

APPENDIX A9

SECTION 4(F) EVALUATION

I-70 WEST VAIL PASS AUXILIARY LANES

DRAFT Section 4(f) Evaluation

Submitted to:

Colorado Department of Transportation, Region 3

Submitted by:

David Evans and Associates, Inc.

1600 Broadway, Suite 800 Denver, CO 80202

and

Mead & Hunt

1743 Wazee St. Denver, CO 80202

September 2020

This page intentionally left blank.



CONTENTS

Contents	
Tables	i
Figures	i
Appendices	i
List of Acronyms and Abbreviations	ii
Introduction and Background	1
I-70 Final PEIS Section 4(f) Analysis	1
Legislation	3
Purpose and Need	4
Proposed Action Alternative	5
Description Recreational Properties and Use	7
Bighorn Creek Trail	10
Bighorn Park	10
Black Lakes Number 1 and 2	10
Bighorn Corral Creek Trail	10
Deluge Lake Trail	11
Gore Creek Campground	11
Gore Creek Fishing Access	11
Gore Creek Trail	11
Gore Valley Trail	11
Katsos Ranch Open Space	12
Vail Memorial Park	12
Pitkin Creek Trail	12
Shrine Pass Road	12
Two Elk Trail	12
Vail Pass Recreation Trail	13
Vail Pass Rest Area	14
Vail Pass Racquet Club	15
Vail Pass Winter Recreation Area	15
Wilder Gulch Trail	15
Description of Section 4(f) Historic Properties and Use	15
Old US Highway 6 (5EA.2587.9)	18



Interstate 70 Segment, Vail Pass Linear Historic District (5EA.1826.4/5ST.892.5)	20
Bradley Residence, 4396 Columbine Drive (5EA.3607)	25
Alternatives	26
Avoidance Alternatives	26
Least Overall Harm Analysis	27
Summary of Use to Section 4(f) Properties	27
Recreation	27
Historic	28
All Possible Planning to Minimize Harm	28
Minimization to Recreation Resources	28
Minimization Specific to Historic Resources	30
Coordination	35
References	37
Appendix A	39
TABLES	
Table 1. Recreation Resources	
Table 2. Existing Bridges	
France	
FIGURES	
Figure 1. Project Location and Study Area	
Figure 2. I-70 West Vail Pass Auxiliary Lanes Proposed Action Alternative	
Figure 3. Parks and Recreation Resources	
Figure 4. Parks and Recreation Resources	
Figure 5. Vail Pass Recreation Trail Relocation Location	
Figure 6. Section 4(f) Historic Resources	
Figure 7. Section 4(f) Historic Resources, continued	
Figure 8. Bridge Types and Locations	32

APPENDICES

Appendix A: West Vail Pass Auxiliary Lanes Conceptual Plans

Appendix B: Draft Supplement to the I-70 Mountain Corridor Programmatic Agreement



LIST OF ACRONYMS AND ABBREVIATIONS

ACHP Advisory Council on Historic Preservation

AGS Advance Guideway System

APE Area of Potential Effect

CDOH Colorado Department of Highways

CDOT Colorado Department of Transportation

CSS Context Sensitive Solutions

EB eastbound

EIS Environmental Impact Statement
FHWA Federal Highway Administration
FTA Federal Transit Administration

ITF Issue Task Force

ITS Intelligent Transportation System

MP mile post

NEPA National Environmental Policy Act

OAHP Office of Archaeology and Historic Preservation

PA Programmatic Agreement

PEIS Programmatic Final Environmental Impact Statement

SHPO State Historic Preservation Officer

USDOT United States Department of Transportation

USC United States Code

VMSs variable message signs

WB westbound

This page intentionally left blank.



INTRODUCTION AND BACKGROUND

The I-70 West Vail Pass Auxiliary Lanes project is located in Eagle and Summit Counties, with the eastern termini just east of the Vail Pass Rest Area and the western termini in the Town of Vail. The project study limits include eastbound (EB) and westbound (WB) I-70 from mile post (MP) 179.5 to MP 191.5. The project location and approximate study area are shown in **Figure 1**.

As part of the intial National Environmental Policy Act (NEPA) analysis, a Tier 1 Environmental Impact Statement (EIS) for the I-70 Mountain Corridor (C-470 to Glenwood Springs) was completed in 2011. This EIS, the *I-70 Mountain Corridor Programmatic Final Environmental Impact Statement* (PEIS), recommended the addition of auxiliary lanes EB and WB on the west side of Vail Pass from MP 180-190 as part of the minimum program. A follow-up Advance Guideway System (AGS) Feasibility Study in 2014 analyzed potential alignments and costs for an AGS system and determined there were three feasible alignments for future AGS. While AGS is not part of the West Vail Pass Auxiliary Lanes project, the AGS Feasibility Study was used to ensure the project did not preclude the favored alignment of the three, which would be partially within CDOT right-of-way (ROW).

A Tier 2 NEPA analysis is the next step required to move highway improvements forward. The project is following the Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) NEPA process to confirm the needs for improvements to the West Vail Pass, identify a Proposed Action, investigate the anticipated benefits and impacts of the proposed improvements (through an Environmental Assessment), produce conceptual design plans, and make funding, scheduling, and phasing recommendations.

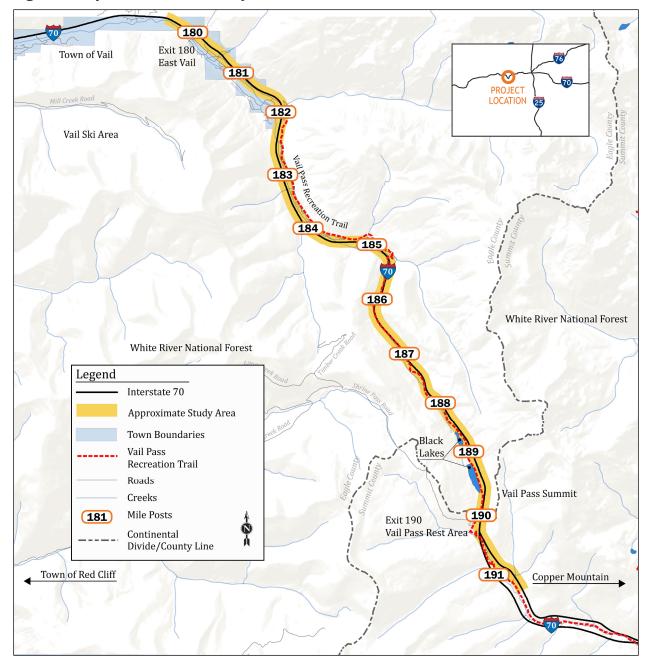
This report describes all Section 4(f) properties (properties) within the Project area, potential impacts to those properties, avoidance alternatives, and efforts to minimize harm to the properties.

I-70 FINAL PEIS SECTION 4(F) ANALYSIS

The I-70 Mountain Corridor PEIS identified potential Section 4(f) uses based on utilizing Geographic Information Systems to overlay the alternatives, including a 30-foot buffer, with Section 4(f) property boundaries. The type of impacts (e.g. temporary, *de minimis*) were not determined and FHWA did not approve any use of a Section 4(f) property as part of the PEIS. The PEIS Section 4(f) Technical Memorandum identified 10 potentially impacted Section 4(f) properties on West Vail Pass. The PEIS committed to the following steps, as applicable, for future Tier 2 NEPA analyses:

- Step 1: Conduct continued coordination with the Officials with Jurisdiction.
- Step 2: Identify properties.
- Step 3: Collect information needed to determine detailed use by alternative.
- Step 4: Conduct Section 4(f) evaluations to determine if a prudent and feasible alternative exists that avoids the Section 4(f) properties.
- Step 5: Identification of all possible planning to minimize harm.
- Step 6: Development of least harm analysis

Figure 1. Project Location and Study Area



Source: DEA Project Team



LEGISLATION

Section 4(f) of the US Department of Transportation (DOT) Act of 1966

Section 4(f) was created when the United States Department of Transportation (USDOT) was formed in 1966. It is codified in Title 49 United States Code (U.S.C.) Section 303 and Title 23 U.S.C. Section 138, and in the implementing regulations 23 Code of Federal Regulations (CFR) 774 and is simply referred to as "Section 4(f)". It states:

"The Secretary shall not approve any program or project (other than any project for a Federal lands transportation facility) which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use."

A Section 4(f) "use" occurs when:

- 1. Land from a Section 4(f) property is permanently incorporated into a transportation facility; land will be considered permanently incorporated into a transportation project when it has been purchased as right-of-way or sufficient property interests have been otherwise acquired for the purpose of project implementation; or
- 2. There is a temporary occupancy of land that is adverse in terms of the Section 4(f) statute's preservation purposes. Under the FHWA/Federal Transit Administration regulations, a temporary occupancy of property does not constitute a use of a Section 4(f) property when the following conditions are satisfied:
 - The occupancy must be of temporary duration (i.e., shorter than the period of construction) and not involve a change in ownership of the property.
 - The scope of work must be minor, with only minimal changes to the protected resource.
 - There are no permanent adverse physical effects to the protected resource, nor will there be temporary or permanent interference with activities, features, or attributes of the property.
 - The land being used must be fully restored to a condition that is at least as good as that which existed prior to the proposed project.
 - There must be documented agreement of the officials with jurisdiction over the Section 4(f) resource regarding the above conditions; or
- 3. There is no permanent incorporation of land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features or attributes that qualify the property for protection are substantially impaired. This is called a constructive use of the property.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). Section 4(f) applies only to the actions of agencies within the USDOT. The USDOT is responsible for applicability determinations, evaluations, findings, and overall compliance.

Exceptions. The FHWA has identified various exceptions to the requirement for Section 4(f) approval. These exceptions include the use of historic transportation facilities, including the maintenance, preservation, rehabilitation, operation, modernization, reconstruction, or replacement of historic transportation facilities, if the Administration concludes, as a result of the consultation under 36 CFR 800.5, that such work will not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register; and the official(s) with jurisdiction over the Section 4(f) resource have not objected to the FHWA conclusion that the proposed work does not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register (23 CFR 774.13(a)(3).) FHWA is applying the use of this exception to the Old US Highway 6 alignment (5EA2587), as discussed later in this evaluation.

PURPOSE AND NEED

The purpose of the project is to improve safety and operations on EB and WB I-70 on West Vail Pass.

This project is needed to address safety concerns and operational issues due to geometric conditions (steep grades and tight curves) and slow-moving vehicle and passenger vehicle interactions that result in inconsistent and slow travel times along the corridor. The I-70 Mountain Corridor PEIS identified safety and mobility issues on West Vail Pass related to speed differentials due to slow-moving vehicles. (Mobility is defined as the ability to travel along the I-70 Mountain Corridor safely and efficiently in a reasonable amount of time.)

- Safety Concerns: A high number of crashes occur along the corridor related to speed, tight curves, narrow roadway area, and inclement weather/poor road conditions. Speed differentials between passenger vehicles and slow-moving vehicles cause erratic lane changes and braking maneuvers resulting in crashes and spin outs. Emergency response is hampered by vehicular speeds and lack of roadway width to provide room for emergency vehicles to pass.
- Operational Issues: The steep grades and resulting speed differentials causes slow and
 unreliable travel times through the corridor. Tight curves also cause drivers to slow down.
 The corridor is frequently closed by vehicle incidents, due to lack of width to maintain a single
 lane of traffic adjacent to emergency responders, resulting in substantial traffic backups and
 delays. During winter months, the travel lanes and shoulders are severely impacted by snow
 accumulation, impacting the overall capacity of the corridor. (Operations is intended to
 describe the flow of traffic at desirable speeds given the geometric and prevailing weather
 conditions.)



PROPOSED ACTION ALTERNATIVE

The Proposed Action (**Figure 2**) will add a 12-foot auxiliary lane, both EB and WB, for 10 miles from approximately the East Vail exit (MP 180) to the Vail Pass Rest Area exit (MP 190). Existing lanes will be maintained at 12 feet and the shoulders would be widened to a minimum of 6 feet for inside shoulders and maintained at 10 feet for outside shoulders. All existing curves will be modified as needed to meet current federal design standards.

Intelligent Transportation System (ITS) equipment will also be installed along the I-70 project corridor, consistent with recent study recommendations. Additional variable message signs (VMSs) will be installed at key locations to warn drivers of upcoming curves, grades, and incidents. Additional variable speed limit signs will be installed to manage driver speeds to conditions. Automated lane closure signage will be installed approaching the East Vail exit on EB I-70 and approaching the WB I-70 Vail Pass Rest Area exit to quickly and efficiently close lanes when needed.

Additional elements of the Proposed Action include:

- The Vail Pass Recreation Trail will be directly impacted by the addition of the I-70 auxiliary lane and therefore relocated for approximately two miles from MP 185 to MP 187.
- Existing runaway truck ramps, located at approximately MP 182.2 and 185.5, will be upgraded to current design standards.
- Six wildlife underpasses and wildlife fencing will be constructed throughout the corridor.
- Additional capacity will be added to the existing commercial truck parking area at the top of Vail Pass.
- Widened shoulders (minimum of eight feet of additional width beyond the 10' shoulder) at multiple locations to accommodate emergency pull-offs, emergency truck parking, and staging for tow trucks.
- Improved median emergency turnaround locations to accommodate emergency and maintenance vehicle turnaround maneuvers.
- Improved chain station located at approximately MP 182.5 with additional parking, signage, lighting, and separation from the I-70 mainline.
- Avalanche protection located at approximately MP 186.

Proposed Action Cross-Section Exit 180 Town of Vail 12' Auxiliary Lane 12'Lane 12'Lane East Vail Inside Outside Shoulder Width Shoulder Width Mill Creek Road Vail Ski Area All horizontal curves will meet Vall Pass Recognition Trail federal standards White River National Forest Legend White River National Forest Interstate 70 Town Boundaries **Existing Vail Pass** Recreation Trail Relocated Vail Pass Recreation Trail Approximate Location 0 of Wildlife Underpasses Black Improved Chain Station Improved Truck Ramps Roads Truck Parking Area Vail Pass Summit Creeks Mile Posts (188) Exit 190 Proposed Lane Vail Pass Rest Area Continental Closure VMS Divide/County Line Town of Red Cliff Copper Mountain

Figure 2. I-70 West Vail Pass Auxiliary Lanes Proposed Action Alternative

Source: DEA Project Team



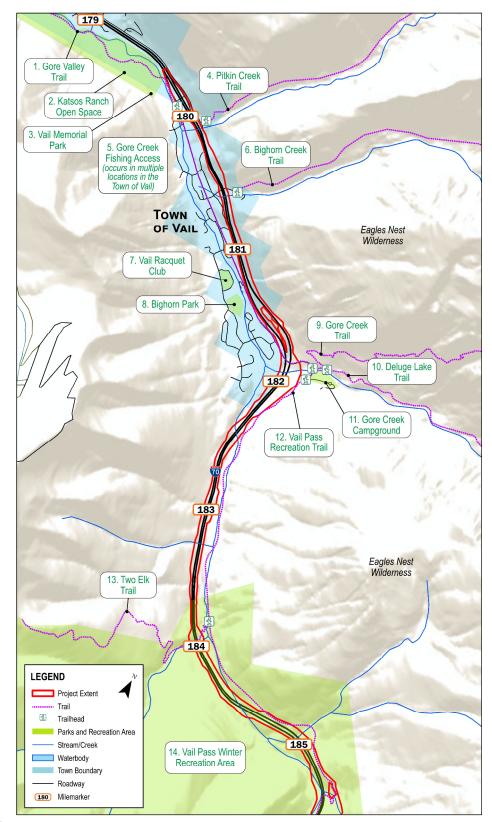
DESCRIPTION RECREATIONAL PROPERTIES AND USE

Due to the proximity to the White River National Forest, the study area provides access to a wide range of recreation opportunities including multiple trails that access the Eagles Nest Wilderness. The Eagles Nest Wilderness is located on the north side of I-70 and is a federally designated wilderness area in Summit and Eagle Counties that encompasses 133,496 acres of the White River National Forest. The White River National Forest is managed for a variety of recreation uses by the Dillon and Holy Cross Ranger Districts of the U.S. Forest Service (USFS). The Vail Pass Winter Recreation Area located at the top of the pass and is a major recreation destination. Additionally, the Town of Vail oversees numerous recreation resources within the study area. Error! Reference source not found. summarizes each recreational resource identified in the study area, Section 4(f) status, the owner with jurisdiction, the type of resource, and approximate MP along I-70. Detailed descriptions of all of the resources in Table 1 can be found on the following pages. **Figures 3 and 4** illustrate these resources geographically within the study area.

Table 1. Recreation Resources

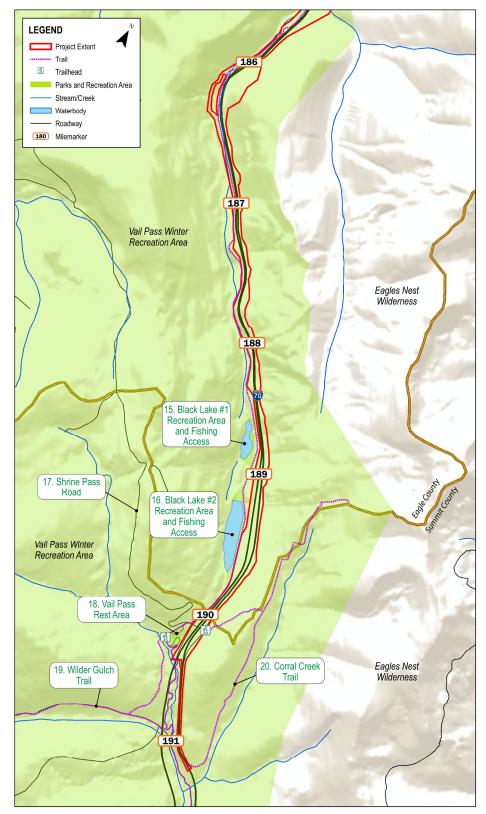
Name	SECTION 4(F)?	Official with Jurisdiction	RESOURCE Type	Project Mile Post	Map ID		
Bighorn Creek Trail	Yes	USFS	Trail	180.3	6		
Bighorn Park	Yes	Town of Vail	Park	181.5	8		
Black Lake Number 1	Yes	Colorado Parks and Wildlife	Recreation Area	188.7	15		
Black Lake Number 2	Yes	Colorado Parks and Wildlife	Recreation Area	189.5	16		
Corral Creek Trail	Yes	USFS	Trail	190	20		
Deluge Lake Trail	Yes	USFS	Trail	181.6	10		
Gore Creek Campground	Yes	USFS	Recreation Area	181.7	11		
Gore Creek Fishing Access	No	NA	Recreation Area	180.2, 190.2	5		
Gore Creek Trail	Yes	USFS	Trail	181.7	9		
Gore Valley Trail	Yes	Town of Vail	Trail	179.5-181.8	1		
Katsos Ranch Open Space	No*	Town of Vail	Recreation Area	177.7-179.4	2		
Pitkin Creek Trail	Yes	USFS	Trail	179.9	4		
Shrine Pass Road	Yes	USFS	Trail	190	17		
Two Elk Trail	Yes	USFS	Trail	184	13		
Vail Memorial Park	No	Town of Vail	Park	180	3		
Vail Pass Recreation Trail	Yes	USFS	Trail	181.8-191.5	12		
Vail Pass Winter Recreation Area	Yes	USFS	Recreation Area	190	14		
Vail Pass Rest Area	No	CDOT	Recreation Area	190	18		
Vail Racquet Club (4695 Vail Racquet Club Drive)	No	Privately Owned	Recreation Area	181.3	7		
Wilder Gulch Trail	Yes	USFS	Trail	190.2	19		
*Trails within Katsos Ranch Open Space are considered Section 4(f) resources.							

Figure 3. Parks and Recreation Resources



Source: DEA Project Team

Figure 4. Parks and Recreation Resources



Source: DEA Project Team



The recreation resources in the study area and potential impacts to the Section 4(f) recreation resources are described in more detail in the following sections. Impacts to non-Section 4(f) recreation resources are documented in the I-70 West Vail Pass Auxiliary Lanes Social Resources Technical Memorandum. All resources described as having a "temporary use" below do not meet the criteria for a temporary occupancy exception as there are no reasonable detours available for access.

BIGHORN CREEK TRAIL

The Bighorn Creek trailhead is located within the Town of Vail, approximately 450 feet north of I-70 at MP 180.3. The parking lot at the trailhead is accessed from Columbine Drive. The Bighorn Creek trail is approximately 3.25 miles and offers views of Bighorn Falls and the Vail Valley. The trail falls under the jurisdiction of the White River National Forest and provides access to the Eagles Nest Wilderness Area. The Columbine Drive concrete box culvert under I-70 may need to be lengthened to accommodate the auxiliary lanes on I-70. The construction would result in partial closures at a minimum; with anticipated full closures of Columbine Drive expected for up to a few days at a time. Because it is anticipated that no detour is available for access to the trail, this work will result in a temporary use.

BIGHORN PARK

Bighorn Park is located within the Town of Vail, south of I-70 near MP 181.5. This park offers a number of amenities, including a playground, off-leash park, open turf area, picnic tables/shelter/grills, restrooms, access to path, and parking. The park is owned by the Town of Vail and is a tax-funded, publicly accessible recreation facility. **There are no anticipated temporary or permanent impacts to Bighorn Park from the Proposed Action.**

BLACK LAKES NUMBER 1 AND 2

The Black Lakes are cold water reservoirs located at the top of Vail Pass just north of the Vail Pass Rest Area, within the White River National Forest. The primary function of the lakes is to serve as the water source for Vail and surrounding communities but also offer fishing opportunities in close proximity to I-70. Colorado Parks and Wildlife stocks the Black Lakes with rainbow trout annually. The area includes a parking lot, vault toilets, fishing pier, and access to the Vail Pass Recreation Trail. Colorado Parks and Wildlife considers the lakes to be recreation facilities as they are frequently used for recreational fishing and passive recreation. In addition, both lakes were identified as contributing resources to the Vail Pass Segment of Interstate Highway 70 historic district (5EA1826.4 and 5ST892.5) which is a historic Section 4(f) property. There are no anticipated temporary or permanent impacts to the Black Lakes from the Proposed Action.

BIGHORN CORRAL CREEK TRAIL

The Corral Creek Trail extends approximately 5 miles into the Eagles Nest Wilderness and can be accessed adjacent to WB I-70 near MP 191 or from the top of Vail Pass at Exit 190. The trail has moderate use but becomes more popular among cross-country skiers and snowshoers during the winter months. There are no anticipated temporary or permanent impacts to Corral Creek Trail from the Proposed Action.



DELUGE LAKE TRAIL

The Deluge Lake Trail begins at the Gore Creek Campground and extends approximately 3.8 miles to Deluge Lake. The trail traverses a steep, sunny, south-facing hillside for about 3 miles before turning north into the Deluge Creek valley with views of the Sawatch Range. The Deluge Lake Trail is under the jurisdiction of the White River National Forest. Short-term closures of access to the trail will be required during construction due to safety-critical work on the I-70 bridges over Bighorn Road. Because it is anticipated that no detour is available for the trail, this will result in a temporary use.

GORE CREEK CAMPGROUND

The Gore Creek Campground is located on the north side of I-70 approximately 760 feet to the east of I-70 at MP 181.7 and is located along Gore Creek close to the Eagles Nest Wilderness. The campground offers 25 campsites with picnic tables and fire grates. It is handicap accessible and accommodates tent camping and trailers, although no hook-ups or dump stations are available. The Gore Creek campground is under the jurisdiction of the White River National Forest and is accessed from Bighorn Road. Short-term closures of access to the campground will be required during construction due to safety-critical work on the I-70 bridges over Bighorn Road. Because it is anticipated that no detour is available for access to the campground, this will result in a temporary use.

GORE CREEK FISHING ACCESS

Gore Creek is a perennial tributary to the Eagle River that flows west through the Vail Valley and along the I-70 frontage road through the study area. Due to its proximity to I-70, there are several locations that offer informal river access for fishing. These access points are informal, provide dispersed recreation, and are not designated as public recreation facilities and are therefore not Section 4(f) resources.

