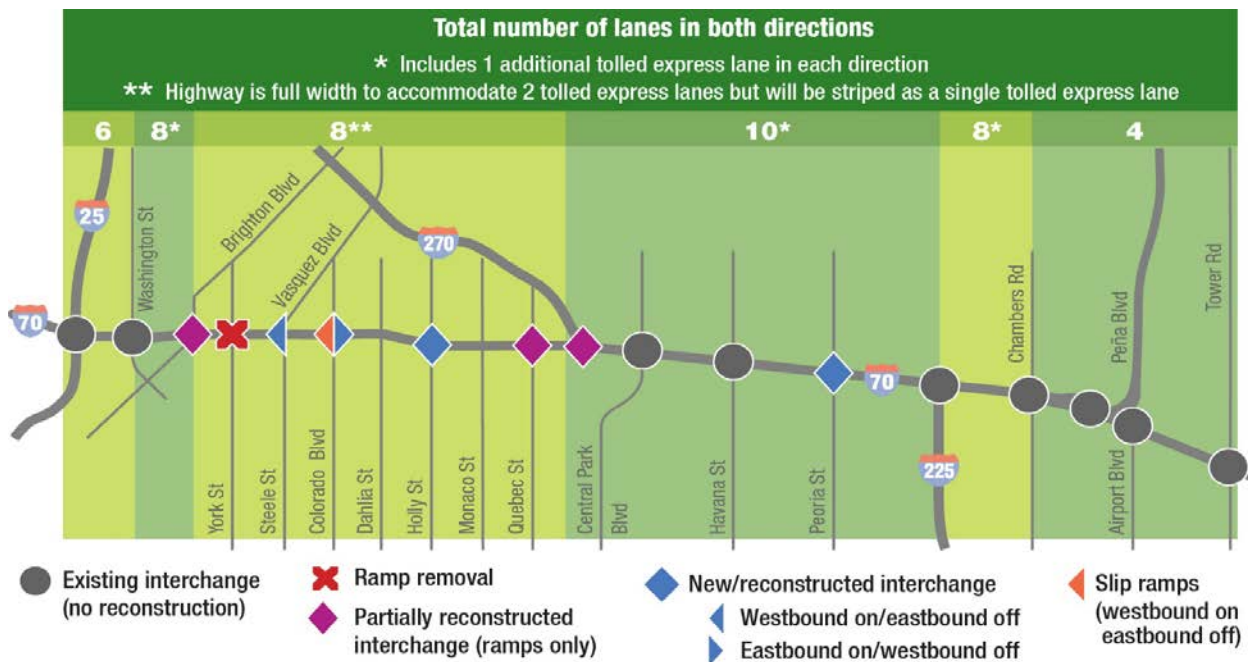


COLORADO DEPARTMENT OF TRANSPORTATION REEVALUATION FORM	Original NEPA Approval Date: 1/19/2017	Reevaluation Date: 11/15/2018	Project Code: AQC R600- 165 Subaccount: 13599
Project Name and Location: Central 70 Project: Reevaluation #5, I-70 from I-25 to Chambers Road			
NEPA Document Title: I-70 East ROD 1: Phase 1 (Central 70 Project) (January 19, 2017)			
Region/Program/Residency: Headquarters—Central 70 Project Office			
<p>Project Description:</p> <p>The Preferred Alternative, Phase 1 (Partial Cover Lowered Alternative with Managed Lanes) selected in the January 19, 2017 Record of Decision (ROD) is the first phase of implementing the Preferred Alternative identified in the Final Environmental Impact Statement (FEIS). The Preferred Alternative, Phase 1 removes the existing Interstate 70 (I-70) viaduct between Brighton Boulevard and Colorado Boulevard and lowers the highway below grade in this area, placing a four-acre cover over a portion of the lowered highway (between the Clayton Street and Columbine Street bridges, adjacent to Swansea Elementary School), and adds additional lanes in each direction.</p> <p>Reevaluation #1 dated 9/18/2017 assessed the impacts of three categories of design alterations: (1) modification to the construction limits determined through coordination with the Union Pacific Railroad (UPRR); (2) changes to the offsite drainage system for the Central 70 Project due to anticipated reduction of stormwater flow volume; and (3) other miscellaneous and slight design adjustments throughout the corridor completed to advance the project.</p> <p>Reevaluation #2 dated 1/11/2018 assessed the impacts of two design alterations and one existing condition change: (Design Modification #1) temporarily moving a fence and gate within the Ralston Purina Plant/Nestle Petcare Company property to accommodate construction and maintain security of the plant; (Design Modification #2) at 4790 Josephine Street, it was determined that placing a temporary easement on the entirety of this vacant property would be beneficial for construction staging, access, and a potential temporary field office trailer location to facilitate the UPRR construction work; (Changed Conditions #1) 4637 Claude Court, 5DV.9667, is now determined not eligible for the National Register of Historic Places and the finding of effect for this resource has been changed to No Historic Properties Affected.</p> <p>Reevaluation #3 dated 6/18/2018 assessed the impacts of design alterations between Colorado Boulevard and Quebec Street. These minor adjustments and refinements to the design of the Preferred Alternative, Phase 1 resulted from advanced design and include the following types of modifications; Construction limit adjustments to allow for additional space to facilitate movement of construction equipment and to tie-back slopes along driveway approaches; and minor adjustments to right-of-way acquisition boundaries.</p> <p>Reevaluation #4 dated 09/05/2018 assessed the impacts of design alterations due to Alternative Technical Concepts (ATC) that had been approved and included in the project except ATC 11.2. The ATCs included in the project that had physical changes to the infrastructure are primarily focused on raising the profile of I-70 to eliminate involvement with groundwater during construction as well as during the operations and maintenance phase of the project. These modifications affected noise impacts, locations, and impacts associated with storm water and sanitary sewer lines.</p>			
<p>Project Phasing Plan and Portions Completed (if warranted):</p> <p><u>Portions Completed:</u> None</p> <p><u>Project Phasing Plan:</u> Phase 1, the Central 70 Project, is the only defined phase for the I-70 East Project at this time. Future phases have not been determined and will rely on future funding.</p>			
<p>Portion of Project Currently Being Advanced:</p> <p>The Central 70 Project incorporates portions of the Preferred Alternative for the I-70 East Project, which were selected in the ROD. It includes improvements to an approximately 10-mile stretch of I-70 from I-25 to Chambers Road, adding one new tolled express lane (selected as the type of managed lane) in each direction, removing the aging 50+-year-old viaduct, lowering the highway between Brighton Boulevard and Colorado Boulevard, and placing a four-acre cover over a portion of the lowered highway (between the Clayton Street and Columbine Street bridges, adjacent to Swansea Elementary School).</p> <p>Figure 1 provides an overview of the Central 70 Project, and Figure 2 shows the number of lanes and planned interchange modifications. Attachment A of Reevaluation #1 includes detailed maps of the Central 70 Project.</p>			

