



I-70 Floyd Hill to Veterans Memorial Tunnels

Historic Resources Effects Technical Report
August 2020

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List of Acronyms

ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BLM	Bureau of Land Management
C-470	Colorado Highway 470
CDOT	Colorado Department of Transportation
CR	County Road
DOT	Department of Transportation
EA	Environmental Assessment
EB	Eastbound
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
I-25	Interstate 25
I-70	Interstate 70
ITF	Issue Task Force
MEXL	Mountain Express Lane
MP	Mile Post
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OAHP	Office of Archaeology and Historic Preservation
OTIS	Online Transportation Information System
PEIS	Programmatic Environmental Impact Statement
ROD	Record of Decision
SHPO	State Historic Preservation Office
US 6	U.S. Highway 6
US 40	U.S. Highway 40
WB	Westbound

Errata Sheet

The design of the Interstate 70 (I-70) Floyd Hill to Veterans Memorial Tunnels Project (Project) was revised since this report was published. Two roundabouts intersections were originally proposed as part of the Project at the US 40 intersections with CR 65 and Homestead Road. These roundabouts, which were included in the Section 106 consultation, are no longer part of the Project but are being advanced as separate early action projects to provide more capacity for through movements at the intersections, improve traffic circulation along CR 65 and Homestead Road, and accommodate turning movements for heavy trucks.

The Proposed Action would also include two permanent air quality monitors within the Project area at Floyd Hill and Idaho Springs to collect data on local air quality conditions and trends, and would coordinate rural broadband access with local communities, including providing access to existing conduits and fiber in the interstate right-of-way.

These changes do not change the Area of Potential Effects nor the historic resources effects determinations in this report. The *no adverse effect* determination for to the Hyland Hills Subdivision from the roundabouts is unchanged and will be included with the Section 106 consultation for the separate early action project.

1. Introduction and Purpose of this Report

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA), in cooperation with local communities and other agencies, are proposing to advance the Interstate 70 (I-70) Floyd Hill to Veterans Memorial Tunnels Project, which fulfills a portion of the program of improvements for the I-70 Mountain Corridor identified in the 2011 Tier 1 *Final I-70 Mountain Corridor Programmatic Environmental Impact Statement* (PEIS) and approved in the 2011 *I-70 Mountain Corridor Record of Decision* (ROD). The agencies are conducting an Environmental Assessment (EA) to evaluate effects of the Project on environmental resources, including historic properties. The EA is a Tier 2 National Environmental Policy Act (NEPA) process and is supported by resource-specific technical reports.

The purpose of this technical report is to document Project effects to historic properties and identify mitigation measures for those effects. In addition, this report documents a change in the Project Area of Potential Effects (APE) to extend the APE approximately one-half mile to the east and account for addition of wildlife fencing, terminating just after Soda Creek Road. This report also includes a description of applicable laws and regulations and a summary of the resource analysis and mitigation framework from the PEIS and ROD.

This *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Effects Technical Report* follows the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (May 2019). These reports are prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA), associated regulations (36 CFR Part 800), and the I-70 Mountain Corridor Programmatic Agreement. The Section 106 compliance process requires consultation with the State Historic Preservation Office (SHPO) and the involvement of consulting parties in determining effects to historic resources. The following parties were invited to participate in the Section 106 consultation process:

- Clear Creek County
 - Central City Historic Preservation Commission
 - Clear Creek County Board of County Commissioners
 - Cindy Neely
 - City of Idaho Springs Historic Preservation Review Committee
 - Historical Society of Idaho Springs
 - Mary Jane Loevlie, Argo Holdings, LLC.
- Gilpin County
 - Black Hawk Historic Preservation Commission
 - Board of County Commissioners and County Manager
 - Gilpin County Historic Preservation Commission
- Jefferson County
 - Evergreen Mountain Area Historical Society
 - Jefferson County Historical Commission

Of these, Clear Creek County, Black Hawk, and Central City elected to participate. Coordination and consultation are described further in Section 8 of this report.

CDOT submitted the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* to SHPO and consulting parties in May 2019, and the parties concurred with eligibility determinations in June 2019. Within the APE, one property was determined eligible for the NRHP and two historic

districts needed additional data and are treated as eligible for the purposes of Section 106 compliance as summarized in Section 5.2 of this report.

The Project includes an evaluation of effects to historic properties under Section 106 of the NHPA and Section 4(f) of the U.S. Department of Transportation Act. This report was written by Ashley L. Bushey, Architectural Historian with Pinyon Environmental, Inc. (Pinyon), who exceeds the Secretary of the Interior's Professional Qualifications Standards in the area of Architectural History, under the direction of CDOT Senior Historian, Lisa Schoch.

2. Proposed Action and Alternatives

2.1. Description of Proposed Action and Alternatives

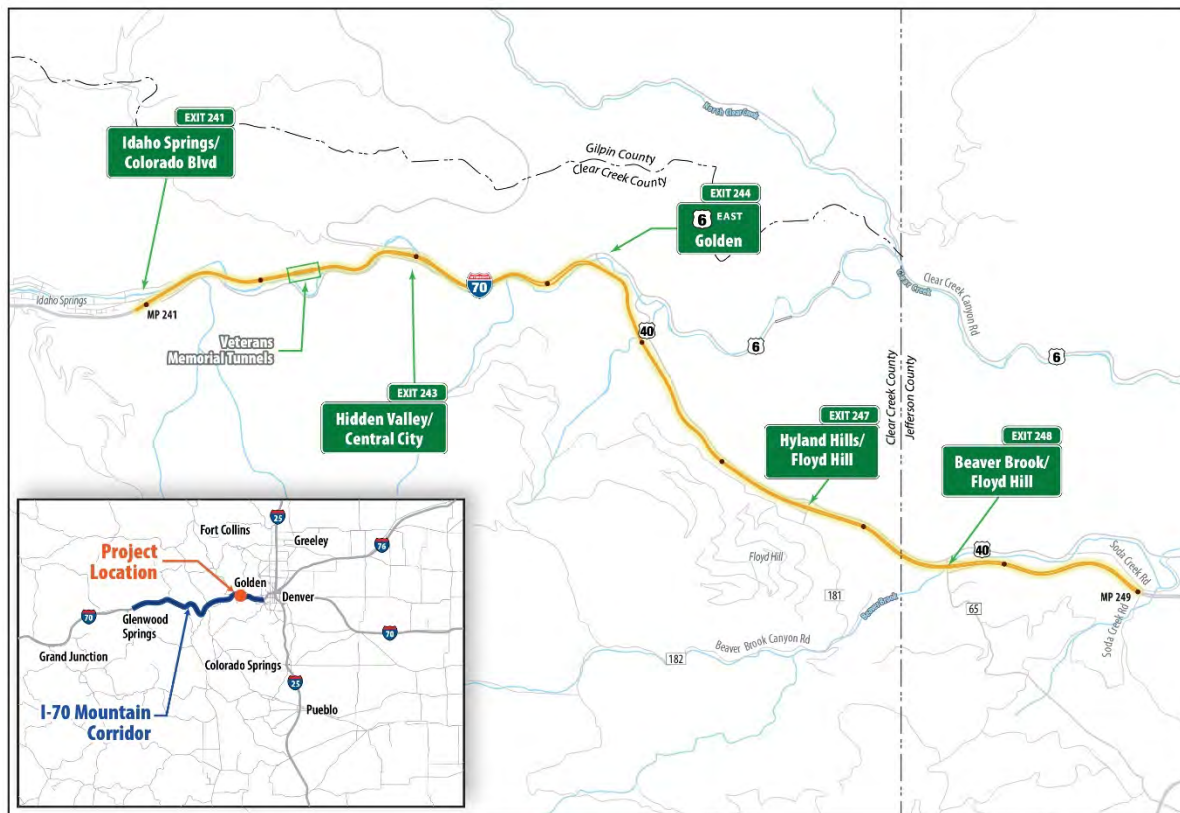
CDOT and FHWA propose improvements along approximately 8 miles of the I-70 Mountain Corridor from the top of Floyd Hill through the Veterans Memorial Tunnels to the eastern edge of Idaho Springs. The purpose of the Project is to improve travel time reliability, safety, and mobility, and address the deficient infrastructure through this area.

The major Project elements include:

- Adding a third westbound travel lane to the two-lane section of I-70 from the current three-lane to two-lane drop (approximately milepost (MP) 246) through the Veterans Memorial Tunnels
- Constructing a new frontage road between the U.S. Highway 6 (US 6) interchange and the Hidden Valley/Central City interchange
- Improving interchanges and intersections throughout the Project area
- Improving design speeds and stopping sight distance on horizontal curves
- Improving the multimodal trail (Clear Creek Greenway) between US 6 and the Veterans Memorial Tunnels
- Reducing animal-vehicle conflicts and improving wildlife connectivity with new and/or improved wildlife crossings and fencing
- Adding an approximately one-mile-long eastbound auxiliary (climbing) lane between US 6 and the Floyd Hill/Homestead Road interchange

The Project is located on I-70 between MP 249 (east of the Beaver Brook/Floyd Hill interchange) and MP 241 (Idaho Springs/Colorado Boulevard), west of the Veterans Memorial Tunnels. It is located mostly in Clear Creek County, with the eastern end in Jefferson County (see Exhibit 1). The primary roadway construction activities would occur between County Road (CR) 65 (the Beaver Brook/Floyd Hill interchange) and the western portals of the Veterans Memorial Tunnels (MP 247.6 and MP 242.3, respectively), with the Project area extended east and west to account for signing, striping, and fencing.

