

# 1 Chapter 4 –Section 4(f) Evaluation

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## 2 4.1 Introduction

3 The United States Department of Transportation (USDOT) Act of 1966 included a special  
4 provision – Section 4(f) – that expressly prohibits the Federal Highway Administration (FHWA)  
5 and other USDOT agencies from using land from publicly owned parks, recreation areas  
6 (including recreational trails), wildlife and waterfowl refuges, or public and private historic  
7 properties unless there is no feasible and prudent alternative to that use and the action includes all  
8 possible planning to minimize harm to the property resulting from such use.

9 The analysis that follows evaluates the impacts of this project on Section 4(f) properties. It is  
10 prepared in compliance with Section 4(f) of the USDOT Act of 1966 and is supported by the  
11 analyses presented in this Environmental Assessment (EA) and in the following materials  
12 contained in **Appendix C: Historic Resources Survey and Effect Determination** (TEC, 2010), and the  
13 *Parks and Recreational Resources Technical Memorandum* (CH2M HILL, 2010c).

## 14 4.2 Purpose and Need

15 The purpose of the project is to: 1) reduce congestion problems for travelers today and through the  
16 year 2035; 2) improve mobility for local trips within the US 24 corridor and regional trips through  
17 the US 24 corridor; and 3) improve connectivity to the multiple destinations accessible from the  
18 US 24 corridor. **Exhibit 4-1** shows the US 24 study area.

19 El Paso County has been among the fastest growing counties in the nation for the last three  
20 decades. When US 24 was built in 1964, the populations of El Paso County and Teller County  
21 totaled 146,000. In 2010, the populations of these counties totaled approximately 626,000, a figure  
22 forecast to grow by 330,000 to 956,000 by 2035 (State of Colorado, 2010). This growth means  
23 more drivers will be on the roadways. In addition, the average annual number of miles traveled by  
24 motorized vehicles more than doubled between 1982 and 2007 (Casper, 2008). This growth in  
25 vehicle travel means that roadways are used more heavily because people drive more miles each  
26 year than they did in the past. These two factors—substantially more people traveling substantially  
27 more miles—overload US 24 and side streets in the study area to the point that they no longer  
28 have adequate capacity for current and future travelers.

29 Congestion in the study area is caused by the high volume of traffic and the interruption of traffic  
30 flow on mainline US 24 at signalized intersections. Daily and peak hour traffic volumes have been  
31 increasing steadily over time, a trend that the Pikes Peak Area Council of Governments (PPACG)  
32 predicts will continue. If the capacity of US 24 and its intersections are not improved to handle  
33 more vehicles, congestion issues will grow as traffic volumes increase over time.

34 See **Chapter 1, Purpose and Need** for additional details.

35 EXHIBIT 4-1  
36 US 24 Study Area

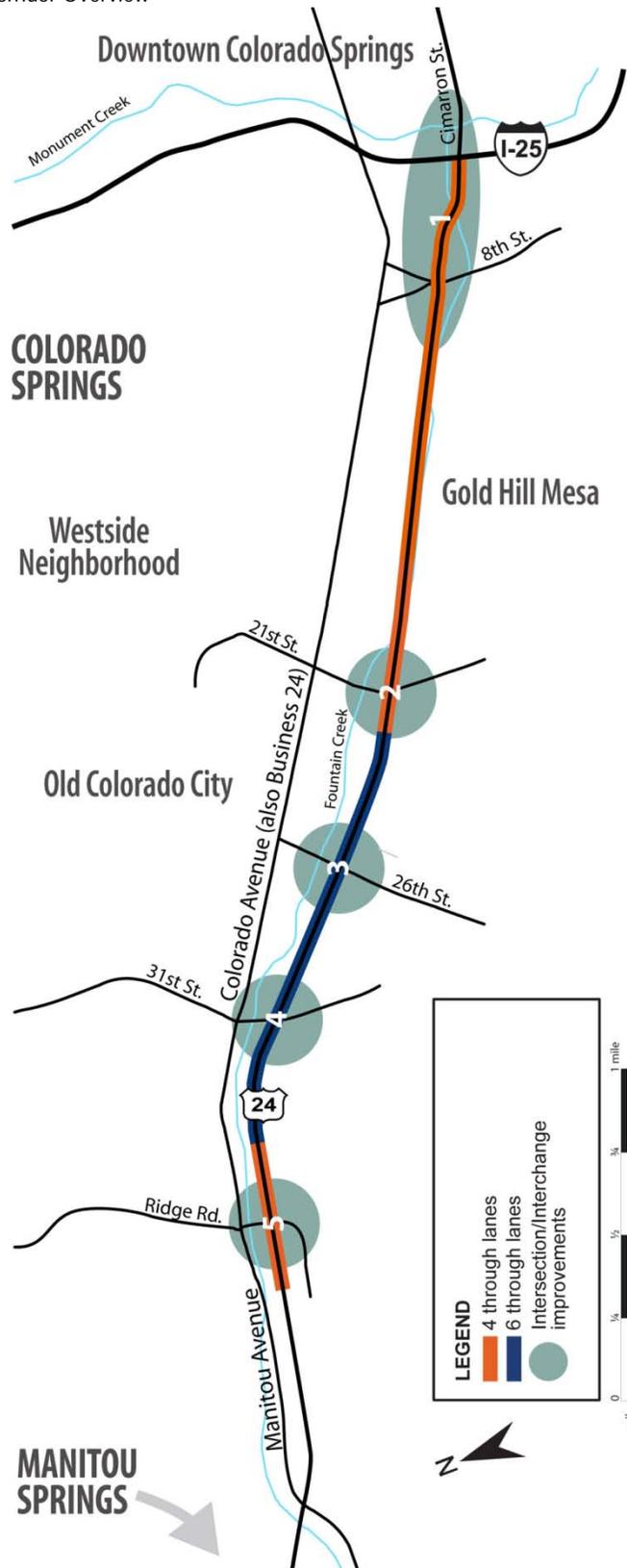


### 37 4.3 Proposed Action

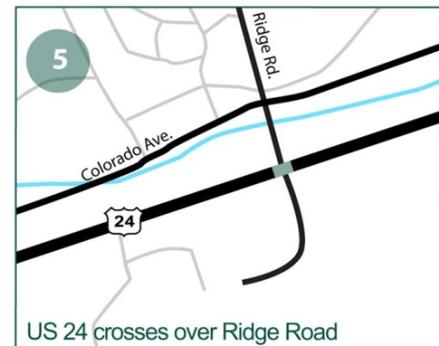
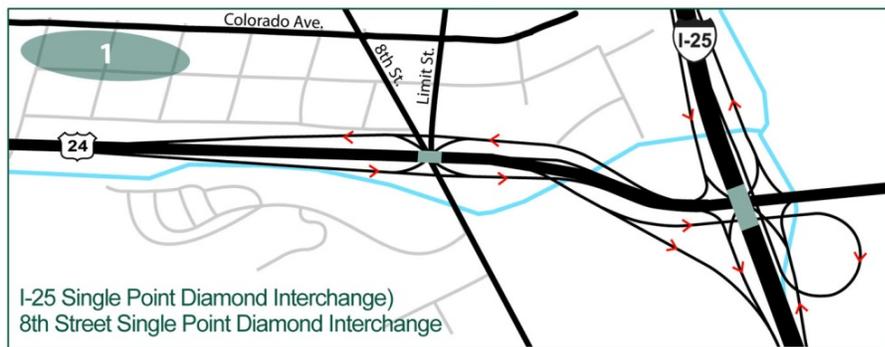
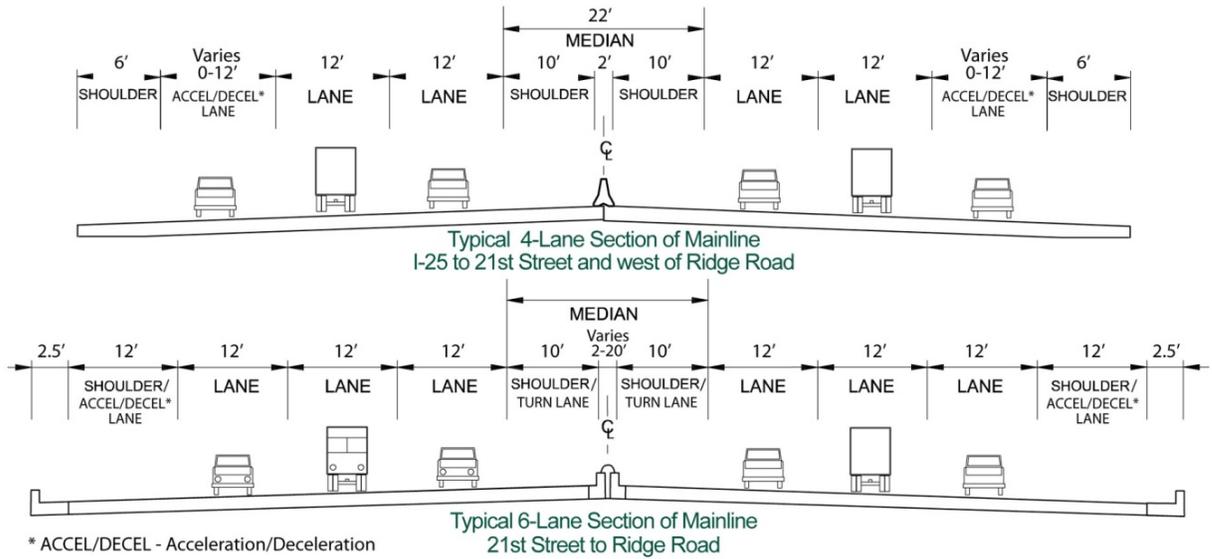
38 All features of the Proposed Action would be designed for 50 miles per hour (mph) and meet or  
 39 exceed American Association of State Highway and Transportation Officials (AASHTO)  
 40 standards. The Proposed Action is generally described in **Exhibit 4-2** and **Exhibit 4-3** and  
 41 detailed in drawings included in **Appendix A**. The Proposed Action on the US 24 corridor  
 42 includes the following elements:

- 43 • **Maintain four through-lanes** (two in each direction) **between I-25 and 21st Street**.
- 44 • **Add two through-lanes, between 21st Street and just west of Ridge Road**, for a total of  
 45 six through-lanes (three in each direction).
- 46 • **Replace nine bridges on US 24 and cross streets** to accommodate the profile changes to  
 47 US 24. Over Fountain Creek, these bridges would be built to comply with current state and  
 48 local standards to reduce flooding hazards in the study area.
- 49 • **Due to replacement of the nine bridges, realign and widen Fountain Creek** at bridge  
 50 crossings and locations where the roadway overlaps the existing channel to provide an  
 51 armored low-flow channel and a widened stabilized area to accommodate the 100-year flood.
- 52 • **Build single-point diamond interchange (SPDI) with a loop ramp for eastbound-to-**  
 53 **northbound travel at US 24 and I-25**. This interchange design replaces the tight diamond  
 54 interchange identified in the *I-25 Improvements through the Colorado Springs Urbanized Area EA*  
 55 (Colorado Department of Transportation [CDOT], 2004). Since that EA was approved, traffic  
 56 forecasts and future traffic operations have been revised by the PPACG, making a SPDI  
 57 design more efficient operationally.
- 58 • **Naegle Road from 21st Street to 25th Street would be closed because the intersection**  
 59 **of 21st Street and Naegle Road is too close to the US 24 and 21st Street interchange**.  
 60 There is inadequate room to provide a turn lane for vehicles at Naegle Road.
- 61 • **The existing 25th Street bridge over Fountain Creek would be removed because it**  
 62 **would no longer connect to Naegle Road and, therefore, provide no function**. The  
 63 existing 25th Street would be ended north of the Fountain Creek.
- 64 • **Replace the existing at-grade intersections with interchanges at 8th Street and at 21st**  
 65 **Street**, which also includes directional interchange ramps and acceleration/deceleration lanes.
- 66 • **Upgrade the US 24 and 26th Street at-grade intersection**, which also includes left and  
 67 right turn lanes.
- 68 • **Widen the intersection of US 24 and 31st Street. Widen the 31st Street and Colorado**  
 69 **Avenue intersection**. South of US 24, 31st Street would be rebuilt to better align with the  
 70 highway intersection.
- 71 • **Replace the existing at-grade intersection with an overpass that carries US 24 over**  
 72 **Ridge Road**. Ridge Road would be widened between High Street and Colorado Avenue and  
 73 improvements would be made to the Ridge Road and Colorado Avenue intersection.
- 74 • **All improvements tie into the unimproved, existing US 24 approximately 1,800 feet**  
 75 **west of Ridge Road**. Because neither existing nor future congestion is a problem between  
 76 Ridge Road and Manitou Avenue, no changes to US 24 are proposed west of Ridge Road.

77 EXHIBIT 4-2  
78 Proposed Action – US 24 Corridor Overview



79 EXHIBIT 4-3  
 80 Proposed Action – Typical Section, Design Details – NOT TO SCALE



- 81 • **Build sidewalks on the north-south cross streets** at all intersections and as a part of all  
82 interchanges.
- 83 • **Connect the Midland Trail from 21st to 25th Street**, with north-south trail connections at  
84 each of the interchanges and intersections along the US 24 corridor. The trail would be built to  
85 meet the City of Colorado Spring’s trail design standards and to allow clearance under the  
86 bridges for bicycle, pedestrian, and equestrian crossings. Completing this east-west bicycle and  
87 pedestrian trail system was an opportunity resulting from the required roadway right-of-way  
88 acquisitions and the channel re-grading required by the bridge replacements. The trail would  
89 improve pedestrian and bicycle mobility in the study area and is consistent with community  
90 planning.
- 91 • **Incorporate Transportation System Management** elements such as signal timing, turn  
92 lanes, and consideration for transit stops.

93 The Proposed Action also includes various environmental mitigation measures, such as  
94 enhancements to park and recreation resources, noise barriers, and permanent water quality  
95 features such as stormwater detention/treatment ponds.

## 96 4.4 Alternatives Analysis

97 Section 4(f) analysis requires a determination of whether feasible and prudent alternatives exist  
98 that avoid the use of Section 4(f) property. An alternative is considered feasible if it is technically  
99 possible to design and build. According to FHWA regulations (Title 23 of the Code of Federal  
100 Regulations [CFR] Part 774.17), an alternative is not prudent if:

- 101 i. It compromises the project to a degree that it is unreasonable to proceed with the project in  
102 light of its stated purpose and need;
- 103 ii. It results in unacceptable safety or operational problems;
- 104 iii. After reasonable mitigation, it still causes:
- 105 a. Severe social, economic, or environmental impacts;
- 106 b. Severe disruption to established communities;
- 107 c. Severe disproportionate impacts to minority or low-income populations; or
- 108 d. Severe impacts to environmental resources protected under other federal statutes;
- 109 e. It results in additional construction, maintenance, or operation costs of an extraordinary  
110 magnitude;
- 111 iv. It causes other unique problems or unusual factors; or
- 112 v. It involves multiple factors described above, that while individually minor, cumulatively cause  
113 unique problems or impacts of extraordinary magnitude.