Figure 1: Central 70 Project Overview



Figure 2: Central 70 Project Lane Configuration and Interchange Reconstruction



Although striped for only one tolled express lane, the lowered section of the highway will be constructed to the full width of the Preferred Alternative as identified in the I-70 East FEIS because it is more cost effective to construct the whole width now and it is less disruptive to the community than performing additional future expansion. For lane continuity, only a single additional lane will be striped from Brighton Boulevard to Quebec Street, even though the highway in this area will be wide enough to accommodate two additional lanes.

Date(s) of Prior Reevaluations: Reevaluation #1, 9/18/2017; Reevaluation #2, 1/11/2018; Reevaluation #3, 6/18/2018; Reevaluation #4, 09/05/2018

I. Document Type

- Categorical Exclusion (CE)
- Environmental Assessment (EA)
- Finding of No Significant Impacts (FONSI)
- Draft Environmental Impact Statement (DEIS)
- Final Environmental Impact Statement (FEIS)
- Supplemental Environmental Impact Statement (SEIS)
- Record of Decision (ROD)
- Other (such as: local funding, etc.) _____

II. Reason for Reevaluation

- Project is proceeding to the next major approval or action [23 CFR 771.129(c)]
- Project changes such as laws, policies, guidelines, design, environmental setting, impacts or mitigation (describe: Changes in project design, existing conditions, and mitigation as described in Section IV below)
- Greater than three years have elapsed since FHWA's approval of the DEIS [23 CFR 771.129(a)] or FHWA's last major approval action for the FEIS [23 CFR 771.129(b)]
- Other: _____

III. Conclusion and Recommendation

- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that no substantial changes have occurred in the social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socio-economic, or natural environment. Therefore, the original environmental document or CE designation remains valid for the proposed action. It is recommended that the project identified here-in be advanced to the next phase of project development. A summary of the review is documented in Section IV.
- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that the environmental document or CE designation is no longer valid or more information is required. Additional required documentation is identified in Section VII.

Regional Planning Environmental Manager or Designee

Date

Federal Highway Administration Division Administrator or Designee

Date

IV. Evaluation

- Level 1: Less than three years since last major step to advance the action (e.g. approval of NEPA document, authority to undertake final design, authority to acquire significant portion of ROW, approval of PS&E) and there are no changes in project scope, environmental conditions, environmental impacts or regulations and guidelines.- OR - The document being re-evaluated is a programmatic Categorical Exclusion regardless of time since the last major step to advance the action (as long as the project would still be covered by a programmatic Categorical Exclusion). All

decisions in the prior NEPA document remain valid. No FHWA concurrence is required. Note to file and to distribution below.

- Level 2: Less than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 3: More than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 4: Major changes in project scope or environmental commitments, or for EISs when greater than three years have elapsed since the last major project action. Updates or new studies maybe required. A Level 4 Reevaluation may require a separate document. FHWA concurrence is required.

ENVIRONMENT SETTING, AFFECTED ENVIRONMENT, AND ENVIRONMENTAL IMPACT ASSESSMENT:

Document changes to human, socio economic, or natural environment for environmental setting or circumstances.

Document changes in impact status. Place check-mark or description where relevant. Note: this list may be expanded or adjusted to match the headings in the original environmental document reviewed.

Setting/Resource/Circumstance	Change in Affected Environment or Setting		Change in Environmental Impact		Date Reviewed	Highlight Section VI Additional Studies Required or Section IX Attachments
	Yes	No	Yes	No		
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Social and Economic Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	
Environmental Justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Land Use and Zoning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	
Relocations and Displacements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Historic Preservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachment E
Paleontological Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Visual Resources and Aesthetic Qualities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Parks and Recreation Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachment G
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Biological Resources and Threatened and Endangered Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachment F and H
Floodplains and Drainage/Hydrology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Wetlands and Other Waters of the U.S.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachment F
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Geology and Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Hazardous Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachments A and B
Utilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Human Health Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Section 4(f)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 2018	See Attachment G
Cumulative Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	August 2018	
Other(s): Right of Way including Temporary Easements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	October 2018	

Changes to the project scope or design:**DESIGN ALTERATION 1:**

Between Quebec Street and I-225, there have been minor adjustments and refinements to the design of the Preferred Alternative, Phase 1. The changes resulted from advanced design include the following types of modifications:

- Construction limit adjustments within existing CDOT ROW to allow for additional space for fill slopes to tie into existing grades, temporary pavement and striping construction and removal, sidewalk connections to existing trails (including Sand Creek Greenway Trail), embankment construction for retaining wall foundations, drainage channel construction, pavement tie-ins to existing public roadways, connections to existing drainage structures, and construction staging southwest of the Quebec Interchange and between Sand Creek and I-270.

- Construction limit adjustment at existing non-jurisdictional Wetland 279-03 north of I-70, West of I-270. Existing wetland is localized depression fed by two existing storm drain outfalls from I-70. The proposed project will combine this drainage and the outfall from the detention pond east of I-270 into a relocated outfall into Wetland 279-03. Impact to wetland will be slightly greater than that shown in the ROD due to location of combined outfall. Overall wetland impacts for the project will continue to be less than those identified in the ROD.
- Minor adjustments to ROW acquisition boundaries. ROW and easement acquisition would increase on one parcel (4600 Niagara St) and a new acquisition would be needed on another parcel (4595 Quebec St) to accommodate sidewalk and adjacent wall construction limits based on refined Quebec Street roadway geometry, and to accommodate drainage outfall improvements associated with a sidewalk connection to the Sand Creek Greenway Trail.

