the historic district (1927 office/garage) are 52-53 dB. Computer modeling indicates that the Regional Arterial Alternative will result in a higher noise level of 62 dB (net increase of 13-14 dB) at both locations.

While noise levels will markedly increase at 5JF3854 following construction of the Regional Arterial Alternative, changes to the auditory aspect of the industrial property's setting will not substantially diminish the characteristics that render the site NRHP-eligible. The brick yard was a manufacturing facility and its operation undoubtedly generated considerable noise from material handling, firing, and transportation of raw materials and finished bricks. CDOT and FHWA have therefore determined that the Regional Arterial Alternative will result in *no adverse effect* to the resource.

### **CHURCH DITCH SEGMENT (5JF267.1)**

Under the Regional Arterial Alternative, this ditch segment would experience minor direct impacts where it crosses existing US 6 west of Golden. The ditch currently passes beneath existing US 6 in a box culvert. The segment is 2.7 miles long and extends both east and west of existing US 6. Realignment of US 6 and development of a new interchange at the junction of US6, SH 93, and SH 58 will require a short extension of the existing box culvert to the west to allow construction of a southbound on ramp. Temporary construction



impacts would likely occur to a small portion of the ditch channel just beyond the end of the new culvert. Any damage to the canal channel associated with these construction impacts will be repaired to maintain its pre-construction configuration and utility. A bridge structure for the northbound off ramp will span the ditch on the east side of existing US 6.

The ditch segment will also be spanned by another 2-lane bridge structure several hundred feet to the west of the new interchange, providing access from US 6 to the Canyonside Condominiums and a private residence on the south bank of Clear Creek.

Avoidance of direct impacts to the ditch segment is impossible with improvement of the US 6 corridor, including development of a new US 6/SH93/SH 58 interchange. CDOT and FHWA have determined that due to the minor nature of the impacts the undertaking will result in *no adverse effect* to this linear historic resource.

#### **WELCH DITCH SEGMENT (5JF848.5)**

This Welch Ditch segment on the west side of US 6 near Golden would be directly affected by construction of a new 6-lane divided regional arterial on the west side of existing US 6. The construction of retaining walls to accommodate the new regional arterial would require filling of an estimated 300 feet of the abandoned ditch. This impact represents 0.14 acre or less than 1 percent of the 12.8-mile-long Welch Ditch. This portion of the ditch is located within the existing CDOT right-of-way that was purchased in 1950 for the original construction of US 6. Since the ditch is no longer in use, no culvert is necessary to maintain the flow of water to the east side of US 6. Drainage from the abandoned ditch will have to be re-routed through a new drainage structure placed near the west edge of the roadway right-of-way, which would direct collected water into a natural drainage—Chimney Gulch. It may be necessary to fill in the abandoned Welch Ditch between this drainage structure and the new retaining wall to prevent the collection of water with no outlet. Avoidance of direct impacts to the ditch segment is impossible under the Regional Arterial Alternative due to the geometrics of the roadway template and alignment traversing existing US 6. No significant engineering features, such as those found farther upstream, will be impacted. CDOT and FHWA have determined that the Regional Arterial Alternative will result in *no adverse effect* to this linear resource.

#### **WELCH DITCH SEGMENT (5JF848.6)**

This segment of Welch Ditch is located on the east side of US 6 near Golden. Under the Regional Arterial Alternative, no expansion of the roadway template will occur on the east side of existing US 6 in the vicinity of this historic ditch segment. No direct effects will occur, and the proposed transportation improvements will not substantially change the visual characteristics of the setting that currently exists in proximity to the ditch segment. For these reasons, CDOT and FHWA have determined that the Regional Arterial Alternative will result in a finding of *no historic properties affected* with respect to this resource.

#### **4.13.2.6 COMBINED ALTERNATIVE (RECOMMENDED ALTERNATIVE)**

Nineteen NRHP-eligible historic and archaeological resources occur along or in proximity to the Combined Alternative (Recommended Alternative), 14 of which are subject to possible effects. These sites are listed from north to south beginning with the SH 93 alignment followed by Indiana Street/McIntyre Street alignment (see **Table 4.13-6**). Sites subject to effects along the SH 93 alignment include the **Church/McKay Ranch at 9600 Indiana Street (5JF2779)**; a **segment of the Denver & Rio Grande Western Railroad (5JF2346.6)**; the **Golden Fire Brick Company Historic District (5JF3854)**, and **one segment of the Welch Ditch (5JF848.5)**. Farther east, along the Indiana Street/McIntyre Street alignment, the following sites are subject to effects: another **segment of the Denver & Rio Grande Western Railroad (5JF2346.7)**; a **segment of the Church Ditch (5JF267.8)**; the **Farmers' High Line Canal (two segments-(5JF250.6, 5JF250.7)**, the former **Ralston Presbyterian Church at 7400 Indiana Street (5JF1712)**; an architecturally eligible farm at **14801-14803 W. 72<sup>nd</sup> Avenue (5JF3873)**; a Craftsman-style farmhouse at **5675 and 5440 McIntyre Street (5JF3877 and 5JF3880)**; a farmhouse at **5100 and 5075 McIntyre Street (5JF3887 and 5JF3888)**; a farm at **5035 McIntyre Street (5JF3890)**; and a segment of the historic **Colorado & Southern Railroad (5JF519.8)**.