114 “Where sufficient analysis demonstrates that a particular  
115 alternative is not feasible and prudent, the consideration of that  
116 alternative as a viable alternative comes to an end. If a feasible  
117 and prudent alternative is identified that avoids the use of  
118 Section 4(f) properties, it must be selected.” (FHWA, 2005)

*No feasible and prudent  
avoidance alternative was  
identified for this project.*

119 An extensive alternatives development process was conducted by the project team, as described in  
120 **Chapter 2, Alternatives**. Under a context sensitive design process, more than 395 ideas were  
121 generated from the public to address transportation issues in the study area. The project team  
122 categorized these ideas into nine broadly defined potential solutions. Among the nine potential  
123 solutions analyzed, two considered improvements to alternate routes in order to avoid or  
124 minimize harm to Section 4(f) properties adjacent to US 24. These potential solutions were  
125 **Reconstruct Local Streets** and **Other Regional Routes**. The following is a brief description of  
126 each solution.

### 127 **Reconstruct Local Streets**

128 Upgrading local or parallel streets or providing traffic-calming features were considered under the  
129 **Reconstruct Local Streets** potential solution. One focus of this potential solution was to make  
130 improvements to Colorado Avenue, just north of US 24, to relieve traffic from US 24. When  
131 US 24 was originally constructed, it was intended to serve as a bypass to Colorado Avenue;  
132 however, the design team considered this option to avoid impacts to Section 4(f) properties along  
133 US 24. Adding capacity to Colorado Avenue, even by just removing the parking, was seen by the  
134 community as unacceptable and inconsistent with its adopted plans. The **Reconstruct Local**  
135 **Streets** potential solution was eliminated as it would not meet purpose and need because it would  
136 only provide minimal reduction of traffic congestion on US 24. Further, given the historic nature  
137 of the study area, it would likely impact other Section 4(f) properties.

### 138 **Other Regional Routes**

139 **Other Regional Routes** were studied to avoid the US 24 corridor. Rebuilding Rampart Range  
140 Road, Mount Herman Road, and other regional routes (all of which are several miles outside the  
141 study area) were considered in the **Other Regional Routes** potential solution category. These  
142 potential solutions were eliminated because none of the routes met the purpose and need given  
143 that each route only captured a minimal number of vehicles from US 24 and, therefore, would not  
144 reduce congestion on US 24. Further, improvements to these routes outside the study area would  
145 not improve mobility for local trips within the US 24 corridor or improve north-south  
146 connectivity to the multiple destinations accessible from the US 24 corridor.

147 Using the nine potential solutions, three alternatives were developed, **the No Action Alternative**,  
148 **the US 24 Freeway Alternative**, and **the Midland Expressway Alternative**. These alternatives  
149 were screened against criteria developed from the project's purpose and need and evaluated with  
150 the Critical Issues and the Community Vision. These criteria included measuring the number of  
151 recorded historic sites within 500 feet of the edge of pavement, as well as the number of parks,  
152 trails, and recreation resources potentially affected.

153 While the No Action Alternative would avoid the use of Section 4(f) properties, it is not  
154 considered to be a prudent alternative because it does not address the purpose and need for the  
155 project. Both of the build alternatives are considered feasible and prudent, but would not avoid  
156 the use of Section 4(f) properties.

157 The design team minimized the right-of-way footprint for both build alternatives to the extent  
158 possible while still meeting design standards, capacity requirements, and minimum floodplain  
159 conditions. In most cases, uses of Section 4(f) properties were avoided through design  
160 modifications. However, impacts to Section 4(f) properties, such as buildings along Sheldon  
161 Avenue on the north side of US 24 near the proposed US 24 interchanges at 8th Street and  
162 21st Street and intersection upgrades at 26th Street, could be avoided but would result in impacts

163 to other Section 4(f) properties to the south, such as the Midland Terminal Railroad Roundhouse  
 164 (5EP194), which is an important historic property currently listed on the National Register of  
 165 Historic Places (National Register). For these reasons, no feasible and prudent alternative to avoid  
 166 use of all Section 4(f) properties was identified for this project.

167 **Exhibit 4-4** summarizes the avoidance potential, the feasibility, and prudence of the No Action  
 168 Alternative, US 24 Freeway Alternative, and Midland Expressway Alternative for the project.

EXHIBIT 4-4  
 US 24 Alternatives

Alternative	Description	Does the Alternative Avoid Section 4(f) Property?	Is the Alternative Feasible?	Is the Alternative Prudent?
No Action	The No Action Alternative consists of existing transportation facilities and transportation projects committed to be built regardless of whether the Proposed Action is built. The No Action Alternative would not make any changes to existing US 24 beyond those that are already planned and funded.	Yes	Yes	<b>No. Not Prudent - 23 CFR 774.17(3.i,ii).</b> Does not address the purpose and need for the project and would result in unacceptable traffic operations.
US 24 Freeway	US 24 would be reconstructed as a high-capacity free-flowing roadway with four through-lanes in each direction west of 8th Street. Interchanges at 8th Street, 21st Street, and 31st Street would provide access to and from US 24 between I-25 and Manitou Avenue; 26th Street and Ridge Road would be rebuilt as overpasses. Access to US 24 at 14th Street, 26th Street, and Ridge Road would be removed.	<b>No.</b> Requires the use of 21st Street pocket park, Vermijo Park, Midland Trail, five historic properties (5EP5285, 5EP5288, 5EP5335, 5EP5336, 5EP5218), and one historic district (5EP5364)	Yes	Yes
Midland Expressway (Proposed Action)	Includes two through-lanes in each direction from I-25 to 21st Street, and three through-lanes in each direction from west of 21st Street to Ridge Road. New interchanges are proposed at 8th Street and 21st Street, and improved at-grade intersections would remain at 26th Street and 31st Street. An overpass would be built to carry US 24 over Ridge Road. Access to US 24 at 14th Street would be removed.	<b>No.</b> Requires the use of 21st Street pocket park, Vermijo Park, Midland Trail, five historic properties (5EP5285, 5EP5288, 5EP5335, 5EP5336, 5EP5218), and one historic district (5EP5364)	Yes	Yes

169 Because all feasible and prudent alternatives use land from Section 4(f) properties, a least-harm  
 170 analysis must be performed to determine which alternative would create the least overall harm to  
 171 the Section 4(f) properties. In performing this analysis after mitigation, the net harm to the

172 properties is the governing factor unless there are additional important environmental impacts that  
 173 are non-Section 4(f) resources. For these alternatives, there are no impacts to important resources  
 174 that need to be considered in assessing feasible and prudent alternatives.

## 175 4.5 Properties Evaluated and All Possible Planning to Minimize 176 Harm

### 177 4.5.1 Parks and Recreation Properties

178 Three Section 4(f) park and recreation properties are within the construction limits for the  
 179 Proposed Action: 21st Street pocket park, Vermijo Park, and Midland Trail. These properties are  
 180 described below and detailed in the *Parks and Recreational Resources Technical Memorandum*  
 181 (CH2M HILL, 2010c) in **Appendix C**. The two parks and the trail are owned and maintained by  
 182 the City of Colorado Springs. Representatives from the City of Colorado Springs were engaged in  
 183 the development of avoidance alternatives and worked with the design teams on the determination  
 184 of mitigation where a use of publicly owned parks and trails properties occurs. A letter from  
 185 CDOT to the City of Colorado Springs Parks, Recreation & Cultural Services Department  
 186 regarding agreement for the use of these park and recreation resources is presented in  
 187 **Appendix I**.

#### 188 4.5.1.1 21st Street Pocket Park

##### 189 *Property Description*

190 The 21st Street pocket park is a small 1.5-acre park located at the intersection of US 24 and 21st  
 191 Street. As shown in **Exhibit 4-5**, the park is bisected by Naegle Road. On the south, a landscaped  
 192 mound holds the Prospector Sculpture, which is a landmark for the community, while on the  
 193 north, the majority of the park is a paved parking lot with a small area for a picnic table and a  
 194 walking path. The park is owned and maintained by the City of Colorado Springs and activities or  
 195 events are not scheduled in this park.

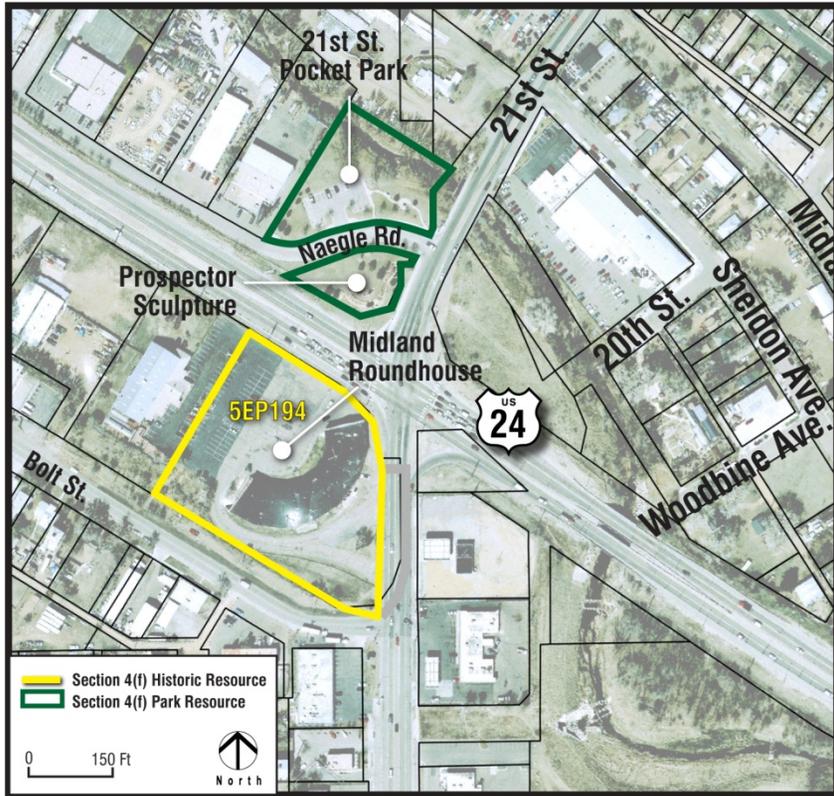
##### 196 *Section 4(f) Use*

197 Both the US 24 Freeway Alternative and the  
 198 Proposed Action would require the same new  
 199 interchange at 21st Street, which would result in the  
 200 total acquisition of the 21st Street pocket park under  
 201 either the US 24 Freeway Alternative or the Proposed  
 202 Action. In this location, the interchange and highway  
 203 widening would occur to the north to avoid impacts  
 204 to the Midland Terminal Railroad Roundhouse  
 205 (5EP194), a Section 4(f) historic property. As shown  
 206 in **Exhibit 4-5**, this new interchange would use a  
 207 large portion of the 1.5-acre park. The remaining  
 208 parcel of parkland would no longer be accessible due  
 209 to its proximity to the interchange. The Prospector Sculpture would be relocated.

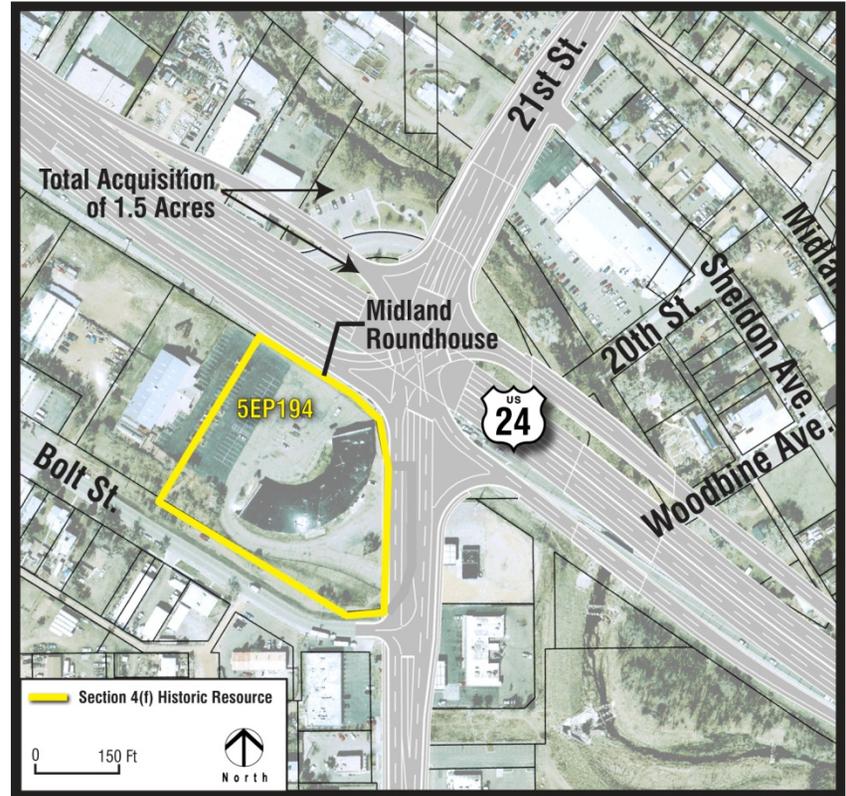


*Prospector Sculpture at 21st Street Pocket Park*

210 EXHIBIT 4-5  
211 Proposed Action for Section 4(f) Use of 21st Street Pocket Park



**Existing Condition**



**Proposed Action**

212 **Measures to Avoid and Minimize Harm**

213 **Avoidance:** The project team evaluated six design options at this location for their potential to  
 214 avoid impacts to the 21st Street pocket park. Five of the design options shifted the roadway to the  
 215 north, maintaining the existing south right-of-way line of US 24 and one design option shifted US  
 216 24 to the south. All five interchange or intersection options that move US 24 to the north would  
 217 require full acquisition of the 21st Street pocket park. These design options are shown in detail in  
 218 **Appendix B** and are listed below:

- 219 • **Design Option 10:** 21st Street Signalized Intersection
- 220 • **Design Option 11:** 21st Street Diamond Interchange with Loop
- 221 • **Design Option 12:** 21st Street Split Diamond Interchange with 18th Street
- 222 • **Design Option 13:** 21st Street Tight Diamond Interchange
- 223 • **Design Option 14:** 21st Street SPDI to the North

224 The one option to move US 24 to the south, **Design Option 15:** 21st Street SPDI South, has the  
 225 potential to avoid use of the 21st Street pocket park. To avoid impacting the Midland Terminal  
 226 Railroad Roundhouse, a historic Section 4(f) property, the designers would have to realign US 24  
 227 to the south, as shown in **Exhibit 4-6**.

228 This south alignment of US 24 would introduce three curves in a short distance into the highway  
 229 alignment in an otherwise straight roadway. These curves would introduce unacceptable  
 230 operational and safety problems due to driver expectations in the roadway. Additionally, this curve  
 231 in the road would cause a reduction in stopping sight distance as drivers approach the 21st Street  
 232 interchange ramps.