Attachment A shows the locations where construction limits have been modified due to Design Alteration 1.

DESIGN ALTERATION 2:

Between Dahlia Street and Quebec Street, there have been minor adjustments and refinements to the design of the Preferred Alternative, Phase 1 at selected side streets. The changes resulted from advanced design and include the need to extend the work limits to fully tie in street, curb, gutter, sidewalk, striping, and drainage features to existing infrastructure. All work associated with these design alterations will occur within the existing ROW boundaries and represents only minor changes from the original ROD design and project limits reflected in previous reevaluations.

The construction limits will be extended the following approximate amounts on side streets beyond existing limits:

- Ivy St: 35 feet to north
- Leyden St.: 80 feet to north
- Dahlia St: 240 feet to south
- Forest St: 35 feet to south, 20 feet to north
- Glencoe St: 55 feet to south, 20 feet to north
- Grape St: 35 feet to south, 20 feet to north
- Kearney St: 65 feet to south

These changes remain within the roadway and existing transportation infrastructure. No additional impacts are created with this change.

Attachment B compares the ROD footprint with the construction limits that have been modified due to Design Alteration 2.

DESIGN ALTERATION 3:

Between I-25 and Colorado Boulevard, Alternative Technical Concept (ATC) 11.2 has optimized the final design. This ATC reroutes the 48-inch sanitary sewer alignment and eliminates the Sanitary Sewer Bridge shown in the ROD. By doing so, it allows the profile of I-70 mainline (ML) to be raised approximately 4 to 14 feet from west of the Union Pacific Railroad (UPRR) bridge to east of Josephine Street. The invert of the Sanitary Sewer Bridge in the ROD design is ten feet below the bottom of the York Street Bridge and a vertical constraint controlling the I-70 profile. **Attachment C** reflects the design alteration profile. Any air and noise impacts associated with ATC 11.2 were disclosed in Reevaluation #4. There are no changes to report in this reevaluation related to noise and air impacts.

- The ATC 11.2 sanitary sewer alignment remains within ROD construction limits, is north of the Coliseum, and its location will require coordination with the City and County of Denver (CCD). See **Figure 5**.
- The new sanitary sewer line will tie into the non-historic Delgany Interceptor, a separate line east of the historic Delgany Common Interceptor Sewer (5DV4725 / 5DV4725.4).
- ATC 11.2 is anticipated to positively impact the Project by minimizing the environmental concerns associated with handling, disposal, and treatment of groundwater through the construction and operations and maintenance period from below the lowered section of I-70. This change would offset the soil excavation that would be involved with the ATC 11.2 construction activities within Operable Unit 2, a part of the Vasquez Boulevard and I-70 Superfund clean-up site (**Figure 5**). Operable Unit 2 is within the boundaries of the Vasquez and I-70 National Priorities List (NPL) site. The NPL site was listed due to metals contamination associated with historic smelter operations. Operable Unit 2 addresses soils and groundwater contamination at the Omaha and Grant Smelter (see **Figure 4**).
- ATC 11.2 will require the coordination with CCD and coordination and approval from the US Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE)-Air Pollution Control Division (APCD) prior to construction activities within Operable Unit 2 and the Vasquez Boulevard/I-70 Superfund site. This is in accordance with the ROD 1 mitigation measures and commitments.

DESIGN ALTERATION 4:

The I-70 East Phase 1 Interstate Access Request (IAR) proposed design and reconstruction of the interchange includes upgrading the I-70 westbound exit ramp to Quebec Street from its existing configuration as a single lane exit to a proposed two-lane exit with two-lane deceleration. The development of the design details revealed that there are geometry constraints that prevent a two-lane exit ramp from meeting the applicable design standards. Subsequently, a redesigned single-lane exit ramp is being advanced for the reasons detailed below:

Geometry constraints associated with the two-lane exit include the following safety considerations:

- i. **American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets (PGDHS) Guidance on two-lane exit rotation:**
Per 2011 AASHTO PGDHS (Table 3-17b), the minimum length of super runoff to transition a two-lane exit from -2% to -6% full super rotation is 133 feet. In a parallel-type exit configuration, the exit ramp horizontal curve begins on I-70 Westbound. The I-70 Westbound outside through lane would be required to super-rotate with the exit ramp until the gore was reached. There is no known standard practice of super rotating a mainline through lane to match the super-elevation rotation of an adjacent ramp connection. The resulting grade break and super-rotation with the mainline through lane could increase the potential for accidents and drivers leaving the traveled way due to vertical geometry and cross slope not being consistent with driver expectations.
- ii. **Two-Lane Exit with Two-Lane Deceleration:**
Per the CDOT 2005 Roadway Design Guide (Table 10-3), the two-lane deceleration would require 300 feet of horizontal distance from the ramp gore point to the beginning of the exit ramp horizontal curve. In the two-lane exit scenario, the beginning of the curve starts within the I-70 Westbound auxiliary and decision lanes at the ramp gore, resulting in zero feet (0') of two-lane deceleration length prior to the gore. Without this deceleration distance, there is a potential for greater rear end collisions because drivers are expecting to slow down once within the gore since the lane balance with I-70 would provide drivers with the sense of being able to maintain mainline speeds until they exit the gore.
- iii. **Constraints to the Exit Ramp Geometry:**
 - a. Distance between the gore and the curve geometry after the taper deceleration
 - b. Widening of I-70
 - c. Existing I-70 Bridge over Sand Creek
 - d. Projection of the I-70 WB profile from the existing Sand Creek Bridge
 - e. Quebec Street Cross Slope

The proposed modifications to the IAR roadway design plans achieve the following:

- i. **Distance between the gore and the curve geometry after the departure taper:**
With a single lane ramp, a departure taper can be developed off the deceleration lane along I-70 Westbound. The ramp horizontal curve can now begin away from the I-70 Westbound geometry and will split ramp deceleration between the ramp curve and the Mainline auxiliary lane.
- ii. **Super-rotation of ramp:**
The exit ramp super rotation begins at a point where it does not affect the existing I-70 Sand Creek Bridge approach slab and parapet wall. Existing barrier and pavement reconstruction outside the approach slab is still required.
- iii. **Stopping sight distance over the crest curve:**
The 45 MPH stopping sight distance of 360 feet can now be fully developed, providing drivers exiting from I-70 a safety benefit by being able to see vehicles queued at the ramp terminal signalized intersection.
- iv. **Signalized intersection storage bay length:**
Enough storage bay length (see **Table 1**) can be provided for the left, left/thru, and thru lanes for the signalized intersection to have nominal operational capacity until 2035. After year 2035, the queue length begins to extend to a point where it could impact the traffic attempting to execute thru and right turn movements at the intersection. These impacts could result in the vehicle queues backing up into the single lane ramp portion of the exit and beyond the gore of the exit ramp.

Table 1: Storage Bay Length

Year	Left and Left/Thru 95 th % Q (Linear Feet)	Thru 95 th % Q (Linear Feet)	Storage provided left (Linear Feet)
2021	262	220	335
2035	347	290	335

Synchro analysis of the Quebec Westbound Exit/Entrance ramp & Quebec Street signalized intersection

No additional impacts are created with this change. **Attachment D** reflects the proposed IAR design modifications.

REGULATORY CHANGES: *Document changes to laws, regulations, and/or guidelines:*

There have been no changes to laws, regulations, and/or guidelines since the completion of the ROD.

IMPACTS ASSESSMENT: For items checked as changed above, assess the affected natural and socio-economic environment, impacts, and new issues/concerns which may now exist.

Changes in impacts from minor design modifications affects social and economic conditions, land use and zoning, historic preservation, parks and recreation resources, biological resources, wetlands and other waters of the U.S., hazardous materials, and Section 4(f) resources. The remaining resources are not affected by these minor design modifications, and have relevant mitigation that is required for environmental impacts identified in the FEIS and ROD.

Social and Economic Conditions

Design Alteration #1 requires approximately 0.1 acre of construction limit expansion onto the Best Inn & Suites property to tie in fill slopes to existing grades and tie in or extend drainage structures. As a result of this expansion, construction may conflict with the Best Inn & Suites sign (see **Figure 3** in the Land Use and Zoning discussion), and relocation or replacement of the sign may be required. Replacement or relocation of the sign will be dependent on right of way appraisal. Consistent with ROD Mitigation Commitment #5, the property owner will be compensated according to the U.S. Constitution and the Uniform Act of 1970, as amended.

Land Use and Zoning

As shown in **Table 2**, advanced design has resulted in an increase in ROW and permanent easement acquisition of approximately 0.1 acres from one parcel—4595 Quebec Street. This increase in ROW and easement acquisition results in a small conversion of existing commercial use into a transportation use. The acquisition on 4595 Quebec Street (Best Inn & Suites) is required to accommodate sidewalk and adjacent wall construction and maintenance limits based on refined Quebec Street Roadway geometry, as well as new inlets, manholes, and extension of existing storm drain pipes. The overall function of the property would remain unchanged. In addition, the ROD had previously proposed approximately 0.3 acre of ROW acquisition on a portion of Denver Rock Island property (4600 Niagara Street). Design Alteration #1 would increase ROW and easement acquisition on the Denver Rock Island property by approximately 0.01 acre on a vacant portion of the property. None of these changes affect zoning within the area, and the project would remain consistent with local and regional plans. **Figure 3**, below, reflects the changes at Best Inn & Suites and Denver Rock Island property. Expansion of the construction limits on 8801 E 39th Avenue, as shown in **Attachment A**, would occur within an existing CDOT drainage easement; therefore, no additional acquisition is proposed and existing uses would be maintained.

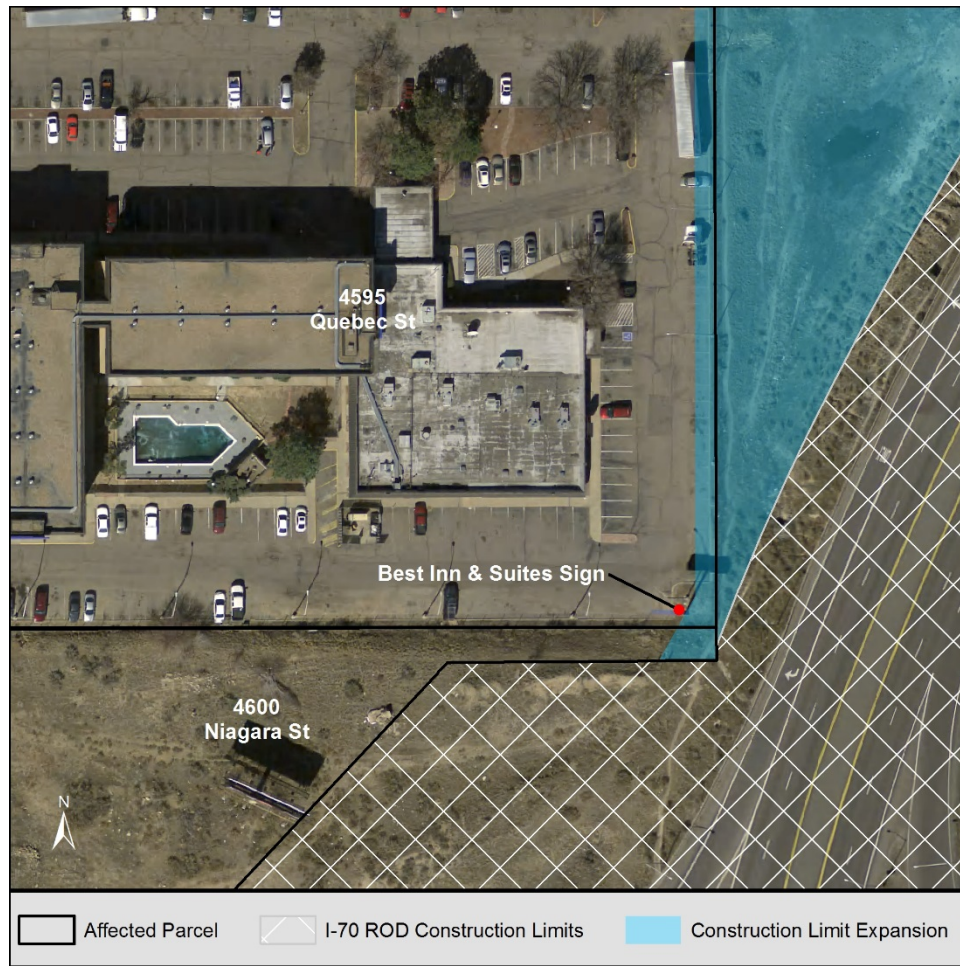
Table 2: Changes to Land Use Impacts (Design Alteration #1)