GORE CREEK TRAIL

The Gore Creek Trail is located approximately 850 feet north of I-70 at MP 181.7. Parking for the trailhead is accessed from Bighorn Road (Old US 6). The trail accesses Gore Lake at approximately 5.5 miles and ends at Buffalo Pass at approximately 6.8 miles. The Gore Creek Trail is open to hiking and horseback riding and offers camping and fishing opportunities. The trail is one of the most popular of the Eagles Nest Wilderness. Short-term closures of access to the trail will be required during construction due to safety-critical work on the I-70 bridges over Bighorn Road. Because it is anticipated that no detour is available for access to the trail, this will result in a temporary use.

GORE VALLEY TRAIL

The Gore Valley Trail is part of the ECO Trails system and consists of a 12-mile bike route that's a combination of attached bike lanes, detached trails and residential streets. The ECO Trails system is an Eagle County program that is responsible for funding, constructing, and promoting a multi-use, non-motorized trail system through the Eagle and Vail valleys. The paved trail winds through open space, parks and recreation facilities, as well as Vail's village areas. The trail extends from the Eagle Valley Trail at the west end of Vail (at Sunburst Road) to the Vail Pass Trail in East Vail. **Short-term closures of access to the trail will be required during construction due to safety-critical work**



on the I-70 bridges over Bighorn Road. Because it is anticipated that no detour is available for access to the trail, this will result in a temporary use.

KATSOS RANCH OPEN SPACE

Katsos Ranch is owned by the Town of Vail and designated as open space. The property is within Vail municipal limits and lies to the south of I-70 between MP 177.7 and 179.4. Its northern boundary varies between over 1000 and less than 100 feet away from I-70. The majority of Katsos Ranch Open Space is not within the study area, with the exception of a small portion along the northern edge of the extreme eastern part of the property. This small portion is south of I-70 at approximately MP 179.6. Katsos Ranch Open Space has trails throughout that are open to pedestrians, bicyclists, and other recreational users. The Open Space is not considered a Section 4(f) property as it is not managed for recreation. However, the trails are considered Section 4(f) resources. **There are no anticipated temporary or permanent impacts to the trails in Katsos Ranch Open Space from the Proposed Action.**

VAIL MEMORIAL PARK

An approximately 11-acre portion of Katsos Ranch is occupied by Vail Memorial Park. The Vail Memorial Park Foundation, a non-profit, non-sectarian organization, leases this portion of Katsos Ranch from the Town of Vail. This park offers a place to purchase memorials in the form of benches, trees and inscriptions on boulders, flagstones, and dry-stacked rock walls. Cremation remains can be buried in containers in the memorial park as well. As the primary purpose of the Park is not recreation, it is not a Section 4(f) resource.

PITKIN CREEK TRAIL

The Pitkin Creek Trail is located within the Town of Vail municipal limits, with its trailhead approximately 140 feet north of I-70. From Exit 180 it is reached by following Fall Line Drive to the parking lot. The first mile of the trail climbs steeply out of Vail Valley and after 2.5 miles hikers climb steep switchbacks with views of two waterfalls on Pitkin Creek. Further on the trail provides access to Pitkin Lake, and to many Gore Range peaks. The Pitkin Creek trail is roughly 4.5 miles in length, of which approximately 500 feet is within the study area. The trail is under the jurisdiction of the White River National and is designated for hiking use. **There are no anticipated temporary or permanent impacts to Pitkin Creek Trail from the Proposed Action.**

SHRINE PASS ROAD

Shrine Pass Road is a USFS-designated biking and recreation trail and 4 wheel-drive dirt road that starts at Vail Pass and ends at the town of Redcliff. **There are no anticipated temporary or permanent impacts to Shrine Pass Road from the Proposed Action.**

TWO ELK TRAIL

The Two Elk Trail is a National Recreation Trail spanning 11 miles from a junction with Vail Pass Recreation Trail to Forest Road 762 near Minturn. From the Vail Pass Recreation Trail, the Two Elk Trail extends southwest through the study area and passes under the two I-70 bridges spanning Timber Creek near MP 184. The trail is open to hiking and biking and falls under the jurisdiction of the White River National Forest. Current access to the east trailhead is provided by Bighorn Road to the Vail Pass Recreation Trail and then hike 1.8 miles east to the Two Elk Trailhead. **Short-term closures of Bighorn Road and access to the east trailhead via Vail Pass Recreation Trail will be**



required during construction due to safety-critical work on the I-70 bridges over Bighorn Road. The trail will also be impacted where it crosses under I-70 near MP 184 due to safety-critical bridge work. Because it is anticipated that no detours are available at either location for the trail, this work will result in a temporary use.

VAIL PASS RECREATION TRAIL

The Vail Pass Recreation Trail begins at Gore Creek Campground and extends approximately 15 miles southeast to Copper Mountain where it connects to the Ten Mile Canyon Trail. It is paved and supports a variety of uses including cycling, hiking/running, cross-country skiing, and snowshoeing. The Vail Pass Recreation Trail is maintained by CDOT and connects to the Gore Valley Trail to the west. Within the study area, the majority of the trail runs adjacent to I-70. The trail was the result of collaboration between CDOT and the USFS and holds a National Recreation Trail designation. As part of the Proposed Action, approximately two miles of the Vail Pass Recreation Trail will be relocated (MP 185 to 187) and two additional small sections at MP 184.5 and 184.9 will be realigned due to direct impacts from construction, resulting in a Section 4(f) use (See Figure 5). The total impact to the trail is approximately 3.8 acres.). In addition, short-term closures of access to the trail from Bighorn Road will be required during construction due to safety-critical work on the I-70 bridges over Bighorn Road and closures of the trail will be required at Polk Creek near MP 185.5 due to safety-critical work on the bridges over Polk Creek. Other sections of the recreation trail will remain unchanged, with the exception of minor realignments due to proximity to the proposed auxiliary lane.

184 Legend Interstate 70 Existing Vail Pass Recreation Trail 185 Relocated Vail Pass Recreation Trail Roads Creeks Mile Posts 186 187

Figure 5. Vail Pass Recreation Trail Relocation Location

Source: DEA Project Team

VAIL PASS REST AREA

The Vail Pass Rest Area is located on the south side of I-70 at exit 190 (at MP 190). It is accessible by automobile from the interstate and from the various trails that tie in at this location. The Vail Pass rest area is maintained by CDOT and offers restrooms, a picnic area, and handicap access. It was constructed to serve as a safety rest area for the traveling public using I-70 and, although it provides parking for some recreational uses, any recreational use of the rest area is incidental. For this reason, it is not considered a Section 4(f) recreational resource. However, the rest area is considered a contributing feature to the Interstate 70 Vail Pass Segment Linear Historic District (5EA1826.4/5ST892.5) and therefore is considered part of a larger historic Section 4(f) resource.



VAIL PASS RACQUET CLUB

The Vail Racquet Club (Club) is located at 4695 Vail Racquet Club Drive in East Vail. It is a privately owned facility located within the Vail Racquet Club Mountain Resort. The Club offers fitness classes, a lap pool, tennis facilities, and a fitness center. The Club is privately owned and therefore not a Section 4(f) resource.

VAIL PASS WINTER RECREATION AREA

The Vail Pass Winter Recreation Area encompasses approximately 15,000 acres and is located predominantly on the south side of I-70 from MP 186.8 to Copper Mountain. The Vail Pass Winter Recreation Area is under the jurisdiction of the White River National Forest and is accessible from the Vail Pass Rest Area. It offers approximately 119 miles of motorized and non-motorized trails for snowshoeing, backcountry skiing, snowmobiling, and accessing huts and is one of the most heavily used recreation facilities in the White River National Forest. CDOT and FHWA have an existing highway easement deed with the USFS for I-70 through the USFS land in the Project area. **Due to the widening and minor realignments of I-70 from the Proposed Action, the highway easement deed will need to be expanded to include an additional approximately 24 acres of the Winter Recreation Area. This inclusion of additional property in the highway easement results in a Section 4(f) use; however, none of the trails or access to the trails within the Vail Pass Winter Recreation Area will be affected.**

WILDER GULCH TRAIL

Wilder Gulch Trail starts at the top of Vail Pass and extends approximately 3.5 miles southwest to the top of Ptarmigan Pass. It can be accessed from the Vail Pass Rest Area at I-70 Exit 190. The trail is open to hiking, horseback, and biking in the summer and cross-country skiing and snowshoeing in the winter. There are no anticipated temporary or permanent impacts to Wilder Gulch Trail from the Proposed Action.

DESCRIPTION OF SECTION 4(F) HISTORIC PROPERTIES AND USE

As part of the Section 106 process, an APE was delineated in consultation with CDOT and SHPO and a total of 25 properties were evaluated as part of the historic resource survey. The properties were evaluated for significance and potential eligibility for listing in the National Register of Historic Places (National Register) and State Register of Historic Places (State Register) and recorded on Office of Archaeology and Historic Preservation (OAHP) site forms. Of the 25 properties evaluated, three were determined eligible for the National Register: the Bradley Residence (5EA.3607), old U.S. Highway 6 (5EA.2587.9), and I-70 at Vail Pass (5EA.1826.4 and 5ST.982.5) (**Figures 6 and 7**.)

Figure 6. Section 4(f) Historic Resources

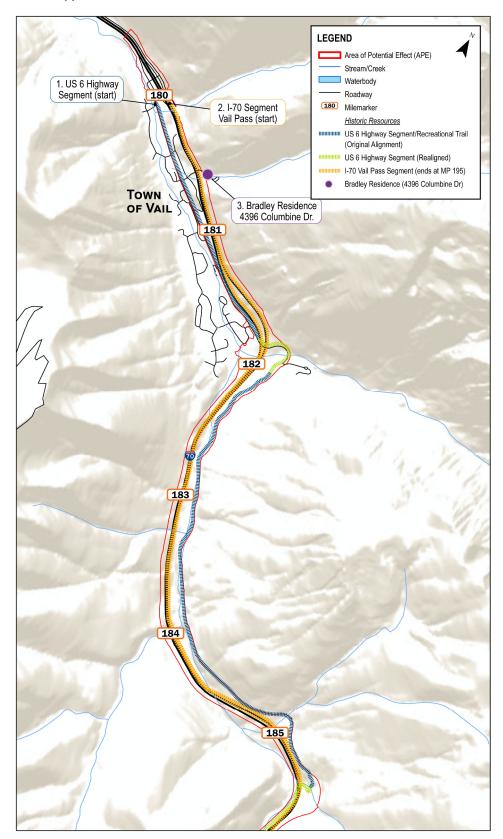
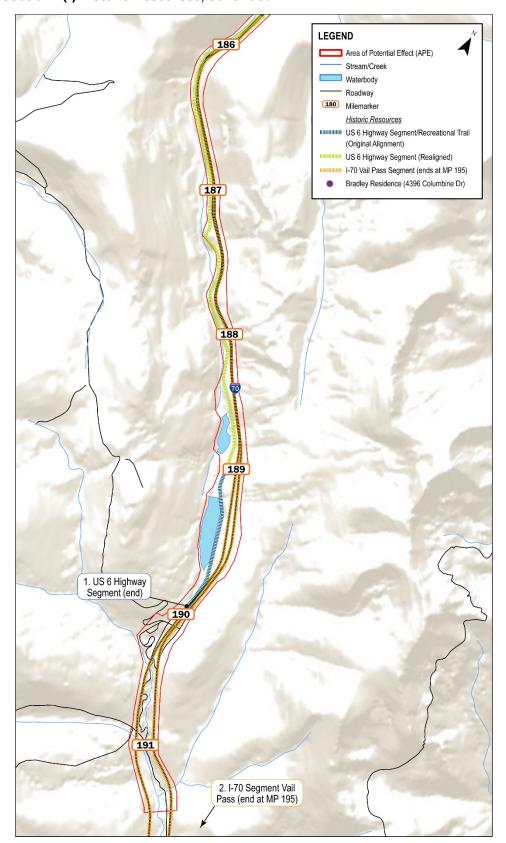


Figure 7. Section 4(f) Historic Resources, continued





All communication with and concurrence from SHPO can be found in **Appendix A7** of the *I-70 West Vail Pass Auxiliary Lanes Environmental Assessment*. Section 106 Documentation. The NRHP eligibility determinations of each of the three properties are summarized below. Of the three eligible properties within the APE, only I-70 at Vail Pass (5EA.1826.4 and 5ST.982.5) will have a Section 4(f) use as a result of the Proposed Action.

OLD US HIGHWAY 6 (5EA.2587.9)

Within the project area, the alignment of former US 6 carries a variety of roadbed features including portions of I-70, a local access road, Vail Pass Recreation Trail, and a runaway truck ramp. Some portions of original alignment have been completely obliterated and no longer serve to carry traffic of any type. The Vail Pass segment of former US 6 extends approximately 11 miles adjacent to I-70 between MP 180 and 190.

According to the Colorado Historic Highway Inventory, the entire length of US 6 in Colorado possesses significance under *Criterion A* in the areas of *Transportation* and *Politics/Government*, but does not possess significance under *Criteria B, C,* or *D*. The highway stretches for 241 miles through Colorado, starting at the Nebraska border through Holyoke before extending west through the eastern plains towns of Haxtun, Sterling, Merino, and Wiggins. It then extends through the Denver metro area to Golden and then west through Clear Creek Canyon and over Loveland Pass to the mountain towns of Dillon, Silverthorne, Avon, and Edwards. On the western slope, the highway runs through the mountain towns of Eagle, Gypsum, New Castle, Rifle, Parachute, and then through Grand Junction, until it reaches Mack and extends into Utah.

US 6 in the project area was built as part of a Public Works Administration (PWA 1220F) project to construct a road over what would become Vail Pass. In 1936, then state highway engineer Charles Vail and highway department construction engineer Dan W. Ormsbee initiated a survey of a new road from Wheeler Junction (near today's Copper Mountain) to Minturn. The route would shorten the trip from Denver to Grand Junction by one hundred miles. The work was not completed by PWA workers but PWA provided funding for two projects/segments of this roadway. The initial project cost \$119,000 and included the 4.6 miles of highway from Wheeler Junction to top of the new pass. The second project was \$455,000 and resulted in 9.6 miles from the top of the pass to the west. When the road was completed in 1939, Eagle County Commissioners suggested it be named for Charles Vail. Now modern I-70 covers much of this old roadway and includes today's Vail Pass

Under Criterion A, the western portion of US 6, from Clear Creek Canyon to Grand Junction and east of Denver near Wiggins, possesses significance in the area of Politics/Government at the state level. These segments have a direct association with work completed by the Works Progress Association (WPA, later renamed the Work Projects Association) and PWA from 1937 to 1941. The WPA and PWA were important Depression-era federal work-relief programs and important themes in state history. Other sections of the highway west of Denver built using WPA or PWA funding include east of Glenwood Canyon to Dotsero (PWA 123A, 1937) and Glenwood Canyon (PWA 185AR, 1937).

The segment of the highway in northeastern Colorado possesses significance under Criterion A in the area of Transportation as an early farm-to-market road that provided primary access for farmers, particularly in Phillips, Logan, Washington, and Morgan Counties, during the 1910s and 1920s at the local level. The road served as a vital connection between Colorado and Nebraska, providing access for rural farmers to transport goods and produce the larger markets. The eastern segment of US 6 in



Colorado is associated with the Good Roads Movement and its development and promotion as the Omaha Lincoln Denver (OLD)/Detroit Lincoln Denver (DLD) Highway, an important early transcontinental highway also in the area of Transportation at the state level.

Assessment of historic physical integrity related to significance:

The former corridor of US 6 is hard to discern within the project area. The segment of US 6 through Vail Pass has been highly modified and retains a low degree of integrity. In some locations the former highway has been replaced by the Vail Pass Recreation Trail and in others by the current I-70 alignment. There are also locations where the old alignment intersects the runaway truck ramp at MP 182 and where the runaway truck ramp follows part of the old US 6 alignment at MP 185.4. The sections of original US 6 and realigned US 6 have been noted on **Figures 6 and 7** based on field survey and research. Portions of the roadbed have been repurposed, realigned, obliterated, or superseded, which compromises integrity of materials, design, and workmanship. Furthermore, the close proximity of I-70 and other additions to the corridor, such as bus stops, bike lanes, and gates, detract from the setting and feeling of a historic U.S. Highway. Due to these impacts to integrity, the segment of US 6 through Vail Pass is non-supporting of the overall, National Register eligible linear resource.

DESCRIPTION OF SECTION 4(F) USE

Old US 6 and Vail Pass Recreation Trail

Ten miles of the Vail Pass Recreation Trail are present within the West Vail Pass project area. Eight miles of the trail will remain in its current alignment, some of which has been identified as the original alignment of US 6. Minor realignments of the trail will occur due to the proximity of the proposed auxiliary lane. Two miles of the trail will be realigned between MP 185 and 187 (see Figures 6 and 7). This section of the trail is directly adjacent to I-70, and in an area where the original grade of US 6 was replaced by I-70. The trail will be moved closer to Black Gore Creek, requiring easements from the White River National Forest, which will also result in a buffer between the trail and the highway.

In addition to the two-mile segment, the following locations where the Vail Pass Recreation Trail follows the Old US 6 alignment will be shifted. At MP 184.5, the trail will be shifted about twenty feet to the north for a distance of 1,000 feet. At MP 184.9, the trail will be shifted north about seventy feet for a distance of about 1,200 feet.

Old US 6 and Runaway Truck Ramps

The project also involves realignment of the runaway truck ramps, which are contributing features of the Vail Pass Segment historic district but also have a connection to Old US 6. The truck ramp at MP 182 is intersected by the old alignment of US 6. The truck ramp at MP 185.4 follows the old US 6 alignment. At MP 182, the runaway truck ramp will be straightened and lengthened for safer utilization by runaway vehicles. The paved portion of the old US 6 alignment in this area will remain as is, but the new ramp alignment will disturb existing ground in the vicinity of old US 6. The access location, a dirt road that leads from the old US 6 alignment to the top of the ramp, will remain in its current originating location, but will be shortened by the new ramp alignment.

At MP 185.4, the runaway truck ramp will be realigned to straighten and eliminate the curve. It is possible that parts of the now gravel section that arrests the momentum of the trucks is on the old US 6 alignment. In addition, there is a dirt access road at the top of the ramp that could be part of the old US 6 alignment. The gravel section and the dirt access road above the ramp will be obliterated with the new straighter alignment. The new straighter and lengthened ramp alignment will end in



or near the existing cul-de-sac at the end of the paved portion of old US 6. The cul-de-sac and a short portion of the paved portion of old US 6 will require adjustment for the new ramp.

Because the US 6 highway segment is considered *non-supporting*, the shifts of trail alignment in these additional locations and the changes to the runaway truck ramps will not affect the qualities that make the overall highway significant. It will continue to convey significance as a transportation corridor eligible under Criterion A in the areas of Transportation and Politics/Government for its association with WPA and PWA projects between 1937 and 1941. For these reasons, CDOT determined the project results in No Adverse Effect to overall US Highway 6 (5EA2587) under 36 CFR 800.5 and SHPO concurred on July 9, 2020.

The Section 4(f) use of US 6 includes realigning two miles of the trail, shifting two additional locations of the trail, and improving portions of the runaway truck ramps that extend along or are crossed by the old US 6 alignment, which constitutes replacement of a portion of the historic transportation facility.

Based on the finding of No Adverse Effect, FHWA has determined that the use of US 6, a Section 4(f) historic transportation facility, meets one of the exceptions for Section 4(f) approval (23 CFR 774.13(a)(3)):

Maintenance, preservation, rehabilitation, operation, modernization, reconstruction or replacement of historic transportation facilities...if FHWA concludes, as a result of consultation under 36 CFR 800.5(a)(1) that such work will not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register; and the official(s) with jurisdiction over the Section 4(f) resource have not objected to the Administration conclusion

INTERSTATE 70 SEGMENT, VAIL PASS LINEAR HISTORIC DISTRICT (5EA.1826.4/5ST.892.5)

In 2005 the Advisory Council on Historic Preservation (ACHP) approved an exemption that relieved federal agencies from taking into account effects of their undertakings on the interstate highway system, except for a limited number of nationally and/or exceptionally significant elements associated with the system. As part of the interstate highway system, I-70 as a whole is exempt from review under Section 106. However, in 2006 FHWA published a list of exceptions to the interstate exemption known as the "Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System" (Final List). The Final List included four portions of I-70 in Colorado: the Genesee Park Interchange, Eisenhower-Johnson Memorial Tunnels, Vail Pass Highway Segment, and Glenwood Canyon Highway Segment. These features were selected because they are considered to potentially possess "exceptional significance" and/or significance at a national level. The entire length of I-70 in Colorado did not rise to the level of "exceptional importance" to be included on the final list; therefore, the entire resource is not eligible for inclusion in the NRHP.

The I-70 Segment, Vail Pass Linear Historic District (5EA.1826.4/5ST.892.5) encompasses the portion of I-70 defined as Vail Pass, beginning at MP 180 at the east side of Vail in Eagle County and ending at MP 195.2 at Copper Mountain, just west of Wheeler Junction in Summit County. The district boundary includes the road alignment of both EB and WB lanes, medians, the highway right-of-way, and all additional features associated with the construction of the Vail Pass segment including



bridges, retaining walls, embankments, sculpted rock cuts, landscape features, runaway truck ramps, on- and off-ramps, drainage structures, the Vail Pass National Recreation Trail, and a rest area. All these resources are considered contributing features to the linear historic district and will be discussed in more detail in this document.

The Vail Pass segment of I-70 contains a cohesive grouping of designed and engineered structures, buildings, and objects united aesthetically and functionally as a distinctive transportation corridor. While the features within the segment lack individual distinction, the assemblage of objects and structures represents a historic district that achieves exceptional significance as whole under National Register *Criterion A* in the areas of *Transportation*, *Community Planning and Development*, and *Conservation*, and under *Criterion C* in the areas of *Landscape Architecture* and *Engineering*. A summary statement of significance is provided below.

Under *Criterion A*, the Vail Pass segment of I-70 possesses significance in the areas of Transportation, Community Planning and Development, and Conservation.

In the area of Transportation, Vail Pass provided a critical link in the I-70 mountain corridor, which led to an expanded transportation network in previously remote areas of the Colorado high country in the latter half of the twentieth century. Original Interstate plans had I-70 ending in Denver with no link across the western portion of the state. Years of debate and the efforts of politicians, boosters, and state highway engineers resulted in the 1957 decision to extend I-70 west from Denver across the challenging terrain presented by the Continental Divide. Subsequently, national controversy emerged over the highway's planned route through the Gore Range-Eagles Nest Wilderness. Ultimately, this route, known as "Red Buffalo," was rejected in favor of the Vail Pass route. The completion of the Vail Pass link in the controversial mountain corridor of I-70 resulted in the expansion of transportation corridors throughout previously remote areas of the Colorado High Country. Therefore, the highway segment is significant in the area of Transportation.

In the area of Community Planning and Development, the Vail Pass segment of I-70 and its anticipated effects were a key factor in Vail town planning. The town's 1973 master plan, the *Vail Plan*, called for various elements to ameliorate the noise and visual impacts along the Interstate corridor through Vail. Such elements included a landscaped main entry to the town "accented with stone walls and coarse stone pavements" and berms and boulders to absorb the sound and shield the visual impacts of the highway. As anticipated, Vail saw further increases in population and development after the completion of the Vail Pass segment. New ski resorts, such as the Beaver Creek Ski Resort, emerged in Vail as tourists flooded to the area in the late 1970s and 1980s. Development in Vail continued for several decades with the construction of new vacation homes, condominium complexes, hotels, strip malls, and various stores. The Vail Pass segment of I-70 was an influential factor in Vail town planning and its completion resulted in the town's continued growth and development. Therefore, the highway segment is significant in the area of Community Planning and Development.

Vail Pass is also significant in the area of Conservation as biologists, water quality specialists, designers and construction crews developed several innovative solutions to environmental issues presented by the highway's construction in a highly sensitive area. These solutions included complex temporary and permanent erosion control measures, the construction of a designated wildlife underpass, improvements to stream habitats and ponds, and sensitive channel relocations that improved the health of fisheries that had been disrupted by earlier projects. Therefore, Vail Pass is significant in the area of Conservation.



Under *Criterion C*, the Vail Pass segment of I-70 possesses significance in the areas of Landscape Architecture and Engineering as a transportation corridor containing a significant linkage of structures and objects united aesthetically and functionally by a planned development. The segment and the associated features represent a significant and distinguishable entity whose components may lack individual distinction.