*Table 4.13-6 Combined Alternative (Recommended Alternative) Effects, Historic and Archaeological Resources*

Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Church/McKay Ranch 9600 Indiana Street	5JF2779	No	Yes—possible minor noise increase	No
Denver & Rio Grande Western Railroad	5JF2346.6	Yes—new roadway would cross the railroad via an underpass. Approximately 1,000 feet of railroad to be temporarily realigned south to allow construction of the underpass structure. Once construction is completed, the temporary realignment would be removed, and the historic (current) railroad alignment would be maintained. Requires a permanent easement for a 280-foot-long by 150-foot-wide (0.96 acre) swath of railroad right-of-way	Yes—visual due to new underpass	Yes—1000 feet of railroad moved during construction of new underpass and bridge
Brookes Stone Circle Site	5JF3195	No	No	No
Ramstetter Ranch 5399 SH 93	5JF2585	No	No	Minor construction impacts to build retaining wall near southwest corner of property
Golden Fire Brick Company Historic District	5JF3854	No	Yes—visual, noise	No
Church Ditch segment	5JF267.1	No	No	No
Welch Ditch segment	5JF848.5	Yes—approximately 300 feet of abandoned ditch destroyed to accommodate new retaining wall	No	No
Welch Ditch segment	5JF848.6	No	No	No



Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
Denver & Rio Grande Western Railroad	5JF2346.7	Yes—new larger railroad bridge over Indiana Street required, necessitating use of 120-foot-long x 200-foot-wide swath of existing railroad right-of-way and possible realignment of 300 feet of track	Yes—visual due to spanning by new bridge structure	No
Church Ditch segment	5JF267.8	Yes—105 linear feet of ditch affected; culvert will be extended	No	No
Farmers' High Line Canal	5JF250.6	Yes—three stretches of the canal would be placed in new box culverts, 850 feet total linear feet would be affected	No	No
Pearce's Grocery Store 7851 Indiana Street	5JF994	No	No	No
Ralston Presbyterian Church 7400 Indiana Street	5JF1712	No	Yes—possibility of increased noise	Construction impacts at west end of parking lot during construction of retaining wall
14801-14803 W. 72 <sup>nd</sup> Avenue	5JF3873	Yes—widening of Indiana Street will require acquisition of 0.40 acres of undeveloped farmland	No	No
Farmers' High Line Canal	5JF250.7	Yes—three stretches of the canal would be placed in new box culverts, 925 feet total linear feet (0.42 acre) would be affected	No	No
5675 McIntyre Street	5JF3877	Yes—widening of McIntyre Street will require acquisition of 0.15 acres of undeveloped land along east end of site	No	No
5440 McIntyre Street	5JF3880	No	Yes—possibility of increased noise	No



Site Name/Address	Site No.	Direct Effects	Indirect Effects	Temporary Effects
5100 McIntyre Street	5JF3887	Yes—realignment/widening will require acquisition of approximately 50 x 125 feet or 0.16 acre of this property, construction of a retaining wall, and change of access	Yes—noise increase	No
5075 McIntyre Street	5JF3888	No	No	No
5035 McIntyre Street	5JF3890	No	Yes—possibility of increased noise	No
Colorado & Southern Railroad segment	5JF519.8	Yes—crossing of McIntyre Street widened to accommodate new roadway, requiring use of 80 x 110 foot swath of railroad right-of-way. Approximately 60 linear feet of track could be upgraded	No	No

*Source: Compiled by FHU, 2007.*

#### **CHURCH/McKAY RANCH— 9600 INDIANA STREET (5JF2779)**

The Combined Alternative (Recommended Alternative) will leave existing Indiana Street in place in the vicinity of the Church/McKay Ranch, but a new 4-lane divided tollway will be built directly west of and parallel to Indiana Street. The new tollway will be depressed approximately 10 feet below the existing grade, necessitating installation of retaining walls along the margins of the facility, including one closely following the western edge of existing Indiana Street. There will be no direct impacts to the historic property. In terms of indirect impacts, depression of the new tollway will limit the visual impact. Additionally, existing Indiana Street serves as an existing visual buffer between the site and the proposed new transportation facility. With respect to noise impacts, a modest increase is expected to occur as a result of the Combined Alternative (Recommended Alternative). Existing AM and PM noise levels are 62.1 dB and 63.5 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will yield slightly higher AM and PM noise levels of 68.1 dB (net increases of 6.0 dB for AM and 4.6 dB for PM.). These impacts are insufficient to diminish the qualities that render the property eligible for the NRHP, and the SHPO has concurred on a determination of *no adverse effect* to the resource.

#### **DENVER & RIO GRANDE WESTERN RAILROAD (5JF2346.6)**

One 600-foot-long segment of this historic railroad located west of Indiana Street and just south of SH 72 would be subject to direct impacts from the Combined Alternative (Recommended Alternative). The proposed new tollway would cross the railroad via an underpass. Approximately 1,000 feet of the railroad would be temporarily realigned south of the existing railroad alignment to allow construction of the underpass structure while maintaining the operability of the rail line. Once construction is completed, the temporary realignment would be removed, and the historic (current) railroad alignment would be maintained. Construction of the new underpass structure would require a permanent easement for a 280-foot-long by 150-foot-wide (0.96 acre) swath of railroad right-of-way to accommodate the underpass and railroad bridge structure. Construction of the new underpass would also alter the segment visually. Since the railroad is a linear facility that must be crossed by the new tollway, avoidance of impacts is impossible. The Combined



Alternative (Recommended Alternative) will affect a very small portion of the overall rail line, and will not substantially diminish the characteristics that render the site eligible for the NRHP. The SHPO has concurred on a determination of *no adverse effect* to the resource.

#### **BROOKES STONE CIRCLE SITE (5JF3195)**

The Combined Alternative (Recommended Alternative) was designed to stay as far away from the site as possible. There will be no direct impacts to the site, and it is far enough from the proposed tollway that no substantial changes in visual character or noise would occur. The SHPO has concurred that the Combined Alternative (Recommended Alternative) will result in *no historic properties affected* with respect to site 5JF3195.