	Land Use Category						Total Acres
	Commercial	Government/ Institutional	Industrial	Parks/ Open Space	Residential	Vacant	
ROD Impacts ¹	30.1	1.1	28.0	1.1	7.4	0.1	67.7
Impacts Through Reevaluation #4	30.1	1.1	27.6	1.1	7.4	0.1	67.3 ²
Reevaluation #5 Impacts	30.2	1.1	27.6	1.1	7.4	0.1	67.4 ²
Impact Change (Reevaluation #4 to Reevaluation #5)	+0.1	0	0	0	0	0	+0.1

¹ Total reflects Preferred Alternative Impact disclosed in ROD

² Total acres may appear inconsistent due to rounding for square foot to acre conversion.

Figure 3: Best Inn & Suites (4595 Quebec St) and Denver Rock Island (4600 Niagara) Impacts



Historic Preservation

Changes to the Preferred Alternative, Phase 1, slightly expanded the construction limits between Colorado Boulevard and I-225 beyond the previous Area of Potential Effect (APE). The APE was modified to adequately capture these changes (see **Attachment E**). A property is evaluated for historical significance if it meets or exceeds the 50-year age threshold determined by the National Register of Historic Places (NRHP). For the purpose of Section 106 consultation related to this re-evaluation, properties that may reach 50 years of age during the construction activities anticipated for the Central 70 Project are evaluated as potentially historic properties. Therefore, properties containing built environment resources constructed in 1972 or earlier are considered as potentially historic properties for the purposes of this evaluation. **Table 3** summarizes the properties that are newly affected by the design and APE modifications. These parcels either do not contain structures or do not contain structures constructed in or prior to 1972. **Table 4** summarizes previously inventoried properties that are affected by the design and/or APE modifications. Note that the APE was modified at one parcel, 6405 E Stapleton Drive South (5DV11723), to adequately capture the entire surveyed parcel boundary; however, the construction limits were not expanded into the parcel.

With the exception of Sites 5AM2083.1 and 5DV10050, the properties in Tables 2 and 3 are *officially not eligible* or do not meet the age threshold for evaluation for NRHP eligibility.

Design Alteration #1 requires work within the historic resource boundary affecting approximately 1.2 acres of the southern extent of the Union Pacific Beltline Railroad property, commonly known as Denver Rock Island Railroad, located south of I-70 (see **Attachment E**). As CDOT owns the property, an easement is not required to accommodate the work within the historic resource boundary. Work within the resource boundary will be temporary and provide for temporary staging of equipment and materials. While the proposed staging area is located within the historic resource boundary of the railroad, this location currently consists of a graded parking area and does not contain any visible rail bed or grade. No rails, ballasts, or ties still exist in this area. In addition, a small portion of roadway reconstruction, totaling approximately 783 square feet, would also encroach further within the historic site boundary for purposes of

roadway striping (see **Attachment E**). However, this work would be located entirely on the existing grade and paved surface of Quebec Street, a portion of which runs concurrent with the historic resource boundary. Neither of these features would introduce new permanent setting features and would not impact the character-defining features of the property.

For these reasons, the design modifications would not further impact integrity of the setting as previously consulted upon. The integrity of design and association would remain and the proposed work would not impact the ability of the railroad to convey significance under Criterion A. Therefore, the finding of *no adverse effect* for 5AM2083 does not change for the undertaking. The SHPO concurred 10/31/2018.

Design Alteration #3 would realign a sanitary sewer pipe under the northern section of the Denver Coliseum parking lot (see **Attachment E**). This would tie into the non-historic Delgany Interceptor (constructed in 1979) which is a separate line east of the historic Delgany Common Interceptor Sewer (5DV4725 / 5DV4725.4). The new sanitary sewer alignment remains within the construction limits described in the ROD, will be installed beneath the Coliseum parking lot within the National Western Historic District (5DV10050).

Impacts to the Coliseum parking lot will be temporary construction impacts, including trenching approximately 750 feet through the parking lot to install the pipe approximately 15 feet below grade. The parking lot pavement is not original and has been re-paved as needed throughout the years. The area will be re-surfaced and returned to its existing condition. There will be no impact to the Denver Coliseum itself (5DV96162/5DV9282). The parking lot is a non-contributing element of the National Western Historic District, and the impact will not directly alter the appearance or character-defining features that qualify the property for inclusion in the National Register of Historic Places. There are no changes to the *no adverse effect* determination or 5DV10050 and the SHPO concurred 10/31/2018. There were no changes of impacts and effects to 5DV96162/5DV9282.

As part of Design Alteration #3, the new alignment of the sanitary sewer pipe will also intersect the boundary of the Union Pacific Railroad (5DV6248.2) (see **Attachment E**). This segment is considered *supporting* of the overall eligibility of the linear resource. No design modifications are indicated at this location to accommodate installation of the sanitary sewer line. The sanitary sewer will be installed within a roadway cut associated with 46th Avenue that will accommodate a new underpass carrying the railroad over 46th Avenue and I-70. This work, resulting in an *adverse effect*, was reflected the ROD, and no additional trenching or other impacts will be required to install the sanitary sewer line under the subject segment of the Union Pacific Railroad. The alteration was disclosed to the State Historic Preservation Office (SHPO) and the determination will continue to be an *adverse effect*.