In the area of Landscape Architecture, Vail Pass exhibits a number of exceptionally significant innovations in highway landscape design. While landscape architects had been employed on earlier road projects, such as urban parkways, and to assist with covering construction scars after highway construction, their influence was a key element in the earliest design concepts produced for the Vail Pass segment. Unique and innovative landscape elements were integrated into the highway design to enhance the experience of motorists on the Interstate segment; these elements included sensitive earthwork and slope molding techniques, sculpted rock cuts to match natural outcroppings, revegetation with native flora, and selective placement of "natural" features such as boulders, stumps, and old logs along the highway slopes. Furthermore, engineered features of the corridor such as retaining walls and bridges exhibited qualities influenced by aesthetic principles of landscape architecture; unique retaining wall styles were used to blend into the landscape and create visual interest, and bridges were used over side valleys and hillsides when possible partly to minimize their visual impacts. Bridges, retaining walls, and some culverts were finished with iron oxide to create a reddish-pink hue to match the natural outcroppings of the Vail Valley. Additionally, several culverts featured a "barnwood" texture on their concrete headwalls and wingwalls. As an early example of a carefully designed highway corridor, Vail Pass is significant in the area of Landscape Architecture.

In the area of Engineering, the Vail Pass segment of I-70 possesses an exceptional level of significance as it represents early innovative design solutions that met Interstate safety and efficiency standards in a geologically constrained area while minimizing environmental and visual impacts to the landscape. The precast, segmented, concrete, post-tensioned, box girder bridges used on Vail Pass were the first of their kind Colorado and among the earliest used in the country. Due to their assembly method of construction, the use of precast elements reduced construction time and minimized impacts to vegetation. Their placement and orientation enabled trees to grow between bridge decks and only the area immediately surrounding the piers was disturbed. In addition to crossing creeks and streams, bridges were also used to minimize terrain disruption. The use of bridges instead of the typical treatment involving major fill and culverts for drainage minimized visual effects to the natural landscape and enabled wildlife to cross the highway beneath the structures. The result of these designs is a highway corridor that retains many of the slopes and valleys of the natural landscape and complements its surroundings rather than detracting from them. Vail Pass represents an early example of innovative engineering solutions in mountain highway design in response to environmental constraints and concerns; therefore, it is significant in the area of Engineering.

Completed in 1978, Vail Pass has not yet reached the 50-year age requirement set forth by the National Park Service. However, under *Criteria Consideration G: Properties that Have Achieved Significance Within the Past Fifty Years*, the Vail Pass segment of I-70 exhibits "exceptional importance" at the statewide level as a resource with direct and significant associations with important events in the development of Colorado transportation networks and early solutions to the conflict between environmental concerns and highway construction that set standards for later Colorado projects.



Assessment of historic physical integrity related to significance:

The Vail Pass segment of I-70 retains a high degree of physical integrity related to its ability to convey significance as an exceptionally designed and engineered interstate segment associated with expanded transportation segments and conservation in the region. While some deterioration, alterations, and additions to individual features are noted, the overall Vail Pass segment retains all aspects of integrity.

Materials, design, and workmanship:

As a highway segment in continuous use since 1978, Vail Pass has undergone routine maintenance, including resurfacing and restriping of the roadbed and travel surfaces of both I-70 and the Vail Pass Recreation Trail. No major alterations to other original features of the corridor were noted during field survey. Overall, the Vail Pass corridor retains its integrity of materials, design, and workmanship. With intact physical features, the corridor continues to convey its significance as an interstate corridor designed with careful consideration of the natural environment and use of innovative designs and construction methods.

Location, setting, and feeling:

The Vail Pass segment of I-70 retains its integrity of location as it still follows the same alignment as selected for the highway in the early 1970s. Additionally, other contributing features of the highway appear to remain in their original locations as constructed. In addition to location, the highway segment has had few impacts to its integrity of setting or feeling.

Association:

Vail Pass retains its integrity of association to historic developments related to Transportation, Community Planning and Development, and Conservation. The segment continues to serve the same function as when it was completed in 1978, and through its recognizable physical elements, it continues to convey its significance as a critical link in the I-70 transportation corridor. The Vail Pass segment also continues to exhibit significance in its association to conservation efforts as its physical structures (bridges, retaining walls, culverts) and landscape treatments (sculpted rock cuts, revegetation areas, slope molding, creek relocations) which were designed to minimize ecological impacts, slow erosion, and reduce adverse visual effects to the natural landscape, remain intact and functioning as intended.

DESCRIPTION OF SECTION 4(F) USE

The Section 4(f) use of the Vail Pass resource include the following improvements its contributing features, all of which collectively result in an adverse effect to the resource.: Contributing features are contained within the Vail Pass resource boundary and include the road alignment of both EB and WB lanes, medians, bridges, retaining walls, embankments, sculpted rock cuts, landscape features, runaway truck ramps, on- and off- ramps, culverts, the Vail Pass Recreation Trail, Black Lake No. 1, Black Lake No. 2, and the Vail Pass Rest Area. Also within the boundary are features constructed outside the period of significance or minor features that are original to the highway, such as the majority of culverts and modern signage.



Road Alignment

The proposed plan is to construct one auxiliary lane on both the EB and WB lanes of Vail Pass in addition to two 12-foot-wide through travel lanes. Designers recommend the typical roadway to have a 10-foot outside shoulder and a 6-foot inside shoulder, two 12-foot-wide through-traffic lanes, and one 12-foot-wide auxiliary lane in each direction. This will require a minimum widening of the current roadway approximately 14 feet in each direction. These widths increase in some areas to provide sight distance at curves, or to offer additional room for chain-up for trucks, runaway truck ramps, heavy tow staging, or maintenance staging. Reduced shoulders will also be considered in areas where a reduction of impacts is necessary. The project will result in small shifts in the road alignment to address safety concerns and operational issues, and to allow the auxiliary lanes and bridges to be constructed on separate alignments so current traffic can be maintained on the existing alignment during construction.

Bridges

There are 16 bridges on the west side of Vail Pass; these include two concrete box girders that serve as wildlife underpasses, eight concrete box girder segmented bridges, and six continuous steel box girder tubs. All date to between 1973 and 1978 and are near the end of their expected life span of 40 years. The segmental concrete box girders have required repairs and retrofitting through the years, including joint replacements and replacement and repair of post-tensioned cables. The steel girders are experiencing fatigue that will need to be addressed as part of the final design. Some of the bridges need to be widened and some are on substandard curves and although widening and rehabilitation options were evaluated, it was determined that the bridges need to be replaced.

Retaining Walls

There are several types of retaining walls present in the corridor. Some retaining walls will need to be replaced due to realignment of the roadway or deteriorated condition.

Embankment, Sculpted Rock Cuts, Landscape Features

One of the landscape techniques used in the original construction of Vail Pass to achieve a visual compatibility with the surrounding mountains were rock cut sculpting treatments. These incorporated into original construction operations to imitate the existing rock outcrops. Blasting techniques were used to allow natural rock fractures to be exposed to produce visually pleasing results. The project will result in impacts to some of these rock cut areas due to roadway widening and will also result in widening of embankments.

Vail Pass Recreation Trail

Ten miles of the Vail Pass Recreation Trail are present within the West Vail Pass project area. The project design proposes to relocate 2 miles of the trail between MP 185 and 187. This section of the trail is directly adjacent to I-70, and in an area where the original grade of US 6 was replaced by I-70. The trail in this section will be moved closer to Black Gore Creek, requiring easements from the White River National Forest, which will also result in a buffer between the trail and the highway. The project will also involves minor shifts in the trail alignment at MP 184.5, where the trail will be shifted about twenty feet north for a distance of 1,000 feet and at MP 184.9, where the trail will be shifted about seventy feet north for a distance of about 1,200 feet.

Runaway Truck Ramps

The project also involves realignment of the runaway truck ramps, which are contributing features of the I-70 Vail Pass Segment linear historic district. At MP 182: the truck ramp will be straightened



and lengthened for safer utilization by runaway vehicles. At MP 184.5, the truck ramp will be realigned to straighten and eliminate the curve.

Culverts and On and Off-Ramps

It is likely that all the culverts in the project corridor will be modified or replaced. Most of the metal pipe or plastic pipe culverts were identified as non-contributing features of the historic district, but the metal pipe culvert featuring the "barnwood" textured and stained concrete headwall/wingwalls is a contributing feature and the concrete box culvert used as an underpass (located west of milepost 181) is also contributing to the historic district.

On and off ramps will either be overlaid with asphalt or will experience minor realignment, repaying, and restriping. There may be widening of the off ramp on EB I-70 at the top of the pass. These features were not specifically identified as contributing or non-contributing to the historic district.

SUMMARY OF SECTION 4(F) USE

CDOT has determined the Proposed Action will replace and modify these contributing features of the linear historic corridor, including changes to road alignment, replacement of bridges, replacement of retaining walls, changes to the appearance and locations of historic embankments, sculpted rock cuts, landscape features, shifts in the Recreation Trail alignment, improvements to the runaway truck ramps, on- and off-ramps and culverts. As such, the Proposed Action will result in an Adverse Effect for 5EA.1826.4/5ST.892.5 under 36 CFR 800.5.

The Proposed Action resulted in a finding of an Adverse Effect to I-70 Segment, Vail Pass Linear Historic District and a Section 4(f) use.

Bradley Residence, 4396 Columbine Drive (5EA.3607)

The Bradley Residence at 4396 Columbine Drive was constructed in 1965 and has been a private residence since its construction. Research and field review did not reveal important associations with events, patterns, trends, or people significant in local, state, or national history, and the property is not likely to yield information important to history or prehistory beyond what is already documented, therefore the Bradley Residence does not possess significance under Criteria A, B, or D.

The Bradley Residence reflects several character-defining features of A-frame architecture under Criterion C, including an A-shaped roof/wall truss system; deep, overhanging eaves and gable ends; large glazing configuration across the facade; wood exterior cladding materials; an expansive porch across the front facade (the rear deck dates to 1984); and scalloped bargeboard and decorative wood railings on the front porch and balcony that reflect Swiss stylistic elements. The house represents a unique method of construction and, despite some alterations, serves as an intact example of the A-frame building type. Therefore, the Bradley Residence is recommended eligible for listing in the National Register of Historic Places under Criterion C in the area of Architecture.

Although the Bradley Residence (5EA.3607) is within the APE, there is no plan to permanently incorporate any of the land from this property into the transportation facility, therefore there is no use of the property under Section 4(f).

ALTERNATIVES

AVOIDANCE ALTERNATIVES

Per FHWA regulations in 23 CFR 774.17, feasible and prudent avoidance alternatives must be identified if the project results in a Section 4(f) use. The following definition of "feasible and prudent alternative" is from 23 CFR 774.17, which provides definitions related to Section 4(f):

- "(1) A feasible and prudent alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute.
- (2) An alternative is not feasible if it cannot be built as a matter of sound engineering judgment;
- (3) An alternative is not prudent if:
 - (i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
 - (ii) It results in unacceptable safety or operational problems;
 - (iii) After reasonable mitigation, it still causes:
 - (A) Severe social, economic, or environmental impacts;
 - (B) Severe disruption to established communities;
 - (C) Severe disproportionate impacts to minority or low income populations; or
 - (D) Severe impacts to environmental resources protected under other federal statutes;
 - (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
 - (v) It causes other unique problems or unusual factors; or
 - (vi) It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems of impacts of an extraordinary magnitude."

No Action Alternative

The No Action Alternative is the only avoidance alternative that was analyzed for this analysis. Under the No Action Alternative, only programmed projects that are planned and funded by CDOT or other entities would be completed. Currently, there are no large-scale transportation projects to add safety improvements, operational improvements, vehicular capacity, and multimodal facilities along I-70 within the project area. The No Action Alternative would leave West Vail Pass as it currently is configured and would not provide substantial improvements beyond typical current maintenance (e.g. resurfacing and plowing) activities. The roadway would remain the same, with 2 EB and 2 WB lanes (each 12 feet in width), an inside shoulder typically 4 feet in width, and an outside shoulder typically 10 feet in width.

The No Action Alternative would not be feasible and prudent because it would not meet the project purpose and need to address safety and operational concerns.



I-70 REALIGNMENT ALTERNATIVES

During the initial planning for the interstate, CDOT (then the Colorado Department of Highways (CDOH)) analyzed potential routes for I-70 between Copper Mountain and Vail prior to the selection of the current location of I-70 through Vail Pass. Most of the study focused on routes of the highway through the Gore Range-Eagles Nest Primitive Area. In the mid-1960s CDOH supported a route known as "Red Buffalo" because it cut between Buffalo Mountain and Red Peak, which cut directly through the Gore Range-Eagles Nest Primitive Area, known as one of the most scenic wilderness areas in Colorado. With the Red Buffalo plan, I-70 would have headed directly west from Silverthorne through the Gore Range. The other option for the location of I-70 was the path of existing US 6 through Vail Pass. In response, environmentalist groups and concerned citizens organized to voice their opposition to the Red Buffalo route. In May 1968, the US Secretary of Agriculture denied the CDOH an easement through the Gore Range-Eagles Nest Primitive Area within the Arapaho and White River National Forests, ending the Red Buffalo route as an option for the interstate.

Relocating I-70 along the previous Red Buffalo route would avoid impacts to some Section 4(f) resources, but the current location and alignment of I-70 through Vail Pass is part of the reason why I-70 is eligible as a historic resource. A large relocation of I-70 would be an adverse effect to the historic segment, and not would not be an avoidance alternative because it does not avoid the use of all Section 4(f) resources. For this reason, any large relocation of I-70 is not a viable avoidance alternative as the existing alignment of I-70 contributes to its designation as a historic resource.

SUMMARY

No prudent and feasible avoidance alternative was identified for the Proposed Action as the interstate itself is a Section 4(f) resource. Abandoning the existing interstate for any realignment or alignment shifts to avoid potential impacts to other Section 4(f) resources, including recreation resources, would still result in a Section 4(f) use.

LEAST OVERALL HARM ANALYSIS

Because there is no feasible and prudent avoidance alternative, and the Proposed Action is the only alternative remaining that uses a Section 4(f) property, no least overall harm analysis is required under 23 CFR 774.3(c).

SUMMARY OF USE TO SECTION 4(F) PROPERTIES

RECREATION

The Proposed Action will result in the use of the properties listed below due to access closures for safety-critical bridge construction. The impacts are temporary in nature but do not meet the criteria for a temporary occupancy exception as no reasonable detours are available. All efforts during final design will be made to further minimize the duration of access closures. Early coordination with the USFS and a robust public outreach program will be implemented should the closures need to occur.

- Deluge Lake Trail
- Gore Creek Trail
- Two Elk Trail
- Gore Creek Campground

The Proposed Action will result in a permanent use of approximately 3.8 acres of the Vail Pass Recreation Trail, due to direct impacts from the EB auxiliary lane, and approximately 24 acres of the Vail Pass Winter Recreation Area, due to the inclusion of additional USFS land into the highway easement deed for I-70.

HISTORIC

CDOT has determined the proposed improvements to the I-70 Segment, Vail Pass Linear Historic District (5EA.1826.4/5ST.892.5) meet the criteria of adverse effect as outlined in 36 CFR 800.5(a)(2)(i) for the following reasons:

- While the general location of the roadway will remain the same and most of the work will take place within existing ROW, these shifts in the location of the road and the associated widening will change and modify the original design of the roadbed.
- The widening for the auxiliary lanes will result in replacements of the bridges that will change and modify the current appearance of the bridges.
- The work will require replacement of some of the retaining walls, while others may be preserved and rehabilitated.
- The work will require replacement and modification of embankment, sculpted rock cuts, landscape features, runaway truck ramps, on- and off- ramps, and culverts, while others may be preserved and rehabilitated. Truck ramps will be modified to be straighter and brought up to standard. The start and end of the auxiliary lanes will take place at the interchange on- and off- ramps but will not require significant modification as their termini remain the same.
- The work requires relocating a 2-mile portion of the Vail Pass Recreation Trail and shifting two short sections of trail farther away from I-70.

Based on the adverse effect to the transportation resource under Section 106, FHWA has determined the proposed design for the West Vail Pass Auxiliary Lanes constitutes a Section 4(f) use of the historic property based on the current level of design. As designs are refined, additional information will be provided consult with SHPO, and Section 106 consulting parties regarding appropriate measures to mitigate the adverse effect.

ALL POSSIBLE PLANNING TO MINIMIZE HARM

MINIMIZATION TO RECREATION RESOURCES

Unless otherwise noted below all Section 4(f) recreation resources will be annotated in the design plans with "no parking, no work, no staging" and the contractor will be required to maintain reasonable access to facilities during construction. As the Project moves into final design, all resources will be re-evaluated for impacts.

DELUGE LAKE TRAIL, BIGHORN CREEK TRAIL, GORE CREEK TRAIL, GORE VALLEY TRAIL, AND TWO ELK TRAIL

Based on the conceptual design for the EA, there may be short-term closures of access to Deluge Lake Trail, Gore Creek Trail, Gore Valley Trail, and the east trailhead for Two Elk Trail due to safety-critical work on the I-70 bridges over Bighorn Road, which is the access to the trailhead. Access to Bighorn Creek Trail may require closures for construction work on the Columbine Drive concrete box culvert crossing under I-70. In addition, the trail will also be impacted where it crosses under I-70 near MP

184 due to safety-critical bridge work. As the Project moves into final design, CDOT will further assess the design and construction phasing of the bridges to minimize potential closures to Bighorn Road, Columbine Road, and Two Elk Trail. CDOT will coordinate with the USFS at the beginning of final design to discuss the timing of potential closures, should they be unavoidable. If closures do occur, CDOT will work with the USFS to facilitate early notification of potential trail users through website updates, portable variable message signs, and email notifications. Additional communication measures will be determined during final design in coordination with the USFS. All closures of Bighorn Road, Columbine Drive, and Two Elk Trail at MP 184 will be minimized in duration to the maximum extent practicable and full closures will only be for the safety of trail users during construction. Contractor parking will only be allowed on Bighorn Road if it is in an active traffic control zone to not further impact access to trails and campground.

GORE CREEK CAMPGROUND

Based on the conceptual design for the EA, there may be short-term closures of access to Gore Creek Campground due to safety-critical work on the I-70 bridges over Bighorn Road, which is the access to the campground. As the Project moves into final design, the construction phasing and necessity of short-term closures will be further assessed. Reservations through the USFS for the campground occur up to six months in advance, the earliest of which are for campsites available when the campground opens in mid-May. Due to this timeframe for reservations, CDOT will coordinate with the USFS as soon as potential closures are known to minimize impacts to the campground users. Additional communication measures will be determined during final design in coordination with the USFS. All closures of Bighorn Road will be minimized in duration to the maximum extent practicable and full closures will only be for the safety of campground users during construction. Contractor parking would only be allowed within an active traffic control zone on Bighorn Road.

VAIL PASS RECREATION TRAIL

The Proposed Action will relocate two miles of the trail between approximately MP 185 and 187 (**Figure 5**) due to direct impacts to the existing trail from the construction of the EB auxiliary lane. This section of the existing trail is directly adjacent to I-70, and in an area where the original grade of US 6 was replaced by I-70. The trail in this section will be moved closer to Black Gore Creek within the White River National Forest, which will result in a buffer between the trail and the highway. The trail will also be widened from existing to provide additional safety for trail users. Other sections of the recreation trail will remain unchanged, with the exception of minor realignments at MP 184.5 and 184.9 due to proximity to the proposed auxiliary lane. These specific locations will be determined during final design.

In order to minimize disruption to trail users, flaggers will be utilized during any additional work to allow for the safe use of the trail while under construction. Whenever possible work will be completed at night when the trail is not in use. All potential detours and closures will be confirmed during final design and coordinated with the USFS. Where the trail requires minor realignment or short intermittent closures, flaggers will be used as necessary keep the path operable during construction.

Based on the conceptual design for the EA, there may be short-term closures of access to the west trailhead of the Vail Pass Recreation Trail due to safety-critical work on the I-70 bridges over Bighorn Road, which is the designated access point to the west trailhead. As the Project moves into final design, CDOT will further assess the design and construction phasing of the bridges to minimize

potential closures to Bighorn Road. CDOT will coordinate with the USFS at the beginning of final design to discuss the timing of potential closures, should they be unavoidable. If closures do occur, CDOT will work with the USFS to facilitate early notification of potential trail users through website updates, portable variable message signs, and email notifications. On-site signage will be placed as coordinated with the USFS for all potential access points to the trail should a closure or potential delay be anticipated so that users will not get "stuck" at the construction point. Additional communication measures will be determined during final design in coordination with the USFS. All closures of Bighorn Road will be minimized in duration to the maximum extent practicable and will be minimized in duration to the maximum extent practicable and full closures of Bighorn Road will be minimized in duration to the maximum extent practicable and full closures will only be for the safety of trail users during construction. Contractor parking would only be allowed within an active traffic control zone on Bighorn Road.

VAIL PASS WINTER RECREATION AREA

During final design, CDOT will coordinate the design with the USFS to minimize the acreage of additional Winter Recreation Area property to be included in the updated highway easement deed and that there will be no temporary or permanent impacts to users of the Winter Recreation Area as construction will not occur during winter.

MINIMIZATION SPECIFIC TO HISTORIC RESOURCES

I-70 SEGMENT, VAIL PASS LINEAR HISTORIC DISTRICT

The I-70 Segment, Vail Pass Linear Historic District (5EA.1826.4/5ST.892.5) is a linear historic district comprising both contributing and noncontributing structures, buildings, and objects. The Proposed Action utilizes all possible planning to minimize harm to contributing features, which includes the road alignment of both EB and WB lanes, medians, bridges, retaining walls, embankments, sculpted rock cuts, landscape features, runaway truck ramps, on- and off- ramps, and culverts. For the purposes of this Section 4(f) evaluation, contributing features of the I-70 Vail Pass segment located within the project area have been grouped into five categories of features: bridges; retaining walls; embankments sculpted rock cuts, landscape features, runaway truck ramps, on- and off-ramps, culverts, the Vail Pass Recreation Trail, and Black Lakes No. 1 and No. 2 and Vail Pass Rest Area.. Summaries of how the Proposed Action will use each type of feature are provided below followed by a summary of its effect to the overall district and measures to minimize harm.

Road Alignment Changes

The original Vail Pass was designed and posted at 55 mph. As time progressed, the Pass was posted at 65 mph and the roadway geometry remained the same. Some of tighter curves are designed for only 55 mph and have become crash hot-spots. This project is proposing some slight curve smoothing to bring the curves up to the currently posted 65 mph design speed. There was a design speed study performed for the corridor after the 2011 PEIS that determined that the posted speed and design speed should be 65 mph. Reconstructing those target curves with a larger radius will require minor adjustments to the alignment of the roadway, and in some cases the replacement of existing bridges that are coincidently located on those curves. Refer to **Appendix A** for locations of alignment shifts and widening, which are indicated on the plans on pages 4-10, 14-20, and 23.



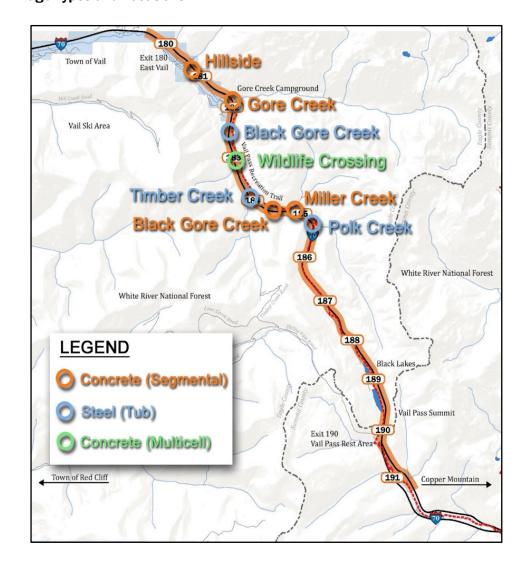
Bridge Replacements

There are 16 major bridge structures (see **Table 2**) within the study area – all concentrated along a 4.6-mile section between approximate MPs 180.8 and 185.4 as shown in Figure 1. There are two primary bridge types – Steel Box Girders and Concrete Box Girders. Two of the ten concrete box girder bridges are single span, multi-cells and mildly reinforced, with the remaining being post-tensioned concrete segmental bridges. The existing bridges were constructed in the mid to late 1970s.