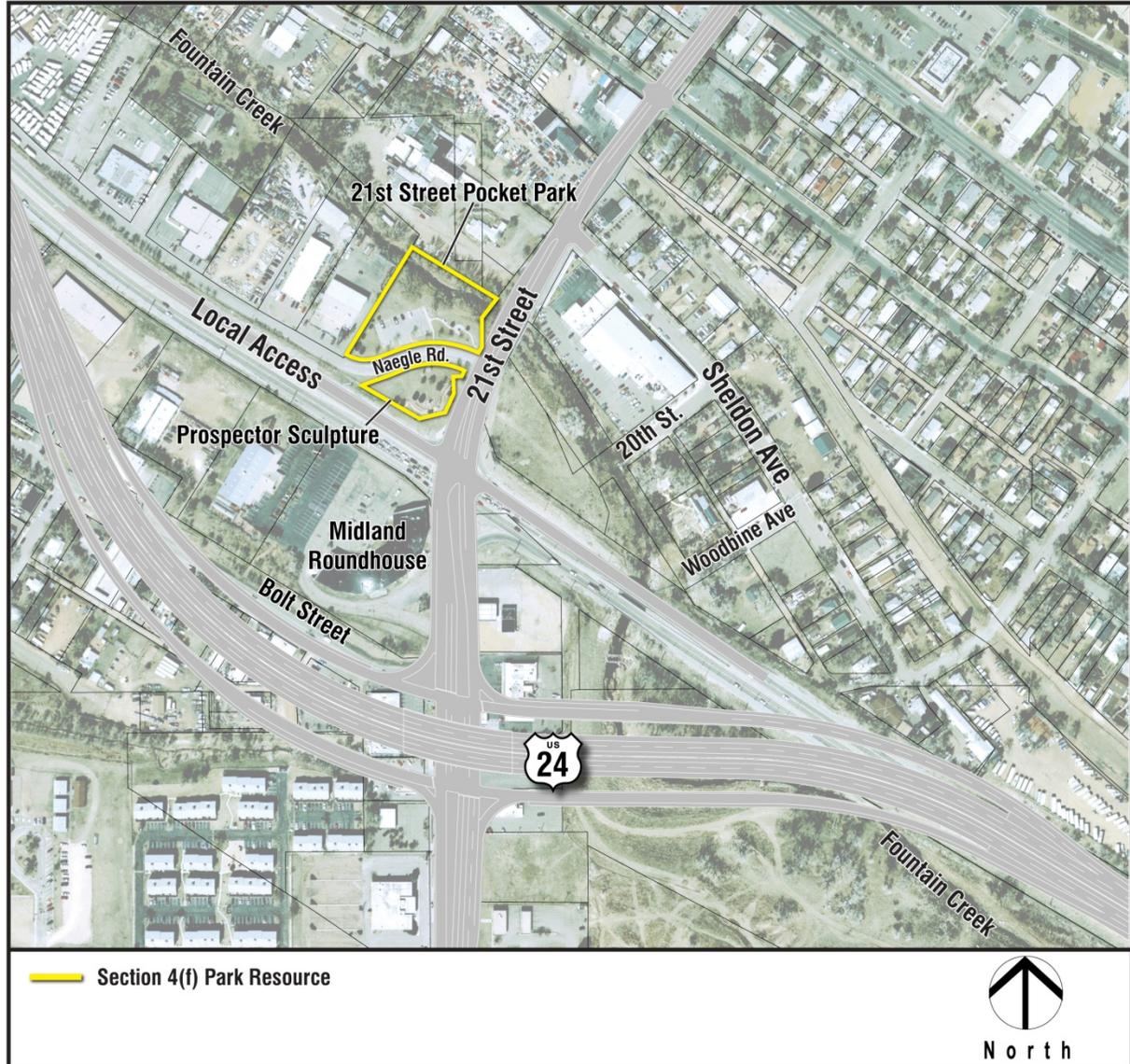
233 This avoidance option would result in 25 property acquisitions in a low-income, community. As  
 234 discussed in **Section 3.8 Environmental Justice**, the proposed action is expected to acquire a  
 235 total of 24 residences with 22 of these being low-income households. Acquisition of 25 more  
 236 properties to avoid this Section 4(f) property would more than double the acquisitions of low-  
 237 income households in the US 24 corridor. This avoidance option would cause severe  
 238 disproportionate impacts to low-income populations.

239 There would be environmental impacts to Fountain Creek from this alternative. As shown in  
 240 **Exhibit 4-6**, a long segment of the creek would run under a new raised US 24 and under the  
 241 off-ramps. The increase in shading on the creek from the bridge would disrupt the ecosystem  
 242 processes of the creek.

243 The shading issue could be minimized by rerouting this segment of Fountain Creek currently on  
 244 the south side of existing US 24 to shorten the distance it has to flow under the improved US 24,  
 245 but such re-routing would shorten the stream segment length and create erosion and other  
 246 geomorphic stresses within the system. This solution would be detrimental to fish habitat, as a  
 247 reduced stream length would introduce additional hard surfaces in the channel adversely impacting  
 248 stream morphology along this stretch of creek.

249 Because of this combination of issues - introducing the curves that degrade the safety and  
 250 operations of the highway, affecting the low-income households, and the environmental impacts  
 251 to the creek - **Design Option 15:** 21st Street SPDI South, was found to be not prudent.

252 EXHIBIT 4-6  
 253 21st Street Pocket Park Design Option 15: 21st Street SPDI South Avoidance Option



254 ***Minimization:*** No viable strategies to minimize harm to the 21st Street pocket park were found.  
 255 Improvements to the 21st Street bridge over Fountain Creek require channel modification that  
 256 impact the 21st Street pocket park. Because Naegle Road provides the only existing access to the  
 257 park, closing Naegle Road results in the total acquisition of the park.

258 ***Mitigation:*** Mitigation strategies were developed in consultation with the City of Colorado  
 259 Springs Parks, Recreation & Cultural Services Department. A letter sent from CDOT to the City  
 260 of Colorado Springs in January 2012 described impacts and the proposed mitigation for 21st  
 261 Street Pocket Park. A concurrence line on this letter was signed February 3, 2012 by the City,  
 262 indicating their agreement with the mitigation for the park. The letter is included in **Appendix I**.

263 The Prospector Sculpture will be relocated by CDOT to a location along US 24 within what is  
 264 known as Old Colorado City. Several possible locations exist, such as within Vermijo Park at the  
 265 intersection of US 24 and 26th Street. This site was popular with the stakeholders because

266 26th Street is considered the gateway into the Old Colorado City Historic District. Relocating the  
267 sculpture would avoid harm to the 21st Street pocket park’s most notable feature and could  
268 potentially improve access to and visibility of the monument. CDOT will provide advanced notice  
269 to the community prior to acquisition of the 21st Street pocket park. CDOT will coordinate with  
270 the community and the City of Colorado Springs Parks, Recreation & Cultural Services  
271 Department to identify a location where the sculpture will be relocated.

#### 272 4.5.1.2 Vermijo Park

##### 273 *Property Description*

274 Vermijo Park is a 4.6-acre park located in the northwest corner of US 24 and 26th Street. Vermijo  
275 Park is owned and maintained by the City of Colorado Springs. Recreational amenities include a  
276 baseball field, basketball court, playground, and walking paths. The park is isolated and  
277 underutilized, hidden from the roadway by the riparian habitat associated with Fountain Creek and  
278 from neighborhoods to the north by a change in topography. The park’s baseball field is not  
279 programmed for events by the City of Colorado Springs, and the public has expressed some  
280 concern over personal safety in the park due to its isolated setting.

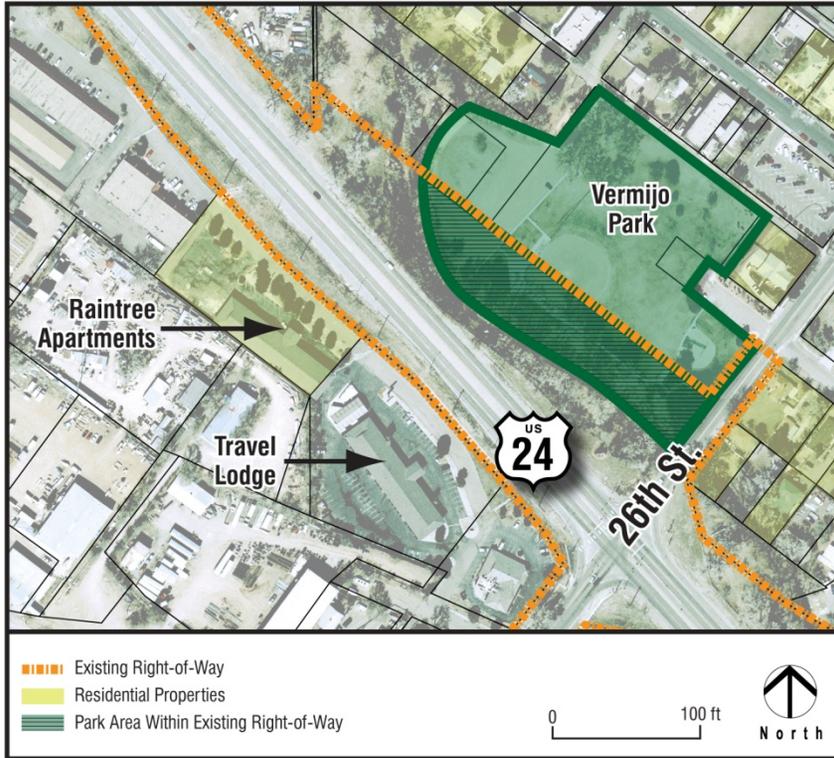
##### 281 *Section 4(f) Use*

282 Improving US 24 involves a bridge replacement at 26th Street, which requires channel  
283 modifications be made to Fountain Creek. Both the US 24 Freeway Alternative and the Proposed  
284 Action would result in the same use of Vermijo Park. However, the US 24 Freeway Alternative  
285 would reduce access to the park because this alternative gives preference to regional travel with  
286 higher speeds on the mainline. The Midland Expressway Alternative does a better job of balancing  
287 local travel and regional trips while providing improved peak hour operations. The Proposed  
288 Action would require the use of nearly half (2.2 acres) of the park area, including part of the  
289 baseball field. This 2.2 acre area is currently located within CDOT right-of-way as illustrated by  
290 the existing right-of-way line in **Exhibit 4-7**. This part of the park is needed for re-channeling  
291 Fountain Creek, which is needed to accommodate the new bridge on 26th Street. See **Section 3.2,**  
292 **Floodplains** for more information on the required channel modifications. When rechanneling  
293 occurs, the baseball field will be removed, which means a complete loss of the baseball field  
294 because there is no other place to construct a new baseball field. In addition, 0.01 acres of the park  
295 will be acquired for the sidewalk improvements along 26th Street. Although 2.4 acres of Vermijo  
296 Park would remain undisturbed after construction, the reduction in park area and a partial loss of  
297 the baseball field would reduce some of its current functions as described above.

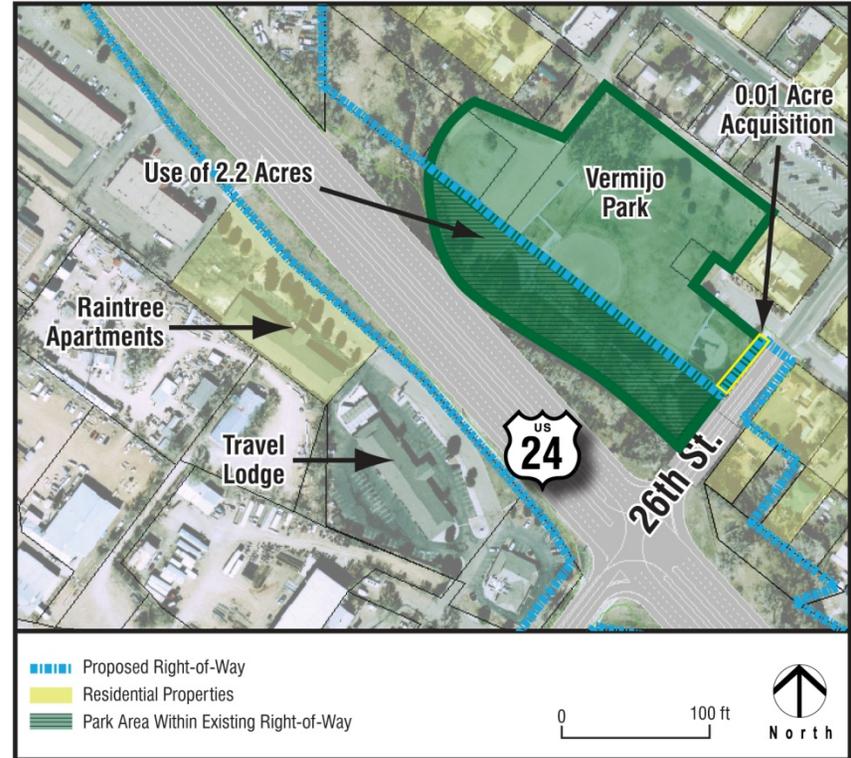
##### 298 *Measures to Avoid and Minimize Harm*

299 ***Avoidance:*** No design options are possible that would avoid impacts to Vermijo Park because the  
300 land acquisition for sidewalk improvements and the use of 2.2 acres is necessary to accommodate  
301 the channel improvements associated with the new bridge on 26th Street. Although designers  
302 tried, there is no way to save the baseball field. Improvements to the 26th Street bridge are  
303 required by changes to the vertical profile of US 24, requiring an elevation change on 26th Street.  
304 Also, the City of Colorado Springs requires that all bridges accommodate the 100-year flood. The  
305 design team considered shifting the alignment of US 24 to the south between 26th Street and  
306 31st Street; however, realignment does not reduce the elevation change on the 26th Street bridge  
307 or the remove the requirement to accommodate the 100-year flood. The Existing Conditions and  
308 the Proposed Action at Vermijo Park are shown in **Exhibit 4-7**.

309 EXHIBIT 4-7  
 310 Existing Conditions and Proposed Action for Section 4(f) Use of Vermijo Park



**Existing Condition**



**Proposed Action**

311 **Minimization:** No viable measures to minimize harm to Vermijo Park were found. No design  
 312 options are possible that would minimize harm to Vermijo Park because the land acquisition of  
 313 0.01 acre and the use of 2.2 acres are necessary to accommodate the channel improvements  
 314 associated with the new bridge on 26th Street. Improvements to the 26th Street bridge are  
 315 required by changes to the vertical profile of US 24, which requires an elevation change on  
 316 26th Street. Also, the City of Colorado Springs requires that all bridges accommodate the 100-year  
 317 flood. The design team considered shifting the alignment of US 24 to the south between  
 318 31st Street and 26th Street; however, realignment does not reduce the elevation change on the  
 319 26th Street bridge or remove the requirement to accommodate the 100-year flood.

320 **Mitigation:** Mitigation proposed for impacts to Vermijo Park include CDOT contributing up to  
 321 \$50,000 to the City of Colorado Springs for a park study. In addition, all trees greater than  
 322 2 inches in diameter at breast height (DBH) will be mitigated at a 1 to 1 basis in the park or along  
 323 Fountain Creek.