The SHPO and other consulting parties were notified of the changes to the APE, identification of eligible properties and changes to the effects to the historic properties in a letter dated October 12, 2018. The SHPO concurred with the findings of eligibility and effects on October 31, 2018 (see **Attachment E**).

Table 3: Newly Identified Properties for Reevaluation #5

Design Alteration #	Location	Construction Date	Site Number (if applicable)	Eligibility Determination (if applicable)
1	4595 Quebec Street	1974	N/A	Insufficient age to evaluate for eligibility (built after 1972)
1	8801 E 39 th Ave	No structure (vacant lot)	N/A	N/A

Table 4: Previously Identified Properties Affected by APE and/or Design Modifications for Reevaluation #5 (Design Alterations 1–3)

Design Alteration #	Location	Construction Date	Site Number (if applicable)	Eligibility Determination (original determination / most recent re-visitation)
1	Union Pacific Beltline Railroad Segment (Denver Rock Island Railroad)	1951	5AM2083.1	Supports Eligibility of Entire Resource (7/18/07) / (6/2/15)
2	Murray and Stafford Property (6405 E Stapleton Dr S)	1967	5DV11723	Officially Not Eligible (5/22/15) / (5/31/18)
3	National Western Historic District / Denver Coliseum parking lot	1951 (Coliseum)	5DV10050 (National Western Historic District)	Officially Eligible (12/10/07) / (6/2/2017)

Hazardous Materials

Design Alterations #1 and #2 expand the project construction limits by approximately 22 additional acres, which consists of varying levels of construction activity. Of the 22 additional acres, approximately 21 acres are associated with Design Alteration #1 and nearly one acre is associated with Design Alteration #2. Between Quebec Street and I-225, Design Alteration #1 would require up to 6 acres of additional excavation and/or fill, including construction activity associated with the Sand Creek Greenway Trail; the remaining 15 acres are associated with signing, striping, construction staging, and equipment movement. A minor amount of increased excavation and fill (approximately 0.01 acre) would occur on the Denver Rock Island property (4600 Niagara Street) where the site is used for material stockpiling and the parcel itself is associated with railroad operations. While the property type may contain hazardous materials associated with standard railroad operations, the small portion of additional encroachment onto the property is in a vacant section consistent with the operational ROW of the adjacent I-70 on-ramp/Quebec Street (see **Figure 3** above). No new hazardous materials concerns are located in this area. Design Alteration #2 is associated with striping and existing infrastructure tie-ins and does not have the potential for increased encounters with hazardous materials.

Table 5 summarizes the changes to the disturbance limits and figures in **Attachments A and B** provide further detail.

With regard to Design Alteration #3, the sanitary sewer realignment crosses into Operable Unit 2 (OU2) of the Vasquez and I-70 National Priority List (NPL) site (see **Figure 4 and Figure 5**), creating approximately 500 linear feet of excavation approximately 15 feet deep in OU2. OU2 addresses soils and groundwater contamination within approximately 50 acres of the original Omaha and Grant Smelter. The alignment also crosses into a Solid Waste Landfill within OU2 (see **Figure 5**). By raising the profile of I-70, impacts with excessive excavation and contaminated groundwater are avoided in the lowered section of I-70. The raising of I-70 also eliminates the need to treat the contaminated groundwater during the operations and maintenance phase of the project. The reduced excavation in potentially contaminated soils and groundwater treatment throughout the life of the lowered section more than offsets the impacts of the sanitary sewer line through the OU2 area and the Solid Waste Landfill within the OU2 boundary. The landfill include embankment fills, artificial fill and domestic refuse, with no hazardous or industrial waste reported. Overall, there has been a net reduction in impacts to solid waste landfill sites--from the seven identified as impacted within the study area in the ROD and previous revaluations, to six with the elimination of the north offsite outfall (as disclosed in Reevaluation #4).

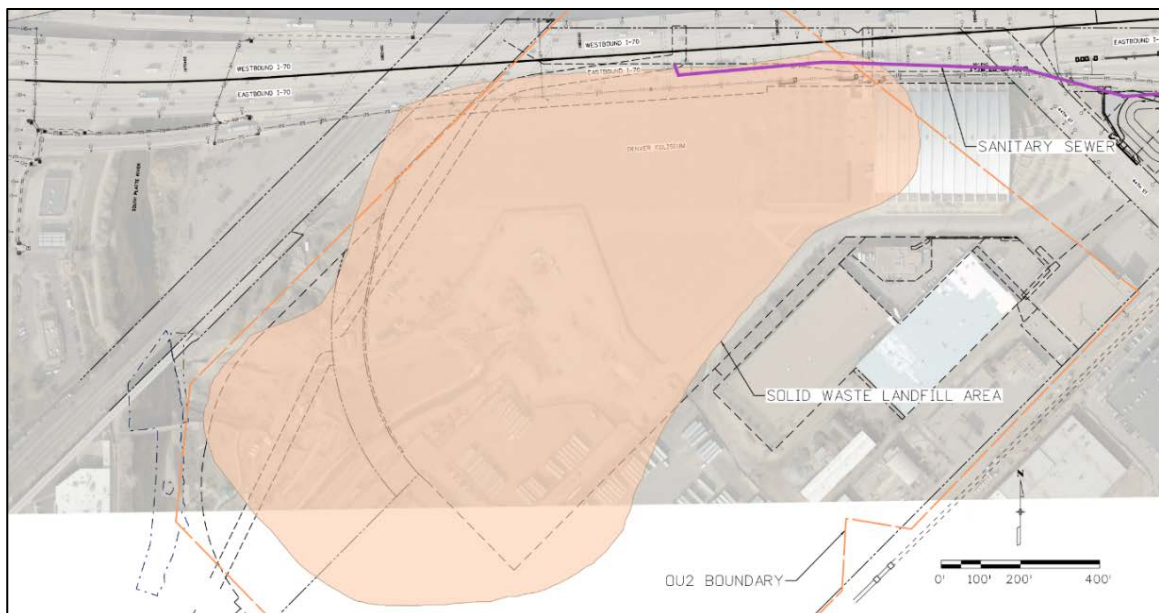
The contractor will coordinate with CCD, US Environmental Protection Agency (EPA) and the CDPHE prior to construction activities, including construction activities associated with Design Alteration #3 (i.e., ATC 11.2), within OU-2 of the Vasquez Boulevard/I-70 Superfund site. This is in accordance with the ROD 1 mitigation measures and with commitments aimed at safeguarding worker and public health and safety that include Project Special Provision Revision to Section 250- Environmental Health & Safety Management, and the preparation of a project specific Health & Safety Plan and a Materials Management Plan. Mitigation will include preparation of a Work Plan, management of waste material, management of contaminated groundwater, preparation of a Sampling and Analysis Plan, preparation of a Materials Management Plan, documenting waste manifests, preparation of a Health and Safety Plan, a Data Sharing