Table 2. Existing Bridges

MILEPOST	STRUCTURE NUMBER	DIRECTION	Crossing	LENGTH	Structure Type
180.790	F-11-AX	I-70 WB	Hillside	727'-1"	Concrete Box Girder Segmented (CBGS)
180.816	F-11-AW	I-70 EB	Hillside	879'-8"	CBGS
181.911	F-11-AV	I-70 WB	Gore Creek	690'-0"	CBGS
181.911	F-11-AU	I-70 EB	Gore Creek	667'-0"	CBGS
182.451	F-11-AT	I-70 WB	Black Gore Creek	349'-2"	Steel Box Girder Continuous (SBGC)
182.451	F-11-AS	I-70 EB	Black Gore Creek	238'-2"	SBGC
183.079	F-11-AR	I-70 WB	Wildlife Passage	78'-9"	Concrete Box Girder (CBG)
183.079	F-11-AQ	I-70 EB	Wildlife Passage	79'-3"	CBG
183.977	F-11-AP	I-70 WB	Timber Creek	310'-10"	SBGC
183.977	F-11-A0	I-70 EB	Timber Creek	221'-7"	SBGC
184.406	F-11-AN	I-70 WB	Black Gore Creek	742'-6"	CBGS
184.406	F-11-AM	I-70 EB	Black Gore Creek	742'-6"	CBGS
184.943	F-11-AL	I-70 WB	Miller Creek	513'-0"	CBGS
184.943	F-11-AK	I-70 EB	Miller Creek	450'-0"	CBGS
185.368	F-12-AT	I-70 WB	Polk Creek	726'-0"	SBGC
185.368	F-12-AS	I-70 EB	Polk Creek	726'-0"	SBGC

Figure 8. Bridge Types and Locations



While the project team initially evaluated rehabilitation as a possible minimization measure, the rehabilitation options were not considered appropriate for the following reasons;

- At over 40 years old, the existing bridges exhibit extensive wear from extreme weather conditions, deicing chemicals, and millions of vehicular load cycles.
- Widening options would involve extensive, risky, and expensive retrofit repairs and remaining service life would be less than half of that of replacement bridge.
- Even with rehabilitation, existing condition of bridges and history of required retrofits and repairs, the bridges would still have major maintenance challenges
- Two of the box girder bridges near MP 185.4 (Polk Creek) are located on non-standard radii curves that need to be re-designed at the larger correct radius for the design speed, so widening in place would not be an option. Both bridges over Gore Creek at MP 181.7 are also noted to be re-aligned for safety, as well as both bridges over Miller Creek at MP 184.8.



Efforts will be made to design the new bridges so they blend in with the natural setting and reflect the aesthetics and values associated with original bridge design along Vail Pass. This approach will minimize effects to the visual setting while honoring the broader original context sensitive design elements associated with the linear historic district.

Retaining Wall Replacements/Rehabilitation

There are several types of retaining walls present in the corridor. The condition assessment for all of the walls has not been done, but numerous precast concrete walls are noticeably deteriorating. The height and terracing of fill walls will be evaluated on a case-by-case basis as part of final design efforts.

Rehabilitation of Retaining Walls

Designers have identified walls that will not be impacted based on current design information. If a current retaining wall is considered to be in acceptable condition, it will be maintained and/or modified to meet the roadway design.

Replacement of Retaining Walls

Some retaining walls will need to be replaced due to realignment of the roadway or deteriorated condition. Replacement walls meet specific design criteria developed for Vail Pass designed to blend into the existing design and appearance of the linear historic district, which is considered a minimization of use.

Embankment, Sculpted Rock Cuts, Landscape Features, Runaway Truck Ramps, On- and Off-ramps, Culverts

Designers purposely avoided embankments, sculpted rock cuts, and landscape features unless there are no other alternatives to correcting substandard curves or other safety and operational deficiencies of the highway.

Realignments Require Embankment Changes

Efforts have been made to widen to one side of the highway or towards the median rather than impacting embankments and cut slopes. The current level of design has made preservation of embankments and cut slopes a high priority. However, widening will have an impact on some of these features, and has been noted in **Appendix A** on pages 8-22, 24-25.

Changes to Runaway Ramps, On- and Off-ramps, and Culverts

The runaway truck ramps require realignment and improvements, but these will be done in a similar location as the existing runaway truck ramps.

Vail Pass Recreation Trail

Ten miles of the Vail Pass Recreation Trail are present within the West Vail Pass project area. The project design proposes to relocate 2 miles of the trail between MP 185 and 187. This section of the trail is directly adjacent to I-70, and in an area where the original grade of US 6 was replaced by I-70. The trail in this section will be moved closer to Black Gore Creek, requiring easements from the White River National Forest, which will also result in a buffer between the trail and the highway. The project will also involves minor shifts in the trail alignment at MP 184.5, where the trail will be shifted about twenty feet north for a distance of 1,000 feet and at MP 184.9, where the trail will be shifted about



seventy feet north for a distance of about 1,200 feet. These shifts of the trail away from the highway will improve and enhance the recreational use of the trail.

Black Lakes No. 1 and No. 2 and the Vail Pass Rest Area

There is currently no plan to permanently incorporate any of the land from Black Lakes No. 1 and No. 2 and the Vail Pass Rest Area into the transportation facility (which would constitute a use under Section 4(f)). Although Black Lakes No. 1 and No. 2 and the Vail Pass Rest Area are within the APE, they are located outside the limits of construction activities and are therefore not subject to a Section 4(f) use.

CONTEXT SENSITIVE SOLUTIONS

CDOT will continue to follow the I-70 Mountain Corridor Context Sensitive Solutions (CSS) process with project stakeholders, including the Section 106 Issues Task Force (ITF), which consists of the Section 106 consulting parties. Using the original interstate design as inspiration, CDOT will work with the ITF to preserve and enhance the alpine environment, honoring original design of the highway and its features.

Critical issues that will be discussed as part of the CSS Process related to historic properties include:

- Maintaining the context sensitive design of the road while modernizing the facility.
- Impacts to high quality views in the project corridor.
- Integrate aesthetic design with engineering rather than tagged on as a decorative afterthought applied to predetermined solutions.
- Adherence to the Section 106 Programmatic Agreement (PA) for the I-70 Mountain Corridor to mitigate adverse effects to historic properties. A supplement to the PA will be developed specifically for this project (draft included in **Appendix B**).

CREST OF THE ROCKIES AESTHETICS GUIDANCE AND VISUAL IMPACT ASSESSMENT

The *I-70 Mountain Corridor Crest of the Rockies Aesthetics Guidance* defines the I-70 Mountain corridor as a whole, rather than defining it in construction phases or funding increments. This ensures that all projects follow the guidance during design efforts. The Vail Pass portion is within the Crest of the Rockies Design Segment, which includes numerous approaches to preserving the existing environment and landscape of Vail Pass. Within this design segment, there is also an Area of Special Attention, where were identified as locations or stretches along the I-70 Mountain Corridor that have been identified with multiple or unique issues. This Project falls with the Top of Vail Pass Area of Special Attention.

A Visual Impact Assessment (VIA) was prepared for the Project and included historic features as one element to consider in the impacts and mitigation. Historic features discussed in the VIA include contributing features within the historic corridor, including bridges, retaining walls, roadbed, embankments, and the Vail Pass Recreation Trail. Locations for comparisons of current and future conditions were chosen based on the proximity of contributing features in the corridor. Adherence to the VIA recommendations is intended to preserve and enhance the visual characteristics of Vail Pass. CDOT has committed to creating an Aesthetics ITF during final design of the project. This ITF will be responsible for developing project-specific aesthetic guidance that builds on the Crest of the Rockies Aesthetic Guidance and incorporates the historic context of West Vail Pass. The VIA is not a



substitute for the evaluation of effects under Section 106; rather, it is used to assist in evaluating effects to historic properties.

In March 2020, CDOT consulted with SHPO and the consulting parties regarding the use of the VIA to evaluate the visual effects to the historic district. The VIA was used to develop visualizations where locations for comparison were selected based on the proximity of contributing features within the linear historic district, including bridges, retaining walls, roadbed, embankments, and the Vail Pass Recreation Trail. Based on the VIA, the majority of visual impacts appear to be either neutral or beneficial, demonstrating the intent of the project team to uphold the high visual quality of the corridor and reinforce the current aesthetics of West Vail Pass. The visual analysis will be updated throughout the project as engineering designs are developed to ensure that the scenic quality of West Vail Pass is upheld and enhanced.

APPLY SECRETARY OF THE INTERIOR STANDARDS FOR REHABILITATION OF CONTRIBUTING FEATURES WHERE APPLICABLE

The Secretary of the Interior's Standards for Rehabilitation will be used as guidance for rehabilitation or reconstruction of contributing features within the project area, which may include bridges or retaining walls.

COMPLETION OF VAIL PASS HISTORIC CONTEXT IN JULY 2019

In July 2019, CDOT completed a historic context statement detailing the history and significance of the Vail Pass route of I-70. This report provides detailed documentation on the design and construction of the highway segment and its contributing features.

Project activities, including the implementation of minimization strategies described in this summary, will focus upon maintaining qualities of Vail Pass so it can still convey its significance as historic transportation facility.

COORDINATION

The study team coordinated with the USFS and additional stakeholders related to the Section 4(f) recreation resources. This coordination included:

- October 10, 2018, coordination meeting between CDOT, FHWA, and the USFS, which included discussion about potential impacts to recreation resources.
- October 23, 2018, Technical Team meeting #7, to discuss design option considerations, including the Vail Pass Recreation Trail relocation initial options.
- November 6, 2018, Recreation Issue Task Force meeting, to discuss potential temporary and permanent impacts to recreation facilities.
- April 11, 2019, meeting between CDOT and the USFS to gather feedback on Vail Pass Recreation Trail relocation options.
- April 24th and 25th, 2019, email coordination between CDOT and the USFS regarding follow-up comments on the Vail Pass Recreation Trail relocation options presented at the April 11, 2019 meeting.
- May 8, 2019, Technical Team meeting #8, to discuss design option considerations, including the Vail Pass Recreation Trail relocation option refinements.

The study team also coordinated with the SHPO and Section 106 consulting parties. This coordination included an initial meeting in May 2018 to introduce the project, consultation as reflected in the correspondence noted below, and a conference call with SHPO and the consulting parties in October 2019 to discuss effects, mitigation, and the VIA . In addition, per the terms of the 2008 I-70 Mountain Corridor Project Programmatic Agreement (PA), a supplement to the PA that outlines mitigation commitments for the I-70 West Vail Pass Auxiliary Lanes Environmental Assessment is being prepared. This supplement will be developed in consultation with the SHPO and consulting parties. Consultation regarding historic properties has included the following:

- May 30, 2018, meeting with Section 106 ITF, including representatives of SHPO, CDOT, FHWA, and USFS to discuss the project and potential historic properties.
- October 3, 2019, correspondence from CDOT to SHPO with proposed APE, and Determinations of Eligibility and Effects on historic properties.
- October 7, 14, 16, 2019, correspondence from CDOT to the consulting parties with proposed APE, and Determinations of Eligibility and Effects on historic properties.
- October 10, 2019, email correspondence from USFS to CDOT concurring with APE, and Determinations of Eligibility and Effects.
- October 17, 2019, correspondence from SHPO to CDOT concurring with APE, and Determinations of Eligibility and Effects
- October 30, 2019, meeting with Section 106 ITF to discuss the effects determination, mitigation, and VIA.
- March 12, 2020, correspondence from CDOT to SHPO with additional information to support Determinations of Effects.
- March 13, 2020, correspondence from CDOT to consulting parties with additional information to support Determinations of Effects.
- March 18, 2020, email correspondence from SHPO to CDOT accepting additional information.
- March 23, 2020, correspondence from CDOT to FHWA notifying of adverse effect determinations to historic properties.
- March 27, 2020, ACHP e106 form completed by FHWA, notifying ACHP of the finding by CDOT acting on behalf of FHWA, of adverse effect determination.
- April 14, 2020, correspondence from ACHP to FHWA stating they will not be participating further in the consultation for the project.
- June 16, 2020, correspondence from CDOT to SHPO with additional information regarding Determinations of Effect.
- June 18, 2020, correspondence from CDOT to consulting parties with additional information regarding Determination of Effect.
- July 30 and 31, 2020, correspondence from CDOT to SHPO and consulting parties requesting review of the I-70 Mountain Corridor Section 106 Programmatic Agreement (PA) supplement.
- Executed PA supplement among CDOT, FHWA, and Colorado SHPO will be included prior to the decision document.

September 2020



REFERENCES

CDOT, 2017. "CDOT NEPA Manual," Colorado Department of Transportation (CDOT), August 2017. Accessed January 2017 and April 2018. (https://www.codot.gov/programs/environmental/nepa-program/nepa-manual)

CDOT, 2011. I-70 Mountain Corridor PEIS Section 4(f) Evaluation Technical Report, March 2011. Accessed December 2019 and March 2020. https://www.codot.gov/projects/i-70-old-mountaincorridor/final-peis/final-peis-documents/technical-reports/Vol5 I-70 Mntn Corridor Final PEIS Section4f TR.pdf)

Eagle County, 2007. Eagle County Strategic Plan Draft. Eagle County, Colorado.

Eagle County, 2017. Eagle County Strategic Plan. Eagle County, Colorado. Updated May 2017.

Eagle County, 2019a. Eagle County GIS Viewer. Accessed June 2019. Eagle County, Colorado. http://www.eaglecounty.us

Eagle County, 2019b. Eagle County Open Space Finder. Accessed June 2019. Eagle County, Colorado. http://gismap.eaglecounty.us/OpenSpace/

Eagle County Community Development (2005). Eagle County Comprehensive Plan. Eagle County, Colorado.

Mead & Hunt. 2019. Historic Context: Vail Pass Segment of Interstate Highway 70.

Mead & Hunt. 2019. Historic Resources Inventory Report: I-70 West Vail Pass Auxiliary Lanes Environmental Assessment.

Summit County, 2019a. Summit County Interactive Trails Map. Accessed June 2019. https://summitcountyco.maps.arcgis.com/apps/webappviewer/index.html?id=3bef9132da234447b7081661157adc8a

US Forest Service, 2019a. White River National Forest Management Areas GIS Data. Accessed June 2019. (https://www.fs.usda.gov/detail/whiteriver/maps-pubs/?cid=fsbdev3_001232)

US Forest Service, 2019b. Forest Service Schedule of Proposed Actions for the White River National Forest. Accessed December 2019. https://www.fs.fed.us/sopa/forest-level.php?110215

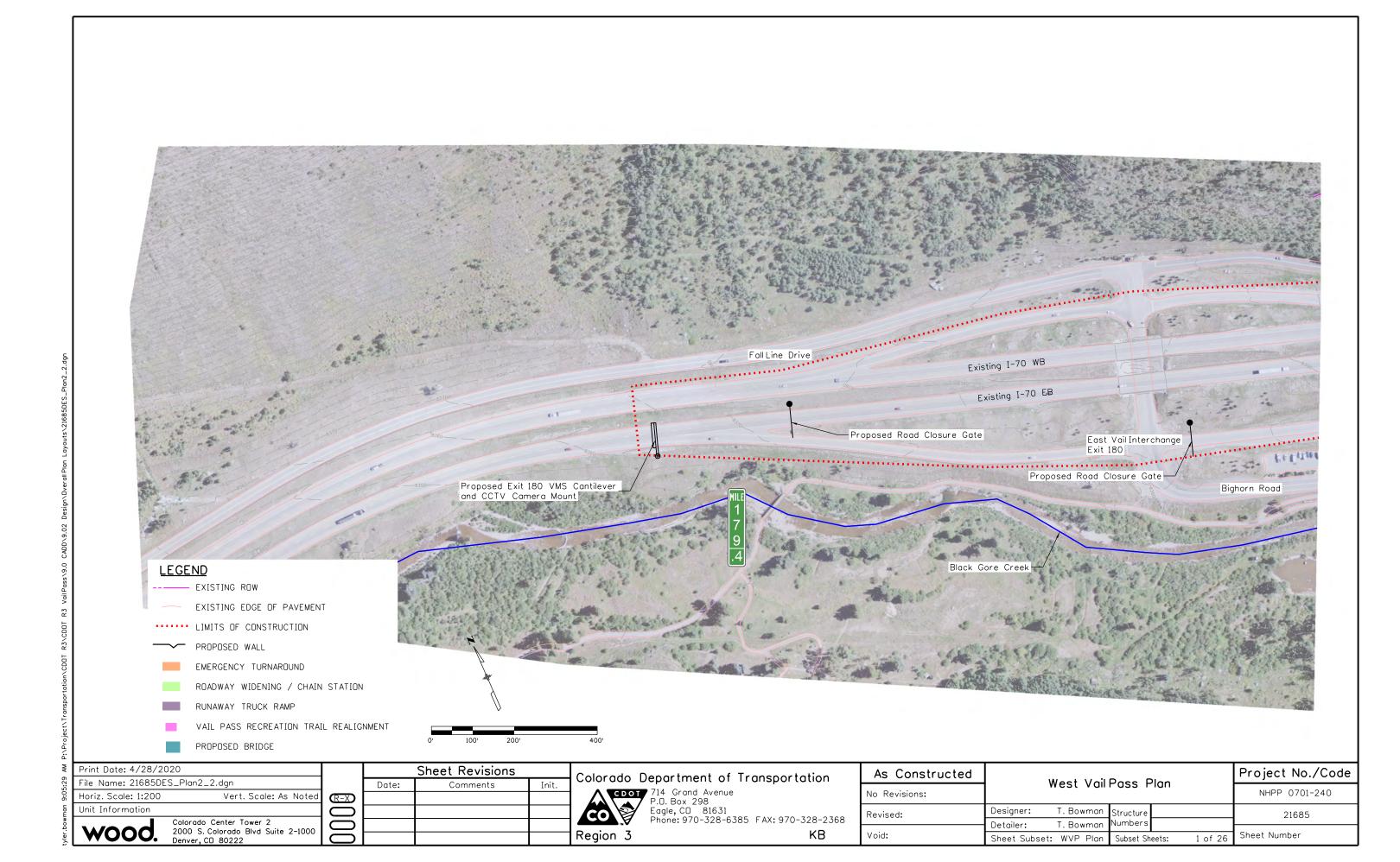
Vail, 2019. GIS Data: Land use, parcel boundaries, zoning, designated open space. Town of Vail, Colorado. Wahlers, Jennifer. *Making it Work: The Contributions of Depression-Era Works Programs to Colorado's Highway System*. Colorado Heritage: The Magazine of History Colorado, the Colorado Historical Society. July/August 2010.

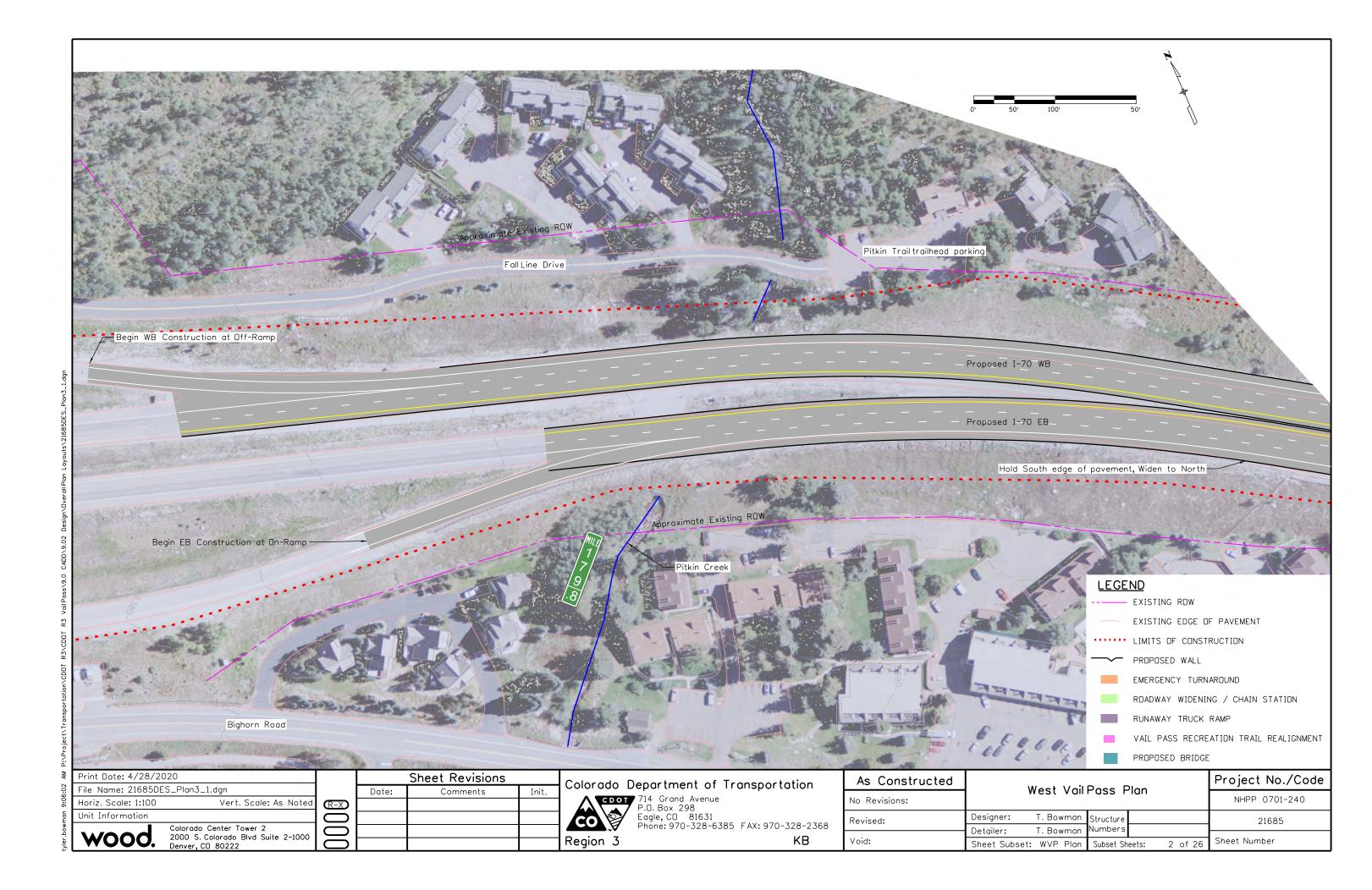
This page intentionally left blank.