324 Mitigation for impacts to Vermijo Park was developed in coordination with the City of Colorado  
 325 Springs Parks, Recreation & Cultural Services. A letter sent from CDOT to the City of Colorado  
 326 Springs in January 2012 described impacts and the proposed mitigation for Vermijo Park. A  
 327 concurrence line on this letter was signed by the City on February 3, 2012, indicating their  
 328 agreement with the mitigation for the park. The letter is included in **Appendix I**.

### 329 4.5.1.3 Midland Trail

#### 330 *Property Description*

331 The Midland Trail is a 2.8-mile concrete trail that  
 332 extends from America the Beautiful Park (located  
 333 on the east side of I-25) and ends at Ridge Road  
 334 with a short segment missing between 21st Street  
 335 and 25th Street. The trail is owned and maintained  
 336 by the City of Colorado Springs, and is classified  
 337 by the City of Colorado Springs as a Tier 1 trail.  
 338 Tier 1 trails are paved, multi-purpose trails that can  
 339 accommodate a variety of trail users including  
 340 walkers, joggers, recreational bicyclists, commuting  
 341 bicyclists, and horseback riders within the same  
 342 trail corridor. The Midland Trail runs parallel to  
 343 US 24 between 8th Street and 11th Street. The  
 344 *Parks, Recreation and Trails 2000-2010 Master Plan* (City of Colorado Springs, 2000) proposes to  
 345 expand the Midland Trail west to the City of Manitou Springs' Creekside Trail, increasing its  
 346 length to a total of 3.52 miles.



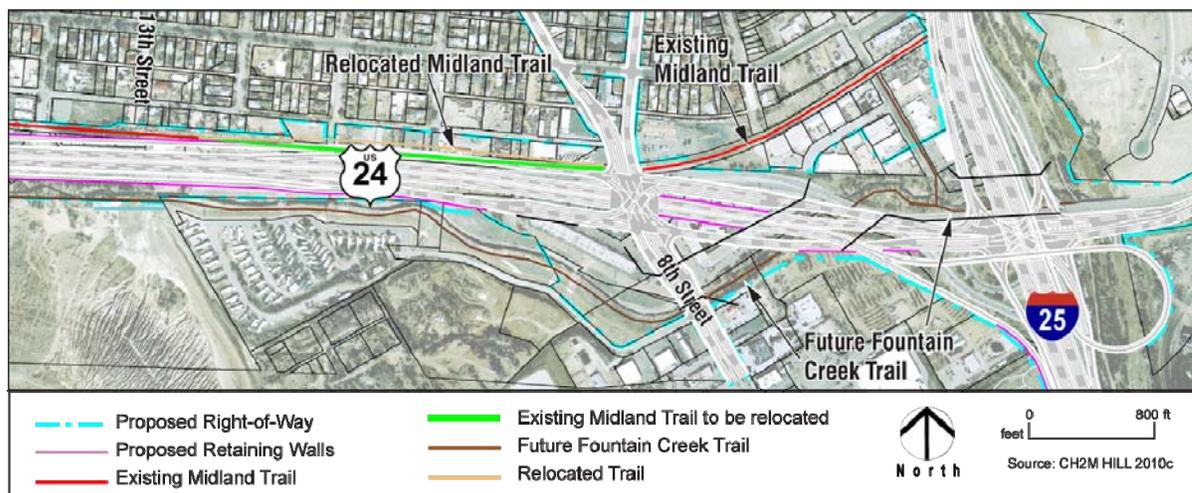
View of Midland Trail

#### 347 *Section 4(f) Use*

348 As shown in **Exhibit 4-8**, the construction of the 8th Street interchange would require the same  
 349 realignment of the Midland Trail between 8th Street and 11th Street, a distance of approximately  
 350 0.3 mile for both the US 24 Freeway Alternative and the Proposed Action. The Proposed Action  
 351 would reconstruct the affected portion of the trail within CDOT right-of-way. No temporary  
 352 impacts are expected and no permanent change in the function or continuity of the trail would  
 353 occur.

354 Prior to disruption of the existing trail, the realignment of the Midland Trail will be completed or a  
355 detour will be provided to ensure the trail's continuity is maintained.

356 EXHIBIT 4-8  
357 Proposed Action for Section 4(f) Use of Midland Trail



358 At the cross streets of 21st Street, 26th Street, 31st Street, and Ridge Road, the bridges will be  
359 replaced, which will cause a temporary use of the trail during construction. Together, these four  
360 temporary uses of the trail will involve approximately 0.2 mile of the Midland Trail. The trail will  
361 be temporarily relocated during the construction of bridges over Fountain Creek and new  
362 permanent trail will be constructed as part of each bridge improvement. Once construction is  
363 completed, users will be able to cross under each bridge at these locations on newly constructed  
364 trails.

365 Improvements would not impact the Midland Trail near I-25 and the pedestrian bridge over  
366 Monument Creek, which are improvements funded with Land and Water Conservation Fund  
367 monies.

### 368 *Measures to Avoid and Minimize Harm*

369 ***Avoidance:*** No design options are possible that would avoid impacts to Midland Trail between  
370 8th Street and 11th Street without unacceptable and adverse environmental impacts to the  
371 Fountain Creek 100-year floodplain. Substantial realignment and modification of US 24 and  
372 Fountain Creek would be necessary to avoid this segment of the Midland Trail. Realigning either  
373 US 24 or the creek farther south would impact the A-1 Mobile Village (a low-income community  
374 with more than 70 homes) and cause impacts to Fountain Creek, which is classified as a water of  
375 the United States.

376 The Proposed Action requires reconstruction of the bridges over Fountain Creek at 21st Street,  
377 26th Street, 31st Street, and Ridge Road. The design team was not able to find options for  
378 avoiding the temporary use of the trail at each of these bridge locations.

379 ***Minimization:*** The US 24 alignment in the Proposed Action minimizes the impacts to the  
380 Midland Trail by impacting only the section between 8th Street and 11th Street. Between  
381 8th Street and 11th Street, the Midland Trail is almost entirely within the proposed area for the  
382 8th Street on-ramp. For safety reasons, the 10-foot-wide trail must be offset from the highway by

383 12 feet to allow adequate separation (highway clear zone) between higher-speed vehicles and  
384 pedestrians or bicycles using the trail. Therefore, the trail could not remain in place.

385 At the four bridge locations, the trail will be temporarily relocated during construction and a new  
386 trail will be constructed under each bridge to provide safe passage under each bridge without  
387 having to cross the street at grade. Between each cross street along US 24, the land between  
388 Fountain Creek and the Midland Trail will be graded to accommodate realignment and widening  
389 of Fountain Creek. This can be accomplished without disturbing the trail at its current location  
390 along Fountain Creek.

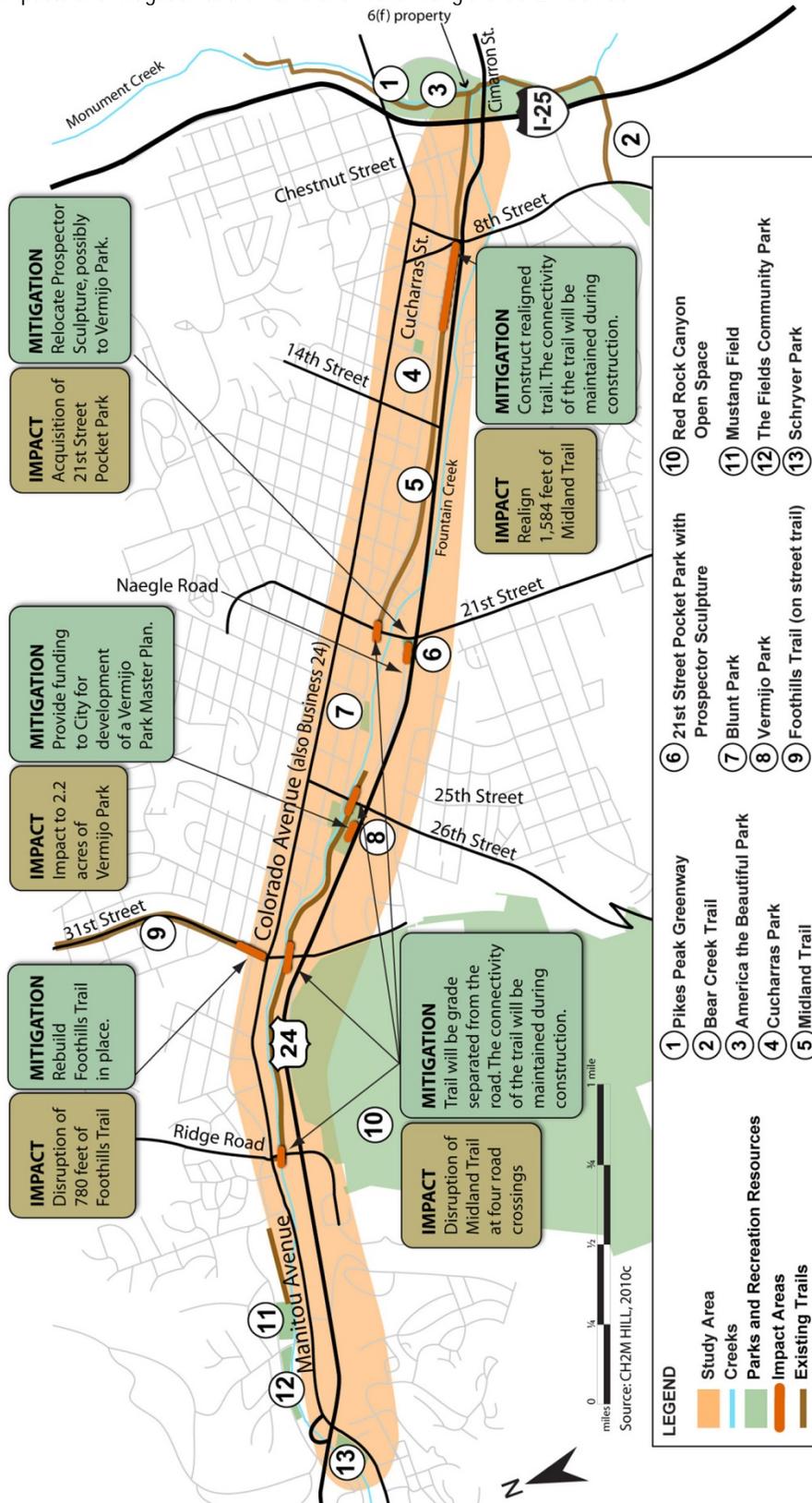
391 **Mitigation:** The Midland Trail is currently a heavily used trail for commuters accessing downtown  
392 Colorado Springs. The segment of the Midland Trail between 8th Street and 11th Street will be  
393 realigned on the north side of US 24 and be built to accommodate the commuter use. This  
394 mitigation was developed in coordination with the City of Colorado Springs Parks, Recreation &  
395 Cultural Services Department. A letter from CDOT sent to the City of Colorado Springs in  
396 January 2012 described impacts and the proposed mitigation for the Midland Trail. A concurrence  
397 line on this letter was signed by the City on February 3, 2012, indicating their agreement with the  
398 mitigation for the park. The letter is included in **Appendix I**.

399 Prior to disruption of the existing trail, the realignment of the Midland Trail will be completed or a  
400 detour will be provided to ensure the trail's continuity is maintained.

401 At each of the four bridge locations, a temporary trail will be constructed to provide a safe detour  
402 around the bridge construction. Once bridge construction is completed, a new trail segment will  
403 be constructed under the bridge and CDOT will post signs indicating segments of the trails that  
404 are within the 100-year floodplain.

405 The following **Exhibit 4-9** illustrates the impacts and mitigation to the parks and trails along the  
406 US 24 corridor.

407 EXHIBIT 4-9  
 408 Impacts and Mitigation to the Parks and Trails Along the US 24 Corridor



409

## 410 4.5.2 Historic Properties

411 The proposed Action results in a Section 4(f) use of five historic properties and one historic  
 412 district. These include two residential properties (5EP5285 and 5EP5288), two commercial  
 413 properties (5EP5335 and 5EP5336), one hotel/motel property (5EP5218), and the Westside  
 414 Historic District (5EP5364), which are discussed below. A small segment of the former Colorado  
 415 Midland Railroad is located at approximately US 24 and 21st Street (5EP384.2), which is now  
 416 overlaid by the Midland Trail. This segment of the Midland Railroad lacks integrity and does not  
 417 support the significance of the entire Colorado Midland Railroad (5EP384), which is considered  
 418 NRHP eligible. This segment of the railroad will be temporarily disrupted and will be replaced in  
 419 kind at the same location except at undercrossing locations where existing at-grade crossing will be  
 420 grade separated (in particular at the 21st Street intersection). During construction, the trail that  
 421 follows the railroad grade will be moved away from bridge construction locations and then will be  
 422 moved back, but at a higher grade, when the bridge work is done. The work involves no transfer  
 423 of land so there is no use of the historic property. There will be temporary impacts that will not be  
 424 adverse. Therefore, the resource was not discussed further in this Section 4(f).

### 425 4.5.2.1 5EP5285 (1815 Sheldon Avenue)

#### 426 *Property Description*

427 Property 5EP5285 is a wood-frame, one-story, single-family residence built in 1899 that faces  
 428 north toward Sheldon Avenue. The back of the property slopes significantly so that the property's  
 429 back edge is approximately 7 feet lower than the front edge of the property where the house is  
 430 situated. The lot is approximately 25 percent larger than surrounding lots, and mature landscaping  
 431 surrounds the property. A vacant lot separates the property from US 24.  
 432  
 433

434 Property 5EP5285 is **eligible for the National**  
 435 **Register under Criterion C** as a good example of  
 436 a Hipped-Roof-Box style of architecture. Its  
 437 hipped roof, full-length porch, and boxy  
 438 appearance are character-defining elements of this  
 439 style. The property is also a contributing element  
 440 to the Westside Historic District (5EP5364).