#### **RAMSTETTER RANCH/5399 SH 93 (5JF2585)**

The Combined Alternative (Recommended Alternative) involves construction of a 6-lane divided regional arterial generally following the SH 93 corridor past the Ramstetter Ranch, as well as realignment of the existing 56<sup>th</sup> Avenue/SH 93 intersection. Fifty-sixth Avenue borders the north side of the Ramstetter Ranch property. The existing 56<sup>th</sup> Avenue access on the west side of SH 93 would be removed and new access to 56<sup>th</sup> Avenue would be provided farther to the north by a connection to the 58<sup>th</sup> Avenue/SH 93 intersection. Minor construction impacts to the southwest corner of the property are possible to permit installation of a retaining wall; these temporary impacts would not affect any contributing historic buildings or features. Currently there are two access entries to the ranch property from SH 93. Under the Combined Alternative (Recommended Alternative), the southernmost, secondary access would be closed, although the principal entry and existing driveway leading to the ranch house and ranch buildings would be maintained. A minor increase in noise levels would occur at the property. Existing AM and PM noise levels are 58.7 dB and 59.6 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will yield slightly higher AM and PM noise levels of 62.5 dB (net increase of 3.8 dB) and 62.6 dB (net increase of 3.0 dB). These impacts are minor in nature, and the SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will have *no adverse effect* upon this resource.

#### **GOLDEN FIRE BRICK COMPANY HISTORIC DISTRICT (5JF3854)**

In the vicinity of the Golden Fire Brick Company Historic District, the Combined Alternative (Recommended Alternative) involves construction of a new, 6-lane divided regional arterial west side of existing SH 93. The regional arterial will pass between the two separate extant historic buildings (1889 Manager's House and 1927 Office/Garage). The Combined Alternative (Recommended Alternative) was designed to completely avoid the acquisition of land from either of the two discontinuous portions of the historic district for new right-of-way. The new regional arterial will be nearly equidistant from the two historic buildings. The distance from the new regional arterial to the eastern part of the historic district (containing the 1927 office/garage) is approximately 220 feet, while the distance from the edge of the new regional arterial to the western part of the historic district (containing the 1889 brick plant manager's house) is approximately 215 feet.

There is currently no direct access from Golden Gate Canyon Road to the 1889 brick manager's house, although an existing driveway from Golden Gate Road runs past the historic building and permits access to a modern house. Both the modern house and the 1889 manager's house are located on land that has been acquired by the City of Golden, and new access to these buildings will have to be provided in coordination with the City.

In terms of visual effects, a new, wider regional arterial facility will be introduced between the historic buildings, through what was originally part of the brick manufacturing plant but has since lost all integrity. The brick plant structures (kilns, drying and storage sheds, etc.) formerly located between the two extant buildings have been removed and the new regional arterial will impact a modern concrete batch plant and construction equipment storage yards not associated with the historic plant. The new regional arterial will be at grade, and will likely be visible to some extent from each of the historic buildings. However, at present the brick plant manager's house and 1927 office/garage are not visible from one another; therefore, the new regional arterial will not disrupt an existing view that reveals the relationship between the two buildings.



Existing AM and PM noise levels at the western portion of the historic district (1889 plant manager's house) are 48.3 dB and 48.9 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will yield higher AM and PM noise levels of 62.1 dB (net increase of 13.8 dB) and 62.2 dB (net increase of 13.3 dB). Existing AM and PM noise levels in the eastern portion of the historic district (1927 office/garage) are 52.2 dB and 53.0 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will yield higher AM and PM noise levels of 61.9 dB (net increase of 9.7 dB) and 62.0 dB (net increase of 9.0 dB).

While noise levels will markedly increase at 5JF3854 following construction of the Combined Alternative (Recommended Alternative), changes to the auditory aspect of the industrial property's setting will not substantially diminish the characteristics that render the site NRHP-eligible. The brick yard was a manufacturing facility and its operation of which undoubtedly generated considerable noise from material handling, firing, and transportation of raw materials and finished bricks. The SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to the resource.

#### **CHURCH DITCH SEGMENT (5JF267.1)**

Under the Combined Alternative (Recommended Alternative), a segment of the NRHP-eligible Church Ditch (5JF267.1) would experience minor direct impacts where it crosses existing US 6 west of Golden. Realignment of US 6 and development of a new interchange at the junction of US 6, SH 93, and SH 58 will require a short extension of the existing box culvert to the west to allow construction of a southbound onramp. Temporary construction impacts would likely occur to a small portion of the ditch channel just beyond the end of the new culvert. Any damage to the canal channel associated with these construction impacts will be repaired to maintain its pre-construction configuration and utility. A bridge structure for the northbound off ramp will span the ditch on the east side of existing US 6.

The ditch segment will also be spanned by another 2-lane bridge structure several hundred feet to the west of the new interchange, providing access from US 6 to the Canyonside Condominiums and a private residence on the south bank of Clear Creek.

Avoidance of direct impacts to the ditch segment is impossible with improvement of the US 6 corridor, including development of a new US 6/SH 93/SH 58 interchange. Due to the minor nature of the effects to this ditch segment, the SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this linear historic resource.

#### **WELCH DITCH SEGMENT (5JF848.5)**

This Welch Ditch segment on the west side of US 6 near Golden would be directly impacted by construction of a new 6-lane divided regional arterial on the west side of existing US 6. Approximately 300 feet (0.14 acre) or less than 1 percent of the 12.8-mile-long Welch Ditch would be subject to direct impacts from construction of a retaining wall along the west side of the new regional arterial. This portion of the ditch is located within the existing CDOT right-of-way that was purchased in 1950 for the original construction of US 6. Since the ditch is no longer in use, no culvert is necessary to maintain the flow of water to the east side of US 6. Drainage from the abandoned ditch will have to be re-routed through a new drainage structure placed near the west edge of the regional arterial right-of-way, which would direct collected water into a natural drainage—Chimney Gulch. It may be necessary to fill in the abandoned Welch Ditch between this drainage structure and the new retaining wall, to prevent the collection of water with no outlet. Avoidance of direct impacts to the ditch segment is impossible under the Combined Alternative (Recommended Alternative) due to the geometrics of the roadway template and alignment traversing existing US 6. No significant engineering features, such as those found farther upstream, will be affected. The SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this linear resource.



### **WELCH DITCH SEGMENT (5JF848.6)**

This segment of the NRHP-eligible Welch Ditch (5JF848.6) is located on the east side of US 6 near Golden. Under the Combined Alternative (Recommended Alternative), direct impacts from construction of a 6-lane divided regional arterial following US 6 will be limited to the west side of the existing roadway and would not cause any direct impacts to Welch Ditch segment 5JF848.6. The SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in a finding of *no historic properties affected* with respect to this linear resource.