Exhibit 1 Project Location

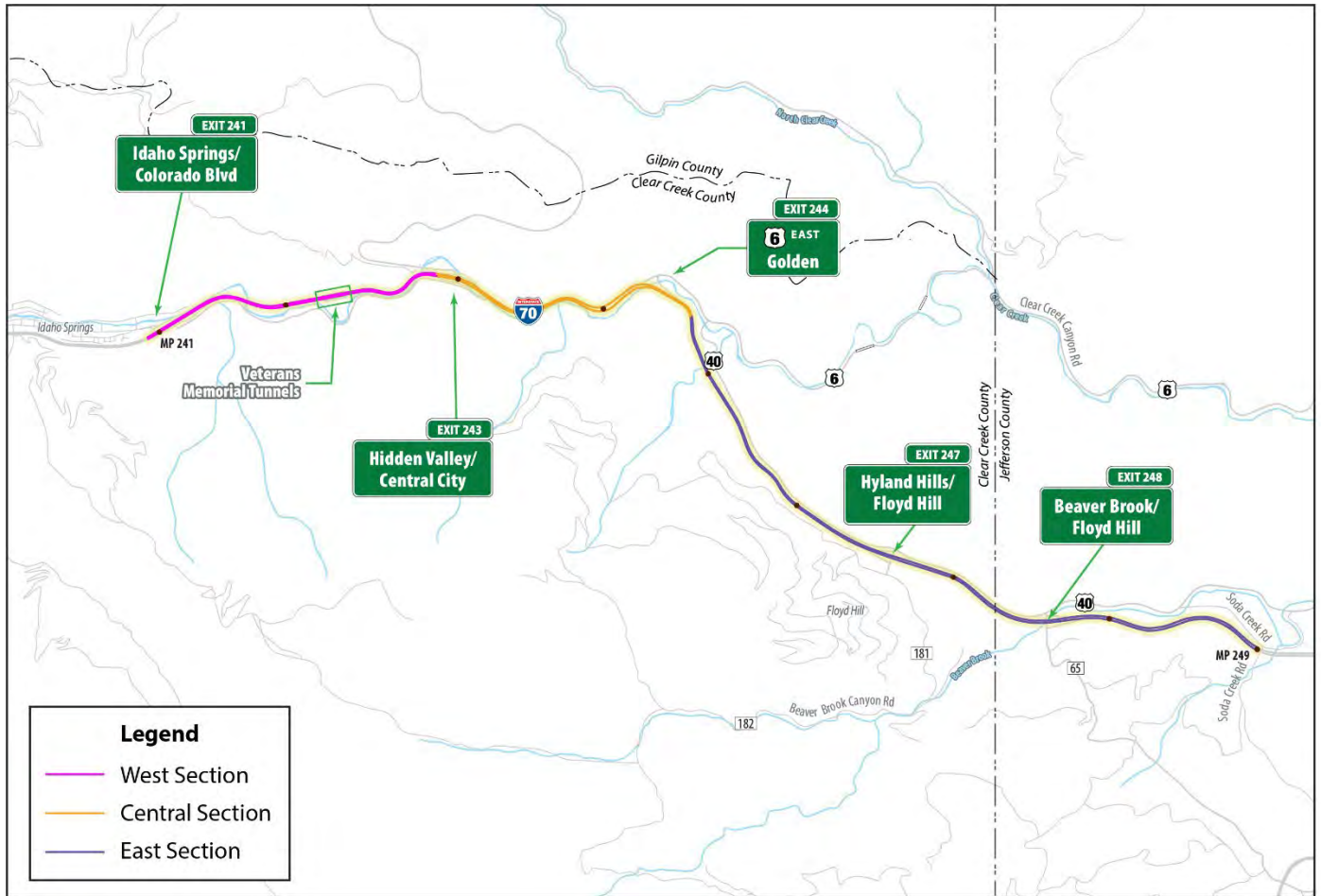


Three alternatives are being evaluated in the EA: (1) No Action Alternative, (2) Tunnel Alternative, and (3) Canyon Viaduct Alternative. The action alternatives—the Tunnel Alternative and Canyon Viaduct Alternative—include the same project elements but differ in how they provide for the third westbound I-70 travel lane and frontage road connections between US 6 and Hidden Valley.

- The **Tunnel Alternative** would realign westbound I-70 to the north (along the curve between MP 244.3 and MP 243.7) through a new 2,200-foot-long tunnel west of US 6. Eastbound I-70 would be realigned within the existing I-70 roadway template to flatten curves to improve design speed and sight distance. This alternative also would include two design options for the alignment of the new frontage road north or south of Clear Creek.
- The **Canyon Viaduct Alternative** would realign approximately one-half mile of both the westbound and eastbound I-70 lanes (along the curve between MP 244 and MP 243.5) on viaduct structures approximately 400 feet south of the existing I-70 alignment on the south side of Clear Creek Canyon. Through the realigned area, the frontage road would be constructed under the viaduct on the existing I-70 roadway footprint north of Clear Creek. The Clear Creek Greenway would be reconstructed along its current alignment on the south side of Clear Creek, north of the viaduct. The viaduct would cross above Clear Creek and the Clear Creek Greenway twice.

Additional information regarding the alternatives evaluated in the EA can be found in *the I-70 Floyd Hill to Veterans Memorial Tunnel Alternatives Analysis Technical Report* (CDOT, 2020a).

Exhibit 2 East, Central, and West Project Sections



2.2. No Action Alternative

The No Action Alternative includes ongoing highway maintenance. In addition, due to the poor condition of the westbound I-70 bridge at the bottom of Floyd Hill, the bridge is programmed to be replaced regardless of whether CDOT moves forward with one of the action alternatives. Therefore, replacing the bridge (as a two-lane bridge) is part of the No Action Alternative. Under the No Action Alternative, the bridge would be replaced in its current location but would need to be designed to current standards, with a 55-mph design speed and improved sight distance with wider shoulders.

2.3. Action Alternatives: East Section

In the east roadway section between the top of Floyd Hill and US 6, the action alternatives are the same. Through this section, westbound I-70 would be widened to the south to accommodate a third travel lane. The typical section would include an additional 12-foot travel lane and inside and outside shoulders of varying widths, depending on sight distance needs around curves. The proposed footprint includes a 4-foot buffer between the new planned Express Lane and the existing (general purpose) lanes.

In the eastbound direction, the three travel lanes would be retained but the roadway would be realigned where needed to accommodate westbound widening or curve modifications to improve sight distance and safety. An approximately one-mile-long eastbound auxiliary (climbing) lane would be added in the uphill (eastbound) direction from the bottom of Floyd Hill to the Floyd Hill/Hyland Hills interchange (Exit 247). Water quality features would be added along the south side of the eastbound lanes.

At the Floyd Hill/Beaver Brook and Floyd Hill/Hyland Hills interchange system, the split-diamond (with on- and off-ramps connected by U.S. Highway 40 (US 40) interchange configuration would remain, and no new accesses would be provided. However, to improve both interchange operations and mitigate effects of local and interstate traffic conflicts along US 40, which acts as a frontage road for the split diamond interchange and the primary local access road for the Floyd Hill neighborhoods, intersections at US 40 and CR 65 and US 40 and Homestead Road would be reconstructed as roundabouts. The roundabouts would provide more capacity for through movements at the intersections, improve traffic circulation along CR 65 and Homestead Road, and would accommodate turning movements for heavy trucks.

Wildlife fencing would be added along the north and south sides of I-70 between the Hyland Hills interchange on the west and Soda Creek Road on the east to reduce wildlife-vehicle collisions.

2.4. Action Alternatives: Central Section

The central section of the Project involves the most substantial improvements—including realigning of curves, adding a third westbound travel lane, improving the Clear Creek Greenway, and providing the frontage road connection—and occurs within the most constrained section of the Project area where the existing I-70 footprint and planned roadway improvements are located between canyon rock walls north and south of existing I-70 and Clear Creek. In context of these constraints, the action alternatives within this section include the same improvements but differ with respect to I-70 mainline and frontage road alignments and the relationship of the roadway improvements to the rock walls and creek. The Clear Creek Greenway would be reconstructed generally along its existing alignment under both action alternatives, but the Clear Creek Greenway's relationship to the creek and roadway infrastructure would differ.

2.4.1. I-70 Mainline

The I-70 mainline through this section continues the same roadway typical section from the east section. Both alternatives would provide an additional westbound 12-foot travel lane; inside and outside shoulders of varying widths, depending on sight distance needs around curves; and a 4-foot buffer between the new planned Express Lane and the existing (general purpose) lanes.

Under the Tunnel Alternative, approximately one mile of westbound I-70 would be realigned north near the US 6 junction through a 2,200-foot-long tunnel that would tie into the existing westbound I-70 alignment and elevation just east of the Hidden Valley interchange. The three eastbound I-70 lanes through this area would remain within the existing roadway prism but would be realigned, moving approximately 100 feet north into the rock face adjacent to the existing westbound lanes to flatten horizontal curves and improve the design speed and sight distance.

Under the Canyon Viaduct Alternative, the westbound I-70 alignment would shift to the south on a new 5,300-foot-long viaduct beginning at approximately MP 245 east of the exit ramp to US 6 and rejoin the existing alignment about one half-mile east of the Hidden Valley interchange at approximately MP

243.5. Through this area, eastbound I-70 would also be realigned on a separate viaduct structure next to westbound from MP 243.4 east to just beyond MP 244.3. Both viaduct structures would cross about 60 feet above Clear Creek and the Clear Creek Greenway twice near MP 243.9 and MP 243.5.

2.4.2. Frontage Road

Both alternatives include a new approximately 1.5-mile-long frontage road connection between Hidden Valley and US 6, specifically from the intersection of CR 314 and Central City Parkway (south of the I-70 Hidden Valley eastbound off-ramp where CR 314, which acts as a frontage road from east Idaho Springs, terminates) to the US 6/I-70 ramp terminal. The roadway section for the frontage road would consist of two 11-foot lanes (one in the eastbound direction and one in the westbound direction) with consistent 2-foot shoulders. The design speed would be 30 mph and the roadway would be constructed to comply with Clear Creek County local access standards.

The Tunnel Alternative includes two design options for the frontage road.

- **North Frontage Road Option** would provide the new frontage road connection between US 6 and Hidden Valley mostly on the north side of Clear Creek. The I-70 mainline would be realigned north into the mountainside, requiring substantial rock cuts (150-foot-high) to make room for the frontage road between the creek and existing I-70. The Clear Creek Greenway would be reconstructed along its current alignment south of Clear Creek.
- **South Frontage Road Option** would provide the new frontage road connection between US 6 and Hidden Valley mostly on the south side of Clear Creek. Moving the frontage road to the south side of the creek would require new rock cuts on the south side of Clear Creek Canyon and less substantial rock cuts on the north side of I-70. The Clear Creek Greenway would be reconstructed generally along its current alignment south of Clear Creek; the Clear Creek Greenway would be located closer to the frontage road alignment than under the North Frontage Road Option, but the design seeks to maximize horizontal and vertical separation between the facilities.

Under the Canyon Viaduct Alternative, the existing I-70 pavement under the elevated structures would be repurposed for the frontage road; excess right of way would be available for other uses—presumably creek and recreation access—through this approximately one-mile area of the canyon.

2.5. Action Alternatives: West Section

The west section between Hidden Valley and the Veterans Memorial Tunnels continues the widening of the interstate to add the third westbound travel lane and flattening the S-curve in this location. Improvements in this section are the same under both alternatives. The curve modifications require realigning both the I-70 mainline and frontage road through this section. The I-70 mainline alignment would shift south about 100 feet around the first curve from the Hidden Valley interchange then north around the second curve about 50 feet, continuing a slight (about 25 foot) shift north before tying into the existing alignment at the Veterans Memorial Tunnels. Much of CR 314 would be realigned south between the doghouse rail bridge over Clear Creek near the Veterans Memorial Tunnels east portal and Hidden Valley. A small section of CR 314 (between MP 242.6 and 242.7) would remain and connect to the reconstructed portions west and east.

These alignment shifts result in substantial rock cuts on both the north and south sides of the canyon. On the north side, rock cuts of up to 160 feet high would be required next to the I-70 westbound lanes (along the curve in the area where CR 314 is not reconstructed). To realign CR 314 south, rock cuts of

70 to 100 feet high are required on the south side of the canyon. Additionally, a 1,200-foot section of Clear Creek, which is located between I-70 and CR 314, would need to be relocated south near MP 242.5.