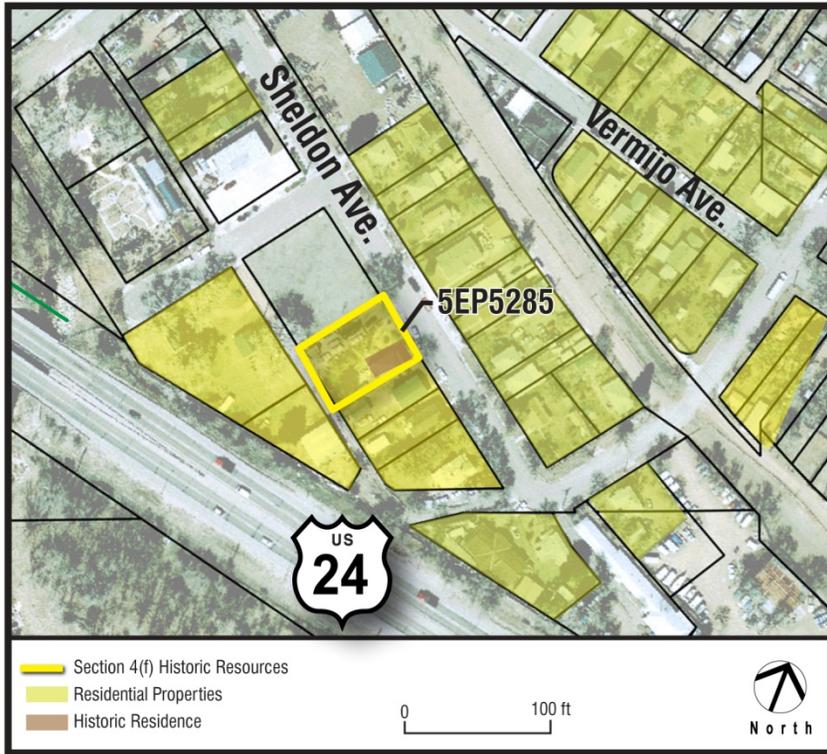


5EP5285, 1815 Sheldon Avenue

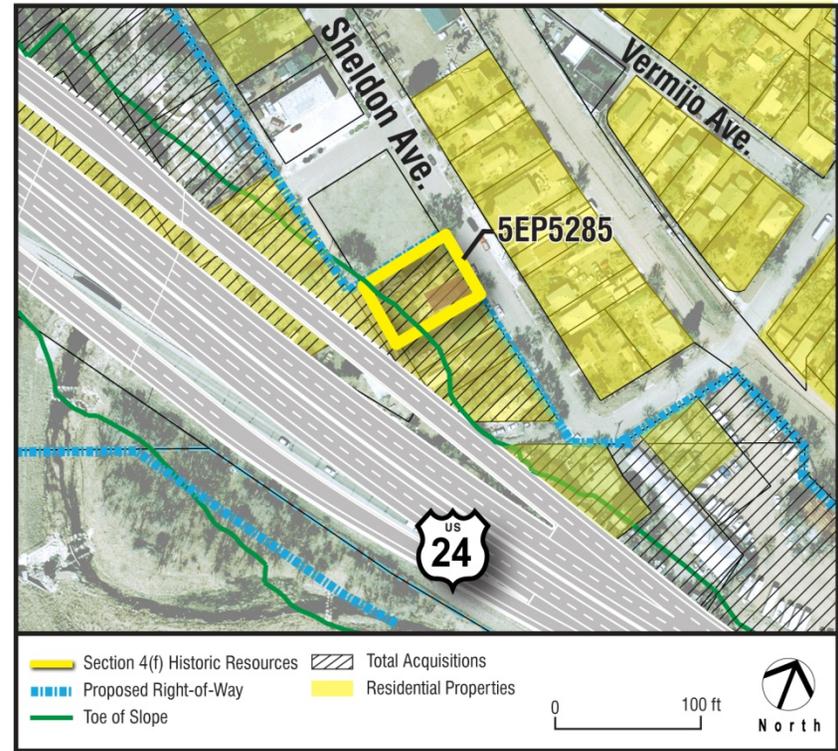
#### 441 *Section 4(f) Use*

442 Both the US 24 Freeway Alternative and the  
 443 Proposed Action would require the total  
 444 acquisition and demolition of the house at 1815 Sheldon Avenue built in 1899 (5EP5285). As  
 445 shown in **Exhibit 4-10**, US 24 would be widened approximately 66 feet to the north, ending 26  
 446 feet from the house (5EP5285). The grade difference between US 24 and the house (5EP5285) as  
 447 well as the proximity of the interchange ramps would make construction in this area not possible  
 448 without affecting the residence. Large construction equipment would be needed to bring in fill  
 449 material and create new grades.

450 EXHIBIT 4-10  
 451 Existing Condition and Proposed Action for Section 4(f) Use of Property 5EP5285



**Existing Conditions**



**Proposed Action**

452 **Measures to Avoid and Minimize Harm**

453 **Avoidance:** The project team evaluated six design options at this location for their potential to  
 454 avoid impacts to the historic house (5EP5285). Five of the design options shifted the roadway to  
 455 the north, maintaining the existing south right-of-way line of US 24 and one design option shifted  
 456 US 24 to the south. All five of the interchange or intersection options that move US 24 to the  
 457 north would require the full acquisition of the historic house (5EP5285). These design options are  
 458 shown in detail in **Appendix B** and are listed below:

- 459 • **Design Option 10:** 21st Street Signalized Intersection  
 460 • **Design Option 11:** 21st Street Diamond Interchange with Loop  
 461 • **Design Option 12:** 21st Street Split Diamond Interchange with 18th Street  
 462 • **Design Option 13:** 21st Street Tight Diamond Interchange  
 463 • **Design Option 14:** 21st Street SPDI to the North

464 The one option to move US 24 to the south, **Design Option 15:** 21st Street SPDI South has the  
 465 potential to avoid use of the historic house (5EP5285). To avoid impacting the Midland Terminal  
 466 Railroad Roundhouse the designers would have to realign US 24 to the far south, as shown in  
 467 **Exhibit 4-11**.

468 EXHIBIT 4-11  
 469 Section 4(f) 5EP5285 Design Option 15: 21st Street SPDI South Avoidance Option



470 For the same reasons, this avoidance option does not work for avoiding the 21st Street pocket  
 471 park as discussed in Section 4.5.1.1 under Measures to Avoid and Minimize Harm, this option is  
 472 not a prudent alternative to avoiding the historic house (5EP5285).

473 **Minimization:** The alignment of the Proposed Action was laid out to minimize harm to the  
 474 property by not directly touching the building (5EP5285). However, land between the house and  
 475 the highway is needed for highway widening. While this closer proximity of the road to a  
 476 residential property is common in urban neighborhoods, it represents a substantial change to the  
 477 setting of this property, which is characterized by a larger-than-average lot that backs to another  
 478 vacant lot, giving the existing property a more expansive feel. The Proposed Action would also  
 479 require acquisition of three residential properties east of this residence, which would leave the  
 480 house (5EP5285) as the last remaining residential property on the block.

481 Moving the highway closer to the property would leave this property in an unlivable condition.  
 482 Reuse of the structure would require a change in the function of the building for something other  
 483 than a residence. Leaving the structure unoccupied would cause it to fall into disrepair and become  
 484 a nuisance, making demolition now (with recordation) preferable. Therefore, it was determined  
 485 that a partial acquisition of land without the residence did not minimize harm to the property.

486 **Mitigation:** Mitigation for impacts to this property has been developed through consultation with  
 487 the Colorado State Historic Preservation Office (SHPO) and other consulting parties and is  
 488 documented in a Memorandum of Agreement (MOA). The MOA is included in **Appendix H** and  
 489 mitigation considered includes, but is not limited to, interpretive signing and architectural salvage  
 490 from historic buildings.

#### 491 4.5.2.2 5EP5288 (1803 Sheldon Avenue)

##### 492 *Property Description*

493 Property 5EP5288 is a brick, one-and-one-half-story,  
 494 single-family, Queen Anne style residence with a  
 495 hipped, cross-gable roof covered in asphalt shingles.  
 496 The property is **eligible for the National Register**  
 497 **under Criterion C** for architectural merit. Built in 1897,  
 498 the house displays characteristics of the Queen Anne  
 499 style of architecture. The property is also a contributing  
 500 element to the Westside Historic District (5EP5364).

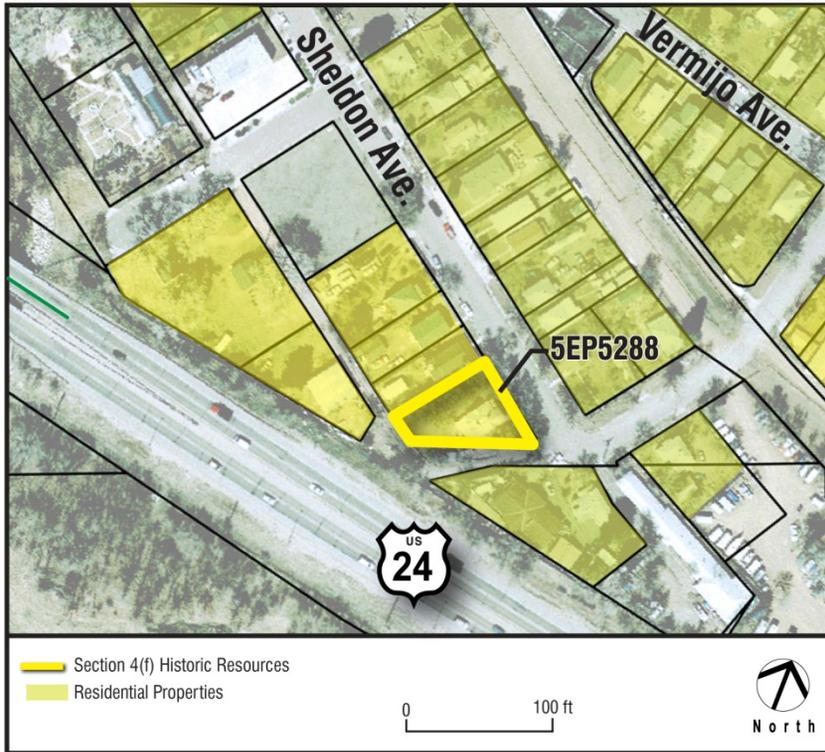


5EP5288, 1803 Sheldon Avenue

##### 501 *Section 4(f) Use*

502 Both the US 24 Freeway Alternative and the Proposed Action would require the total acquisition  
 503 and demolition of 5EP5288. As shown in **Exhibit 4-12**, the off-ramp for the US 24 and  
 504 21st Street interchange would occupy approximately 921 square feet of the southern portion of  
 505 5EP5288 - more than 10 percent of the property area.

506 EXHIBIT 4-12  
507 Existing Condition and Proposed Action for Section 4(f) Use of Property 5EP5288



**Existing Conditions**



**Proposed Action**

508 In addition, the roadway would move to within 24 feet of the back of the structure, as compared  
 509 to the existing 124 feet that currently buffers the property from the roadway. Relocation of the  
 510 highway off-ramp would decrease the historic integrity of the property's setting and constitute an  
 511 adverse effect. Construction activities would not be possible in the 24-foot strip that would remain  
 512 at the back of the property if the building was not demolished.

513 ***Measures to Avoid and Minimize Harm***

514 **Avoidance:** The project team evaluated six design options at this location for their potential to  
 515 avoid impacts to the historic house (5EP5288). Five of the design options shifted the roadway to  
 516 the north, maintaining the existing south right-of-way line of US 24 and one design option shifted  
 517 US 24 to the south. All five of the interchange or intersection options that move US 24 to the  
 518 north would require full acquisition of the historic house (5EP5288). These design options are  
 519 shown in detail in **Appendix B** and are listed below:

- 520 • **Design Option 10:** 21st Street Signalized Intersection
- 521 • **Design Option 11:** 21st Street Diamond Interchange with Loop
- 522 • **Design Option 12:** 21st Street Split Diamond Interchange with 18th Street
- 523 • **Design Option 13:** 21st Street Tight Diamond Interchange
- 524 • **Design Option 14:** 21st Street SPDI to the North

525 The one option to widen to the south, **Design Option 15:** 21st Street SPDI South has the  
 526 potential to avoid use of the historic house (5EP5288). To avoid impacting the Midland Terminal  
 527 Railroad Roundhouse the designers would have to realign US 24 to the far south, as shown in  
 528 **Exhibit 4-13**.

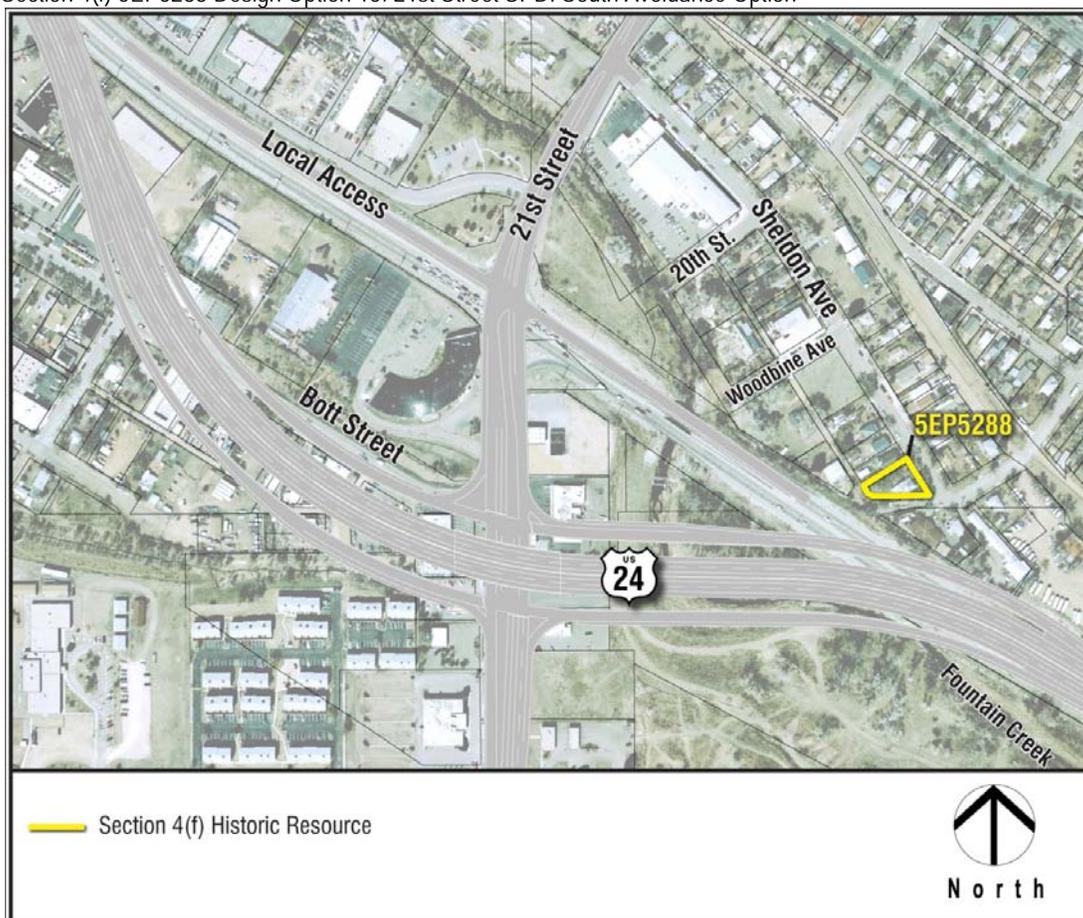
529 For the same reasons, this avoidance option does not work for avoiding the 21st Street Pocket  
 530 Park as discussed in Section 4.5.1.1 under Measures to Avoid and Minimize Harm, this option is  
 531 not a prudent alternative to avoiding the historic house (5EP5288).

532 **Minimization:** The alignment of the Proposed Action was laid out to minimize harm to the  
 533 property by not directly touching the building. However, land between the house and the highway  
 534 is needed for highway widening.