### **DENVER & RIO GRANDE WESTERN RAILROAD (5JF2346.7)**

This 600-foot-long segment of the historic Denver & Rio Grande Western Railroad (5JF2346.7) crossing Indiana Street north of 80<sup>th</sup> Avenue would be directly impacted by the Combined Alternative (Recommended Alternative). The existing railroad bridge over Indiana Street is of inadequate size to accommodate the proposed new principal arterial. A new, 4-span, approximately 230-foot-long bridge would replace the existing 60-foot, single-span bridge (which is not an NRHP-eligible structure). Bridge piers would be installed outside the existing railroad right-of-way (which is wider than the site boundary). This action would potentially impact a 240-foot-wide by 150-foot-long (0.83 acre) swath of railroad right-of-way and 300 feet of track to allow construction of a new larger bridge, demolition of the old bridge, and temporary realignment of the tracks during construction of the new bridge. Approximately 1,000 feet of track would be temporarily realigned to the north onto a temporary “shoo-fly” bridge structure to avoid a disruption in rail service during construction. The new, longer bridge over Indiana Street would also represent a permanent change in appearance at this location, although after construction is complete the railroad would remain in its historic alignment, and would still cross the Indiana Street corridor in a manner similar to the present method (by use of a bridge). Since the railroad is a linear facility that must be crossed by the new principal arterial, avoidance of all impacts is impossible. These changes only affect a very small portion of the overall linear site, and will not substantially diminish the characteristics that render it eligible for the NRHP. The SHPO has concurred with a determination of *no adverse effect* to the resource.

### **CHURCH DITCH SEGMENT (5JF267.8)**

Under the Combined Alternative (Recommended Alternative), a segment of the NRHP-eligible Church Ditch (5JF267.8) would experience direct effects where it crosses existing Indiana Street north of Leyden Lake. The segment is 226 feet long. Proposed widening of Indiana Street at this location would impact 105 linear feet or approximately 0.05 acres (less than 1 percent) of the 27-mile-long Church Ditch. A box culvert extension would have to be constructed on the west end of the existing culvert to accommodate the new, wider principal arterial. Temporary construction impacts would likely occur to a small portion of the canal channel just beyond the end of the new culvert. Any damage to the canal channel associated with these construction impacts will be repaired to maintain its pre-construction configuration and utility.

Avoidance of direct effects to the ditch segment is impossible with improvement of the Indiana Street corridor. The SHPO has concurred with a determination that the minor nature of the effects upon this Church Ditch segment with the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this linear historic resource.

### **FARMERS’ HIGH LINE CANAL (5JF250)**

Two segments of the NRHP-eligible Farmers’ High Line Canal (5JF250) are crossed multiple times by the Combined Alternative (Recommended Alternative). These segments are designated (from north to south) as 5JF250.6 and 5JF250.7. An unrecorded segment of the Farmers’ High Line Canal crosses the canal between segments 5JF250.6 and 5JF250.7 and will require evaluation in the future.

### **FARMERS’ HIGH LINE CANAL SEGMENT (5JF250.6)**

This Farmers’ High Line Canal segment is 6,020 feet long, crossing the proposed new 4-lane principal arterial along Indiana Street three times, designated from north to south as Localities A, B, and C (see **Figure 4.13-1**). At Locality A the canal crosses existing Indiana Street through a 40-foot-long concrete box culvert in an east-west trajectory, directly east of Leyden Lake. The new Combined Alternative (Recommended Alternative)



principal arterial alignment would swing in a shallow arc west of existing Indiana Street in order to avoid another historic site (the Pearce Grocery Store at 7851 Indiana Street/5JF994) south of Locality A. In order to allow the new principal arterial to cross the canal, it will be necessary to extend the existing Indiana Street culvert to the west, and place an additional 220 feet of the historic open canal in a new box culvert. A small area of the canal on the west side of the new culvert may be disturbed during construction of the culvert, but the canal channel will be restored to its pre-project configuration. The realignment will lead to the abandonment of a short stretch of Indiana Street including Locality A. Although the pavement on this stretch of Indiana Street will be removed, the existing culvert will be left in place. Access to the ditch rider's road following the south side of the canal will be maintained from existing Indiana Street south of Locality A.

Locality B of 5JF250.6 crosses existing Indiana Street in a northwest-southeast trajectory just south of the historic, NRHP-eligible Pearce Grocery Store (5JF994). That crossing/culvert would be left as is, although a new impact would occur west of Locality B to an approximate 330-foot-long stretch of the historic canal that would be placed in a new culvert beneath the proposed new principal arterial. Small areas of the canal at the east and west ends of the new culvert may be disturbed during construction of the culvert, but the canal channel will be restored to its pre-project configuration.

Locality C of 5JF250.6 crosses existing Indiana Street in an approximate east-west trajectory through a 40-foot-long culvert. In this location the present alignment of Indiana Street would be followed and widened. Box culvert extensions would be required on both the east and west sides of existing Indiana Street, placing an additional total of 110 feet of the open canal in a box culvert beneath the widened roadway. Small areas of the canal at the east and west ends of the new culvert may be disturbed during construction of the culvert, but the canal channel will be restored to its pre-project configuration.

To summarize, with respect to Farmers' High Line Canal segment 5JF250.6, a total of three separate locations would require construction of new culverts or culvert extensions enclosing a total of 660 feet of open earthen canal— 220 feet in Locality A, none in Locality B, 330 feet between Localities A and C to the west of Indiana Street, and 110 feet at Locality C. This translates to a total permanent direct effect to 0.30 acre of the historic canal, or less than 1 percent of the total 40 mile length of the Farmers' High Line Canal. Avoidance of effects to the canal is impossible with proposed improvement of the Indiana Street corridor. However, due to the minor nature of these effects to the segment, the SHPO has concurred with a determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this linear resource.