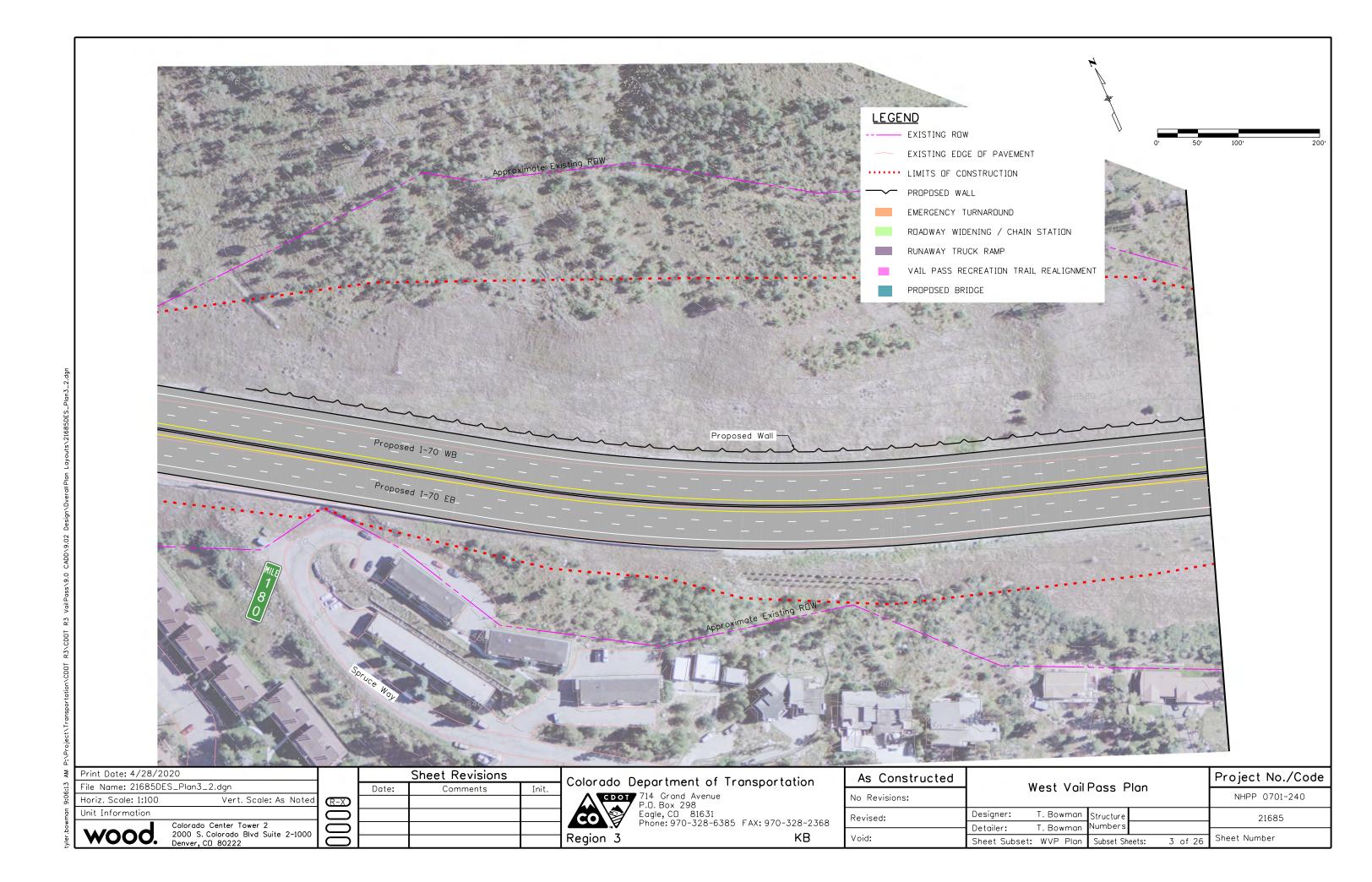


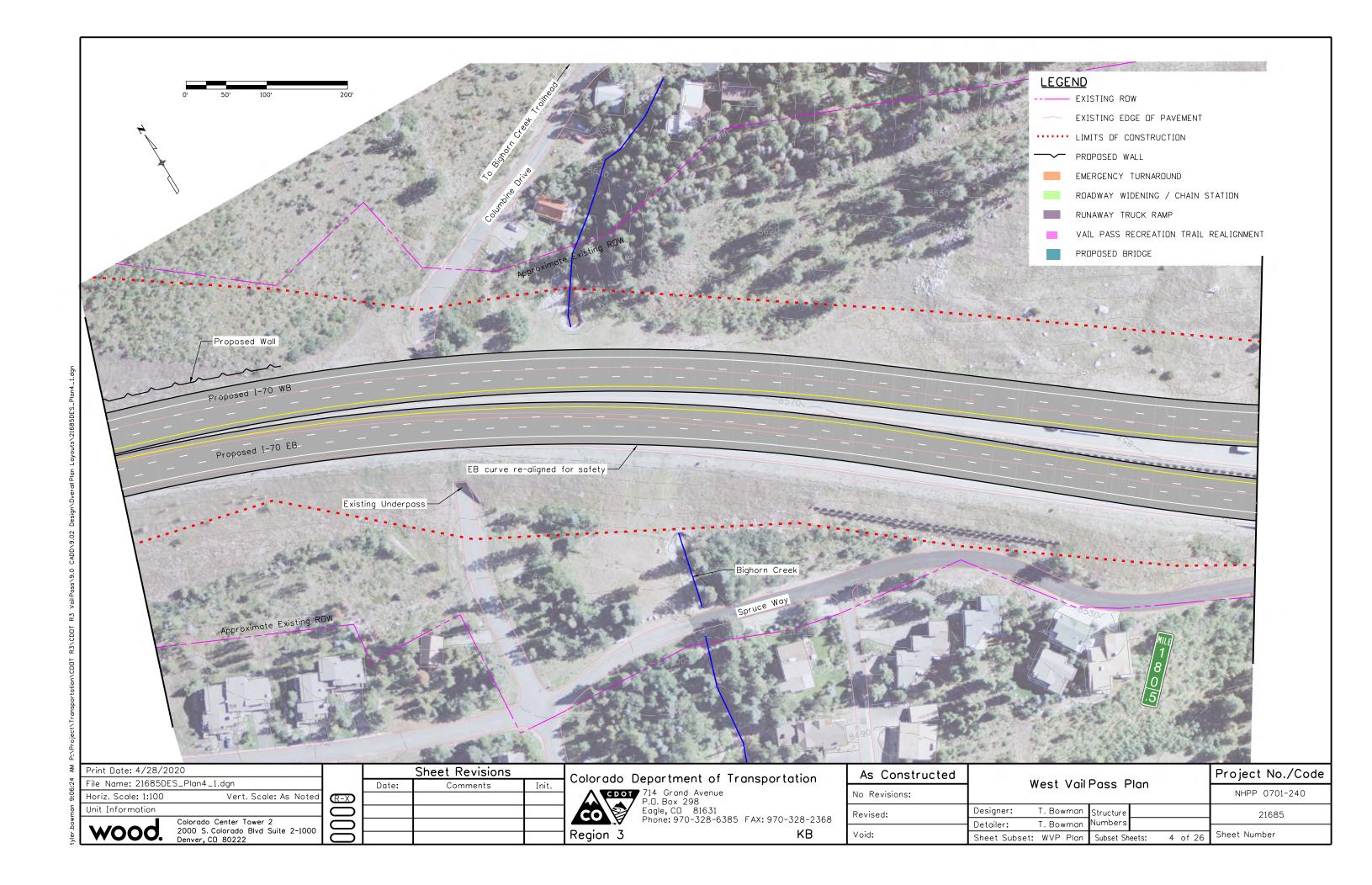
APPENDIX A

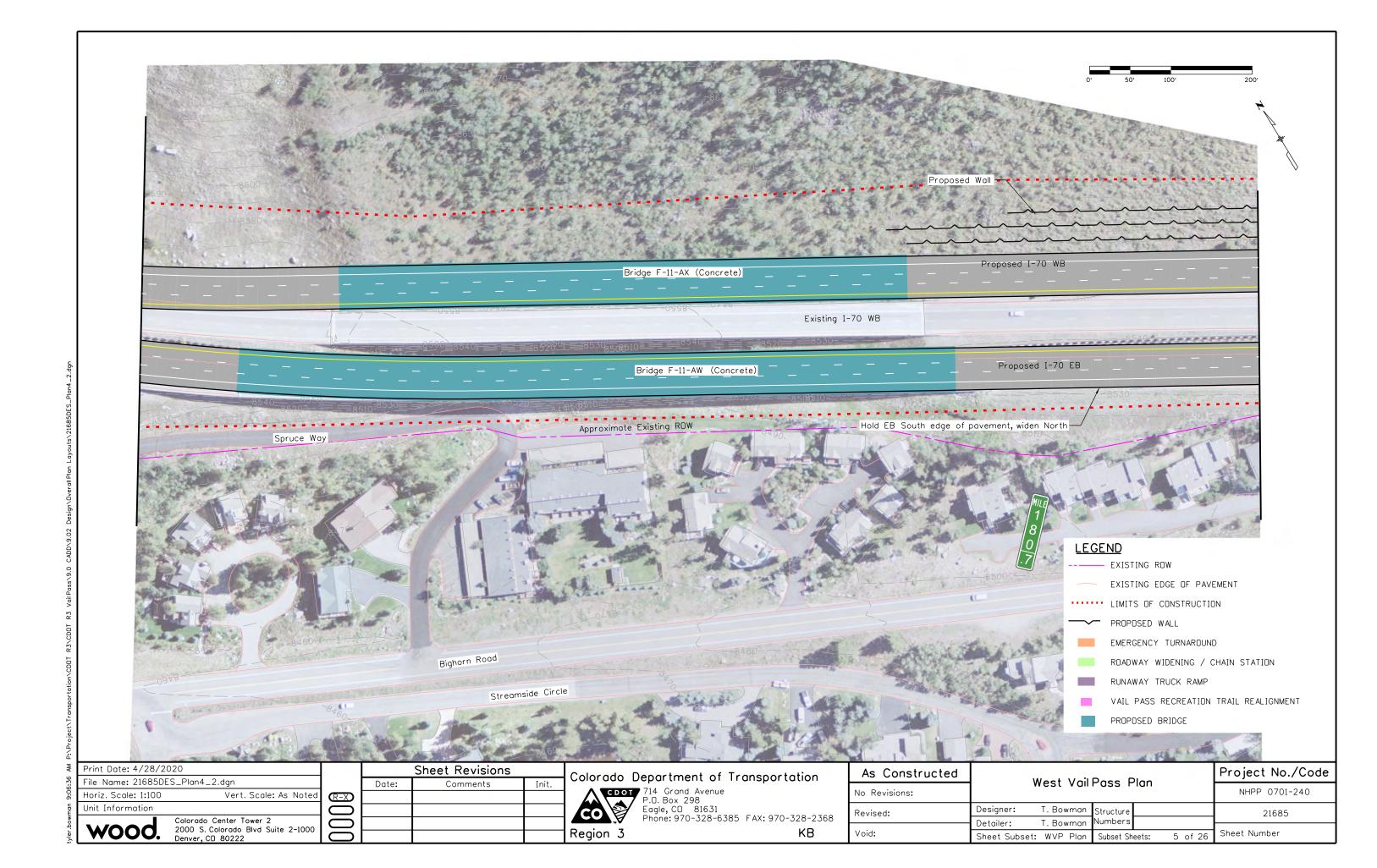
WEST VAIL PASS AUXILIARY LANES CONCEPTUAL PLANS