The Hidden Valley interchange would not be reconstructed, and the I-70 bridges would remain because they are wide enough to accommodate the widened I-70 footprint without being replaced. All the on- and off-ramps would be reconstructed, but the bridges over Clear Creek for the I-70 westbound off-ramp and I-70 eastbound on-ramp can also be retained. New bridges over Clear Creek to the west would be needed for the I-70 westbound on-ramp and I-70 eastbound off-ramp to accommodate the curve flattening and shift of I-70 to the south in this location. The CDOT maintenance facility would need to be relocated.

No changes are required west of the Veterans Memorial Tunnels. Within the westbound tunnel, the roadway would be restriped for the third lane (the expansion of the tunnel to accommodate the third lane was completed in 2014). After the tunnel, restriping and signing would continue west to the next interchange at Idaho Springs/Colorado Boulevard (Exit 241) where the third lane would terminate. The Express Lane would operate in conjunction with the westbound Mountain Express Lane (MEXL) during peak periods (winter and summer weekends).

2.6. Construction of Action Alternatives

CDOT is planning to use a Construction Manager/General Contractor (CMGC) delivery method for construction of the Project. This contracting method involves a contractor advising in the design phases to better define Project technical requirements and costs, improve design quality and constructability, and reduce risks through the construction phase. This method promotes innovation and aligns well with the multidisciplinary Context Sensitive Solutions (CSS) process. It was used successfully on the Twin Tunnels projects to reduce environmental impacts and accommodate community values in the design and construction phases.

It is anticipated that construction of either Action Alternative would require four to five years and could occur generally within the proposed right of way. Specific construction methods and phasing will be determined with contractor input and could affect the duration and/or physical requirements for construction activities. The focus of environmental impact analysis during the NEPA process is to identify resources and locations sensitive to construction impacts and incorporate reasonable mitigation measures, including potential to avoid impacts by avoiding sensitive areas, to inform the contractor's plans. Final design and construction plans will consider changes in resource impacts, and reevaluations will be completed as needed during final design.

3. Applicable Laws, Regulations, and Guidance

Federal Laws

National Historic Preservation Act Section 106 [36 CFR Part 800]

The Project is subject to review for compliance with the NHPA. The NHPA was passed in 1966, containing a set of regulations commonly referred to as *Section 106*. Section 106 [36 CFR Part 800] requires consideration of the effects to cultural resources created by projects receiving funds, permits, licenses, or approvals from federal agencies. The Section 106 compliance process requires consultation with the SHPO and the involvement of consulting parties in determining effects to historic resources. Consulting parties may include local governments, historic preservation commissions, non-profit

organizations with an interest in historic preservation, and the public. The Section 106 process requires federal agencies to avoid and minimize potential effects to historic resources; when avoidance or minimization are not possible, the agency will be required to mitigate impacts to historic resources.

Department of Transportation Act Section 4(f) [23 CFR Part 774]

The Project is subject to review and compliance with the Department of Transportation Act, passed in 1966 and containing a regulation referred to as *Section 4(f)* [23 CFR Part 774]. Section 4(f) requires agencies under the authority of the Department of Transportation (DOT) to avoid the use of Section 4(f) resources, including historic sites listed on or eligible for the NRHP. The use of a Section 4(f) resource is only permitted if no feasible and prudent alternative to the use can be identified.

State Laws

Colorado Register of Historic Places Act [24 CRS 80.1]

The Colorado Register of Historic Places Act was passed with the intent to preserve the cultural and historic places in the state for the “education and enjoyment of the residents of this state, present and future.” The Colorado Register of Historic Places Act primarily creates the State Register of Historic Places, similar to the National Register of Historic Places, and a framework for nominating sites to this list. The Register of Historic Places Act also includes a stipulation for review of proposed actions by state agencies. This stipulation is generally satisfied within the context of Section 106 review for projects requiring compliance under Section 106.

Policy and Guidance

Advisory Council on Historic Preservation Exemption Regarding Historic Preservation Review Process for Effects to the Interstate System

Because the work includes an interstate corridor, the 2005 Advisory Council on Historic Preservation (ACHP) *Exemption Regarding Historic Preservation Review Process for Effects to the Interstate System* (ACHP Interstate Exemption) may be applicable to potentially historic resources within the Interstate System. The ACHP Interstate Exemption defines the “Interstate Highway System” as “...the facilities within the rights-of-way of those highways carrying the official Interstate System shield, including but not limited to the road bed, engineering features, bridges, tunnels, rest stops, interchanges, off-ramps, and on-ramps.”

The ACHP Interstate Exemption excludes the Interstate Highway System from review under Section 106. FHWA identified several exceptions to the ACHP Interstate Exemption within each state, which remain subject to review under Section 106. In Colorado, these exceptions are:

- Glenwood Canyon (I-70 Milepost 118.5 - 130.3)
- Eisenhower-Johnson Memorial Tunnels (I-70 Milepost 213.7)
- Vail Pass (I-70 Milepost 180.0 - 195.2)
- Genesee Park Interchange (I-70 Milepost 253.5)
- Twin Tunnels (I-70 Milepost 242.2) (reconstructed; no longer eligible)
- Arkansas River Bridge (I-25 Milepost 97.6)
- Speer Boulevard Underpasses (I-25 Milepost 211.5)
- 23rd Avenue Underpass (I-25 Milepost 211.2)

4. Historic Resources in the Tier 1 PEIS

4.1. Context

Historic resource analysis under the I-70 Mountain Corridor PEIS included a high-level overview of known and potential historic resources within the PEIS corridor, which spans approximately 144 miles from Glenwood Springs to Colorado Highway 470 (C-470). The analysis included a file search for known historic resources in the Colorado Office of Archaeology and Historic Preservation (OAHP) COMPASS database. A windshield survey was performed to identify potentially historic properties within the corridor without requiring property access and intensive site evaluation. Local parties also provided insight into the locations of potentially historic resources in their respective communities. The PEIS provided context for comparing potential effects to historic properties of the Tier 1 alternatives but did not conduct detailed surveys needed to fully assess effects or mitigation of the Preferred Alternative, which was intended to occur in Tier 2 processes as described in Section 4.2 of this report.

The corridor contains several nationally significant historic properties, including the Georgetown-Silver Plume National Historic Landmark District, as well as NRHP-listed sites and districts. Towns and communities throughout the corridor contain historic sites and districts, and the rural areas include historic mining sites. While I-70 itself is considered exempt from Section 106 review per the 2005 ACHP Interstate Exemption, the corridor contains five of Colorado's eight nationally and exceptionally significant interstate properties that are exceptions to the exemption. One of these, the former Twin Tunnels (renamed the Veterans Memorial Tunnels), is located within the APE but was removed from the list of exceptions because they were expanded and reconstructed and are no longer extant in their original form. Consequently, they are no longer considered eligible for inclusion on the NRHP and were removed from the list of exceptions to the ACHP Interstate Exemption.

The APE extends to the eastern edge of the City of Idaho Springs, where the PEIS identified numerous potential historic properties and districts, but none of these previously identified properties are within the APE. The APE includes two subdivisions in the community of Floyd Hill, a census-designated place, which were not evaluated in the PEIS. Mining sites are present in the Project area and are evaluated under a separate report for archaeological resources. Historic linear transportation resources are also present in the APE.

4.2. Analysis in Tier 2 Processes

The Tier 2 analysis for historic resources in this Project incorporated the process outlined within the I-70 Mountain Corridor Section 106 Programmatic Agreement.

5. Affected Environment

5.1. Project Area

As described in detail in Section 2 of this report, the Project is located on I-70 between MP 249 (east of the Beaver Brook/Floyd Hill interchange) and MP 241 (Idaho Springs/Colorado Boulevard), west of the Veterans Memorial Tunnels, and includes a new approximately two-mile-long frontage road connection between the US 6 and Hidden Valley interchanges. Easternmost roadway improvements and activities within the Project limits start at MP 247.2 with an intersection improvement at US 40 and County Road 65 at the Floyd Hill/Beaver Brook interchange. Since the original APE was developed, the Project identified need for wildlife fencing to extend east of this interchange approximately one mile to Soda Creek Road (see Section 5.1.2). The westernmost roadway improvements end at the east portals to the Veterans Memorial Tunnels MP 242.35.

5.1.1. Area of Potential Effects (APE)

The APE developed for this Tier 2 evaluation defines the areas where the Project may directly or indirectly affect historic or potentially historic resources. APE boundaries are meant to be dynamic and can evolve based on changes to the project scope. The APE for this project has changed over time and this section summarizes in detail the modifications to the APE. Please note that references to APE 1 and APE 2 reflects an evolution of the boundary but that there is still a single APE for this project. CDOT coordinated with the Section 106 Issue Task Force (ITF) in defining the APE. This Project considered use of the ridgeline to ridgeline viewshed APE, as was considered in the Tier 1 PEIS, but determined a narrower APE was appropriate for the following reasons. First, the topography in the area surrounding the proposed Project area is steep and forested and traverses predominantly rural areas, encompassing the canyon viewscape. Second, the Project area intersects the communities of Idaho Springs and Floyd Hill. In Idaho Springs, the APE was not expanded beyond the Idaho Springs/Colorado Boulevard exit because the Project activities are minimal west of the Veterans Memorial Tunnels, and there was no identified historic district potential in this eastern edge of Idaho Springs. In the Floyd Hill area, the APE was expanded to include consideration of district potential for the mountain subdivisions in the Floyd Hill community, which are adjacent to the Project, though distant and heavily forested.

The APE boundary encompasses the highway, Project study area (500 feet from I-70 and 1000 around interchanges), and the limits of historic, potentially historic, and linear resources and districts. The study area was identified as part of the evaluation under NEPA for the overall project and is not to be confused with the APE. To understand the potential for historic properties within the APE, previously recorded historic resources were identified through a file search of the COMPASS database maintained by the OAHP, records reviews of the Clear Creek County Assessor and Jefferson County Assessor, and topographic maps, aerial images, and field inspection. The APE has evolved over time as Project design has advanced.

A preliminary APE, referred to as APE-1, was identified based on the initial Project description. APE-1 included the study area as provided by the Project and expanded to include known historic resources identified through the COMPASS search. The APE-1 boundary was also expanded to include parcels identified by the Clear Creek and Jefferson County Assessors as containing resources (improvements) constructed in 1973 or earlier.

After a meeting of consulting parties held in April 2018, requested changes to the APE resulted in APE-2. APE-2 expanded to include all properties constructed through 1975. This included several

properties in the subdivisions of Saddleback Ridge and Hyland Hills. These subdivisions were evaluated as potential historic districts.