### **PEARCE'S GROCERY STORE/7851 INDIANA STREET (5JF994)**

The Combined Alternative (Recommended Alternative) was designed to avoid direct effects to this historic resource. The proposed principal arterial was designed to depart existing Indiana Street approximately 0.25 mile north of the historic grocery store, swinging in a shallow arc west of and around the historic property, then rejoining the Indiana Street corridor approximately 500 feet south of the site. Because traffic will be diverted away from the property, a reduction in noise levels is also expected at Pearce's Grocery Store. Existing AM and PM noise levels are 65.2 dB and 65.6 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will yield reduced AM and PM noise levels of 62.5 dB (net decrease of 2.7 dB) and 62.3 dB (net decrease of 3.3 dB).

The proposed principal arterial running behind (west of) the Pearce Grocery Store will not change the historic setting enough to create adverse visual or noise effects, particularly if screening is included with the final design. A stretch of the Farmer's High Line Canal behind the site will be placed in a buried box culvert, and the new principal arterial will be placed atop this fill. The roadway will be elevated as many as 5–15 feet above the existing grade behind the property's west end, and the new principal arterial will be partially screened by trees and other vegetation lining the canal banks closer to Indiana Street. Further screening by trees can also be incorporated as an impact minimization measure north of the canal crossing referred to above. Under the Combined Alternative (Recommended Alternative), existing Indiana Street running along the front (east) side of the property would remain at its current grade to provide access to the grocery store, and there would be a substantial decrease in traffic in front of the store property. Relocating the proposed



principal arterial alignment, and the anticipated increase in vehicular traffic behind (to the west of) the historic site will help maintain the tranquil rural setting of the site as observed from Indiana Street, and will enable the existing property access to be maintained.

CDOT and FHWA have determined that the undertaking will result in a finding of *no historic properties affected* with respect to this historic resource.

#### **RALSTON PRESBYTERIAN CHURCH/7400 INDIANA STREET (5JF1712)**

In the vicinity of the historic Ralston Presbyterian Church, the Combined Alternative (Recommended Alternative) follows the alignment of existing Indiana Street, but will replace the existing 2-lane roadway with a wider, divided 4-lane principal arterial facility with detached sidewalks. In the vicinity of the historic church, the roadway widening will occur only on the west side of existing Indiana Street. No acquisition of the church property will be required for new transportation right-of-way. On the eastern margin of the new principal arterial will be a detached sidewalk bordered by a small retaining wall running along the west edge of the historic church property line/site boundary. Temporary impacts may occur to a non-contributing parking lot within the site boundary during construction of the retaining wall, but any damage will be repaired to pre-project condition. Vehicular access will be maintained from Indiana Street through an opening between new retaining walls. An imperceptible, slight increase in noise levels is expected at the Ralston Presbyterian Community Church. Existing AM and PM noise levels are 65.5 dB and 65.6 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will result in slightly higher AM and PM noise levels of 66.1 dB (net increase of 0.6 dB) and 66.0 dB (net increase of 0.4 dB). The SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to 5JF1712.

#### **14801–14803 W. 72<sup>ND</sup> AVENUE (5JF3873)**

Relatively minor direct impacts would occur to a historic 26-acre livestock ranch situated on the northeast corner of Indiana Street and West 72<sup>nd</sup> Avenue, at 14801–14803 W. 72<sup>nd</sup> Avenue (5JF3873). Widening of Indiana Street at this location to accommodate a 4-lane divided principal arterial with on-street bike lane and detached sidewalks would require acquisition of a 0.4-acre piece of farmland at the site's northeast corner for new right-of-way. None of the site's contributing agricultural buildings would be directly or indirectly affected. The NRHP-ineligible Croke Canal extends along the west side of existing Indiana Street, between the roadway and the historic ranch property, and would be placed in a buried box culvert. A retaining wall would be installed between the buried canal and historic ranch. Small amounts of land adjacent to the piece of new right-of-way to be acquired from the historic ranch may experience temporary construction impacts, and similar temporary construction impacts may occur along the southeast edge of the property for construction of a retaining wall.

In terms of indirect effects, the new, wider principal arterial will not greatly alter the visual character of the site, since it upgrades an existing, busy thoroughfare. Existing AM and PM noise levels as recorded at the 1930 farmhouse near the southeast corner of the property are 63.5 dB and 64.1 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will result in slightly lower AM and PM noise levels of 62.8 dB (net reduction of 0.07 dB) and 63.1 dB (net reduction of 1.0 dB). The Combined Alternative (Recommended Alternative) will not substantially diminish the architectural qualities that render the site NRHP-eligible, and CDOT and FHWA therefore conclude that the undertaking will result in *no adverse effect* with respect to 5JF3873.

#### **FARMERS' HIGH LINE CANAL (5JF250.7)**

The southernmost inventoried Farmers' High Line Canal segment (5JF250.7) is 1,516 feet long and crosses the proposed new 4-lane principal arterial following existing McIntyre Street three times. These crossings are designated from north to south as Localities A, B, and C (see **Figure 4.13-2**).



At Locality A of 5JF250.7, the historic canal crosses existing McIntyre Street in an approximate east-west trajectory through a 35-foot-long culvert. Portions of the existing open canal channel on both sides of McIntyre Street, totaling 100 feet, would be placed within new box culvert extensions beneath the widened roadway.

At Locality B of 5JF250.7, the canal crosses McIntyre Street in a northwest-southeast trajectory through a 40-foot-long box culvert. Fifty-five (55) feet of open canal channel on both the east and west sides of existing McIntyre Street, or a total of 110 feet of open canal, would be placed in new concrete box culvert extensions beneath the widened roadway.

At Locality C of 5JF250.7, north of 52<sup>nd</sup> Avenue, the canal crosses existing McIntyre Street in a sharply skewed southwest-northeast trajectory through a 200-foot-long culvert. The Combined Alternative (Recommended Alternative) involves westward widening of McIntyre Street in this location, with 160 feet of open canal placed in a new concrete box culvert extension. For all of these culvert extensions, there will likely be temporary construction impacts to small areas of the canal channel just beyond the end of the culvert. Any damage to the canal channel associated with these construction impacts will be repaired to maintain its pre-construction configuration and utility.