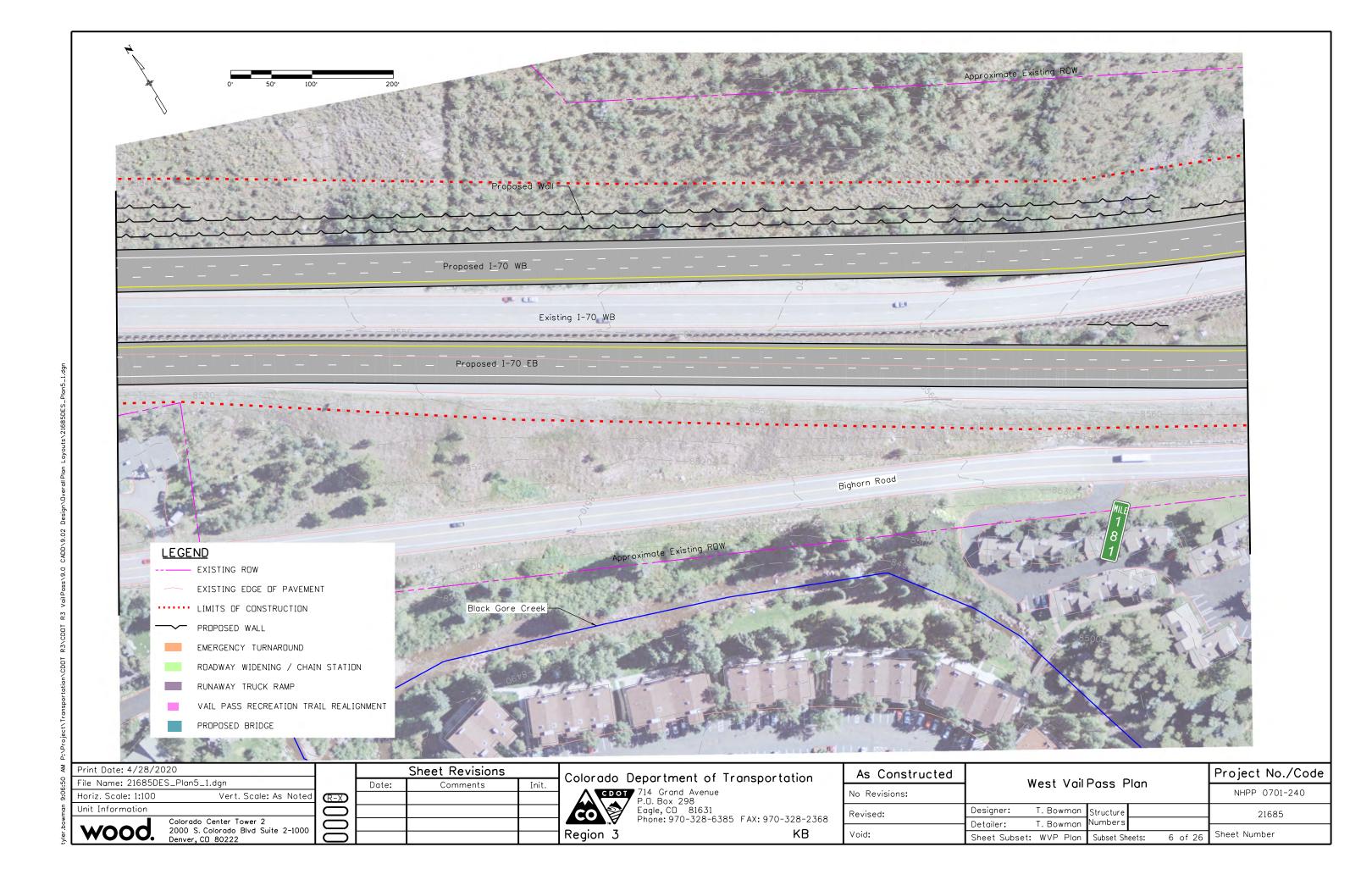


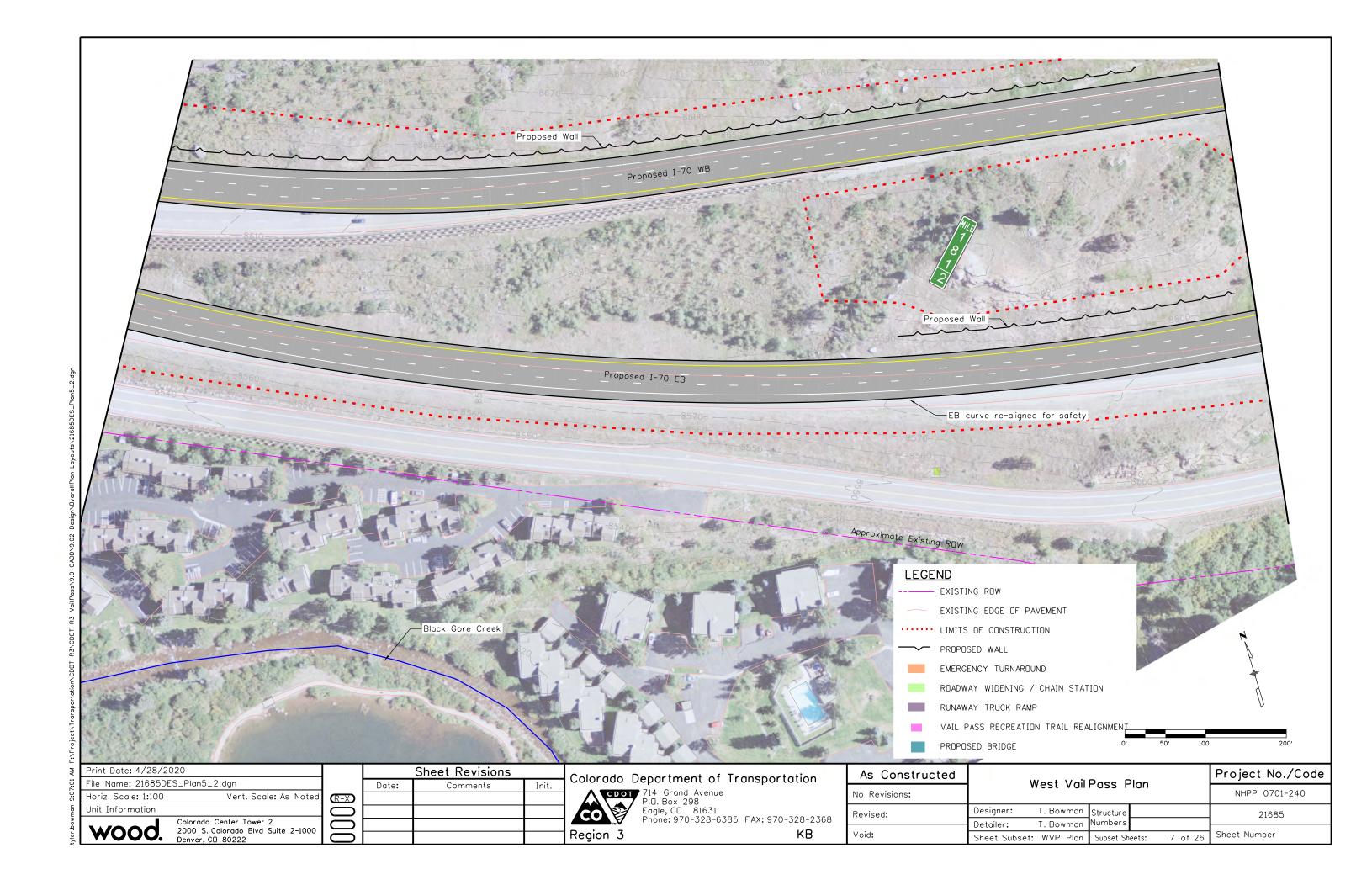


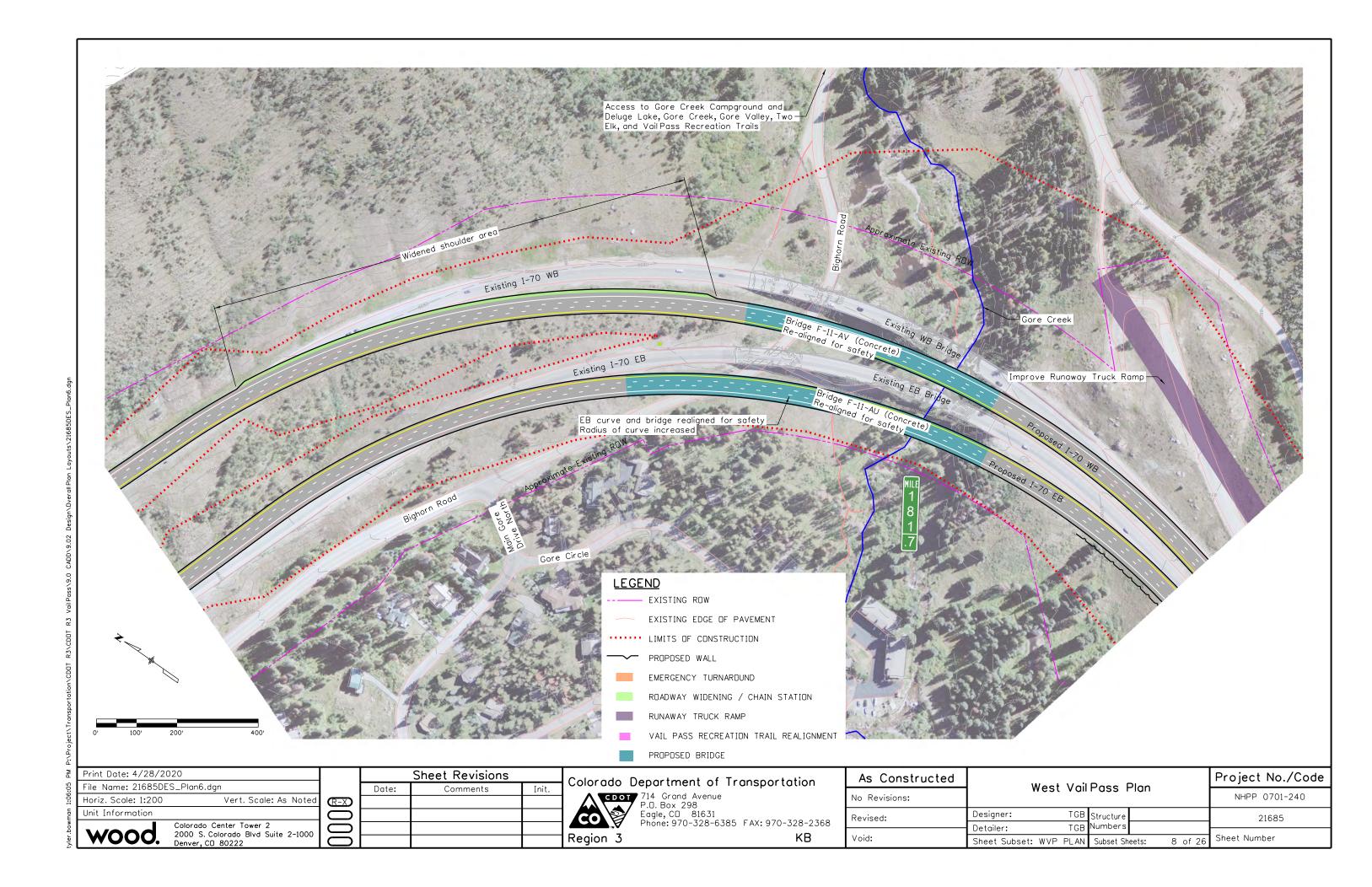


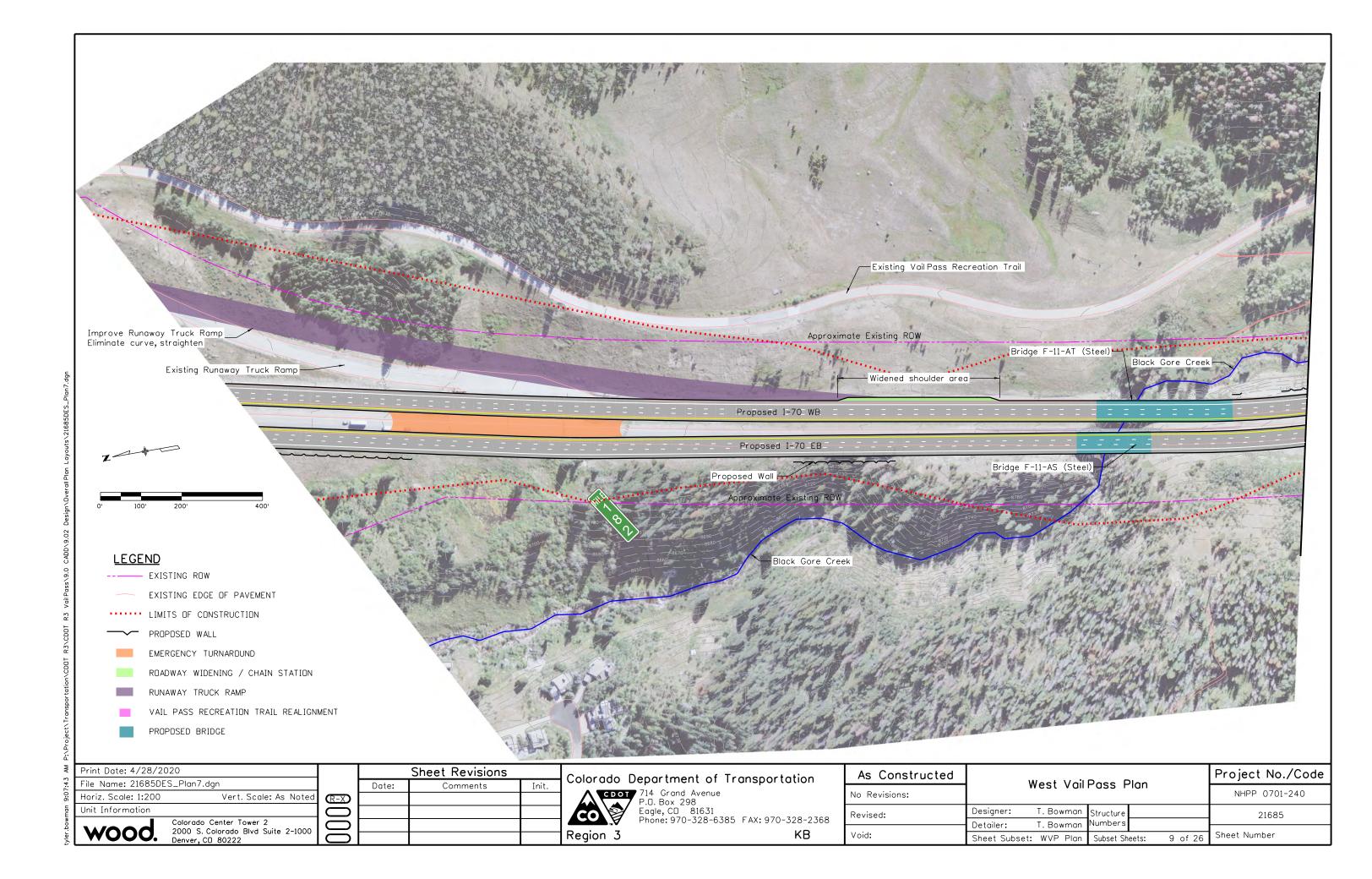


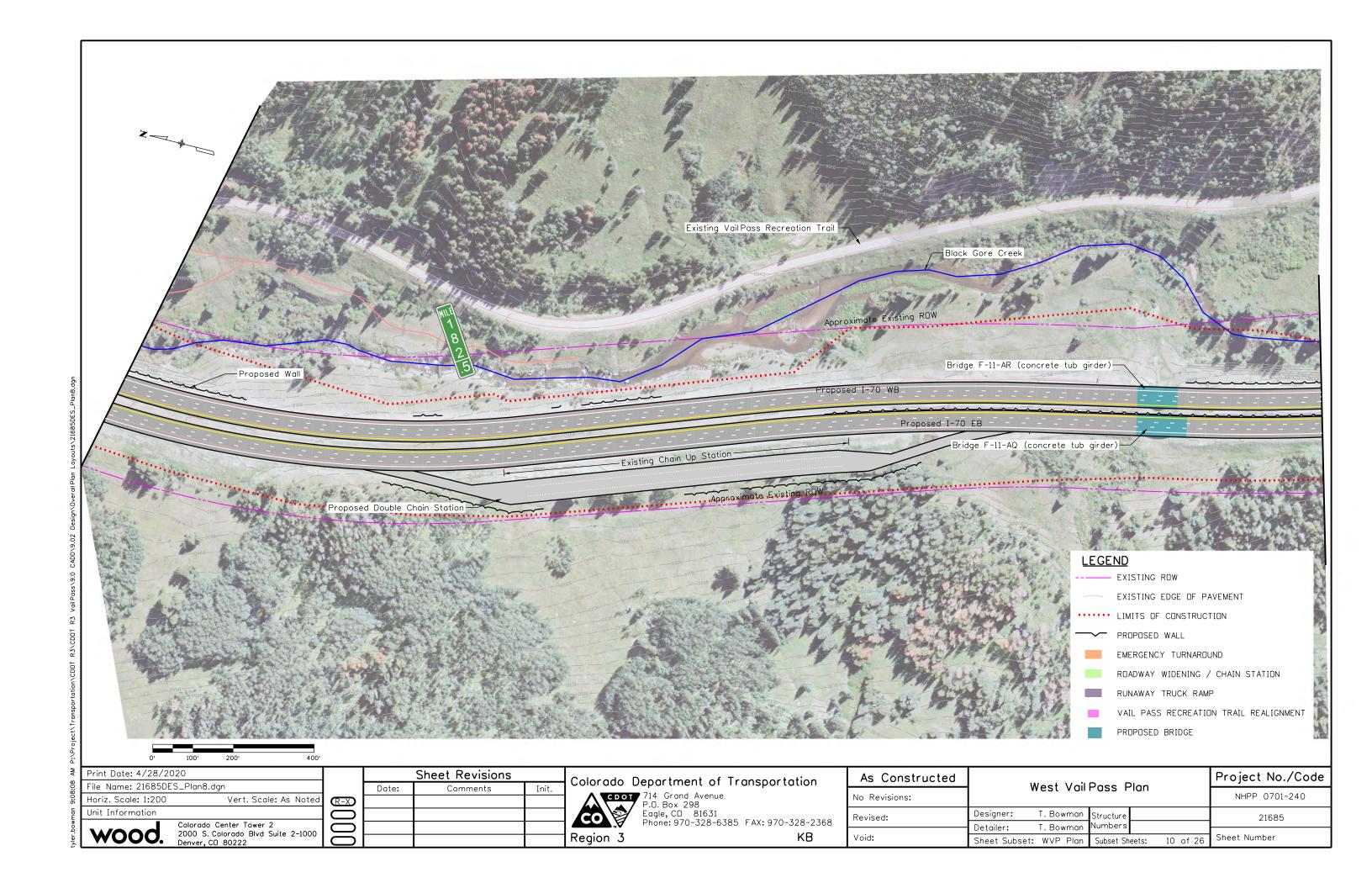


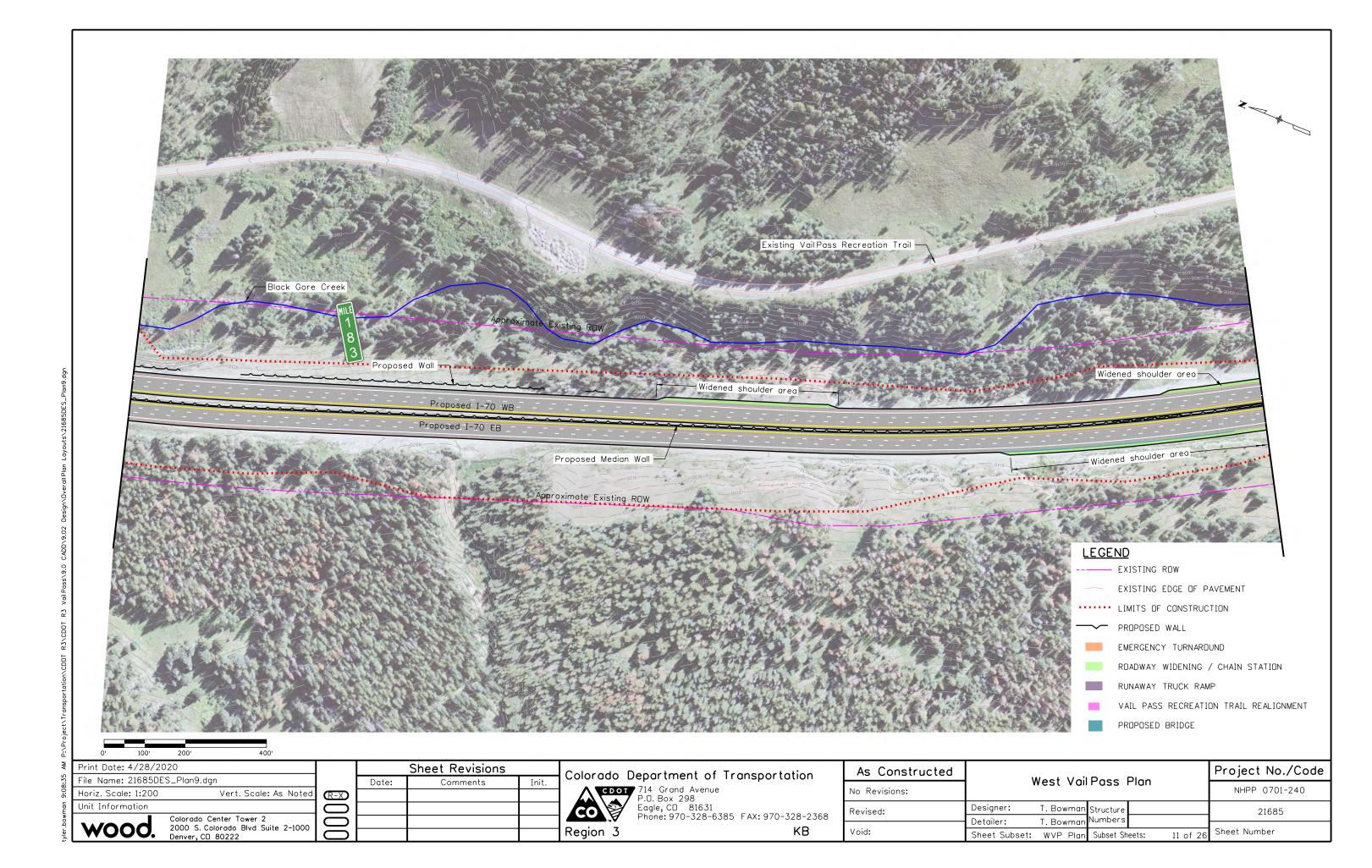


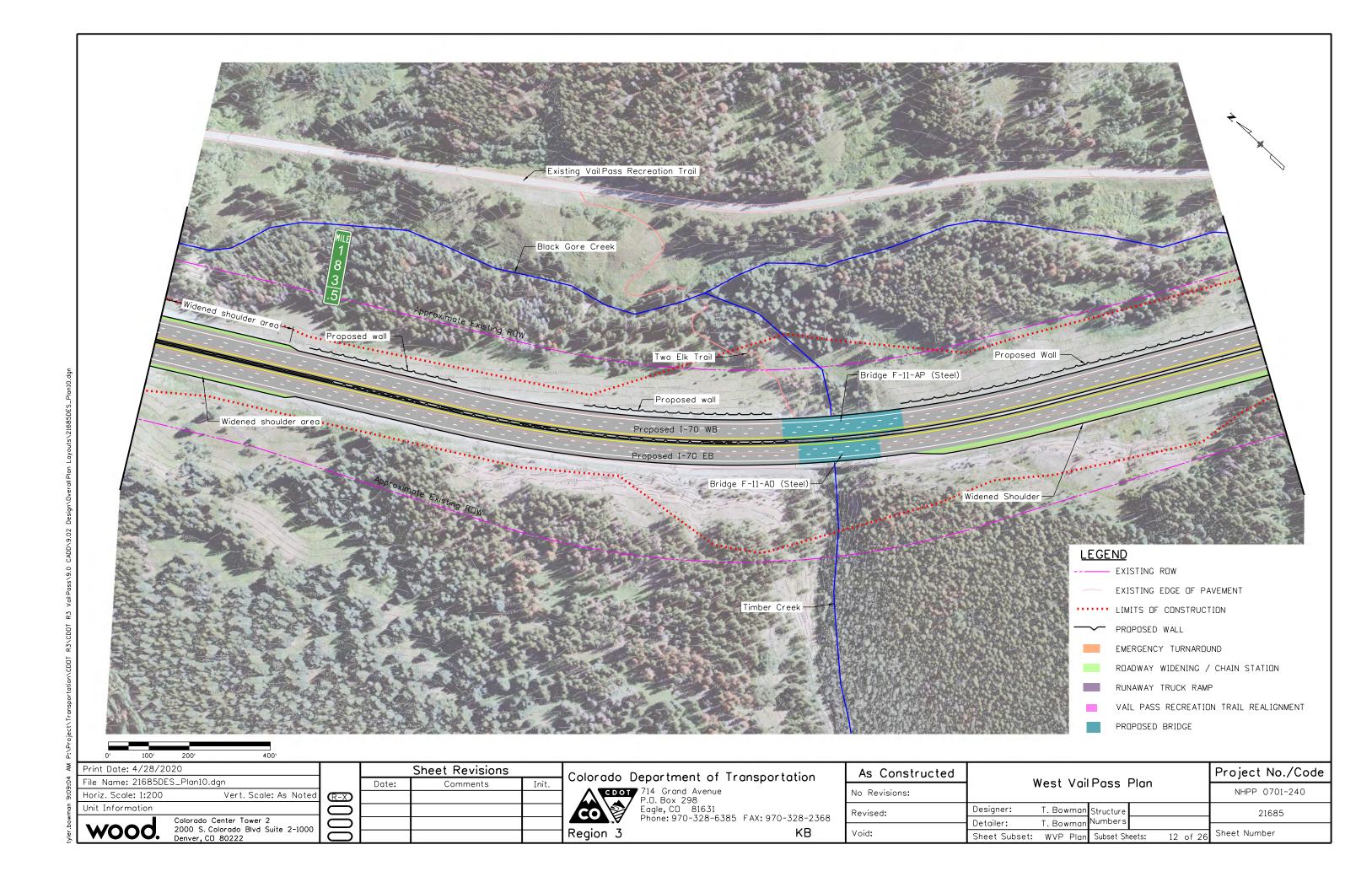


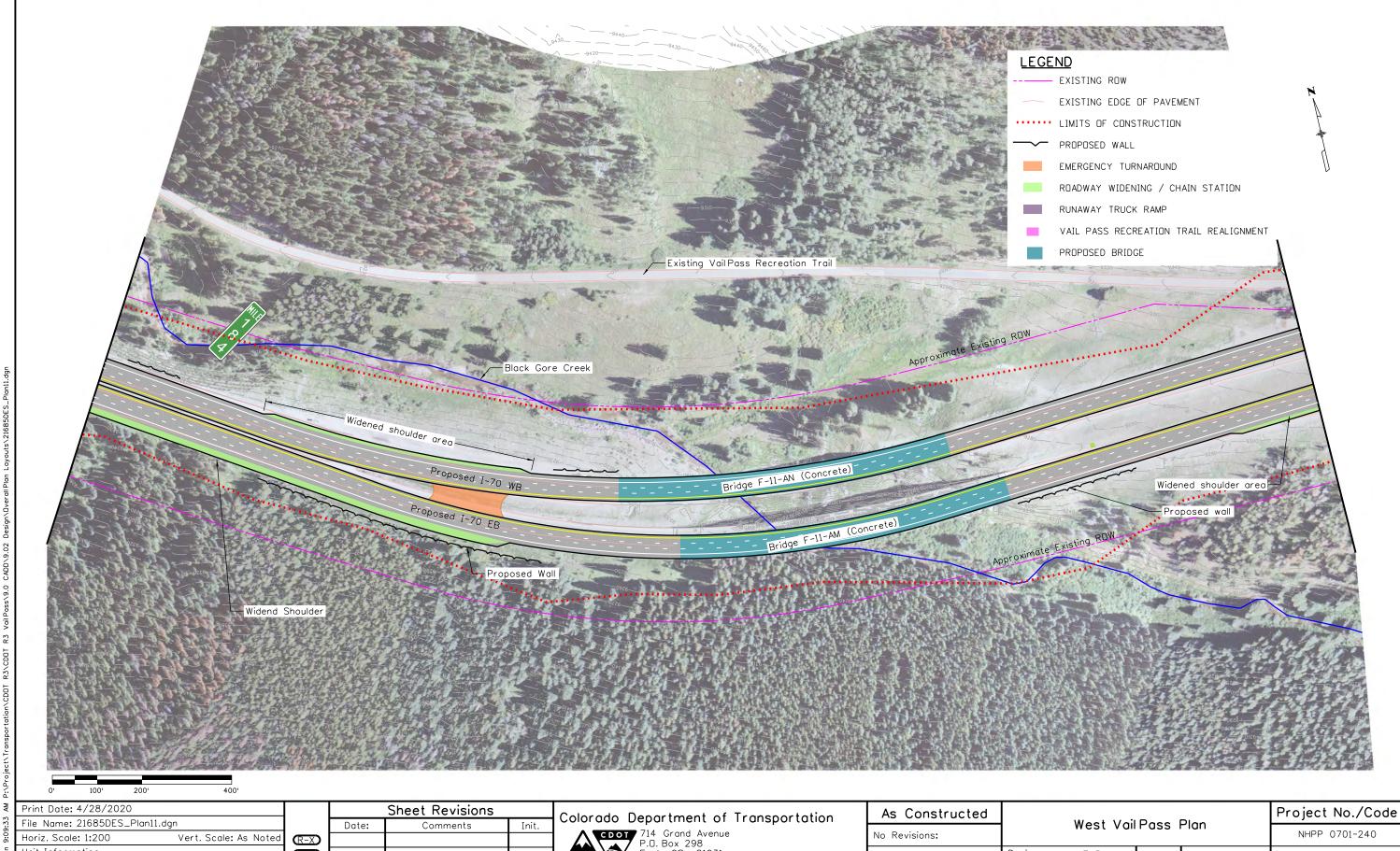












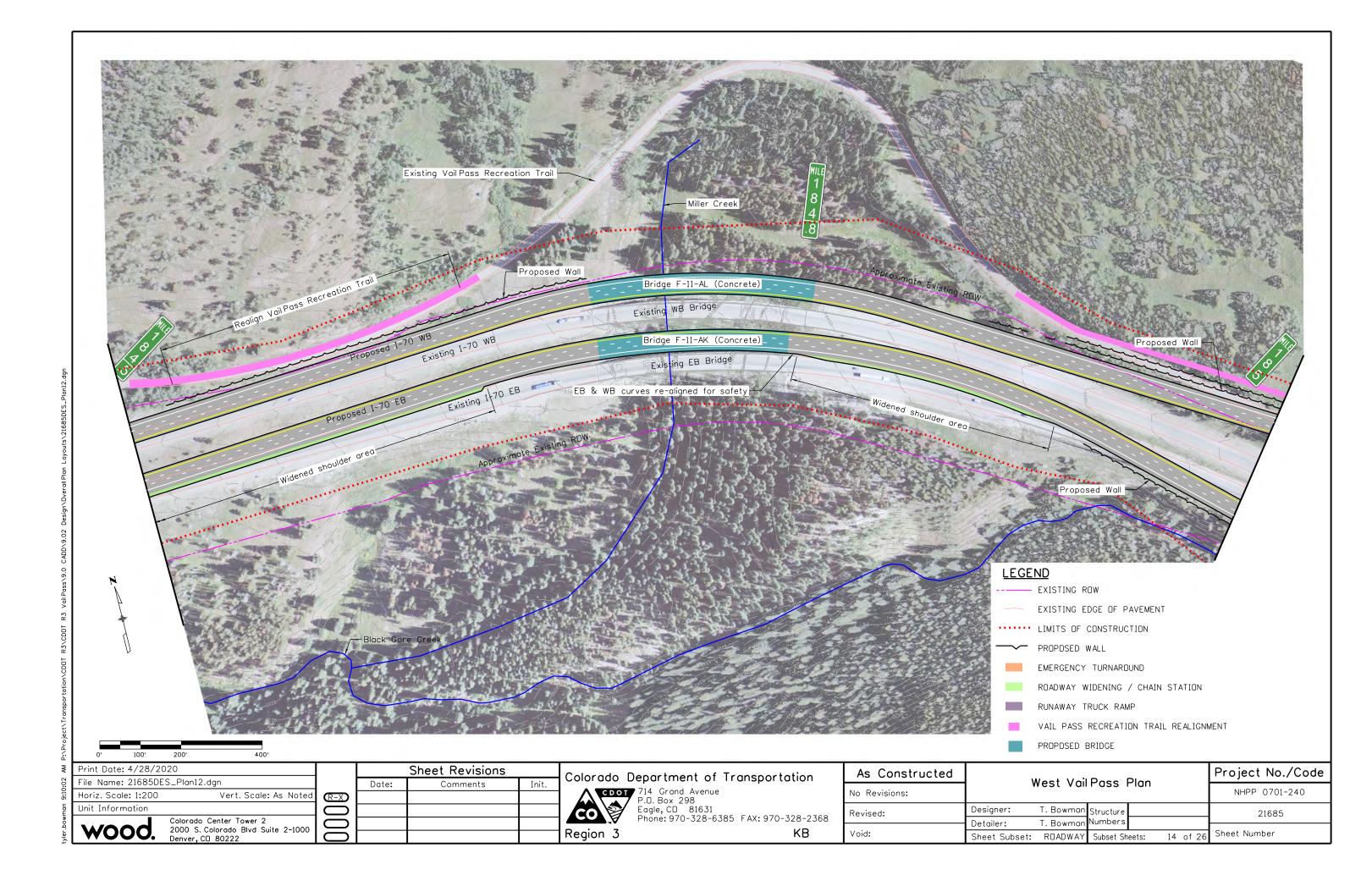
Unit Information WOOD.

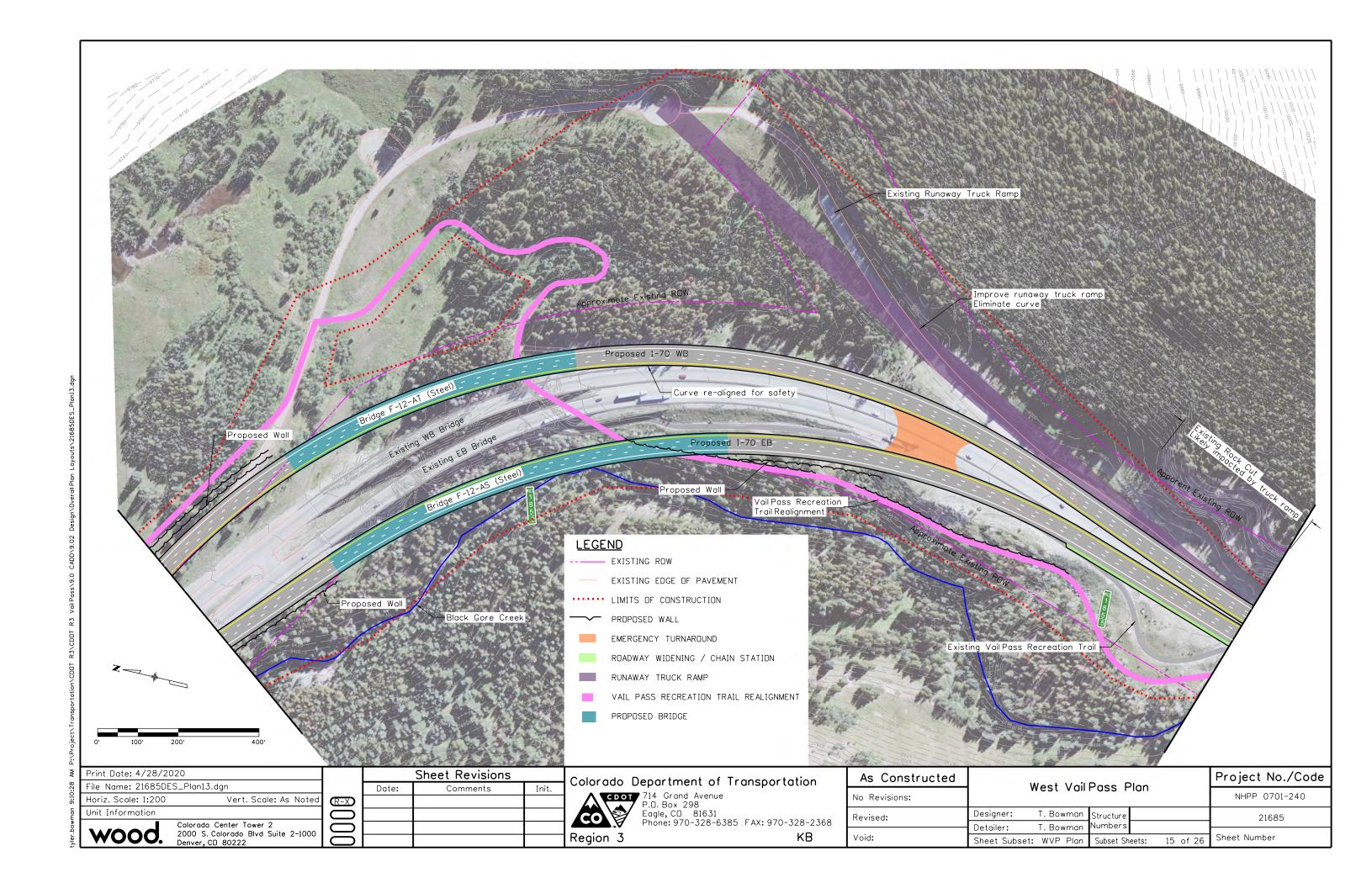
Colorado Center Tower 2 2000 S. Colorado Blvd Suite 2–1000 Denver, CO 80222