5.1.2. APE Updates

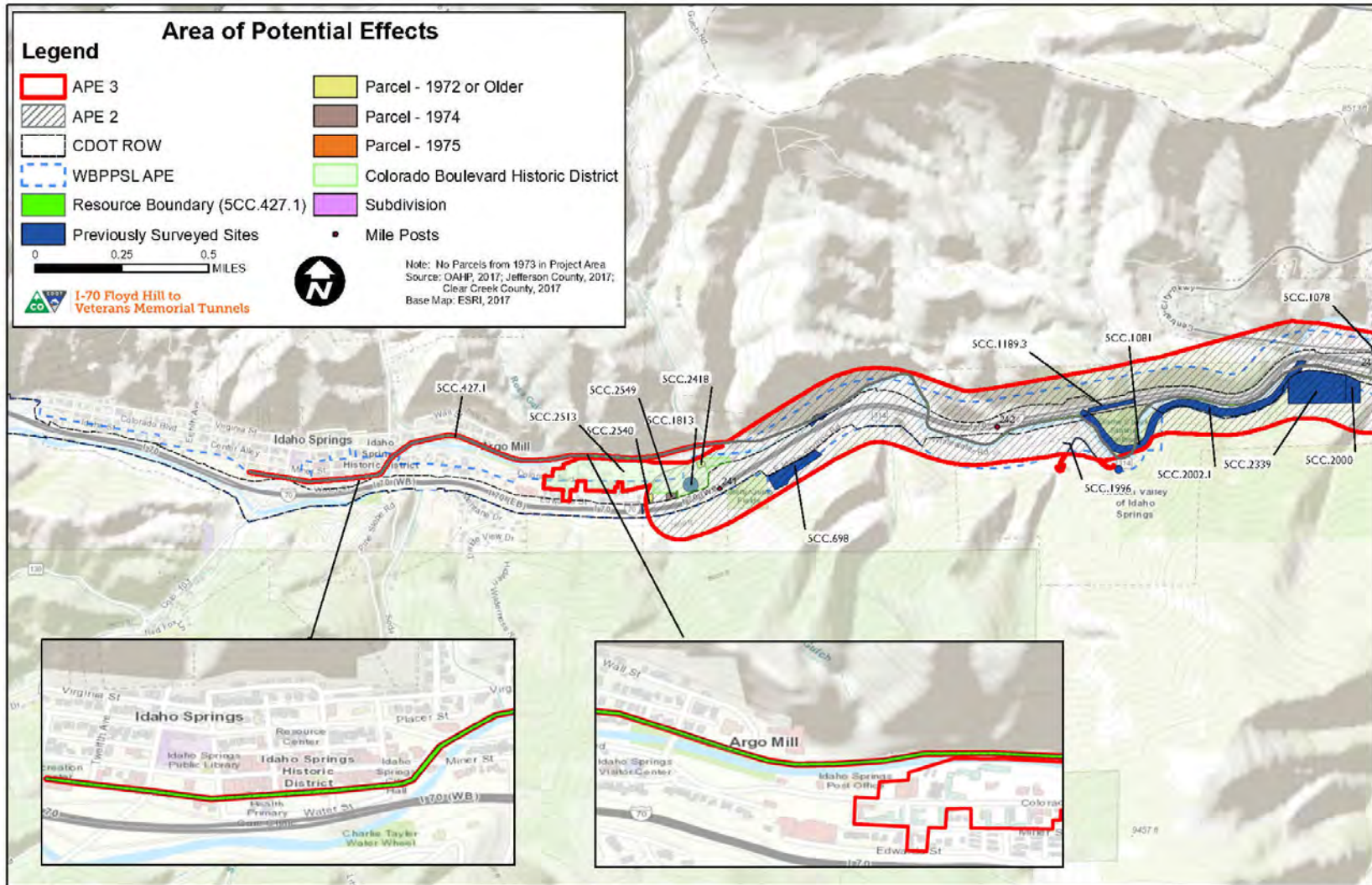
The APE was recently expanded to accommodate a minor change in Project design to add wildlife fencing (Exhibit 3c), resulting in the APE-3 boundary, which extends approximately one-half mile east of the boundary limit of APE-2. The proposed wildlife fencing would be installed on the north and south sides of I-70 within existing CDOT right of way. It would extend from the Floyd Hill/Homestead Road interchange east to Soda Creek Road to reduce wildlife-vehicle collisions in the Beaver Brook area and funnel animals toward a safe crossing under I-70 at Soda Creek Road; no easements or acquisitions are anticipated to accommodate this work. Therefore, the expanded boundary for APE-3 follows the right of way in this area. Two properties bordering the right of way contain buildings or structures that were constructed in 1975 or earlier (the age threshold for historic consideration associated with this Project). The APE is expanded around the boundaries of these properties to consider potential Project effects.

APE-3 was also expanded on the west end of the Project area to include the full boundaries of the Colorado Boulevard Commercial Historic District (5CC.2513), which was surveyed and determined Not Eligible - Officially through consultation under the *WB I-70 Peak Period Shoulder Lane Historic Resources Technical Report* (October 2018). The *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019) included 5CC.2513 but mapping was not available at the time of its submittal.

The APE boundary and locations of surveyed resources are contained in the APE map (Exhibit 3a - 3c).

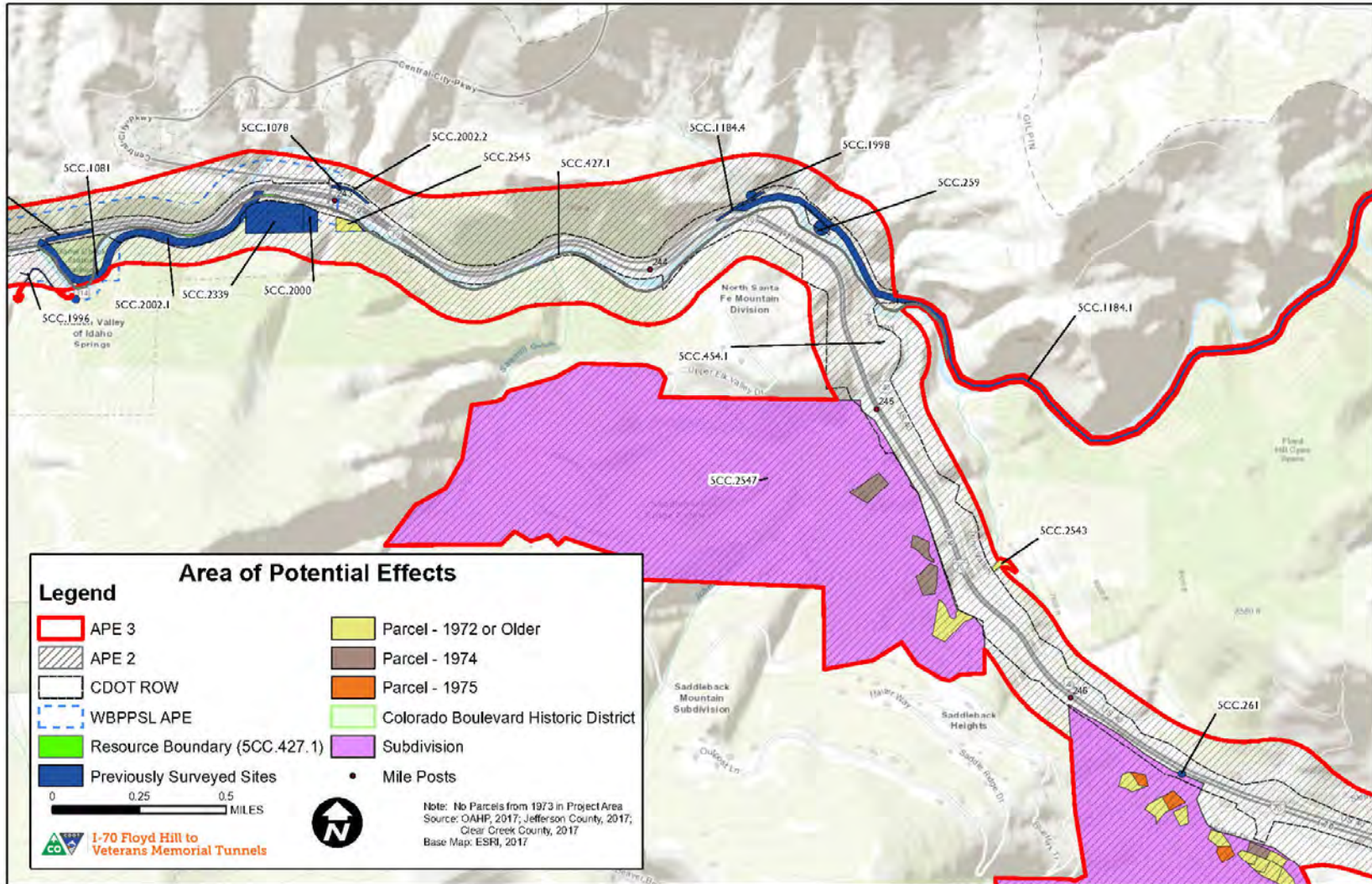


1 Exhibit 3a: APE Map



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1 Exhibit 3b: APE Map

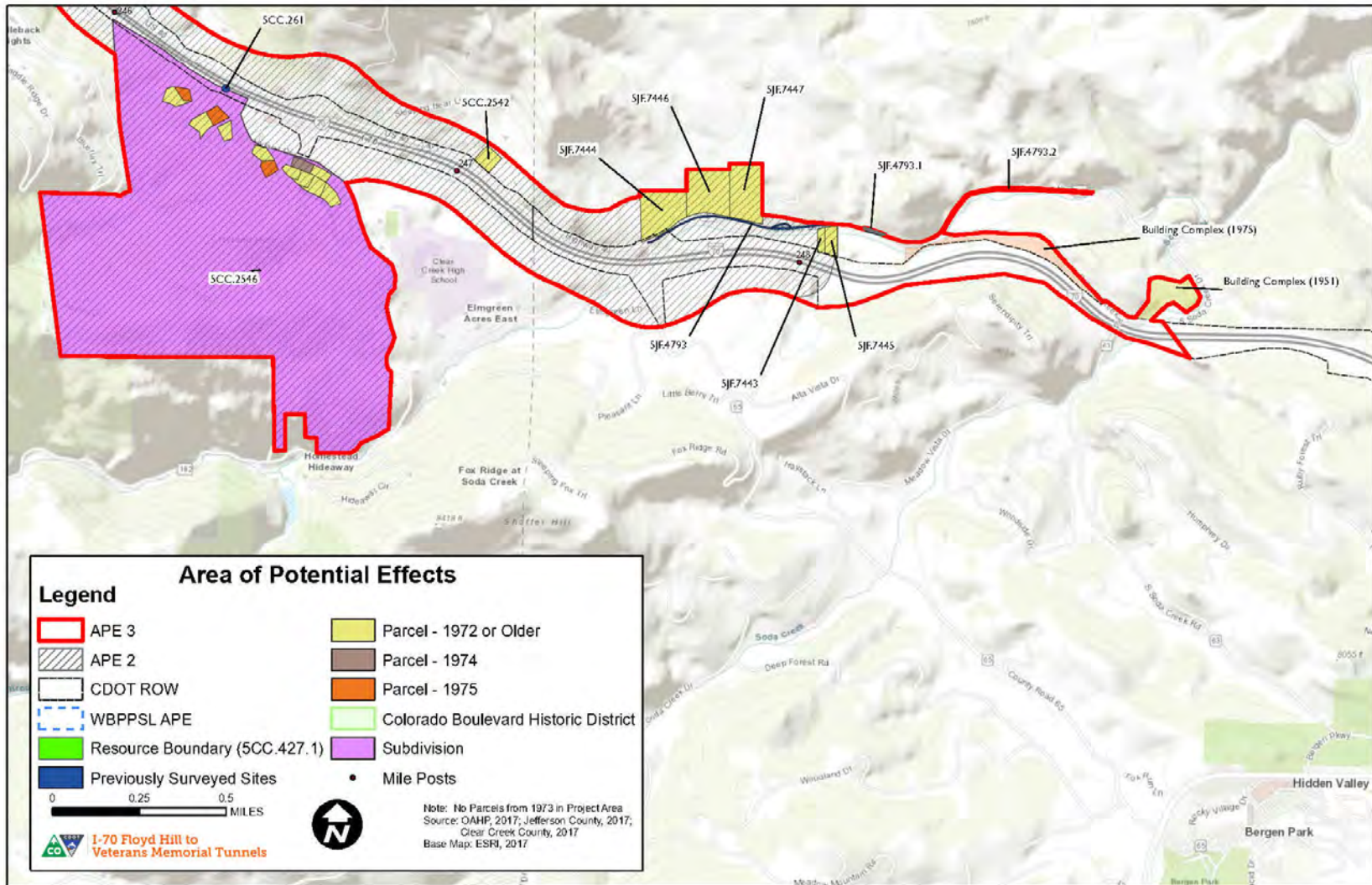


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1 Exhibit 3c: APE Map

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5.2. Environmental Conditions