A total of three separate locations would require placement of a total of 370 linear feet of open earthen canal—100 feet in Locality A, 110 feet in Locality B, and 160 feet at Locality C—in new box culverts. This translates to a total direct impact to 0.17 acre, or less than 1 percent of the total 40-mile length of the historic Farmers' High Line Canal. Avoidance direct of effects to the canal is impossible with proposed improvement of the McIntyre Street corridor. The SHPO has concurred with the determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this linear historic resource.

### **5675 MCINTYRE STREET (5JF3877)**

Expansion of the right-of-way along McIntyre Street to accommodate a 4-lane divided principal arterial will require acquisition of a small (approximately 60 x 115 feet, or 0.15 acre) amount of land from the east end of a NRHP-eligible farm property located at 5675 McIntyre Street (5JF3877). (Note: the site boundary of 5JF3877 is smaller than the parcel boundary). The right-of-way expansion on the west side of McIntyre Street includes a new sidewalk and retaining wall that would occupy land within the historic property boundary, and would cut off existing vehicular access from McIntyre Street. Elimination of the existing access from McIntyre Street is also required to limit turning movements from the new principal arterial. A new access opening will have to be established on W. 56<sup>th</sup> Place.

The sidewalks will be attached with retaining walls (toe walls) on both sides of the principal arterial, eliminating the landscaped buffers between the roadway and sidewalks. The right-of-way will be shifted to the east of the existing right-of-way along McIntyre Street. The roadway improvements would result in an encroachment of approximately 17 feet along the 115-foot-long eastern edge of the site. This area of new right-of-way consists of 0.046 acre of the 0.66 acre site. However, attaching the sidewalks to minimize direct effects to this site will result in reduced snow storage capacity along the margins of the roadway. Temporary direct construction impacts may also occur in order to build the retaining wall along the west edge of the roadway. These impacts would be minor in nature, would be limited to undeveloped land, and the affected land would be restored to its original condition.

In terms of indirect impacts, the new, wider principal arterial will not greatly alter the visual character of the site, since it upgrades an existing, busy thoroughfare. Existing AM and PM noise levels are 54.5 dB and 54.4 dB respectively, and computer modeling indicates that the recommended alternative will yield slightly higher AM and PM noise levels of 62.0 dB (net increase of 7.5 dB) and 62.1 dB (net increase of 7.7 dB).

The direct and indirect effects resulting from the Combined Alternative (Recommended Alternative) are so minor that the architectural and setting characteristics that render the property eligible for the NRHP will not be substantially diminished. CDOT and FHWA have therefore determined that the Combined Alternative (Preferred Alternative) will result in *no adverse effect* to site 5JF3877.



### **5440 McINTYRE STREET (5JF3880)**

Under the Combined Alternative (Preferred Alternative), the McIntyre Street corridor will be widened to accommodate a new 4-lane divided principal arterial. A small retaining wall will be constructed along the west edge of the property. The roadway widening and new right-of-way acquisition in this area will occur along the west side of existing McIntyre Street. No direct effects to the historic farm property will occur. The existing access from McIntyre Street will be maintained.

In terms of indirect impacts, the new, wider principal arterial will not greatly alter the visual character of the site, since it upgrades an existing, busy thoroughfare. Existing AM and PM noise levels are 59.4 dB and 60.3 dB respectively, and computer modeling indicates that the Combined Alternative (Preferred Alternative) will result in slightly higher AM and PM noise levels of 62.3 dB (net increase of 2.9 dB) and 62.8 dB (net increase of 2.5 dB). The Combined Alternative (Preferred Alternative) will not diminish the architectural qualities that render the site NRHP-eligible, and the SHPO has concurred with a determination that the alternative will result in *no adverse effect* to 5JF3880.

### **5100 McINTYRE STREET (5JF3887)**

An NRHP-eligible farmhouse located at 5100 McIntyre Street (5JF3887) will be directly affected by the replacement of existing McIntyre Street with a re-aligned 4-lane divided principal arterial. The new principal arterial will deviate eastward from the existing McIntyre Street alignment in order to avoid direct impacts to another NRHP-eligible farm located at 5035 McIntyre Street (5JF3890). In order to minimize effects to this site, the edge of the transportation improvements will be shifted to the west by adopting a narrower template in this vicinity. To accomplish this, it will be necessary to attach the sidewalk on both sides of the roadway with retaining walls (toe walls) and eliminate the landscaped buffers between the roadway and sidewalks. This realignment will necessitate acquisition of approximately 28 feet along the 125-foot-long western edge of the site, comprising a take of 0.081 acre from this 0.46 acre site. The existing access from McIntyre Street will be maintained. However, attaching the sidewalks to minimize direct effects to this site will result in reduced snow storage capacity along the margins of the roadway.

The direct and indirect effects to the property have been minimized to the greatest extent possible, and will not substantially diminish the architectural qualities that render the site NRHP-eligible. CDOT and FHWA have determined that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to site 5JF3887.

### **5075 McINTYRE STREET (5JF3888)**

Under the Combined Alternative (Recommended Alternative), existing McIntyre Street in the vicinity of this site will be replaced by a wider, 4-lane divided principal arterial with sidewalks. The new principal arterial will deviate eastward from the existing McIntyre Street alignment in order to avoid impacts to another NRHP-eligible farm complex located at 5035 McIntyre Street. Complete avoidance of direct effects has been achieved by relocating the sidewalk and installing a small retaining wall between the sidewalk and historic property. The existing access from McIntyre Street will be maintained.

In terms of indirect effects, the realigned, wider principal arterial will slightly change the appearance of the site, by replacing McIntyre Street with a new facility that angles away from the property to the southeast. With respect to auditory impacts, existing AM and PM noise levels are 60.4 dB and 61.3 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will result in slightly higher AM and PM noise levels of 63.2 dB (net increase of 2.8 dB) and 63.3 dB (net increase of 2.0 dB).