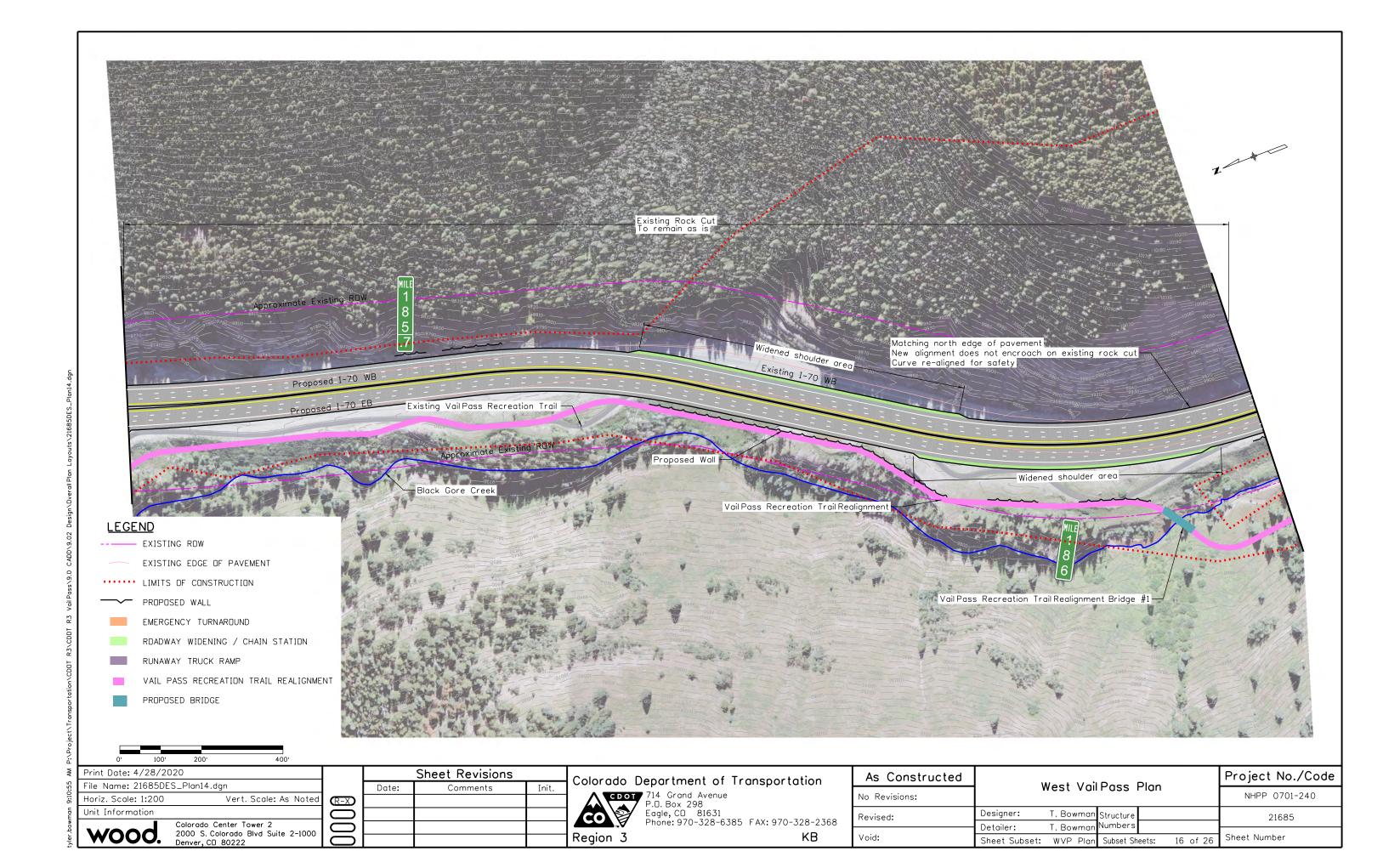
Region 3

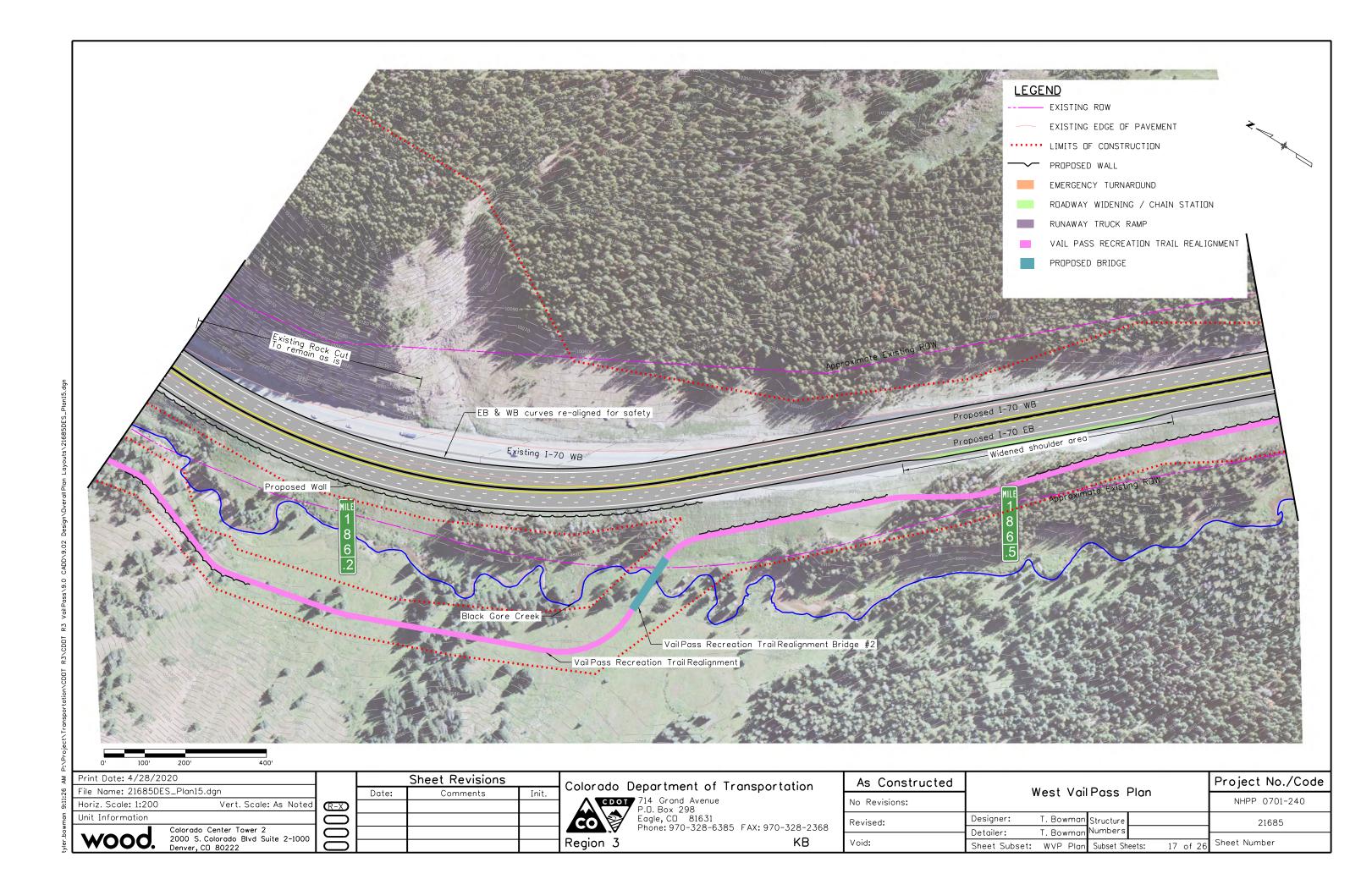
	KB
P.O. Box 298 Eagle, CO 81631 Phone: 970-328-6385	FAX: 970-328-2368
7/14 Grana Avenue	

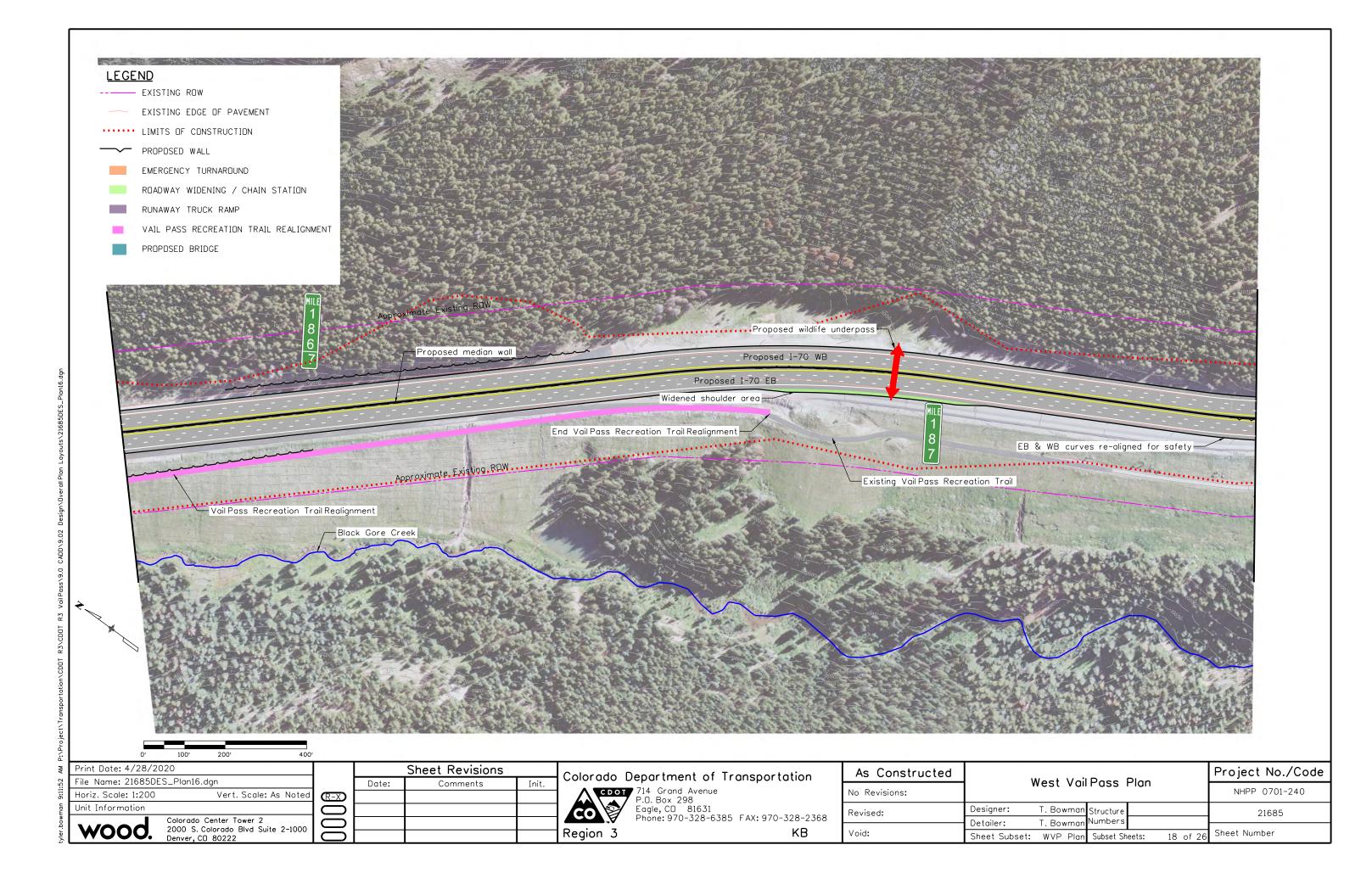
As Constructed	West Vail Pass Plan		Project No./Code			
No Revisions:			NHPP 0701-240			
Revised:	Designer:	T. Bowman	Structure			21685
	Detailer:	T. Bowman	Numbers			
Void:	Sheet Subset:	WVP Plan	Subset Sh	eets:	13 of 26	Sheet Number
	No Revisions:	No Revisions: Revised: Designer: Detailer:	No Revisions: Revised: Designer: T. Bowman Detailer: T. Bowman	No Revisions: Revised: Designer: T. Bowman Structure Detailer: T. Bowman Numbers	No Revisions: No Revisions: West Vail Pass Plan	No Revisions: Revised: Designer: T. Bowman Structure Detailer: T. Bowman Numbers

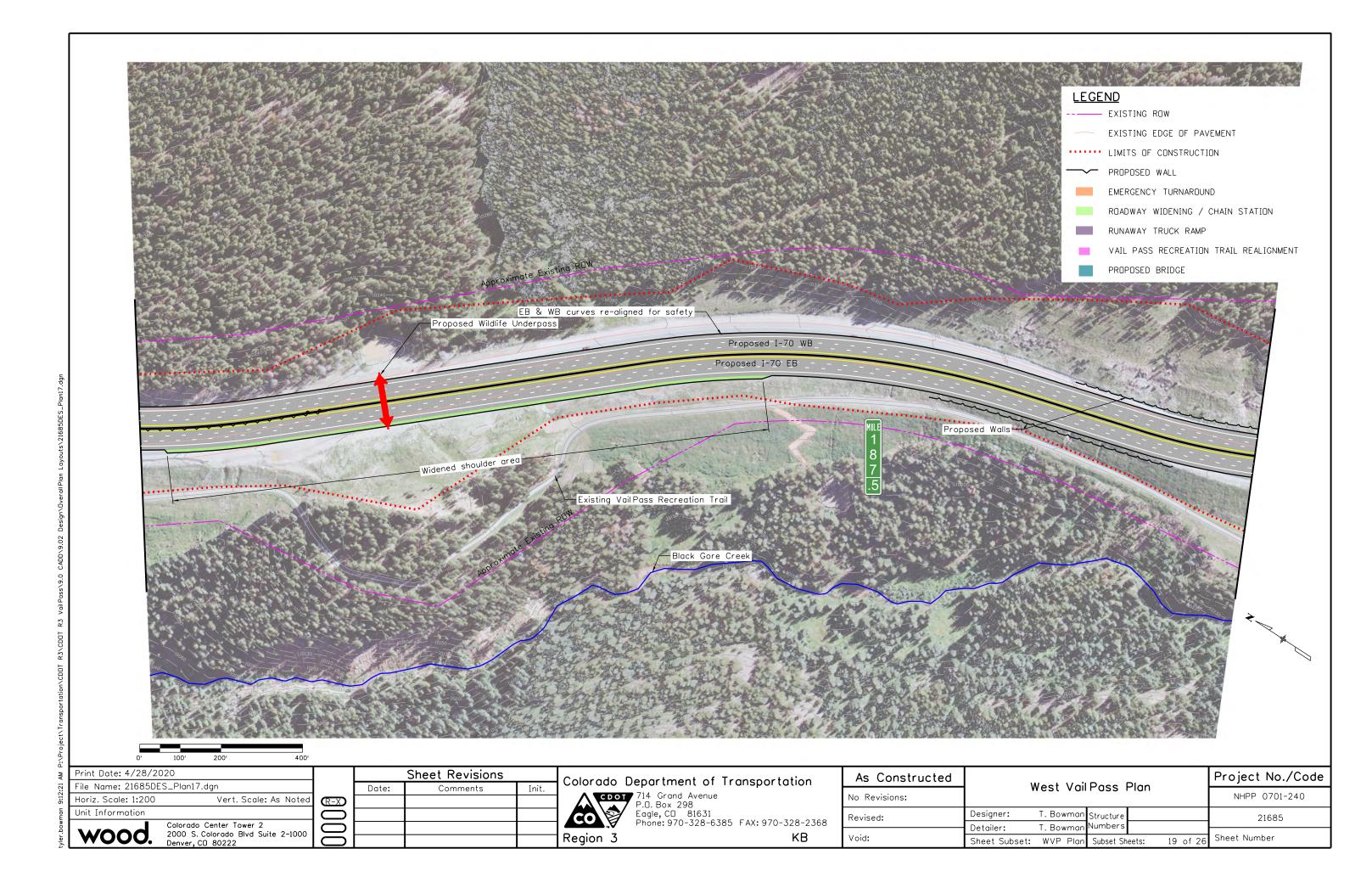


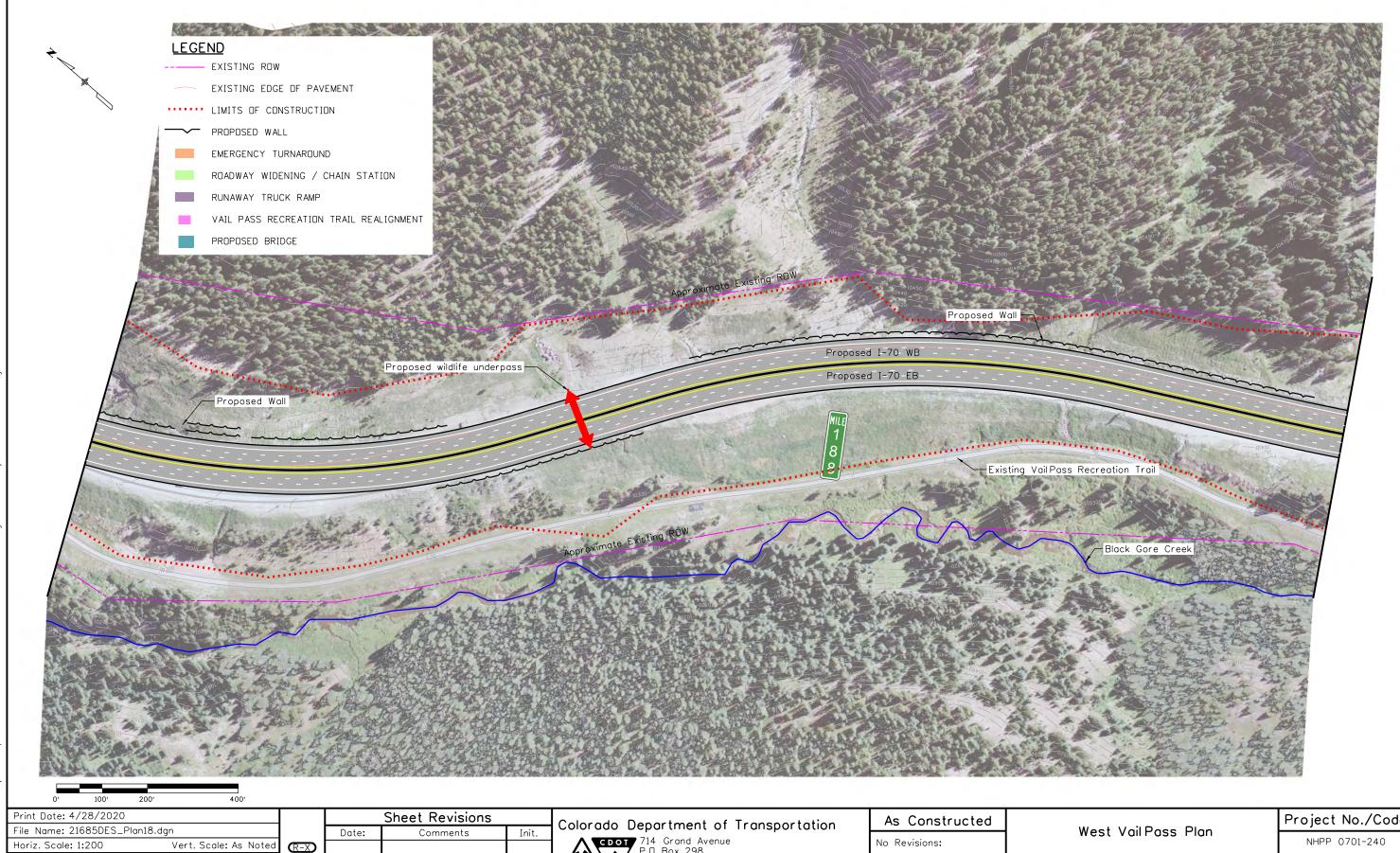












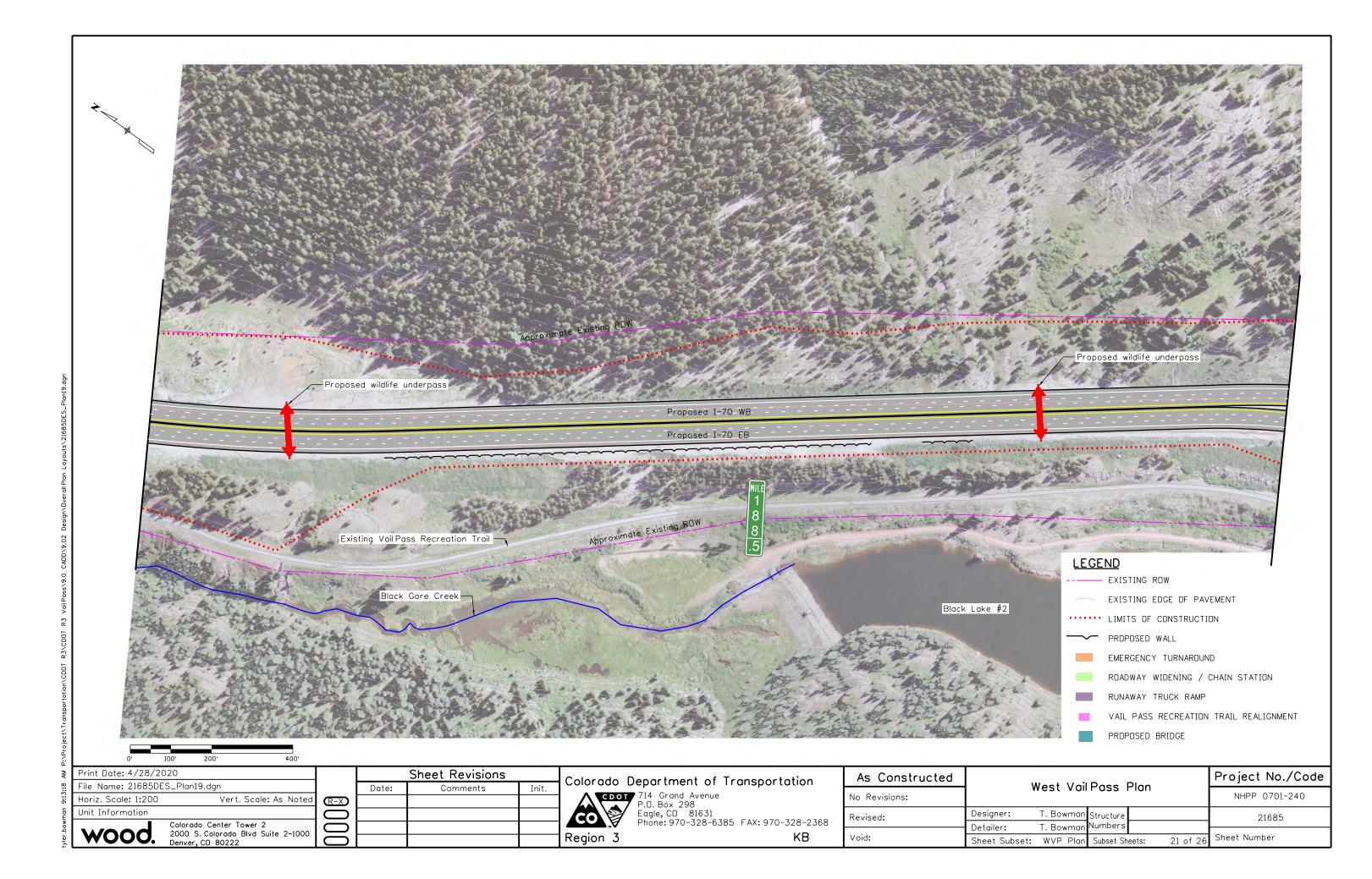
Unit Information

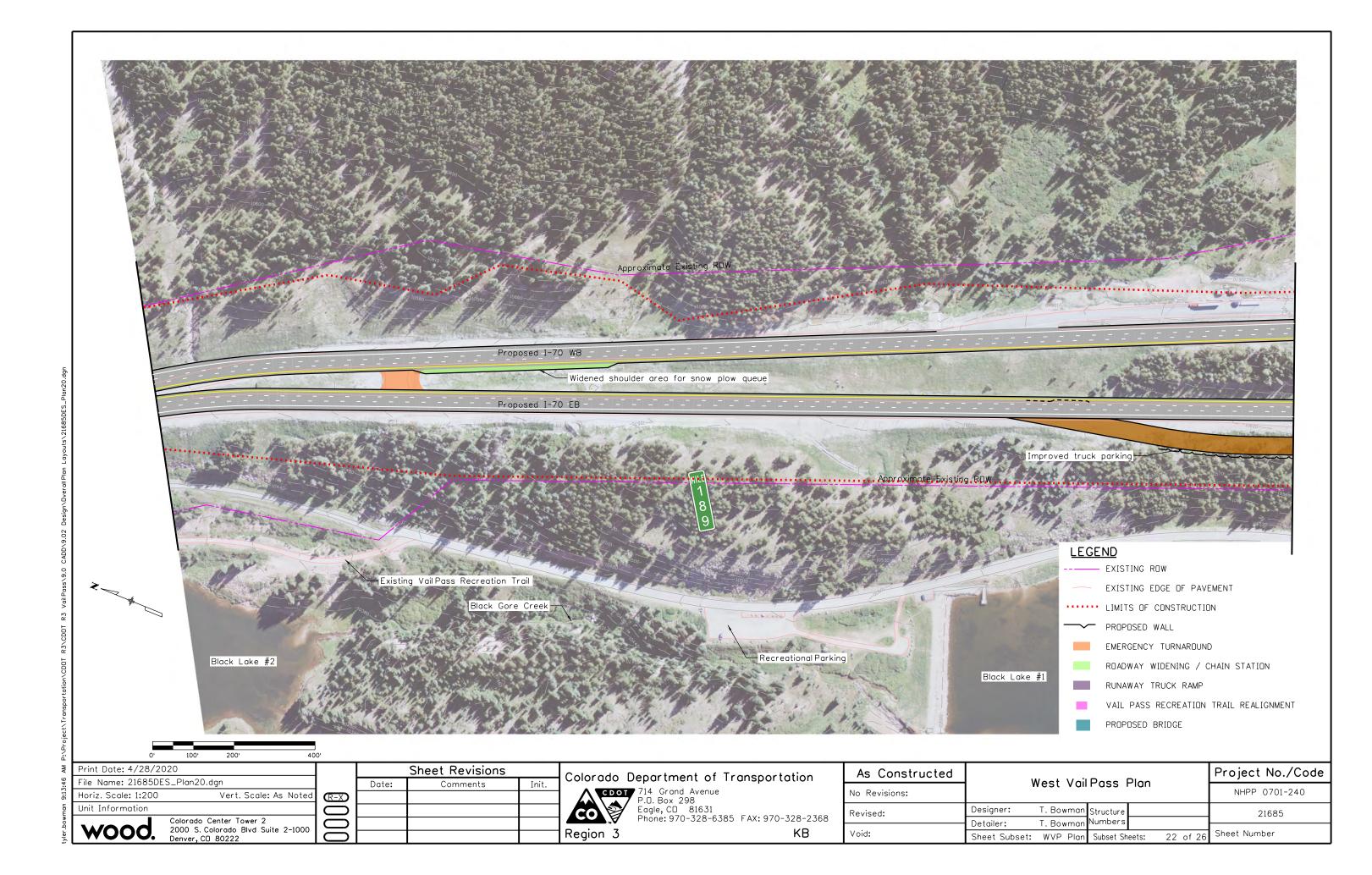
Colorado Center Tower 2 2000 S. Colorado Blvd Suite 2–1000 Denver, CO 80222 Date: Comments Init.