Historic properties in the APE were evaluated through background research, review of previous surveys and historical context reports, OAHF data, and site visits. Details regarding the historic context, survey methodology, and eligibility determinations are contained in the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019).

A total of 17 resources were identified for historic survey or re-survey in the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019), three of which are eligible or treated as eligible for the NRHP and are the subject of the Project analysis of effects to historic properties (Exhibit 4). These include 5JF.7445, a historic residence constructed in 1915 that was determined eligible under Criterion C as an example of Folk Victorian architecture and two historic districts treated as eligible for the purpose of Section 106 compliance related to this Project. These districts include two 1970s era residential mountain subdivisions for which not enough contextual data are available related to the construction of mountain subdivisions either regionally or nationally to evaluate their historic significance under NRHP criteria. Therefore, these districts are treated as eligible in this evaluation for the purpose of assessing Project effects. Eligible properties are described further in Sections 5.2.1, 5.2.2, and 5.2.3 of this report and in detail in the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019).

Several eligible linear resources traverse the APE, but none of the segments of these resources within the APE support their overall eligibility. These include the Colorado Central Railroad (5CC.427 and segment 5CC.427.1, which was resurveyed and expanded as part of the eligibility determinations for this Project) and US 6 Highway (5CC.1184 and segments 5CC.1184.1 and 5CC.1184.4).

Three properties in the Project area that had been surveyed as potential historic resources prior to the initiation of this Project were revisited for this Project and determined not eligible because they had been demolished or were otherwise non-extant.

Ten other properties were determined not to meet NRHP eligibility requirements and are not included in this evaluation.

Exhibit 4: Summary of Eligible Resources

Resource Number	Name/Address	Determination of Eligibility
5JF.7445	Mesa LLC Property, 33160 US Highway 40	Eligible (2019)
5CC.2546	Hyland Hills Subdivision	Treat as Eligible (2019)
5CC.2547	Saddleback Ridge Estates Subdivision	Treat as Eligible (2019)
5CC.1184	US Highway 6	Linear - Eligible (2016)*
5CC.427	Colorado Central Railroad	Linear - Eligible (No Date)
5CC.2002	US Highway 6 and US Highway 40	Linear - Eligible (2016)*

*Determined Eligible in Colorado Historic Highway Inventory, 2016

5.2.1. Mesa LLC Property, 33160 US Highway 40 (5JF.7445)

The Mesa LLC Property is a cross gabled Folk Victorian house constructed in 1915. The residence is *eligible* to the NRHP under Criterion C in the area of Architecture. Hyland Hills Subdivision (5CC.2546)

5.2.2. Hyland Hills Subdivision (5CC.2546)

The Hyland Hills subdivision is composed of 289, 443-acre Modern style residences built between 1962 and 1975, developed by A. Vaughn Ayers, president of United Investors. The Hyland Hills subdivision does not demonstrate architectural cohesion, which may in fact be a character defining feature of mountain subdivision development. No distinct models of houses were identified. The layout of circulation patterns appears to follow topography and does not create a discernable pattern of layout; this, too, may be demonstrated to be typical of mountain subdivision planning. The subdivision appears to emphasize natural features, including topography and vegetation, which honor the mountain experience early residents were seeking. This collection of styles and integration of naturally occurring features may be the defining element of mountain subdivision development; however, additional contextual information is needed to evaluate against the NRHP Criteria. Therefore, the resource is *treated as eligible* for inclusion on the NRHP for the purposes of Section 106 compliance related to this Project.

5.2.3. Saddleback Ridge Estates (5CC.2547)

The Saddleback Ridge Estates subdivision is a 300-house, 504-acre subdivision built between 1970 and 1975. All houses in the subdivision exhibit modern design style. Saddleback Ridge was the second development on Floyd Hill, after Hyland Hills. The subdivision does not demonstrate architectural cohesion, which may in fact be a character defining feature of mountain subdivision development. No distinct models of houses were identified. The layout of circulation patterns appears to follow topography and does not create a discernable pattern of layout; this, too, may be demonstrated to be typical of mountain subdivision planning. The subdivision appears to emphasize natural features, including topography and vegetation, which honor the mountain experience early residents were seeking. This collection of styles and integration of naturally occurring features may be the defining element of mountain subdivision development; however, additional contextual information is needed to evaluate against the NRHP Criteria. Therefore, the resource is *treated as eligible* for inclusion on the NRHP for the purposes of Section 106 compliance related to this Project.

5.2.4. US Highway 6 Segment (5CC.1184.1 & 5CC.1184.4)

Both segments of this linear resource within the APE have been determined *non-supporting of the overall eligibility* of US 6; segment 5CC.1184.1 in 2015 and 5CC.1184.4 in 2012. While the entirety of US 6 has not been fully evaluated to determine NRHP eligibility, the resource was evaluated for historic significance by the CDOT Colorado Historic Highway Inventory (2016), conducted by Mead & Hunt, Inc. The overall linear resource was considered significant under NRHP Criterion A in the area of Politics/Government, with emphasis on the Clear Creek Canyon to Grand Junction area.

5.2.5. Colorado Central Railroad (5CC.427.1)

Through consultation on the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019), the subject segment of the Colorado Central Railroad was determined *non-supporting of the overall eligibility* of the resource.

5.2.6. US Highway 6 and Highway 40 (5CC.2002.1 & 5CC.2002.2)

The two linear segments of the subject resource within the APE were determined *non-supporting of the overall eligibility* of the linear resource in 2012 as part of the historic resource evaluation completed for the Twin Tunnels Environmental Assessment (EA) (Centennial Archaeology, 2011). US 6 was evaluated for historic significance by the CDOT Colorado Historic Highway Inventory (2016), conducted by Mead & Hunt, Inc. The overall linear resource was considered significant under NRHP Criterion A in the area of Politics/Government, with emphasis on the Clear Creek Canyon to Grand Junction area. US 40 was similarly evaluated and determined significant under NRHP Criteria A and C in the areas of Politics/Government and Engineering. Both segments are located in the west section of the Project, where the work proposed is the same under all Project alternatives.

5.2.7. New Properties in APE

Two properties (Exhibit 5) are included in the expanded APE (referred to as APE 3). They were not evaluated on the OAHP Architectural Inventory Form 1403 because the Project is not expected to affect them. Work proposed in this area is limited to wildlife fencing along the right of way for I-70; no easements or right of way acquisitions would be required to accommodate the work. Wildlife fencing is anticipated to be approximately 6-foot to 8-foot tall and is anticipated to be comprised of wood posts and wire fencing, creating a barrier with high visual permeability. The parcels are forested with mature trees and the building complexes for both properties are set-back from the roadway, leaving limited visibility of architectural features on the properties from either Soda Creek Road or I-70. No potential for effect to these properties was identified relative to their architecture, potential historic associations, or overall setting. Therefore, they are not further addressed in this submission.

Exhibit 5: New Properties in Expanded APE



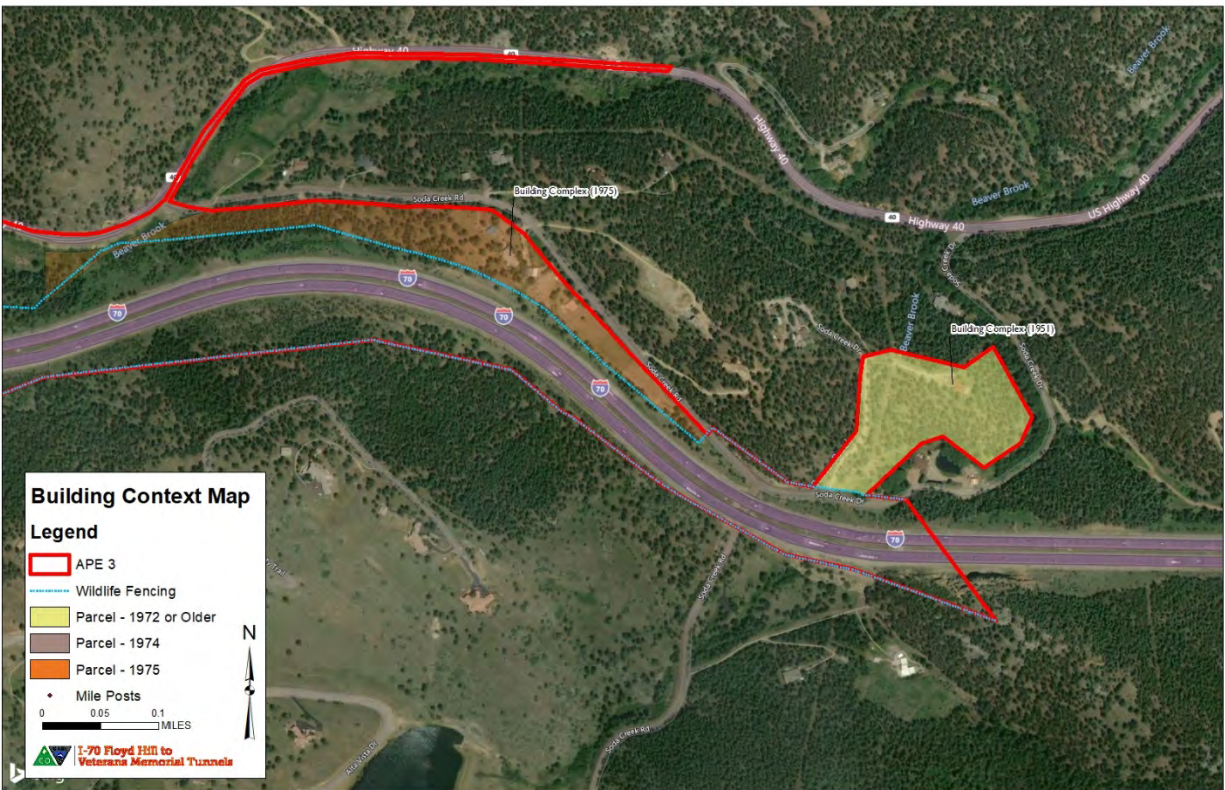
Address	Parcel Number	Year Built	Property Image
32163 Soda Creek Drive	30196508300006	1951	 <p data-bbox="971 1514 1365 1537"><i>Photograph courtesy of Jefferson County Assessor</i></p>
97 Soda Creek Road	30196507400002	1975	 <p data-bbox="971 1871 1365 1894"><i>Photograph courtesy of Jefferson County Assessor</i></p>