535 Moving the highway closer to the property would leave this property in an unlivable condition.  
 536 Reuse of the structure would require a change in the function of the building for something other  
 537 than a residence. Leaving the structure unoccupied would cause it to fall into disrepair and become  
 538 a nuisance. Therefore, it was determined that a partial acquisition of land without the residence did  
 539 not minimize harm to the property.

540 **Mitigation:** Mitigation for impacts to this property has been developed through consultation with  
 541 the Colorado SHPO and other consulting parties and is documented in a MOA. The MOA is  
 542 included in **Appendix H** and mitigation considered includes, but is not limited to, interpretive  
 543 signing and architectural salvage from historic buildings.

544 EXHIBIT 4-13  
 545 Section 4(f) 5EP5288 Design Option 15: 21st Street SPDI South Avoidance Option



546 4.5.2.3 5EP5335 (302 South 10th Street)

547 *Property Description*

548 Property 5EP5335 is a wood-framed, one-story,  
 549 brick-clad commercial building constructed in 1959.  
 550 This commercial building is currently occupied by  
 551 CITGO Lubricants. The building's principal façade  
 552 faces north toward Vermijo Street; the Midland Trail  
 553 and US 24 run along the southern edge of the  
 554 property. A concrete block building with a flat roof  
 555 and no visible entrance or doorways is attached along  
 556 the building's west façade.



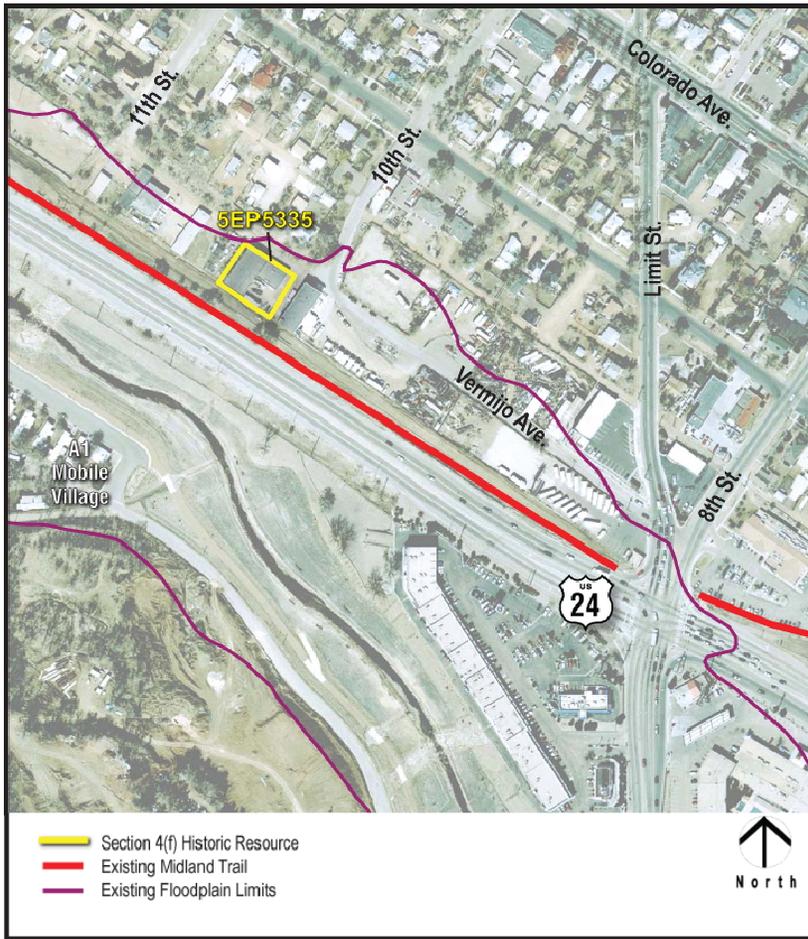
5EP5335 CITGO Lubricants, 302 South 10th Street

557 Property 5EP5335 is **eligible for listing in the**  
 558 **National Register under Criterion C** as an example of the Folk Victorian style of architecture.

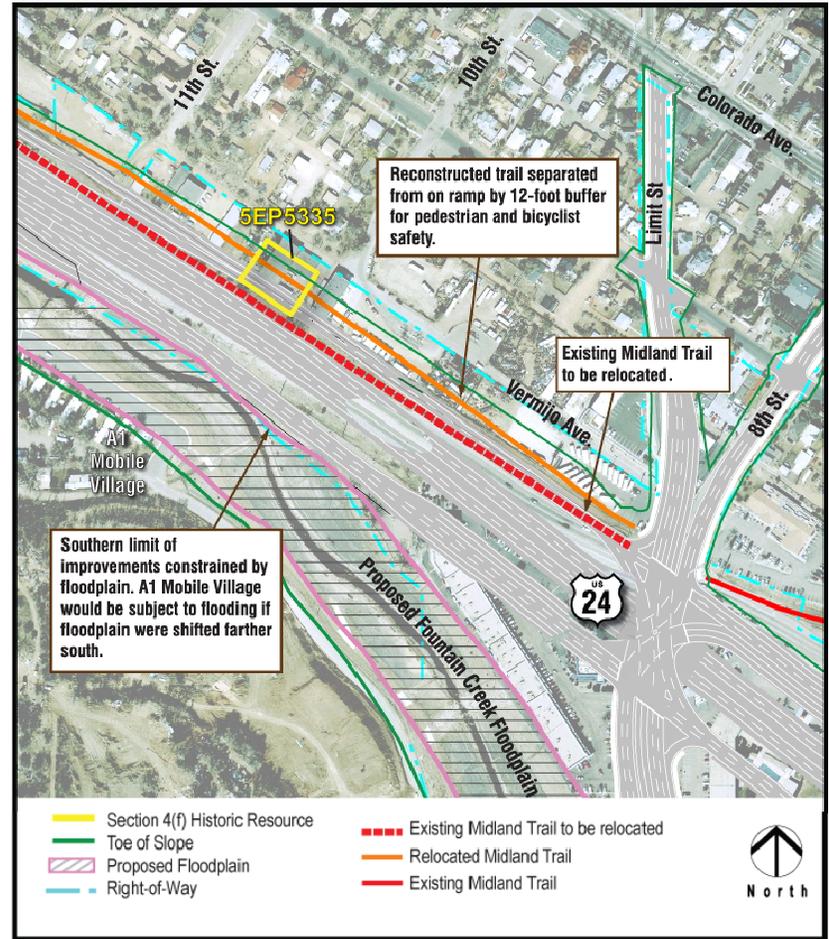
559 *Section 4(f) Use*

560 Both the US 24 Freeway Alternative and the Proposed Action would require the total acquisition  
 561 and demolition of 5EP5335. As illustrated in **Exhibit 4-14**, the proposed westbound  
 562 through-lanes on US 24 and interchange ramps associated with the proposed 8th Street  
 563 interchange directly encroach on 5EP5335.

564 EXHIBIT 4-14  
 565 Existing Condition and Proposed Action for Section 4(f) Use of Property 5EP5335



**Existing Condition**



**Proposed Action**

566 ***Measures to Avoid and Minimize Harm***

567 ***Avoidance:*** A substantial realignment and modification of US 24 and Fountain Creek would be  
 568 necessary to avoid 5EP5335. Because of recent efforts to improve Fountain Creek undertaken by  
 569 the City of Colorado Springs Stormwater Engineering, CDOT, and the private developer Gold  
 570 Hill Mesa, in coordination with the US Army Corps of Engineers, negative impacts to Fountain  
 571 Creek were not supported by the agencies or the community.

572 Two design options were analyzed that would move US 24 south using the floodplain as the right-  
 573 of-way needed for the highway widening. These avoidance options prevented impacts to CITGO  
 574 Lubricants (5EP5335) by moving the highway to the south, but resulted in unacceptable and  
 575 adverse environmental impacts to Fountain Creek and its 100-year floodplain by either putting the  
 576 Fountain Creek in a pipe under US 24 or re-routing the Fountain Creek and its floodplain to the  
 577 south. The option to avoid 5EP5335 requires that Fountain Creek be put in a pipe under US 24  
 578 through this segment. This would disrupt the ecosystem processes of the creek and would  
 579 jeopardize the stream restoration work completed along this stretch of creek. Furthermore, this  
 580 avoidance option would undermine the City's efforts to improve fish habitat and increase fish  
 581 populations in Fountain Creek by introducing an artificial barrier for fish movement and by  
 582 increasing the speed of stream flow in the pipe resulting in an adverse impact to stream  
 583 morphology along this stretch of the creek.

584 For these reasons, putting Fountain Creek in a pipe under US 24 was found to not be prudent.  
 585 The second option, realigning the highway and the Fountain Creek farther south, would shift the  
 586 100-year floodplain south and would require the acquisition of a portion of the A-1 Mobile  
 587 Village, a low-income community with more than 70 homes. Of the 70 manufactured homes  
 588 approximately 30 would need to be acquired, more than doubling the low income residential  
 589 acquisitions for the project. Furthermore, the A-1 Mobile Village is one parcel with one owner and  
 590 it is possible that acquisition of 30 of the 70 manufactured home sites would result in an  
 591 uneconomical remnant and therefore require acquisition of the entire parcel and all 70 homes.  
 592 Acquisition of all 70 homes would more than triple the number of low-incomes homes impacted  
 593 from this avoidance option.

594 For these reasons, a substantial realignment of US 24 and Fountain Creek was found to not be  
 595 prudent.

596 Four other design options were studied in an attempt to avoid CITGO Lubricants (5EP5335) that  
 597 involved widening to the north. All of these design options evaluated for the US 24 from I-25 to  
 598 15th Street would require full acquisition of the historic property. The four design options  
 599 considered are shown in detail in **Appendix B** and are listed below:

- 600 • **Design Option 16:** I-25 Direct/8th Street Overpass/13th Street Diamond
- 601 • **Design Option 17:** I-25 Direct/One-Way Pair 8th Street and 10th Street/14th Street Access
- 602 • **Design Option 18:** I-25 Direct/8th Street Signalized Intersection/14th Street Access
- 603 • **Design Option 19:** I-25 Direct/8th Street SPDI/14th Street Access

604 ***Minimization:*** No viable measures to minimize harm were found for this property. Design  
 605 options either avoided the property with impacts to the Fountain Creek and the A-1 Mobile  
 606 Village, or required full acquisition of this property.

607 ***Mitigation:*** Mitigation for impacts to this property has been developed through consultation with  
 608 the Colorado SHPO and other consulting parties and is documented in a MOA. The MOA is

609 included in **Appendix H** and mitigation considered includes, but is not limited to, interpretive  
610 signing and architectural salvage from historic buildings.

#### 611 4.5.2.4 5EP5336 (301 South 10th Street)

##### 612 *Property Description*

613 Property 5EP5336 is a wood-framed, brick-clad Twentieth-Century Commercial building  
614 constructed in 1950. The building is currently occupied by Chief Petroleum Company. The  
615 property includes the primary building, a gravel lot with paving near the building, and petroleum  
616 storage tanks that line the south end of the property, east of the principal building. The building is  
617 situated on the west end of the property, oriented north-south on the lot so that the building  
618 encompasses the width of the property at its western end. Its principal façade faces north toward  
619 Vermijo Street; the Midland Trail and US 24 run along the southern edge of the property.

620 Property 5EP5336 is **eligible for listing in the National Register under Criterion C** for  
621 architectural merit as a Twentieth-Century Commercial building. The surrounding property,  
622 including the parking and circulation areas and storage tanks, are contributing historic features of  
623 the property.

##### 624 *Section 4(f) Use*

625 Both the US 24 Freeway Alternative and the Proposed Action would require the total acquisition  
626 and demolition of 5EP5336. As illustrated in **Exhibit 4-15**, the proposed westbound  
627 through-lanes on US 24 and interchange ramps associated with the proposed 8th Street  
628 interchange are features that directly encroach on 5EP5336.

629 The north-south orientation of the Chief Petroleum building and the relatively small size of the  
630 property for an industrial operation together limit  
631 the land area within the property to accommodate  
632 improvements without removing the historic  
633 commercial building and affecting most of the  
634 remaining property area.

##### 635 *Measures to Avoid and Minimize Harm*

636 **Avoidance:** A substantial realignment and  
637 modification of US 24 and Fountain Creek would be  
638 necessary to avoid 5EP5336. Because of recent  
639 efforts to improve Fountain Creek undertaken by the  
640 City of Colorado Springs Stormwater Engineering,  
641 CDOT and Gold Hill Mesa, in coordination with the  
642 US Army Corps of Engineers, negative impacts to  
643 Fountain Creek were not supported by the agencies  
644 or the community.



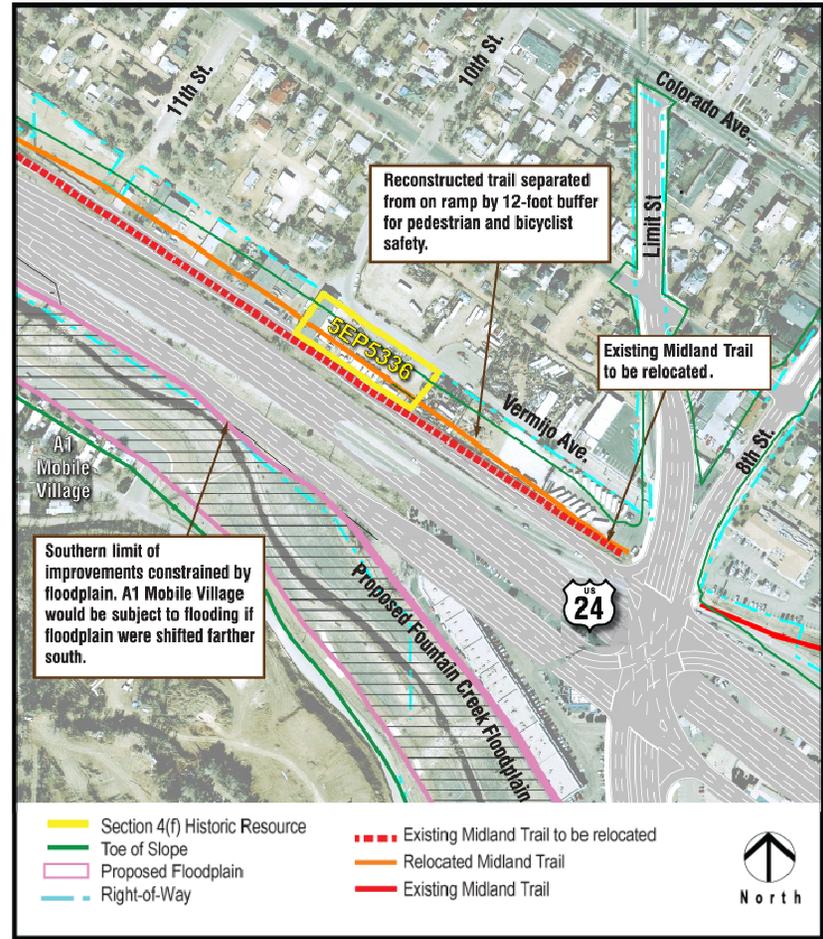
5EP5336 Chief Petroleum Company, 301  
South 10th Street

645 Two options were considered to avoid impacts to Chief Petroleum Co. (5EP5336). Putting  
646 Fountain Creek in a pipe under US 24 or re-routing it and its flood plain to the south. For the  
647 same reasons these avoidance options do not work for avoiding CITGO Lubricant (5EP5335) as  
648 discussed in Section 4.5.2.3 under Measures to Avoid and Minimize Harm, these options are not  
649 prudent alternatives to using Chief Petroleum Co. (5EP5336).