Agreement, preparation of a Completion Report, protection of existing monitoring wells, coordination with EPA on notification of the Community Advisory Group, coordination with EPA if air monitoring will be required, and provide project access for DDPHE employees, per June 7, 2018 correspondence.

Figure 4: NPL and Operable Unit Boundaries



Figure 5: Sanitary Sewer Alignment within OU2 and Solid Waste Landfill



While there are hazardous material facilities within the area, no additional hazardous material facilities of concern identified in the Environmental Records Search database obtained for the FEIS will be impacted because of the modifications. Design Alteration #1 has the only construction activity that would have a measureable increase in excavation and/or fill that increases the potential to encounter hazardous materials because the likelihood of encountering hazardous materials is proportional to the amount of ground disturbance. However, the design modifications are consistent with the hazardous materials evaluation conducted in the ROD and would not increase disturbance on identified hazardous materials sites.

Table 5: Updated Hazardous Materials Sites Affected and Acres Disturbed

	ROD Impacts	Impacts through Reevaluation #4	Reevaluation #5 Impacts
Number of sites affected	34	33	33
Acres disturbed	750	771	777

Parks and Recreation Resources

Sand Creek Greenway Trail is located within the Quebec/I-270 Interchange ROW. Design Alteration #1 includes diverging the sidewalk along Quebec Street approximately 205 linear feet to the north to tie into the Sand Creek Greenway Trail rather than keeping the sidewalk adjacent to Quebec Street and terminating at the Quebec Street bridge over Sand Creek as originally proposed (see **Attachment G**). In addition, to improve drainage at the sidewalk tie-in location, the grade of the trail would be raised 2–3 feet and drainage pipes installed underneath the trail. This would require reconstruction of approximately 200 feet of the trail on its existing alignment. In accordance with the ROD mitigation commitments (Mitigation Commitments #53 and #54), a trail detour and ADA-compliant trail signage will be provided during construction and the trail will be returned to comparable pre-construction conditions. Trail users will also be provided adequate notice prior to construction at the trail (ROD Mitigation Commitment #50). Therefore, trail continuity and use will be maintained throughout construction, and long-term use of the trail will be continued and improved as a result of increased connectivity.

Biological Resources

Due to the expanded construction limits associated with Design Alteration #1, additional permanent and temporary disturbance to available habitat associated with Sand Creek would occur. Changes to impacts would specifically occur to riparian habitat associated with a stormwater detention pond and within the overall habitat range for white-tailed deer. **Table 6** summarizes the changes in impact to riparian habitat, and **Attachment F** includes figures reflecting these changes. With regard to projected direct impacts to white-tailed deer overall range, Design Alteration #1 would result in an increase of approximately 20.2 acres of direct impacts as compared to the ROD; however, only approximately 6 acres, when including the small Sand Creek Greenway Trail reconstruction, are related to permanent fill or excavation and the remainder are either temporary construction-related impacts or are minor striping or infrastructure tie-ins. Based on the urban nature of the project area, these impacts are consistent with the impacts disclosed in the ROD which characterized these impacts as minor to negligible. Per ROD Mitigation Commitment #92, riparian trees would be replaced at a 1:1 ratio and riparian shrubs at a 1:1 square-foot ratio.

Table 6: Changes to Impacts at Riparian 279-01

	ROD Impacts (acres)	Reevaluation #4 Impacts (acres)	Reevaluation #5 Impacts (acres)
Permanent	0.566	0.563	1.190
Temporary	0.074	0.072	0.000

With regards to threatened and endangered species, the design alterations would not impact the South Platte River, Sand Creek, or riparian and wetland areas associated with these waterbodies. Riparian 279-01 is associated with a stormwater basin and, as described in the Biological Assessment prepared for the project no Ute-ladies' tresses or Colorado butterfly plants were identified in plant surveys performed in August of 2018. Based on the poor quality of the

habitat, no sightings during the plant surveys and regular flooding at this site, there will be no impact to these species. Correspondence to the USFWS is included in Attachment H.

Wetlands and Other Waters of the U.S.

In the vicinity of the Quebec interchange, portions of Design Alteration #1 extend beyond the area previously surveyed for the presence of wetlands or other potential waters of the U.S. In April 2018, WSP environmental scientists conducted a field verification of these areas to determine the presence or absence of wetlands or other potential waters of the U.S. Following field verification, it was confirmed that no additional wetlands or other potential waters of the U.S. are located in the expanded construction limits.