Exhibit 6: APE-3 New Properties and Right of Way Proximity



6. Effect Determinations

The APE contains one individual resource determined eligible for the NRHP (Mesa LLC Property, 5JF7445) and two potentially eligible subdivisions (Hyland Hills Subdivision, 5CC2546; Saddleback Ridge Estates Subdivision, 5CC2547;) that are being *treated as eligible* for the purpose of Section 106 compliance associated with this Project. The APE also contains several linear resource segments representing sections of US Highway 6/US Highway 40 (5CC2002), US Highway 6 (5CC5CC1184), Colorado Central Railroad (5CC427), and an unnamed wagon road (5JF454.1). In Colorado, linear resources such as railroads, roads, and irrigation ditches are evaluated in segments, which are determined supporting or non-supporting of NRHP eligibility of the entire linear resource. If the entire linear resource has not been evaluated, it is assumed to be NRHP eligible. All linear resource segments in the APE are determined non-supporting.

6.1.1.1. Methodology for Impact Analysis and Effects Determinations

NEPA regulations and Section 106 regulations define effects differently. NEPA regulations (40 CFR 1508.8) define direct effects as “caused by the action and occur at the same time and place.” Section 106 (36 CFR 800) defines effects, collectively, as “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.” For the purpose of this technical report and Section 106 compliance, the Section 106 definition of effects is used.

Section 106 regulations do not define direct and indirect effects independently; however, most practitioners evaluate effects in terms of direct (generally accepted to include physical impacts within the boundary of a historic resource) and indirect (generally accepted to include changes to the setting of the resource which may include introduction of new or changes to existing visual, audible, or atmospheric setting).

Direct effects are individually assessed and described for each historic resource. Limited direct effects are anticipated as no eligible historic properties would be affected by easement or right of way acquisition. Several linear resource segments may be directly affected through activities such as realignment.

Effects under Section 106 may also include “reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.” The Section 106 approach to cumulative effects will be used in the evaluation of Section 106 effects contained in this technical report.

6.2. No Action Alternative Impacts

The No Action Alternative includes replacement of I-70 bridge structures F-15-BL (1959) and F-15-CM (1974) over Clear Creek. Though both structures meet the age threshold for consideration as potential historic resources, they are part of the interstate system exempt from Section 106 review by the ACHP Interstate Exemption. The replacement structures are anticipated to be similar in length, width, and elevation.

The bridges span the two non-supporting segments of US 6 and the non-supporting segment of the Colorado Central Railroad within the APE. Because the affected segments are considered non-supporting of the overall resources, the Project would result in a determination of *no adverse effect* relative to resource 5CC.1184, including segments 5CC.1184.1 and 5CC.1184.4, and resource 5CC.427

and segment 5CC.427.1. No other historic resources would be affected by the work under this alternative.

6.3. Action Alternative Impacts

6.3.1. Eligible and Treated Eligible Properties

The East Section, east of US 6, contains the highest concentration of eligible historic resources in the corridor, including one property considered eligible for its architectural significance and two mountain subdivisions being *treated as eligible* for the purpose of Section 106 consultation. The Canyon Viaduct and Tunnel Alternatives have the same design through the East Section, and therefore, the same impacts and effect determinations.

6.3.1.1. Effects Determinations

Eligible Resources

Mesa LLC Property, 33160 US Highway 40 (5JF.7445)

The Mesa LLC Property is a cross gabled Folk Victorian house constructed in 1915. The residence is eligible to the NRHP under Criterion C in the area of Architecture.

In the vicinity of this resource, under both the Tunnel Alternative and Canyon Viaduct Alternative, the Project will add a new, third travel lane to I-70 in the westbound direction of travel and wildlife fencing within the I-70 right of way. No direct effects are anticipated to this resource as no easements or right of way acquisition are anticipated to accommodate the work.



No added highway capacity is proposed for I-70 in the vicinity of this property; therefore, noise is not expected to increase in the setting of this resource as a result of the project. Noise is not expected to affect the resource. Additionally, the views of I-70 from the resource are shielded by mature trees, and no work is occurring along US 40 that would alter the view of the resource. Neither changes to the roadway nor construction of the Project would be visible from the resource, and its setting would not be altered.

Because the Project is not anticipated to affect the features of the resource causing it to be eligible to the NRHP, the Project will result in a determination of *no historic properties affected* relative to resource 5JF.7445.

US Highway 6 Segment (5CC.1184.1 & 5CC.1184.4)

Both segments of this linear resource within the APE have been determined *non-supporting of the overall eligibility* of US 6; segment 5CC.1184.1 in 2015 and 5CC.1184.4 in 2012. While the entirety of US 6 has not been fully evaluated to determine NRHP eligibility, the resource was evaluated for historic significance by the CDOT Colorado Historic Highway Inventory (2016), conducted by Mead & Hunt, Inc. The overall linear resource was considered significant under NRHP Criterion A in the area of Politics/Government, with emphasis on the Clear Creek Canyon to Grand Junction area.

These segments are located at the interchange of US 6 and I-70. Through the Central Section of the Project, I-70 would be realigned north, with westbound lanes either in a tunnel under the Tunnel Alternative or realigned on the Canyon Viaduct Alternative approximately one-half mile of both westbound and eastbound I-70 lanes (along the curve between MP 244 and MP 243.5) on viaduct structures approximately 400 feet south of the existing I-70 alignment on the south side of Clear Creek Canyon. Through the realigned area, the frontage road would be constructed on the existing I-70 roadway footprint north of Clear Creek.

The Project does not propose alterations to existing US 6 under either Action Alternative, including those critical features of linear transportation resources - alignment, width, and elevation. Due to the nature of the highway as an operational transportation resource, effects derived from the realignment of the I-70 Mainline within the setting of the resource and potential for noise increases would not affect the features of the resource considered for NRHP eligibility.

Because the subject segments are considered non-supporting of the overall resource, the Project would result in a determination of *no adverse effect* relative to resource 5CC.1184, including segments 5CC.1184.1 and 5CC.1184.4.

Colorado Central Railroad (5CC.427.1)

Through consultation on the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019), the subject segment of the Colorado Central Railroad was determined *non-supporting of the overall eligibility* of the resource.

The subject segment of the resource is located in the east, central, and west sections of the Project, with effects occurring primarily in the central section. The Project would affect 5CC.427.1 by reconstructing the Clear Creek Greenway along its current alignment south of Clear Creek. The Clear Creek Greenway includes the Scott Lancaster Memorial Trail, which follows the alignment of the former Colorado Central Railroad (5CC.427) through the Project area and is part of the segment of this resource within the APE (5CC.427.1). Reconstruction would maintain the approximate alignment of the subject segment. While the Colorado Central Railroad corridor can be traced with significant support from historic mapping and indications on the landscape, limited physical elements of the resource are extant within the evaluated segment. Because the subject segment demonstrates minimal historic integrity, and as a result was determined non-supporting of the overall resource, effects of the Project would not alter the features of the overall resource causing it to be considered eligible to the NRHP.

While the Action Alternatives and frontage road design options have different relationships with the Clear Creek Greenway and segment 5CC.427.1, because the subject segment is considered non-supporting of the overall resource, the Project would result in a determination of *no adverse effect* relative to resource 5CC.427, including segment 5CC.427.1.

US Highway 6 and Highway 40 (5CC.2002.1 & 5CC.2002.2)

The two linear segments of the subject resource within the APE were determined *non-supporting of the overall eligibility* of the linear resource in 2012 as part of the historic resource evaluation completed for the Twin Tunnels Environmental Assessment (EA) (Centennial Archaeology, 2011). US 6 was evaluated for historic significance by the CDOT Colorado Historic Highway Inventory (2016), conducted by Mead & Hunt, Inc. The overall linear resource was considered significant under NRHP Criterion A in the area of Politics/Government, with emphasis on the Clear Creek Canyon to Grand Junction area. US 40 was similarly evaluated and determined significant under NRHP Criteria A and C in the areas of Politics/Government and Engineering. Both segments are located in the west section of the Project, where the work proposed is the same under all Project alternatives.

Segment 5CC.2002.1 is a 0.82-mile segment that includes the alignment of US 6/US 40 south of I-70 from the Twin Tunnels east to approximately the Hidden Valley interchange, along the current alignment of CR 314. The Project would flatten curves of the I-70 Mainline in this area, shifting the I-70 alignment closer to CR 314. These alignment shifts result in substantial rock cuts on both the north and south sides of the canyon; on the south side along the subject resource segment, rock cuts of 70 to 100 feet high are required. The subject segment would be realigned to the south in these areas, and much of the resource segment would be realigned from the doghouse rail bridge south of the Veteran's Memorial Tunnels to the Hidden Valley interchange. The Project would result in direct effects derived from the shift in alignment and indirect effects to the resource setting through rock cuts and alignment shifts in the I-70 Mainline. Because the resource is considered non-supporting of the overall eligibility of linear resource, these effects would not diminish features of the resource considered in NRHP evaluation.

Segment 5CC.2002.2 is a 631-foot segment located at the north-east quadrant of the Hidden Valley interchange. The Hidden Valley interchange would not be reconstructed, and no direct effects are anticipated to the resource. Limited indirect effects would occur, and as a functioning transportation resource, visual or audible effects would not diminish the features of the resource that would be considered in NRHP evaluation.

Because the subject segments are considered non-supporting of the overall resource, the Project would result in a determination of *no adverse effect* relative to resource 5CC.2002, including segments 5CC.2002.1 and 5CC.2002.2.

Treat as Eligible Resources

Hyland Hills Subdivision (5CC.2546)

The Hyland Hills subdivision is composed of 289, 443-acre Modern style residences built between 1962 and 1975, developed by A. Vaughn Ayers, president of United Investors. The Hyland Hills subdivision does not demonstrate architectural cohesion, which may in fact be a character defining feature of mountain subdivision development. No distinct models of houses were identified. The layout of circulation patterns appears to follow topography and does not create a discernable pattern of layout; this, too, may be demonstrated to be typical of mountain subdivision planning. The subdivision appears to emphasize natural features, including topography and vegetation, which honor the mountain experience early residents were seeking. This collection of styles and integration of naturally occurring features may be the defining element of mountain subdivision development; however, additional contextual information is needed to evaluate against the NRHP Criteria. Therefore, the resource is *treated as eligible* for inclusion on the NRHP for the purposes of Section 106 compliance related to this Project.