None of the architectural characteristics that render the site NRHP-eligible will be diminished by the Combined Alternative (Recommended Alternative), and the SHPO has concurred with a determination of *no adverse effect* to 5JF3888.



### **5035 MCINTYRE STREET (5JF3890)**

Under the Combined Alternative (Recommended Alternative), existing McIntyre Street in the vicinity of this historic farm will be replaced by a new, wider 4-lane divided principal arterial with detached sidewalks on both sides. Direct effects to the property have been completely avoided under this alternative by realigning the roadway in a shallow curve away from (to the east of) the site.

In terms of indirect effects, the realigned, wider principal arterial will slightly change the appearance of the site, by replacing McIntyre Street with a new facility that curves away from the property to the east. With respect to auditory impacts, existing AM and PM noise levels are 58.1 dB and 59.0 dB respectively, and computer modeling indicates that the Combined Alternative (Recommended Alternative) will result in slightly higher AM and PM noise levels of 60.9 dB (net increase of 2.8 dB) and 61.1 dB (net increase of 2.1 dB).

Due to the lack of direct effects and the minor nature of indirect effects, the SHPO has concurred with a determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to 5JF3890.

### **COLORADO & SOUTHERN RAILROAD SEGMENT (5JF519.8)**

A 700-foot-long by 20-foot-wide segment of the historic Colorado & Southern (C&S) Railroad (5JF519.8) crossing existing McIntyre Street (via an at-grade crossing) would also be subject to minor direct impacts. The railroad crossing at McIntyre Street has recently been replaced by Jefferson County to accommodate a 4-lane principal arterial, obviating the need for railroad crossing replacement by the Northwest Corridor project. Slight widening of the roadway to accommodate left-turn lanes may be required under the Combined Alternative (Recommended Alternative), along with installation of a detached sidewalk for improving pedestrian mobility along the west side of the roadway. A maximum of approximately 100 feet of railroad property on the west side and 25 feet on the east side of McIntyre Street (2,500 square feet or 0.06 acre) may be subject to extension of railroad crossing pavement (concrete with tracks placed below grade). Railroad service along this alignment may be temporarily disrupted during construction but would be restored once construction is completed. Visual effects would be negligible, since the undertaking would simply slightly extend the existing street crossing in an urban setting.

The changes noted above affect a very small portion of the overall linear site, and will not substantially diminish the characteristics that render the site eligible for the NRHP. The SHPO has concurred with a determination that the Combined Alternative (Recommended Alternative) will result in *no adverse effect* to this resource.

### **4.13.3 SUGGESTED MITIGATION**

Mitigation measures to minimize the effects of the alternatives on historic and archaeological properties should be developed in consultation with FHWA, CDOT, SHPO, other consulting parties, and the Advisory Council on Historic Preservation (ACHP). Possible mitigation measures that may be incorporated into the final design include planting of screening vegetation, installation of sound walls, and the use of construction materials that are visually compatible with the historic site(s). Additionally, minor damage to irrigation canals and land within the boundaries of historic sites resulting from the construction of culverts and retaining walls will be repaired to pre-project condition.

The anticipated loss of physical or environmental integrity of historic and archaeological sites should also be mitigated through recordation. Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) documentation, involving archivally processed and printed large-format (4x5) black-and-white photography, narrative historical and architectural information, and, if appropriate, measured drawings should be compiled to meet National Park Service standards and, upon approval, copies should be submitted to relevant repositories including the Colorado Office of Archaeology and Historic Preservation (OAHP) as well as the Library of Congress in Washington, D.C. Alternatively, a modified version of HABS/HAER documentation developed by the Colorado OAHP, called Level II Documentation, might be prescribed. The latter documentation includes medium-format rather than large-format black-and-white photography, and



does not require approval by the National Park Service nor submittal to the Library of Congress. Other mitigation measures may be appropriate, including the development of public interpretation (e.g., signage, brochures, museum displays).

Mitigation recommendations for each alternative under consideration are presented.

#### **4.13.3.1 NO ACTION ALTERNATIVE**

No adverse effects requiring mitigation would occur under the No Action Alternative.

#### **4.13.3.2 FREEWAY ALTERNATIVE**

FHWA and CDOT have not formally consulted with the SHPO to determine effects of this alternative upon specific historic and archaeological resources; however, no adverse effects to any NRHP-eligible sites are expected to occur. Should the Freeway Alternative be selected, FHWA and CDOT would have to obtain official determinations of effect and consult with the SHPO and other Section 106 consulting parties concerning appropriate mitigation measures.

General harm minimization measures would be implemented including the restoration of small areas disturbed within NRHP-eligible sites while constructing retaining walls and installing box culverts. Noise and visual effects in close proximity to the alignment may be minimized to some degree by context sensitive design and screening by vegetation.

#### **4.13.3.3 TOLLWAY ALTERNATIVE**

FHWA and CDOT have not formally consulted with the SHPO to determine effects of this alternative upon specific historic and archaeological resources; however, no adverse effects to any NRHP-eligible sites are expected to occur. Should the Tollway Alternative be selected, FHWA and CDOT would have to obtain official determinations of effect and consult with the SHPO and other Section 106 consulting parties concerning appropriate mitigation measures.

General harm minimization measures would be implemented including the restoration of small areas disturbed within NRHP-eligible sites while constructing retaining walls and installing box culverts. Noise and visual effects in close proximity to the alignment may be minimized to some degree by context sensitive design and screening by vegetation.

#### **4.13.3.4 REGIONAL ARTERIAL ALTERNATIVE**

FHWA and CDOT have not formally consulted with the SHPO to determine effects of this alternative upon specific historic and archaeological resources; however, no adverse effects to any NRHP-eligible sites are expected to occur. Should the Regional Arterial Alternative be selected, FHWA and CDOT would have to obtain official determinations of effect and consult with the SHPO and other Section 106 consulting parties concerning appropriate mitigation measures.

General harm minimization measures would be implemented including the restoration of small areas disturbed within NRHP-eligible sites while constructing retaining walls and installing box culverts. Noise and visual effects in close proximity to the alignment may be minimized to some degree by context sensitive design and screening by vegetation.