Between Sand Creek and I-270, there are currently two storm drain pipes from I-70 that outfall into a stormwater basin identified as non-jurisdictional Wetland 279-03. There is a third storm drain pipe originating from a detention pond east of I-270 which outfalls to a shallow ditch north of the stormwater basin. As part of Design Alteration #1, the proposed project will combine the two existing storm drain outfalls from I-70 with the outfall from the detention pond east of I-270. This will be completed by (1) removing the two pipes associated with I-70 drainage; (2) installing a new pipe beneath I-70; (3) tying in the storm drain pipe from the detention pond; and (4) relocating the new, combined outfall to the east end of Wetland 279-03 and Open Water 279-01. This would maintain existing drainage from the detention pond, continue to accommodate highway drainage, and continue to provide hydrology for the wetland. Due to construction of the combined outfall, permanent impacts to this wetland will be slightly greater while temporary impacts will decrease slightly, and temporary impacts to the open water will slightly increase (see **Table 7** below and detailed impact figure in **Attachment F**). In addition, relocation of a storm drain outfall would permanently impact Wetland 278-13, located east of Quebec Street (see **Figure 6**). This wetland is a non-jurisdictional stormwater basin and the existing culvert functions as the source of hydrology for the wetland. While the basin would still receive minimal amounts of sheetflow from the roadway, it is anticipated that relocation of the outfall would eliminate the wetland over time due to lack of a consistent water source (see **Table 7**).

Figure 6: Wetland 278-13



Table 7: Changes to Wetlands and Other Waters Impacts

Delineation Feature	ROD Impacts (acres)		Reevaluation #5 Impacts (acres)		Difference (acres)	
	Perm	Temp	Perm	Temp	Perm	Temp
Wet279-03	0.003	0.006	0.006	0.002	+0.003	-0.004
Wet278-13	0.000	< 0.001	0.068	0.000	+0.068	- < 0.001
OW279-01	0.000	0.000	0.000	0.001	-	+0.001

In accordance with ROD Mitigation Commitment #103, unavoidable permanent wetland impacts will be mitigated at a 1:1 ratio in a wetland mitigation bank in the South Platte River watershed. Temporary impacts to wetlands will be restored to preconstruction conditions (ROD Mitigation Commitment #106).

Section 4(f)

The finding of *no adverse effect* under Section 106 for the Union Pacific Beltline Railroad (5AM2083.1) and the National Western Historic District and Denver Coliseum (5DV10050) maintains the Section 4(f) *de minimis* impact findings for the properties. This finding concludes the effects would not “alter, directly or indirectly, any of the characteristics of [the] historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” as described in 36 CFR § 800.5(a)(1). SHPO concurrence with the finding of *no adverse effect* on October 31, 2018 and FHWA’s intent to continue with the *de minimis* impact finding (see **Attachment E**).

As previously discussed, the Sand Creek Greenway Trail is located at the Quebec/I-270 Interchange and Design Alteration #1 includes a 205-foot sidewalk extension to tie into the trail system and reconstruction of approximately 200 feet of the existing trail in order to raise the grade and install drainage pipes (see **Attachment G**). Within the project area, the Sand Creek Greenway Trail is located entirely within CDOT right-of-way. In order to maintain continuity of the trail during construction, a trail detour will be provided within CDOT right-of-way at this location.

The impacts to the Sand Creek Trail are an exception to Section 4(f) under 23 CFR 774.13(f)(3) “trails, paths, bikeways, and sidewalks that occupy a transportation facility right of way without limitation to any specific location within that right of way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained”. Because the trail is located within CDOT right-of-way, and the continuity of the trail would be maintained throughout construction, the impacts to the Sand Creek Greenway Trail are excepted from the requirements for Section 4(f) approval in this location. Please refer to the Section 4(f) Trails, Paths, Bikeways, and Sidewalks Exception form located in **Attachment G**.

Right of Way and Permanent Easements

As discussed in Land Use and Zoning, advanced design has resulted in an increase in ROW and permanent easement acquisition of approximately 0.1 acres from one parcel—4595 Quebec Street. The acquisition on 4595 Quebec Street (Best Inn & Suites) is required to accommodate sidewalk and adjacent wall construction and maintenance limits based on refined Quebec Street Roadway geometry, as well as new inlets, manholes, and extension of existing storm drain pipes. In addition, the ROD had previously proposed approximately 0.3 acre of ROW acquisition on a portion of Denver Rock Island property (4600 Niagara Street). Design Alteration #1 would increase ROW and easement acquisition on the Denver Rock Island property by approximately 0.01 acre on a vacant portion of the property. Consistent with ROD Mitigation Commitment #5, the property owner will be compensated according to the U.S. Constitution and the Uniform Act of 1970, as amended.

MITIGATION:

- All mitigation commitment(s) from NEPA document remain the same (discuss status and compliance):
- Mitigation commitment(s) have changed from NEPA document.

Mitigation measures remain the same as documented in the ROD for all resources.

V. Public/Agency Involvement (optional)

If any, document public meetings, notices, and websites, and/or document agency coordination. For each, provide dates and coordination, where applicable:

There were no public meetings during the completion of this Reevaluation.

Section 106 consultation with SHPO and the consulting parties occurred and copies of the consultation materials are available in **Attachment E**, Section 106 Consultation.

VI. Additional Studies Required for Proposed Action

None

VII. Additional Requirements for Proposed Action

- An SEIS is required, because the changes to the proposed action will result in significant impacts not evaluated in the EIS.
- An SEIS is required, because new information or circumstances will result in significant environmental impacts not evaluated in the EIS.
- A revised ROD is required, because an alternative is recommended that was fully evaluated in an approved FEIS but was not identified as the preferred alternative.
- Appropriate environmental study or an EA is required, because the significance of new impacts is uncertain.
- A revised FONSI is required, because an alternative is recommended that was fully evaluated in an approved EA but was not identified as the preferred alternative.
- Other _____
- None

VIII. Permits Updated (optional)

This section is only required when the next stage of a project is going to construction. List permits:

IX. Attachments Listed

List permits, studies, background data, etc.

Attachment A: Design Alteration 1 Construction Limit Modifications

Attachment B: Design Alteration 2 Construction Limit Modifications

Attachment C: Design Alteration 3 Highway Profile Change

Attachment D: Design Alteration 4 Westbound Off-Ramp at Quebec

Attachment E: Section 106 Consultation

Attachment F: Wetland/Waters and Biological Resource Impacts

Attachment G: Section 4(f) Documentation

Attachment H: ULTO and CBP Survey Results and correspondence with USFWS