650 EXHIBIT 4-15  
 651 Existing Condition and Proposed Action for Section 4(f) Use of Property 5EP5336



**Existing Condition**



**Proposed Action**

652 Four other design options were studied in an attempt to avoid this historic property that involved  
 653 widening to the north. All of these design options evaluated for US 24 from I-25 to 15th Street  
 654 would require full acquisition of the historic property. The four design options considered are  
 655 shown in detail in **Appendix B** and are listed below:

- 656 • **Design Option 16:** I-25 Direct/8th Street Overpass/13th Street Diamond
- 657 • **Design Option 17:** I-25 Direct/One-Way Pair 8th Street and 10th Street/14th Street Access
- 658 • **Design Option 18:** I-25 Direct/8th Street Signalized Intersection/14th Street Access
- 659 • **Design Option 19:** I-25 Direct/8th Street SPDI/14th Street Access

660 **Minimization:** No viable measures to minimize harm were found for this property. Design  
 661 options either avoided the property with impacts to the Fountain Creek and the A-1 Mobile  
 662 Village, or required full acquisition of this property.

663 **Mitigation:** Mitigation for impacts to this property has been developed through consultation with  
 664 the Colorado SHPO and other consulting parties and is documented in a MOA. The MOA is  
 665 included in **Appendix H** and mitigation considered includes, but is not limited to, interpretive  
 666 signing, architectural salvage from historic buildings, and investigation into the reuse of the Chief  
 667 Petroleum sign.

#### 668 4.5.2.5 5EP5218 (3627 West Colorado Avenue)

##### 669 *Property Description*

670 The property at 3627 West Colorado Avenue is a  
 671 heavily wooded, multi-building motel complex  
 672 (Timber Lodge) that is accessible via a single-car  
 673 bridge over Fountain Creek. It is located in a light  
 674 commercial setting north of US 24 and south of  
 675 West Colorado Avenue. The complex consists of  
 676 29 units, four of which are partially visible from  
 677 Colorado Avenue. The main structure was  
 678 constructed in 1885. It is a small rectangular, one-  
 679 story, gable-roofed building that is located in the  
 680 northwestern portion of the property. The  
 681 moderately pitched gable roof is covered with  
 682 composition. Many of the cottages on the  
 683 property retain integrity from their original  
 684 construction in the 1930s.



5EP5218, Timber Lodge, 3627 West Colorado Avenue

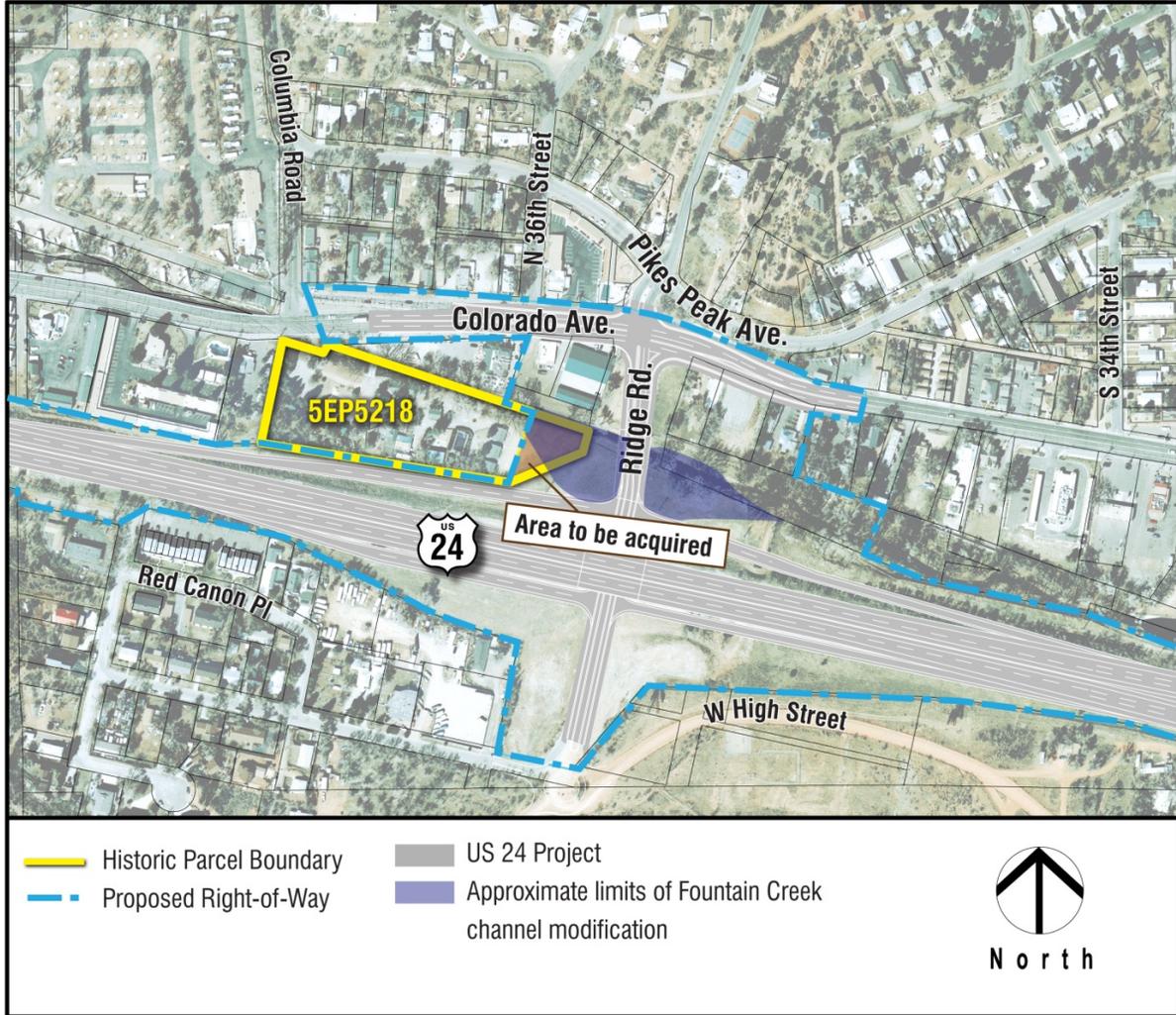
685 The property is **eligible for the National Register under Criterion A** for its association with the  
 686 development of automobile tourism in Colorado and the United States.

##### 687 *Section 4(f) Use*

688 Both the US 24 Freeway Alternative and the Proposed Action would require acquisition of a small  
 689 portion of property at the eastern end of the Timber Lodge property boundary (see **Exhibit 4-16**).  
 690 The area of acquisition involves approximately 0.43 acre (14 percent) of the land area at the  
 691 eastern border of the motor lodge property and does not include any buildings, structures, or  
 692 features of historic importance. The acquisition is needed for the construction of the Ridge Road  
 693 bridge over Fountain Creek and the associated floodplain improvements. The action involves  
 694 widening, deepening, and realigning the channel to carry the 100-year flood. No new physical

695 infrastructure would be introduced, so the change in setting from existing conditions at the  
 696 Timber Lodge is minimal, particularly because the changes would occur at the periphery of the  
 697 property.

698 EXHIBIT 4-16  
 699 Proposed Action for Section 4(f) Use of Property 5EP5218



700 **Measures to Avoid and Minimize Harm**

701 **Avoidance:** No design options are possible to avoid 5EP5218, Timber Lodge. The project team  
 702 considered refinements to the alignment for both the US 24 Freeway Alternative and the Midland  
 703 Expressway Alternative; however, because the use of this property is a function of the 110-foot  
 704 wide Fountain Creek channel and floodplain modifications, no realignment of US 24 avoids this  
 705 property. Moving the creek to the southern edge of this property would not only further impact  
 706 the property (since the creek would no longer flow through the parcel) but would also require  
 707 extreme angles in the creek to return it to its original location as it crosses back under Colorado  
 708 Avenue.

709 The design options evaluated for the US 24 at Ridge Road would all impact the historic property  
 710 due to the Fountain Creek channel modifications. The three design options considered are shown  
 711 in detail in **Appendix B** and are listed below:

- 712 • **Design Option 6:** Ridge Road Overpass
- 713 • **Design Option 7:** Ridge Road Signalized Intersection
- 714 • **Design Option 20:** Ridge Road Diamond Interchange

715 **Minimization:** The alignment of the Proposed Action was laid out to minimize harm to the  
 716 5EP5218, Timber Lodge, by having US 24 go over Ridge Road, which allows the new Ridge Road  
 717 bridge over the Fountain Creek to be raised only enough to accommodate the 100-year flood, as  
 718 required by the City of Colorado Springs and CDOT design standards. In addition, the Proposed  
 719 Action avoids the acquisition of any buildings located on the property.

720 The acquisition of land would have no adverse effect on the operation of the property as a motel  
 721 and would not change its setting or character. The elevation of Ridge Road over US 24 would  
 722 have a minor visual effect to the east side of the property. The orientation of the buildings to the  
 723 north minimizes this effect, as does the existing vegetative screening from the property's  
 724 landscaping.

725 **Mitigation:** As a mitigation measure, CDOT will replace the existing vegetation and trees to  
 726 maintain the visual screen and wooded setting of the property. All trees greater than 2 inches in  
 727 DBH will be mitigated at a 1 to 1 basis.

728 Additional mitigation for impacts to this property has been developed through consultation with  
 729 the Colorado SHPO and other consulting parties and is documented in a MOA. The MOA is  
 730 included in **Appendix H**. Mitigation considered includes, but is not limited to, interpretive signing  
 731 and architectural salvage from historic buildings.

#### 732 4.5.2.6 5EP5364 (Westside Historic District)

##### 733 *Property Description*

734 The Westside Historic District encompasses the  
 735 area north of US 24 between I-25 to the east and  
 736 Columbia Road to the west, as shown in  
 737 **Exhibit 4-17**. It is a residential/mixed-use  
 738 neighborhood constructed between the late  
 739 1800s and early 1900s. It contains more than  
 740 60 subdivisions and thousands of properties.

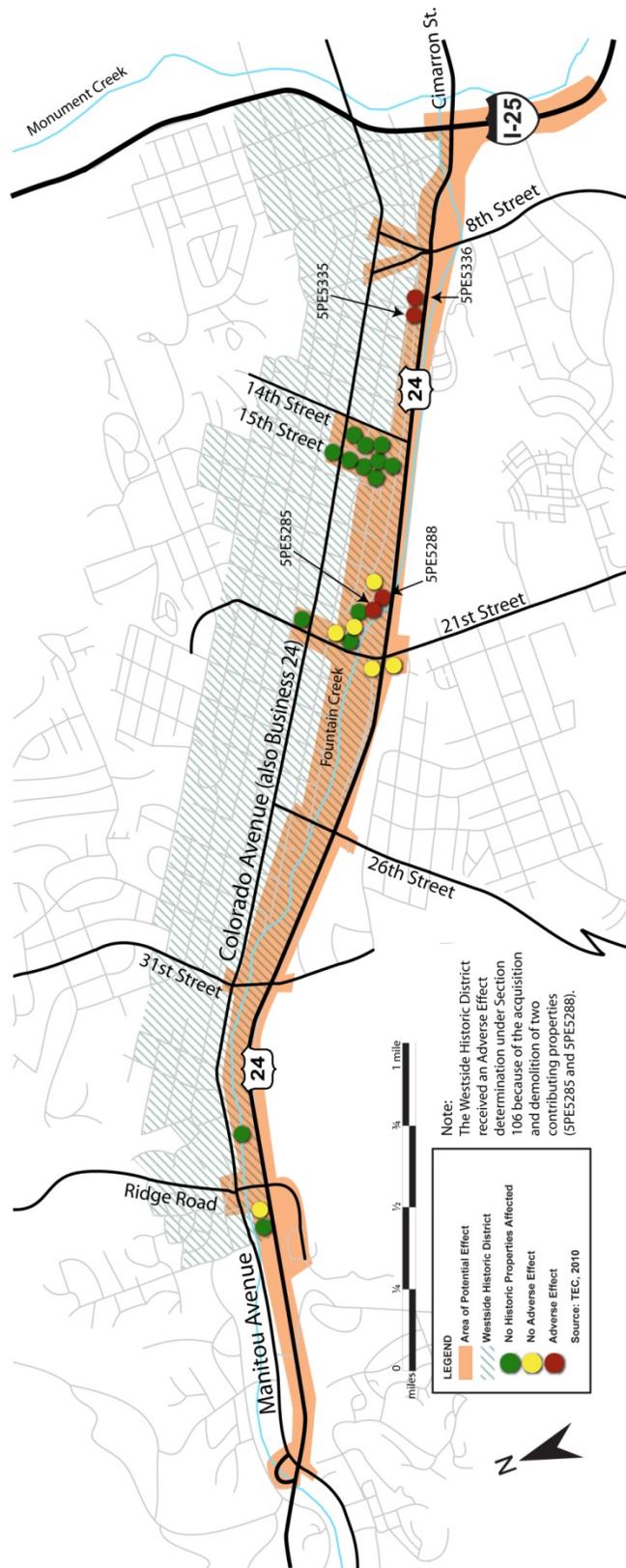
741 The Westside Historic District is **eligible for**  
 742 **listing in the National Register under**  
 743 **Criterion A** for its role in the development of  
 744 Colorado Springs and **Criterion C** for its  
 745 architectural significance a late Nineteenth  
 746 Century and Early Twentieth Century commercial and residential neighborhood.



*Typical Residential Dwelling in the Westside Historic District*

747 Of the affected historic properties within the study area (5EP5285, 5EP5288, 5EP5335, 5EP5336,  
 748 and 5EP5218), the two residential properties (5EP5285 and 5EP5288) on Sheldon Avenue  
 749 contribute to the Westside Historic District. The two industrial properties (5EP5335 and  
 750 5EP5336) and the Timberline Lodge Motel (5EP5218) were determined to not contribute to the  
 751 Westside Historic District.

752 EXHIBIT 4-17  
 753 Westside Historic District



754 **Section 4(f) Use**

755 Both the US 24 Freeway Alternative and the Proposed Action would acquire and demolish two  
 756 contributing properties within the Westside Historic District (5EP5285 and 5EP5288), as shown  
 757 in **Exhibit 4-10** and **Exhibit 4-12**.

758 **Measures to Avoid and Minimize Harm**

759 **Avoidance:** The project team evaluated six design options for their potential to avoid impacts to  
 760 the Westside Historic District including houses at 1815 Sheldon Avenue (5EP5285), shown in  
 761 **Exhibit 4-10**, and 1803 Sheldon Avenue (5EP5288), shown in **Exhibit 4-12**.