The Hyland Hills Subdivision is located on a hill above the south side of I-70, approximately 35 feet from the I-70 right of way and 555 feet from the Floyd Hill interchanges with I-70. Work in the area for both the Tunnel Alternative and Canyon Viaduct Alternative would include addition of a third westbound travel lane (west of the Floyd Hill/Homestead interchange), addition of an auxiliary lane in the eastbound direction between US 6 and the Floyd Hill/Beaver Brook interchange, wildlife fencing, and roundabouts along US 40 between the Floyd Hill interchanges (Beaver Brook and Homestead) on the north side of I-70. No direct effects are anticipated to the Hyland Hills subdivision as no easements or right of way acquisition from the resource are required to accommodate the Project. A visualization (Exhibit 7) of the Project area, when viewed from the Hyland Hills subdivision, illustrates the distance and limited visual impact of Project changes from the subdivision. Noise increases are expected to be negligible in this area. Individual properties closest to I-70 may experience minor changes that are

expected to dissipate quickly moving further away from the highway (Exhibit 7). The slight alteration in noise anticipated for the properties closest to the highway represents a minor change to the setting of the resource that will not diminish the ability of the resource to convey significance.

Because the Project will not diminish the features of the resource causing it to be eligible to the NRHP, the Project will result in a determination of *no adverse effect* relative to resource 5CC.2546.

Exhibit 7: Sensitive Receptor Placement within Hyland Hills Subdivision

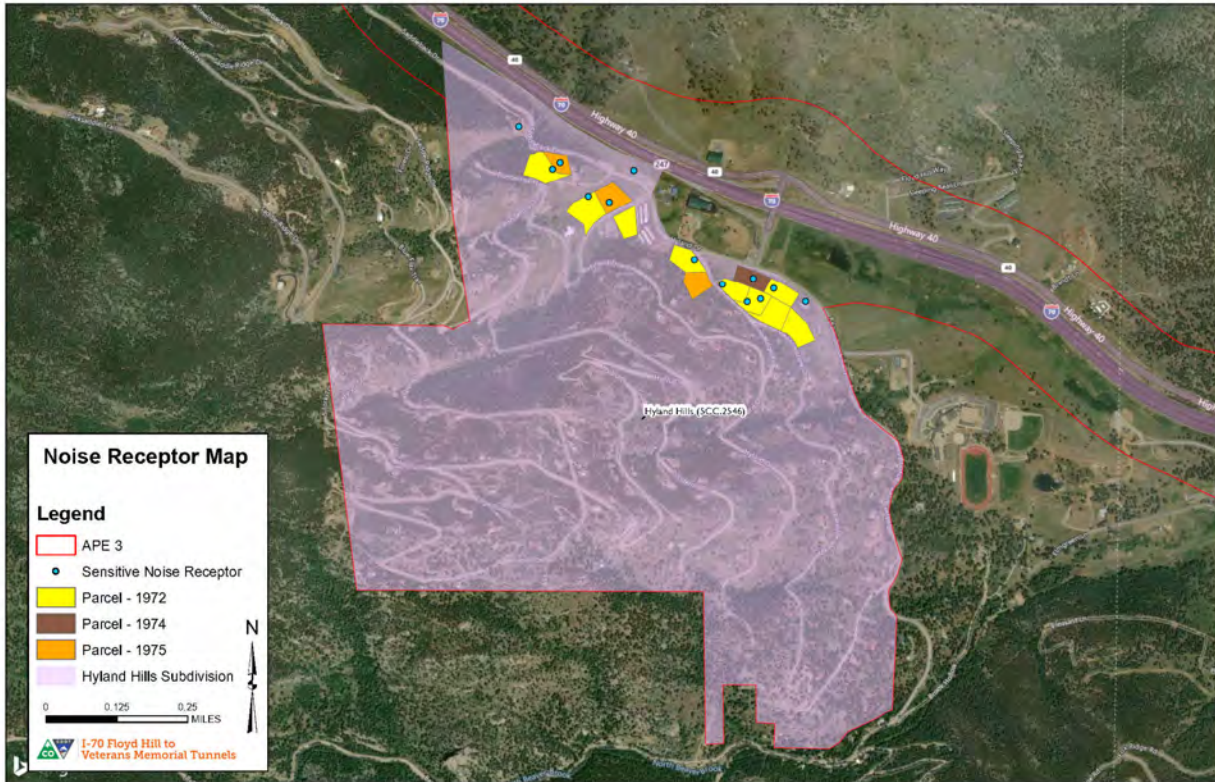


Exhibit 8: Visualization of the US 40 and Homestead Road Intersection from Hyland Hills Subdivision (Top photo is the existing conditions, and bottom is simulation with Project)

The simulation shows the improvements including the addition of an approximately one-mile-long eastbound auxiliary (climbing) lane between US 6 and the Floyd Hill/Homestead Road interchange; construction of a roundabout north of I-70 at the intersection of US 40 and Homestead Road; and installation of wildlife fencing on the north and south sides of I-70 within existing CDOT right of way. Improvements represent negligible change in visual character of the infrastructure when viewed from the subdivision. The highway remains the dominant visual feature as it was during the period of significance when the subdivision was developed.



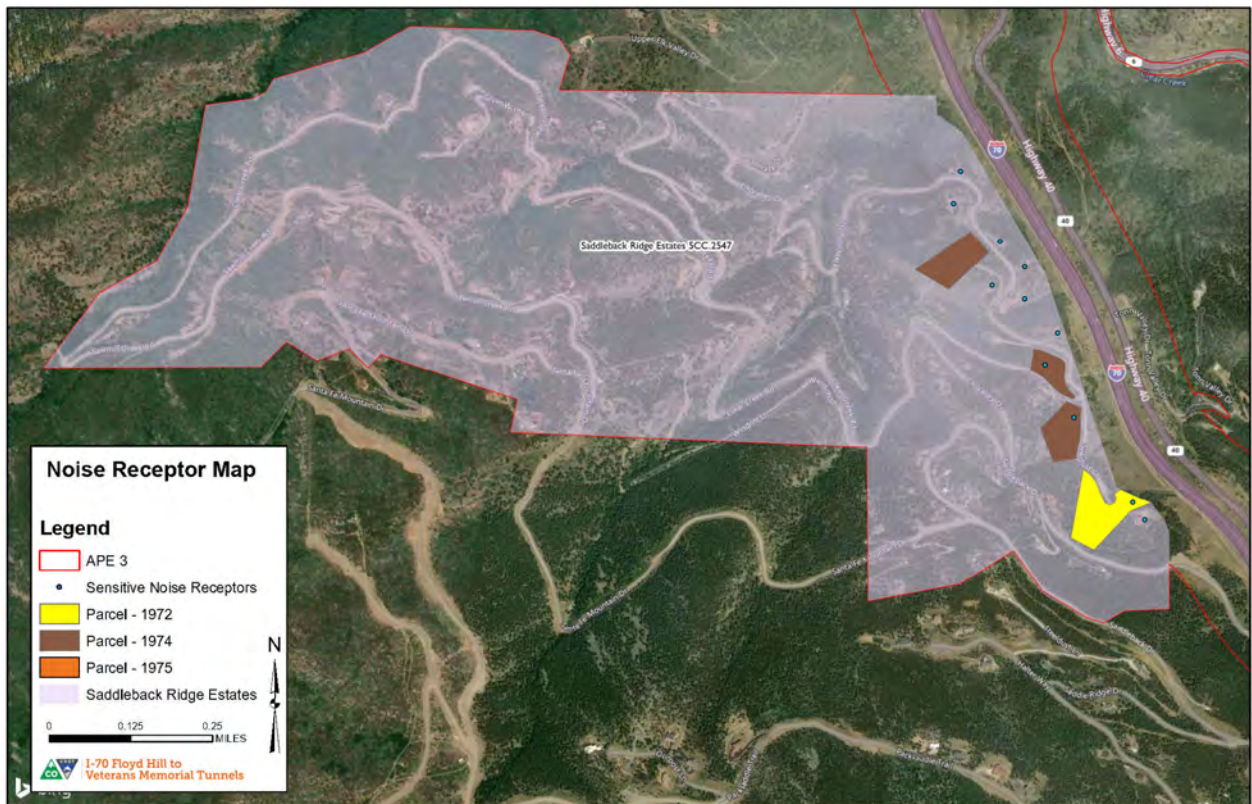
Saddleback Ridge Estates Subdivision (5CC.2547)

The Saddleback Ridge Estates subdivision is a 300-house, 504-acre subdivision built between 1970 and 1975. All houses in the subdivision exhibit modern design style. Saddleback Ridge was the second development on Floyd Hill, after Hyland Hills. The subdivision does not demonstrate architectural cohesion, which may in fact be a character defining feature of mountain subdivision development. No distinct models of houses were identified. The layout of circulation patterns appears to follow topography and does not create a discernable pattern of layout; this, too, may be demonstrated to be typical of mountain subdivision planning. The subdivision appears to emphasize natural features, including topography and vegetation, which honor the mountain experience early residents were seeking. This collection of styles and integration of naturally occurring features may be the defining element of mountain subdivision development; however, additional contextual information is needed to evaluate against the NRHP Criteria. Therefore, the resource is *treated as eligible* for inclusion on the NRHP for the purposes of Section 106 compliance related to this Project.

Saddleback Ridge Estates is located on the southwest side of I-70, to the west of the Hyland Hills subdivision, approximately 95 to 750 feet from the highway edge of pavement, depending on location and due to the irregular layout of the subdivision. Work in the area for both the Tunnel Alternative and Canyon Viaduct Alternative would include additions of a third westbound travel lane and an eastbound auxiliary (climbing) lane. No direct effects are anticipated to the Saddleback Ridge Estates subdivision as no easements or right of way acquisition from the resource are required to accommodate the Project. Noise increases are expected to be negligible in this area. Individual properties closest to I-70 may experience minor changes that are expected to dissipate quickly moving further away from the highway (Exhibit 9). The slight alteration in noise anticipated for the properties closest to the highway represents a minor change to the setting of the resource that will not diminish the ability of the resource to convey significance.

Because the Project will not diminish the features of the resource causing it to be eligible to the NRHP, the Project will result in a determination of *no adverse effect* relative to resource 5CC.2547.