#### **4.13.3.5 COMBINED ALTERNATIVE (RECOMMENDED ALTERNATIVE)**

FHWA and CDOT have consulted with the SHPO to determine effects of this alternative upon specific historic and archaeological resources, and no adverse effects to any NRHP-eligible sites are expected to occur (see **Appendix C**).



General harm minimization measures would be implemented including the restoration of small areas disturbed within NRHP-eligible sites while constructing retaining walls and installing box culverts. Noise and visual effects in close proximity to the alignment may be minimized to some degree by context sensitive design and screening by vegetation.

#### 4.13.4 NATIVE AMERICAN CONSULTATION

Section 106 of the National Historic Preservation Act (as amended) and the ACHP regulations (36 CFR 800.2[c][2][ii]) mandate that federal agencies coordinate with interested Native American tribes in the planning process for federal undertakings. Consultation with a Native American tribe recognizes the government-to-government relationship between the United States government and sovereign tribal groups, and federal agencies must be sensitive to the fact that historic properties of religious and cultural significance to one or more tribes may be located on ancestral, aboriginal, or ceded lands beyond modern reservation boundaries. Consulting tribes are offered the opportunity to identify concerns about cultural resources and comment on how the project might affect them. If it is found that the project would affect cultural resources that are eligible for inclusion on the National Register of Historic Places and are of religious or cultural significance to one or more consulting tribes, their role in the consultation process may also include participation in resolving how best to avoid, minimize, or mitigate those effects (ACHP, 1966). By describing the proposed undertaking and the nature of any known cultural sites, and consulting with the interested Native American community, CDOT and FHWA strive to effectively protect areas important to American Indian people.

In September 2004, FHWA contacted 15 federally recognized tribes with an established interest in Boulder, Broomfield, and Jefferson counties, Colorado, and invited them to participate as consulting parties:

Apache Tribe of Oklahoma

Cheyenne and Arapaho Tribes of Oklahoma (two tribes administered by a unified tribal government)

Cheyenne River Sioux Tribe (South Dakota)

Comanche Nation of Oklahoma

Crow Creek Sioux Tribe (South Dakota)

Kiowa Tribe of Oklahoma

Northern Arapaho Tribe (Wyoming)

Northern Cheyenne Tribe (Montana)

Oglala Sioux Tribe (South Dakota)

Rosebud Sioux Tribe (South Dakota)

Southern Ute Indian Tribe (Colorado)

Standing Rock Sioux Tribe (North Dakota)

Ute Mountain Ute Tribe (Colorado)

Ute Tribe of the Uintah and Ouray Agency (“Northern” Ute) (Utah)

White Mesa Ute Tribe (Utah)

The Comanche Nation of Oklahoma, Cheyenne River Sioux Tribe, and the Southern Ute Indian Tribe responded to the invitation, all expressing the desire to be consulting parties for the project. No specific issues of concern were raised by any of the tribes in the context of known places of religious or cultural significance.



All three tribal governments continue to receive information about the project as it becomes available, and every opportunity is taken to involve them in the NEPA planning and project development process. In so doing, FHWA and CDOT fulfill their legal obligations for tribal consultation under federal law.

#### 4.13.5 SUMMARY

The No Action Alternative and four build alternatives are ranked in terms of severity of anticipated effects to historic and archaeological resources. The No Action Alternative would result in the fewest effects to historic and archaeological resources. Of the four build alternatives, the Freeway Alternative, Tollway Alternative, and Regional Arterial Alternative would result in roughly equivalent effects to historic and archaeological resources, while the Combined Alternative (Recommended Alternative) would result in the greatest number of effects due to the relatively large number of historic properties occurring along Indiana Street and McIntyre Street (see **Table 4.13-7**).

The No Action Alternative would leave historic and archaeological resources in their present state for the short term. All of the build alternatives would cause direct effects to two NRHP-eligible historic sites by acquisition of new right-of-way: a segment of the **Denver & Rio Grande Railroad (5JF2346.6)** and a segment of the **Welch Ditch (5JF848.5)**. All of the build alternatives would cause indirect (visual and/or auditory) impacts to three sites: railroad segment **5JF2346.6**, the **Church/McKay Ranch (5JF2779)**, and the **Golden Fire Brick Historic District (5JF3854)**.

In addition to the effects common to all build alternatives, the Freeway Alternative would cause an additional direct effect to the **Ramstetter Ranch at 5399 SH 93 (5JF2585)**.

In addition to the effects common to all build alternatives, the Tollway Alternative would cause an additional direct effect to another **Welch Ditch segment (5JF848.6)**.

The Regional Arterial Alternative would produce only direct and indirect effects common to all the build alternatives discussed above.

The Combined Alternative (Recommended Alternative) would cause direct and indirect effects to additional sites along Indiana Street and McIntyre Street. One segment of the NRHP-eligible **Church Ditch (5JF267.8)**, two segments of the NRHP-eligible **Farmers' High Line Canal (5JF250.6, and 5JF250.7)**, and another segment of the **Denver & Rio Grande Western Railroad (5JF2346.7)** would be directly affected by acquisition of new right-of-way for proposed transportation improvements. Two additional non-linear sites, historic farms at **14801–14803 West 72<sup>nd</sup> Avenue (5JF3573)** and **5675 McIntyre Street (5JF3877)**, would also be directly affected by the Combined Alternative (Recommended Alternative). Three additional historic architectural sites would be indirectly affected by increased noise levels due to improvement and increased use of Indiana Street and McIntyre Street.

**Table 4.13-7 Comparison of Alternatives' Effects to NRHP-Eligible Historic and Archaeological Resources**

Alternative	Number of Sites Directly Affected	Number of Sites Indirectly Affected
No Action Alternative	0	0
Freeway Alternative	2	4
Tollway Alternative	4	3
Regional Arterial Alternative	1	2
Combined Alternative (Recommended Alternative)	10	5

*Source: Compiled by FHU, 2007.*



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