762 The project team evaluated six design options at this location for their potential to avoid impacts  
 763 to the historic houses (5EP5288 and 5EP5285). Five of the design options shifted the roadway to  
 764 the north, maintaining the existing south right-of-way line of US 24 and one design option shifted  
 765 US 24 to the south. All five of the interchange or intersection options that move US 24 to the  
 766 north would require full acquisition of the historic houses (5EP5288 and 5EP5285). These design  
 767 options are shown in detail in **Appendix B** and are listed below:

- 768 • **Design Option 10:** 21st Street Signalized Intersection
- 769 • **Design Option 11:** 21st Street Diamond Interchange with Loop
- 770 • **Design Option 12:** 21st Street Split Diamond Interchange with 18th Street
- 771 • **Design Option 13:** 21st Street Tight Diamond Interchange
- 772 • **Design Option 14:** 21st Street SPDI to the North

773 The one option to widen to the south, **Design Option 15:** 21st Street SPDI South has the  
 774 potential to avoid use of the historic houses (5EP5288 and 5EP5285). To avoid impacting the  
 775 Midland Terminal Railroad Roundhouse the designers would have to realign US 24 to the far  
 776 south, as shown in **Exhibit 4-13**.

777 For the same reasons, this avoidance option does not work for avoiding the 21st Street Pocket  
 778 Park as discussed in Section 4.5.1.1 under Measures to Avoid and Minimize Harm, this option is  
 779 not a prudent alternative to avoiding the Westside historic houses (5EP5288 and 5EP5285).

780 The other five design options widened the roadway to the north, maintaining the existing south  
 781 right-of-way line of US 24. With the widening to the north, all of the other five interchange or  
 782 intersection options evaluated for the US 24 and 21st Street would require full acquisition of these  
 783 properties. The five other design options considered are shown in detail in **Appendix B** and are  
 784 listed below:

- 785 • **Design Option 10:** 21st Street Signalized Intersection
- 786 • **Design Option 11:** 21st Street Diamond Interchange with Loop
- 787 • **Design Option 12:** 21st Street Split Diamond Interchange with 18th Street
- 788 • **Design Option 13:** 21st Street Tight Diamond Interchange
- 789 • **Design Option 14:** 21st Street SPDI to the North

790 Measures to avoid the two contributing properties within the Westside Historic District would  
 791 have impacted other district Section 4(f) resources such as the Midland Terminal Railroad  
 792 Roundhouse, a property on the National Register of Historic Places. This avoidance option would  
 793 separate the Roundhouse from its historic association.

794 **Minimization:** The alignment of the Proposed Action was laid out to minimize harm to the  
 795 Westside Historic District by avoiding as many properties as possible. The Proposed Action was  
 796 then refined to minimize harm to the two affected contributing historic properties. However,  
 797 construction of the highway requires the consumption of the backyards of the two residences and  
 798 would leave the homes in a setting that is not livable. Therefore, it was determined that partially  
 799 acquiring the needed land and leaving the structures did not minimize harm to the properties or  
 800 the Westside Historic District.

801 **Mitigation:** Mitigation for impacts to Westside Historic District has been developed through  
 802 consultation with the Colorado SHPO and other consulting parties and is documented in a MOA.  
 803 The MOA is included in **Appendix H** and mitigation considered includes, but is not limited to,  
 804 interpretive signing and architectural salvage from historic buildings.

#### 805 4.5.2.7 Section 4(f) Use and Mitigation Summary

806 **Exhibit 4-18** provides a summary of information presented in this chapter that documents the  
 807 Section 4(f) resource evaluation and the proposed mitigation for impacted Section 4(f) resources  
 808 for both the US 24 Freeway Alternative and the Proposed Action.

EXHIBIT 4-18  
 Summary of Section 4(f) Resource Evaluation

Site Number	Property Description	Property Type	Property Name/ Address	Section 4(f) Use <sup>1</sup>	Proposed Mitigation
N/A	Park	Park	21st Street Pocket Park	Full Acquisition	The Prospector Sculpture will be relocated to a location along US 24. <sup>2</sup>
N/A	Park	Park	Vermijo Park	Partial Acquisition 0.01 acres	CDOT will provide \$50,000 to plan Vermijo Park. <sup>2</sup> All trees greater than 2 inches in diameter will be replaced.
N/A	Trail	Recreation	Midland Trail	Partial Acquisition 0.3 miles	Realign the trail between 8th Street and 11th Street to ensure a connection with the full trail.  Prior to construction, either complete the realignment of the trail or provide a safe detour until the permanent realigned trail is completed. <sup>2</sup>
5EP5285	Residential Building	Historic Site	1815 Sheldon Avenue	Full Acquisition	Details are contained in the signed Section 106 MOA. <sup>3</sup>
5EP5288	Residential Building	Historic Site	1803 Sheldon Avenue	Full Acquisition	Details are contained in the signed Section 106 MOA. <sup>3</sup>
5EP5335	Commercial Building	Historic Site	CITGO 302 South 10th Street	Full Acquisition	Details are contained in the signed Section 106 MOA. <sup>3</sup>

EXHIBIT 4-18  
Summary of Section 4(f) Resource Evaluation

Site Number	Property Description	Property Type	Property Name/ Address	Section 4(f) Use <sup>1</sup>	Proposed Mitigation
5EP5336	Commercial Building	Historic Site	Chief Petroleum 301 South 10th Street	Full Acquisition	Details are contained in the signed Section 106 MOA. <sup>3</sup>
5EP5218	Hotel/Motel	Historic Site	Timber Lodge 3627 West Colorado Avenue	Partial Acquisition 0.43 acres	Details are contained in the signed Section 106 MOA. <sup>3</sup>
5EP5364	Historic District	Historic District	Westside Historic District	Full Acquisition of 2 contributing properties (1815 Sheldon Avenue and 1803 Sheldon Avenue)	Details are contained in the signed Section 106 MOA. <sup>3</sup>

<sup>1</sup> This table summarizes the Section 4(f) evaluation for both the US 24 Freeway Alternative and the Proposed Action. Note that both build alternatives would use the same Section 4(f) resources to the same degree.

<sup>2</sup> The City of Colorado Springs owns and maintains this park. CDOT consulted with the City of Colorado Springs Parks, Recreation & Cultural Services Department to determine these mitigation measures. See **Appendix I** for details.

<sup>3</sup> The Section 106 MOA is included in **Appendix H** and mitigation considered includes, but is not limited to: interpretive signing and architectural salvage from historic buildings, and investigation into the reuse of the Chief Petroleum sign.

## 809 4.6 Least Harm

810 The Section 4(f) regulation states that, if no feasible and prudent alternative exists that avoids use  
811 of Section 4(f) properties, FHWA “may approve only the alternative that causes the least overall  
812 harm in light of the statute’s preservation purpose.” In determining the alternative that causes the  
813 overall least harm, the following factors must be balanced and weighted before deciding which  
814 alternative would cause the least overall harm (23 CFR 774.3):

- 815 i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures  
816 that result in benefits to the property);
- 817 ii. The relative severity of the remaining harm, after mitigation, to the protected activities,  
818 attributes, or features that qualify each Section 4(f) property for protection;
- 819 iii. The relative significance of each Section 4(f) property;
- 820 iv. The opinions of the official(s) with jurisdiction over each Section 4(f) property;
- 821 v. The degree to which each alternative meets the purpose and need for the project;

822 vi. After reasonable mitigation, the magnitude of any adverse impacts to resources not  
823 protected by Section 4(f); and

824 vii. Substantial differences in costs among the alternatives.

825 As indicated in **Exhibit 4-4**, each of the build alternatives requires the use of the same eight  
826 Section 4(f) properties and one historic district, which is also a Section 4(f) property. Because the  
827 direct Section 4(f) use is the same for each build alternative, many of the above factors do not aid  
828 in making a determination of least harm (that is, factors i through iv). Therefore, emphasis is  
829 placed on factors v through vii.

830 Both build alternatives satisfy the purpose and need for the project (factor v); however, the  
831 Midland Expressway Alternative (Proposed Action) better meets the purpose and need. The US 24  
832 Freeway Alternative emphasizes regional mobility between Colorado Springs and the mountains,  
833 rather than access to local neighborhoods and destinations between I-25 and Manitou Avenue.  
834 Because the US 24 Freeway Alternative was designed to serve local traffic from grade-separated  
835 interchanges, it gives preference to regional travel with higher speeds on the mainline. This would  
836 reduce access to local destinations, neighborhoods, and some public amenities, such as Vermijo  
837 Park. The Midland Expressway Alternative does a better job of balancing local travel and regional  
838 trips while providing improved peak hour operations.

839 There are differences between the build alternatives in terms of impacts to resources that Section  
840 4(f) does not protect (factor vi). The US 24 Freeway Alternative does not provide the balance  
841 needed for all users, is less consistent with the neighborhood context, and would impair some  
842 characteristics that make the community unique. A freeway would be more visually intrusive than  
843 an expressway. It would change the use and feel of the entryway access into Manitou Springs, the  
844 Old Colorado City Historic District, and the neighborhoods that surround it. The Midland  
845 Expressway Alternative would result in 42 acres of impervious surface area, 4 acres less than the  
846 US 24 Freeway Alternative. The US 24 Freeway Alternative would require 10 additional acres of  
847 right-of-way over the Midland Expressway Alternative. Both build alternatives would impact  
848 approximately 5.2 acres of waters of the United States, including one small wetland totaling  
849 0.02 acre.

850 The cost of each alternative is also considered (factor vii). Conceptual program-level construction  
851 costs for the US 24 Freeway Alternative are \$260 million (not including right-of-way acquisition  
852 costs). This is compared to \$230 million for the Midland Expressway Alternative (not including  
853 right-of-way acquisition). While there is not a substantial difference in costs among the  
854 alternatives, there is a difference worth noting because cost differences among alternatives is one  
855 of the factors in determining which alternative will cause the least overall harm (23 CFR 774.3).

856 The Midland Expressway Alternative is the least-harm alternative based on factors vi and vii. It  
857 better meets the project's purpose and need because it has fewer impacts to resources not  
858 protected by Section 4(f) and is less expensive than the US 24 Freeway Alternative. The above  
859 discussion of least-harm factors is summarized in **Exhibit 4-19**.

860

## EXHIBIT 4-19

## Factors to Determine Least-Harm Alternative

<b>Factors to Determine Least Harm 23 CFR 774.3 (c)</b>	<b>Midland Expressway Alternative</b>	<b>US 24 Freeway Alternative</b>
(v) The degree to which each alternative meets the purpose and need for the project	<ul style="list-style-type: none"> <li>Balances local travelers' needs and the needs of regional commuters with improved peak hour operations while still providing the connectivity needed by local travelers to destinations along US 24. Maintains existing intersection at 26th Street (considered the Gateway to Old Colorado City) as a way to maintain access to US 24 needed by local travelers</li> </ul>	<ul style="list-style-type: none"> <li>Does not provide the connectivity needed by local travelers to destinations along US 24</li> <li>Emphasizes regional mobility between Colorado Springs and the mountains with all grade-separated interchanges</li> </ul>
(vi) After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)	<ul style="list-style-type: none"> <li>42 acres of impervious surface area</li> <li>A total of 78 acres of right-of-way would be required.</li> <li>Has community support because of the connectivity of at-grade intersections at 26th Street and 31st Street and because of the more urban arterial feel and the lower speeds.</li> <li>Is more consistent with neighborhood context for an urban arterial</li> </ul>	<ul style="list-style-type: none"> <li>46 acres of impervious surface area</li> <li>A total of 88 acres of right-of-way would be required.</li> <li>Is less consistent with neighborhood context because it introduces continuous flow for regional trips</li> <li>Would impair the urban characteristic that defines the setting by requiring local trips to reroute their trips to the interchanges</li> <li>Removes intersections at 26th Street, considered the Gateway to Old Colorado City</li> <li>Community would not support the grade separated freeway because there is no access at 26th Street and because of the freeway feel and also due to the higher speed.</li> </ul>
(vii) <sup>1</sup> Differences in costs among the alternatives	<ul style="list-style-type: none"> <li>\$230 million for program level construction cost estimate (not including right-of-way acquisition costs)</li> </ul>	<ul style="list-style-type: none"> <li>\$260 million for program level construction cost estimate (not including right-of-way acquisition costs)</li> </ul>

<sup>1</sup>23 CFR 774.3 (c) (vii) references "substantial" differences in costs. The costs of each alternative are noted here.

861 Based on the available factors for consideration in the least harm analysis, the Midland  
862 Expressway Alternative is the least harm alternative because it better meets the project's purpose  
863 and need and does so at less cost than the other prudent and feasible alternative. After considering  
864 comments on this evaluation from the Department of the Interior and the City of Colorado  
865 Springs as the agency with jurisdiction over the parks, trail and SHPO-historic Section 4(f)  
866 resources, FHWA will approve the final Section 4(f) evaluation. The FHWA approved decision  
867 document will include the final Section 4(f) evaluation.

## 868 4.7 Consultation and Coordination

869 Agencies and the public will have the opportunity to comment on the US 24 EA and this  
870 Section 4(f) Evaluation. Coordination will continue throughout the EA process, Decision  
871 Document, and final design to identify additional opportunities to avoid and minimize potential  
872 effects on Section 4(f) properties.

### 873 4.7.1 Parks

874 CDOT and FHWA have coordinated with agencies that have jurisdiction over the affected  
875 Section 4(f) properties, including the City of Colorado Springs Parks, Recreation & Cultural  
876 Services Department for park properties.

877 Development of the Proposed Action occurred over several years and was guided by extensive  
878 public involvement and input from an Executive Leadership Team (ELT) and a Technical  
879 Leadership Team (TLT) that included elected officials and representatives from the City of  
880 Colorado Springs Parks, Recreation & Cultural Services Department. Members of the public and  
881 community organizations (such as the City of Colorado Springs' Trails, Open Space & Parks  
882 [TOPS] Working Committee) have been involved from the start of the project, and have helped  
883 shape project outcomes as part of a collaborative, interdisciplinary process – sometimes referred  
884 to as “Context Sensitive Solutions.” The City of Colorado Springs contributed to the design of the  
885 Proposed Action and assisted with the identification of Section 4(f) properties. Coordination with  
886 the City of Colorado Springs Parks, Recreation & Cultural Services Department regarding  
887 Section 4(f) Park and Recreation properties was completed and the City of Colorado Spring's  
888 agreement with the mitigation measures is documented in the signed letter in **Appendix I**.

### 889 4.7.2 Historic Properties

890 Agreement among the Colorado SHPO and FHWA has been reached through the Section 106  
891 process of the National Historic Preservation Act concerning effects of this project to the historic  
892 Section 4(f) resources. The Colorado SHPO concurred that the project results in an adverse effect  
893 in a concurrence letter dated December 27, 2010 (see **Appendix H**). The Section 106  
894 correspondence letter and MOA are located in **Appendix H**. The City of Colorado Springs  
895 Historic Preservation Board and the El Paso County Public Services Department were involved in  
896 the Section 106 process.