Exhibit 9: Sensitive Receptor Placement within Saddleback Ridge Estates Subdivision



6.3.2. Not Eligible Resources

Not Eligible Resources

The following properties were determined **Not Eligible - Officially** through consultation in 2019 via the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Eligibility Report* (CDOT, 2019). Because these resources are **Not Eligible** for inclusion in the NRHP, the corresponding Section 106 determination is **No Historic Properties Affected** for the following resources:

- 5CC.259 Floyd Hill Railroad Depot
- 5CC.454.1 Wagon Road¹
- 5CC.698 Idaho Springs Work Center
- 5CC.1078 Clear Creek Bridge F-15-D
- 5CC.1081 Clear Creek Bridge CLR314-W0.7
- 5CC.1996 Seaton Mountain Electric Company Hydroelectric Plant and Flume
- 5CC.1998 The Tunnel Inn Service Station and Lunch Room/Kermitts Roadhouse
- 5CC.2000 Bell Property

¹ Though assigned a point number, the subject resource represents the last remaining 35-meter/100-foot section of an overall resource that is no longer extant. This resource was recorded in 1989 and determined Not Eligible - Officially in 1990. The survey form indicated that this remnant is the last remaining piece of the resource, which was destroyed during the construction of SH 40 and I-70. Though surveyed with a point number, this remnant is in effect an individual resource and bears an official determination of Not Eligible.

- 5CC.2339 1998 East Idaho Springs Road
- 5CC.2418 6 & 40 Fireplace Lounge
- 5CC.2513 Colorado Boulevard Commercial Historic District
- 5CC.2540 Kjeldgaard Residence
- 5CC.2542 Brandt Residence, 23 Brandt Lane
- 5CC.2543 Francis Residence, 283 Tonn Valley Drive
- 5CC.2545 Anderson Residence
- 5CC.2549 Thurlow Residence
- 5JF.4793/5JF.4793.1/5JF.4793.2 Road²
- 5JF.7443 Hakes Residence, 33180 US Highway 40
- 5JF.7447 Stauffer Residence, 403 Quarter Circle Lane
- 5JF.7446 Elmgreen Residence, 344 Crooked Pine Trail
- 5JF.7444 Elmgreen Ranch, 355 Crooked Pine Trail

6.4. Construction Impacts

No eligible properties are located within the construction area and would not be affected by construction impacts. Access to the Floyd Hill subdivisions (Hyland Hills and Saddleback Ridge Estates) would be a requirement of the construction, and no activities would occur on US 40.

6.5. Summary of Effect Determinations

The project results in a determination of *no adverse effect* with regard to two subdivisions treated as eligible (5JF.2546 and 5JF.2547), and several linear resources, including the following segments: 5CC.1184.1, 5CC.1184.4, 5CC.2002.1, 5CC.2002.2, and 5CC.427.1. A summary of determinations is provided as Exhibit 8.

Resources determined not eligible or those that would not be affected by the Project result in a Section 106 determination of *no historic properties affected*.

² Though 5JF.4793 is a linear resource, the overall extent of the 5JF.4793 was surveyed and determined Not Eligible - Officially in 2010. Therefore, the overall extent of the resource does not need to be assumed eligible, as is common practice for linear resources, and a Section 106 determination of no Historic Properties Affected is appropriate.

Exhibit 10: Summary of Impacts

Resource Name (Number)	Section	Eligibility Determination (Year)	Tunnel Alternative Effects Determination*	Canyon Viaduct Alternative Effects Determination
Road (5JF.4793.1)	East	Not Eligible** – Officially (2010)	No Historic Properties Affected	No Historic Properties Affected
Road (5JF.4793.2)	East	Not Eligible** – Officially (2010)	No Historic Properties Affected	No Historic Properties Affected
Mesa LLC Property (5JF.7445)	East	Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Hakes Residence (5JF.7443)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Road (5JF.4793)	East	Not Eligible – Officially (2010)	No Historic Properties Affected	No Historic Properties Affected
Stauffer Residence (5JF.7447)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Elmgreen Residence (5JF.7446)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Elmgreen Ranch (5JF.7444)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Brandt Residence (5CC.2542)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Hyland Hills Subdivision (5CC.2546)	East	Treat as Eligible – (2019)	No Adverse Effect	No Adverse Effect

Resource Name (Number)	Section	Eligibility Determination (Year)	Tunnel Alternative Effects Determination*	Canyon Viaduct Alternative Effects Determination
Floyd Hill Stage Station (5CC.261)	NA	No Longer Extant (2019)	No Historic Properties Affected	No Historic Properties Affected
Francis Residence (5CC.2543)	East	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Saddleback Ridge Estates Subdivision (5CC.2547)	East	Treat as Eligible – (2019)	No Adverse Effect	No Adverse Effect
US Highway 6 (5CC.1184.1)	Central	Entire resource is significant; Segment Does Not Support – Officially (2012)	No Adverse Effect	No Adverse Effect
Wagon Road (5CC.454.1)	Central	Not Eligible – Officially (1990)	No Historic Properties Affected	No Historic Properties Affected
Floyd Hill Railroad Depot (5CC.259)	Central	Not Eligible – Officially (2002)	No Historic Properties Affected	No Historic Properties Affected
The Tunnel Inn Service Station And Lunch Room/Kermitts Roadhouse (5CC.1998)	Central	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
US Highway 6 (5CC.1184.4)	Central	Entire resource is significant; Segment Does Not Support – Officially (2012)	No Adverse Effect	No Adverse Effect
Anderson Residence (5CC.2545)	Central	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
US Highway 6 and Highway 40 (5CC.2002.2)	West	Entire resource is significant; Segment Does Not Support – Officially (2012)	No Adverse Effect	No Adverse Effect
Clear Creek Bridge F-15-D (5CC.1078)	West	Not Eligible – Officially (2002)	No Historic Properties Affected	No Historic Properties Affected
Bell Property (5CC.2000)	West	Not Eligible – Officially (2012)	No Historic Properties Affected	No Historic Properties Affected

Resource Name (Number)	Section	Eligibility Determination (Year)	Tunnel Alternative Effects Determination*	Canyon Viaduct Alternative Effects Determination
1998 East Idaho Springs Road (5CC.2339)	West	Not Eligible – Officially (2016)	No Historic Properties Affected	No Historic Properties Affected
US Highway 6 and Highway 40 (5CC.2002.1)	West	Entire resource is significant; Segment Does Not Support – Officially (2012)	No Adverse Effect	No Adverse Effect
Clear Creek Bridge CLR314-W0.7 (5CC.1081)	West	Not Eligible – Officially (2002)	No Historic Properties Affected	No Historic Properties Affected
Twin Tunnels (5CC.1189.3)	NA	Not Eligible (2019)	No Historic Properties Affected	No Historic Properties Affected
Seaton Mountain Electric Company Hydroelectric Plant and Flume (5CC.1996)	West	Not Eligible – Officially (2012)	No Historic Properties Affected	No Historic Properties Affected
Idaho Springs Work Center (5CC.698)	West	Not Eligible – Officially (2012)	No Historic Properties Affected	No Historic Properties Affected
6 & 40 Fireplace Lounge (5CC.2418)	West	Not Eligible – Officially (2018)	No Historic Properties Affected	No Historic Properties Affected
Peoriana Motel (5CC.1813)	NA	Not Eligible – Officially (2010) No Longer Extant (2019)	No Historic Properties Affected	No Historic Properties Affected
Thurlow Residence (5CC.2549)	West	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected
Kjeldgaard Residence (5CC.2540)	West	Not Eligible – Officially (2019)	No Historic Properties Affected	No Historic Properties Affected

Resource Name (Number)	Section	Eligibility Determination (Year)	Tunnel Alternative Effects Determination*	Canyon Viaduct Alternative Effects Determination
Colorado Boulevard Commercial Historic District (5CC.2513)	West	Not Eligible – Officially (2018)	No Historic Properties Affected	No Historic Properties Affected
Colorado Central Railroad (5CC.427.1)	East	Entire resource considered eligible; Segment Does Not Support – Officially (2019)	No Adverse Effect	No Adverse Effect
Colorado Central Railroad (5CC.427.1)	Central	Entire resource considered eligible; Segment Does Not Support – Officially (2019)	No Adverse Effect	No Adverse Effect
Colorado Central Railroad (5CC.427.1)	West	Entire resource considered eligible; Segment Does Not Support – Officially (2019)	No Adverse Effect	No Adverse Effect

*There are slight differences in specific effects to resources through the central section of the Project under this alternative due to differences in the North Frontage Road and South Frontage Road design options; however, due to the nature of the resources, these differences do not change the Section 106 determinations of effect or Section 4(f) use.

**Though these resources are surveyed as linear segments, the determination of not eligible rather than a supporting/non-supporting segment is appropriate as the recorder also completed a Management Data Form 1400 for the overall resource 5JF.4793 which concluded the full extent of the resource is not eligible. This determination was made official by SHPO review on January 22, 2010.

7. Mitigation

No adverse effects were identified under Section 106 as a result of the Project alternatives, so no mitigation is required. However, given the history of this project corridor, this report provides a summary of mitigation measures that align with general commitments for the mitigation of Project impacts identified within the I-70 Mountain Corridor Section 106 Programmatic Agreement (2008). Impacts identified in Section 6 are summarized in tabular format, by alternative, in this section to align with recommended mitigation.

7.1. Relevant Tier 2 Mitigation

The Project would not result in a Section 106 determination of *adverse effect* to any historic resources within the Project APE. Therefore, no mitigation is required under Section 106 and no Tier 2 resource-specific mitigation strategies are relevant.

However, the I-70 Mountain Corridor Section 106 Programmatic Agreement (2008) includes several mitigation measures and best management practices that apply generally to the historic environment within the I-70 Mountain Corridor; those that apply are included in the mitigation table (Exhibit 8).

Exhibit 10 Recommended Mitigation Measures

Location	Activity	Impact	Mitigation
Throughout Project Limits	Road Construction	<ul style="list-style-type: none"> Alterations to the viewshed from historic resources 	CDOT will incorporate the design guidelines of the I-70 Mountain Corridor Mountain Mineral Belt design segment, identified through the Context Sensitive Solutions for the I-70 Mountain Corridor.
Throughout Project Limits	Road Construction	<ul style="list-style-type: none"> Traffic control/Construction scheduling 	As each construction phase potentially affecting historic communities, namely Idaho Springs, is conducted, CDOT will work with the communities to select community liaisons who will represent the interests of the community and provide assistance and feedback to the traffic control team concerning construction scheduling and mitigation strategies.

8. Agency Coordination

Agency coordination for historic resources is primarily subject to the Section 106 consultation process, which involves coordination with the Colorado SHPO and interested parties or stakeholders, called consulting parties. Clear Creek County, Black Hawk, and Central City participated as consulting parties for this Project. For the purpose of this Project and its connection with the I-70 Mountain Corridor PEIS, the SHPO and consulting parties met as an ITF to identify historic resources and consider potential Project effects to sensitive historic resources.

Two ITF meetings were held for the Project. An initial meeting was held February 28, 2019, with focus on APE development and resource identification methodology. A second meeting was held on April 4, 2019 to review determinations of eligibility for resources evaluated by the Project and discuss approach and content with the ITF members. A third meeting will held to review determinations of Section 106 effect.

This document, the *I-70 Floyd Hill to Veterans Memorial Tunnels Historic Resources Effects Report*, represents the second set of deliverables for formal comment. This document was submitted to the SHPO and consulting parties with a letter dated August 27, 2020.

9. References

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Colorado Department of Transportation. *I-70 Mountain Corridor Context Sensitive Solutions*
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