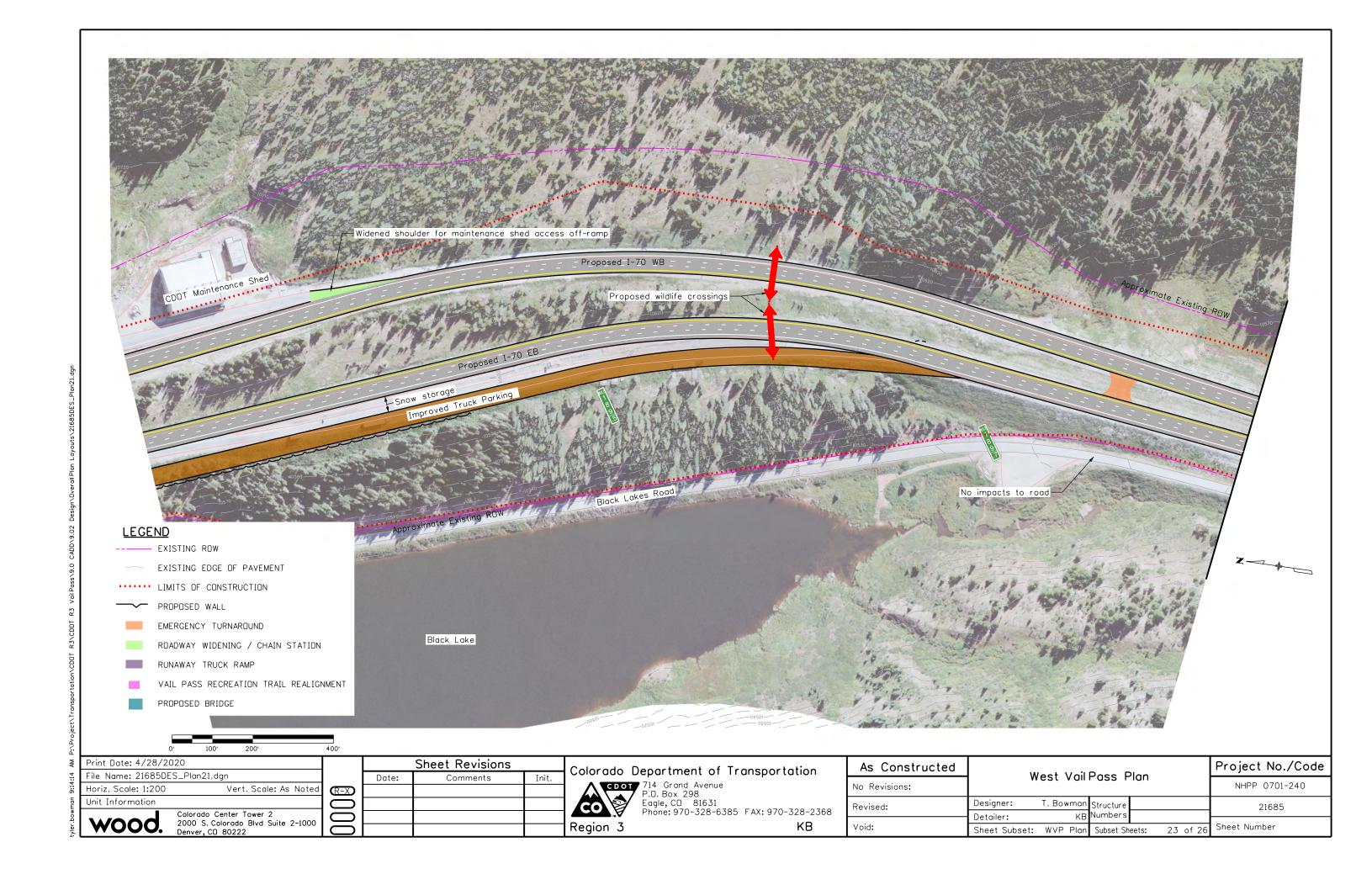
CO	7 P E P
Region 3	

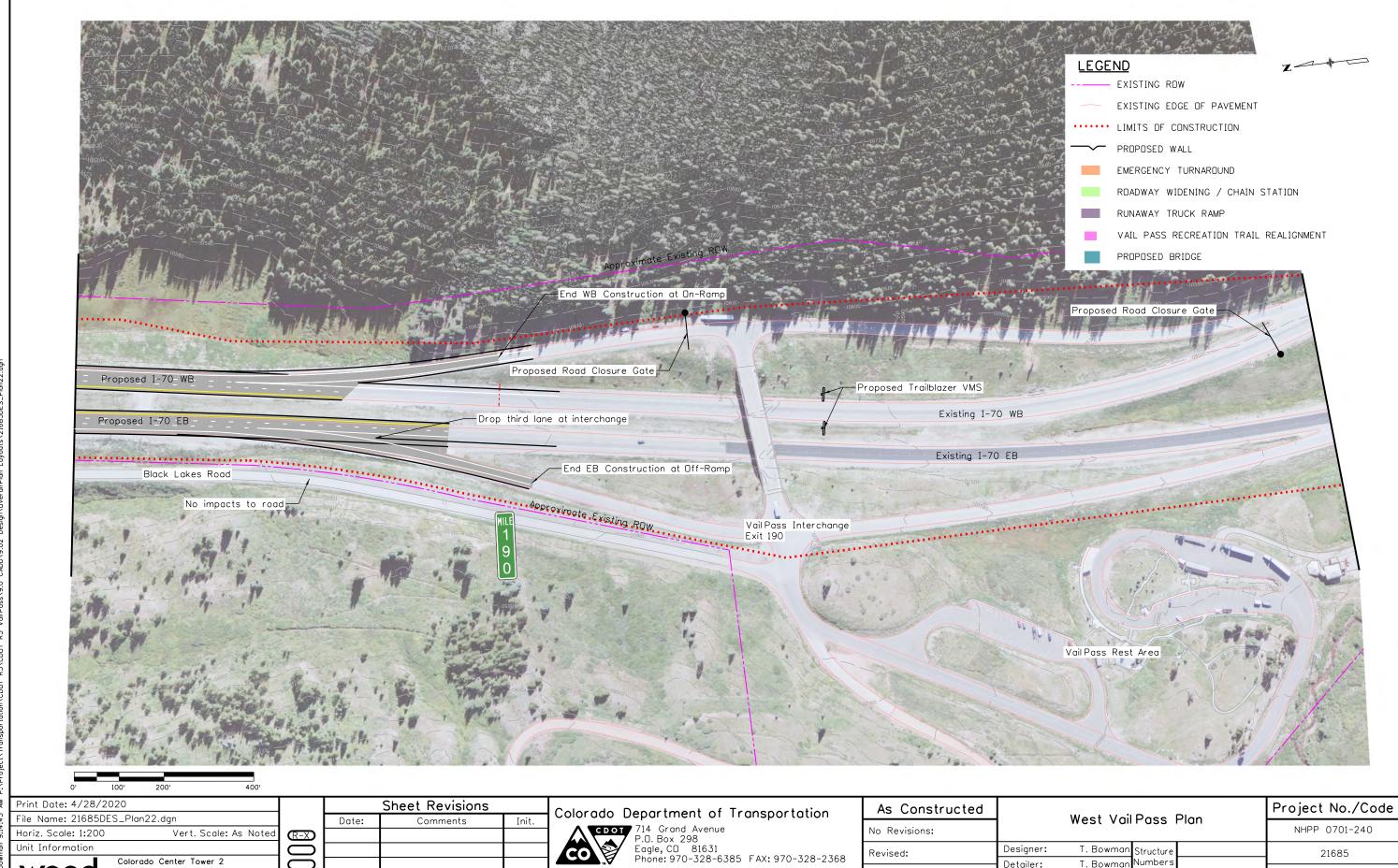
714 Grand Avenue P.D. Box 298 Eagle, CD 81631 Phone: 970-328-6385 FAX: 970-328-2368

As Constructed					Project No./Code	
No Revisions:	west valifass Flan		NHPP 0701-240			
Revised:	Designer:	T. Bowman	Structure			21685
	Detailer:	T. Bowman	Numbers			
Void:	Sheet Subset:	WVP Plan	Subset Shee	ets:	20 of 26	Sheet Number
	No Revisions:	No Revisions: Revised: Designer: Detailer:	No Revisions: Revised: Designer: T. Bowman Detailer: T. Bowman	No Revisions: Revised: Designer: T. Bowman Structure Detailer: T. Bowman Numbers	No Revisions: Revised: Designer: T. Bowman Structure Detailer: T. Bowman Numbers	No Revisions: Revised: Designer: T. Bowman Structure Detailer: T. Bowman Numbers Numbers









CO)

Region 3

Revised:

Void:

T. Bowman

Subset Sheets:

Sheet Subset: WVP Plan

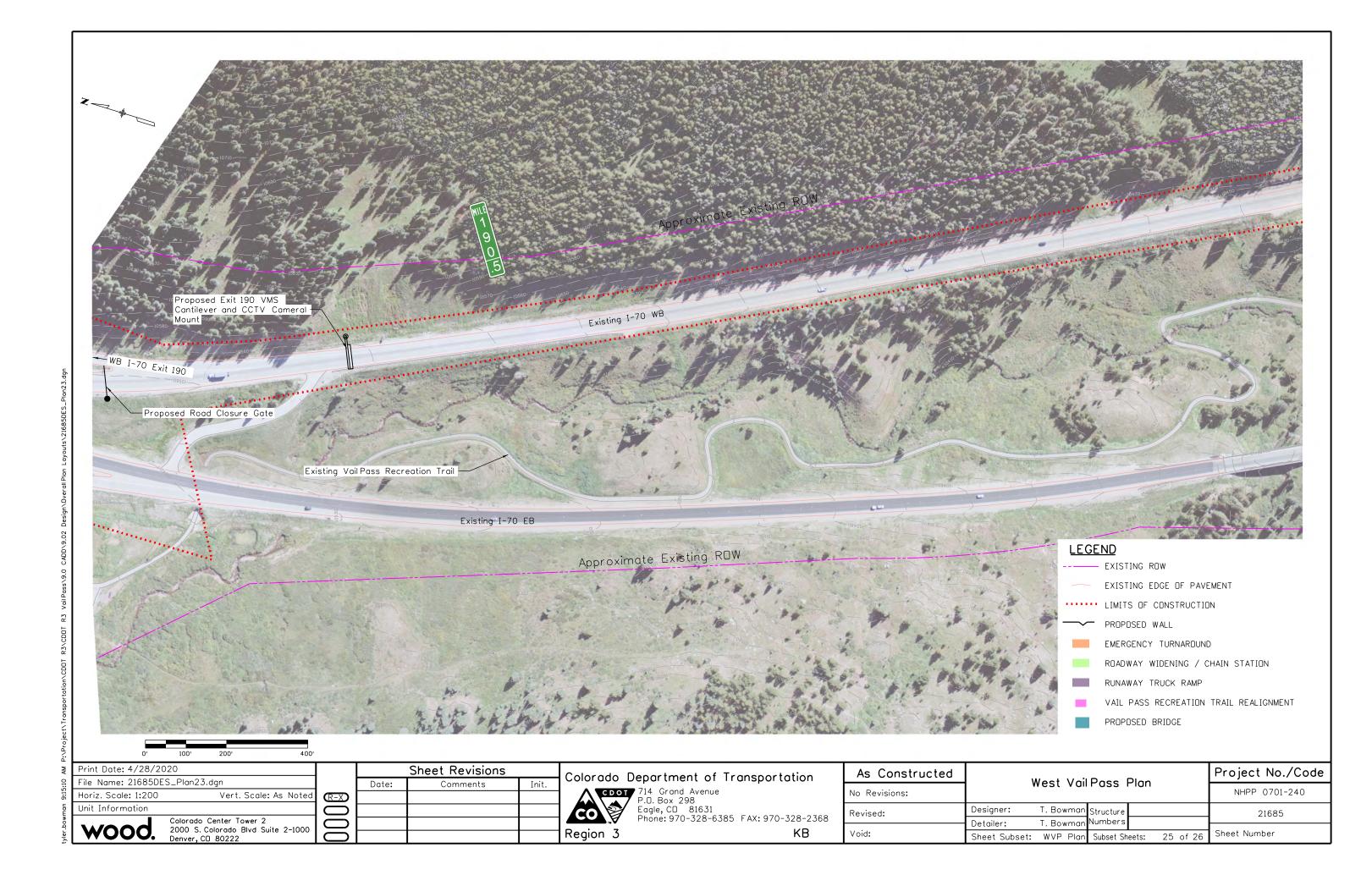
Detailer:

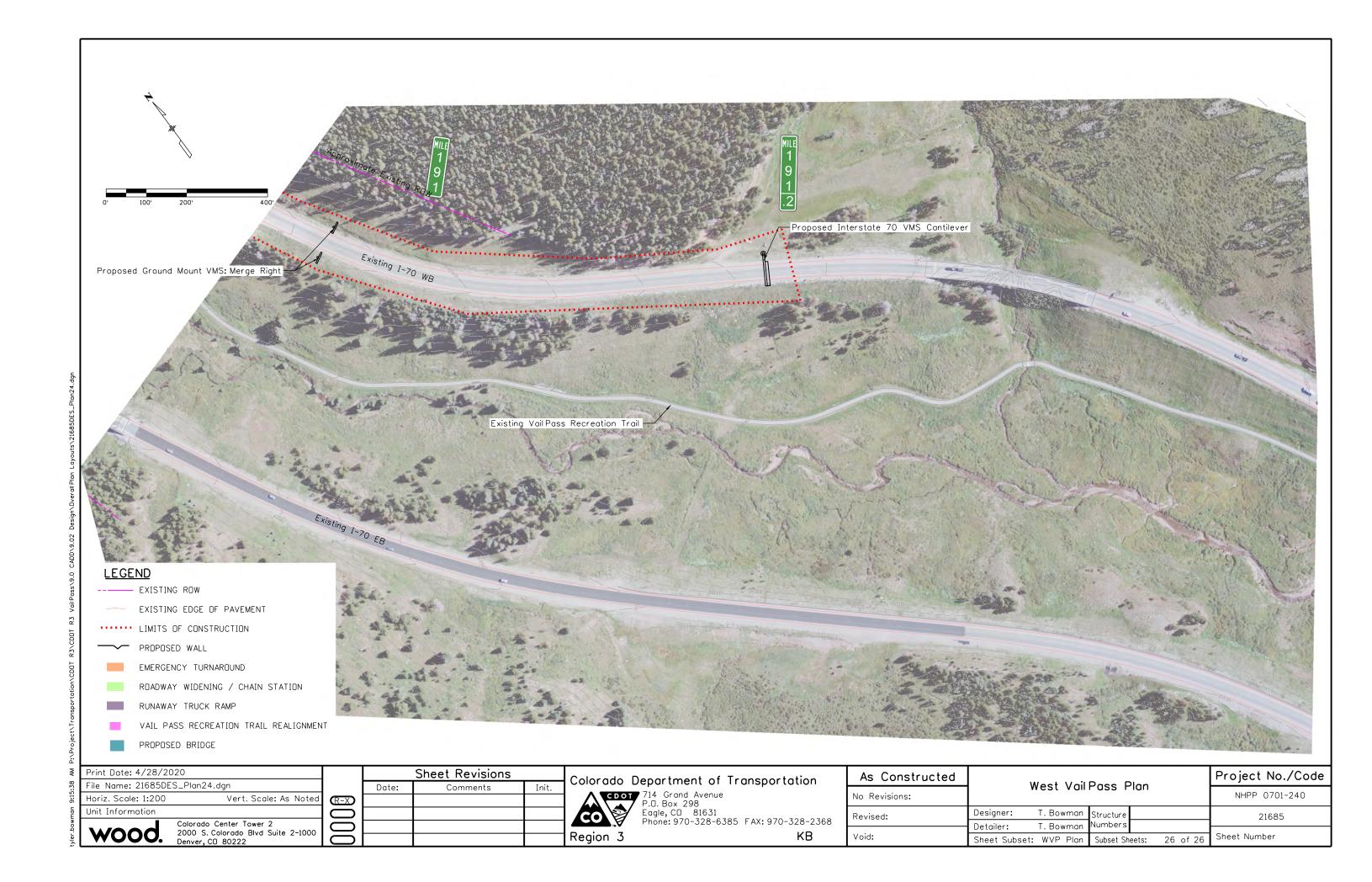
21685

Sheet Number

24 of 26

Colorado Center Tower 2 2000 S. Colorado Blvd Suite 2–1000 Denver, CO 80222







APPENDIX B

DRAFT SUPPLEMENT TO THE I-70 MOUNTAIN CORRIDOR PROGRAMMATIC AGREEMENT

DRAFT

Third Supplement to the **Programmatic Agreement**

Among

Federal Highway Administration US Department of Agriculture, Forest Service, Rocky Mountain Region **Department of the Interior, Advisory Council on Historic Preservation** Colorado State Historic Preservation Officer

Colorado Department of Transportation Regarding Implementation of the Interstate 70 Vail Pass Auxiliary Lanes Environmental Assessment Project NHPP 0701-240

WHEREAS, the Federal Highway Administration (FHWA), USDA Forest Service, Rocky Mountain Region (USFS), USDOI Bureau of Land Management, Colorado River Valley Field Office (BLM), Colorado State Historic Preservation Officer (SHPO), Colorado Department of Transportation (CDOT) and Advisory Council on Historic Preservation (ACHP) have executed a Programmatic Agreement (PA) effective as of April 3, 2008, regarding Section 106 compliance for the Interstate 70 Mountain Corridor; and

WHEREAS, for each Tier 2 undertaking within the I-70 Mountain Corridor, Stipulation II(F) of the PA requires CDOT to prepare a supplement which specifies the measures it will take to avoid, minimize, or mitigate adverse effects to historic properties eligible for or listed on the National Register of Historic Places; and

WHEREAS, CDOT Project NHPP 0701-240, Interstate 70 Vail Pass Auxiliary Lanes Environmental Assessment, proposes the addition of auxiliary lanes in both directions on the west side of Vail Pas from milepost 180 to 190 in Eagle and Summit Counties; and

WHEREAS, FHWA has determined that Project NHPP 0701-240 will have an adverse effect on the Interstate 70 Vail Pass Segment (5EA1826.4, 5ST892.5) and has consulted with the Colorado SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f); and

WHEREAS, the signatories to the PA agree that FHWA and CDOT have completed all appropriate planning to mitigate the adverse effect to the I-70 Vail Pass Segment, and that a supplement to the PA is necessary to document the applicable stipulations thereof; and

WHEREAS, FHWA and CDOT have coordinated with the Section 106 consulting parties for the I-70 Vail Pass Auxiliary Lanes Environmental Assessment undertaking, which include Colorado Preservation Inc, Town of Breckenridge Planning Commission, Summit County Historical Society, Eagle County Historical Society, National Trust for Historic Preservation Denver Field Office, Copper Mountain Consolidated Metropolitan District, Breckenridge Heritage Alliance, Town of Vail Design Review Board, National Park Service Intermountain Region, and White River National Forest; and

WHEREAS, of the consulting parties contacted, only Colorado Preservation Inc., the National Park Service Intermountain Region, and White River National Forest participated or provided comments; and

WHEREAS, FHWA has consulted with the Southern Ute Indian Tribe, a sovereign Indian nation participating as a consulting tribe for the project, and determined that there are no sites eligible for or listed on the National Register of Historic Places containing evidence of Native American occupation or use that will be directly impacted by the undertaking; and

WHEREAS, in accordance with 36 CFR Section 800.6(a)(1), FHWA has notified the Council of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR Section 800.6(a)(1)(iii); and

WHEREAS, the historic property addressed by this supplement is:

Interstate 70 Vail Pass Segment Historic District (5EA1826.4/5ST892.5): The Vail Pass segment of I-70, which is defined as the portion from MP 180 to MP 195.2, has been documented as a linear historic district that possesses exceptional significance at the statewide level under *Criterion A* in the areas of Transportation, Community Planning and Development, and Conservation, and under *Criterion C* in the areas of Landscape Architecture and Engineering because it represents an important aspect of highway planning, design, and construction in Colorado. Completed in 1978, Vail Pass has not yet reached the 50-year age requirement set forth by the National Park Service. However, under *Criteria Consideration G: Properties that Have Achieved Significance Within the Past Fifty Years*, the I-70 Vail Pass segment exhibits "exceptional importance" at the statewide level as a resource with direct and significant associations with important events in the development of Colorado transportation networks and early solutions to the conflict between environmental concerns and highway construction that set standards for later Colorado projects.

NOW, THEREFORE, FHWA, USFS, SHPO, CDOT and ACHP hereby agree that the I-70 Mountain Corridor PA is supplemented according to Stipulation II(F) of the agreement in order to take into account the effect on historic properties as a result of proposed improvements to I-70 and the Interstate 70 Vail Pass Segment Historic District.

Stipulations

FHWA shall ensure that the following measures are carried out:

I. MITIGATION

A. HISTORIC DOCUMENTATION

1) Historic Context and Site Form: A detailed historic context of the Interstate 70 Vail Pass Segment was completed for CDOT in 2019. As part of that effort, the resource was documented as a historic district on the appropriate Colorado Office of Archaeology and Historic Preservation (OAHP) site forms, which included historical background, significance and integrity information, and the identification of contributing and non-contributing features within the district boundary. That documentation was forwarded to the SHPO in November 2019 and identified as mitigation for this project at that time. The historic context and site form provide detailed information about the history of the resource that is beneficial to the broader historic preservation community in Colorado; the context and site forms will also be used to manage and assist in preserving the resource when there are future projects along the corridor.

B. DESIGN and AESTHETIC MITIGATION

- 1) Context Sensitive Design Elements: CDOT will follow the I-70 Mountain Corridor Context Sensitive Solutions (CSS) process. Using the original interstate design as inspiration, CDOT will work to preserve and enhance the alpine environment, honoring the original design of the highway and its features. Included in this effort will be the following commitments related to design within the boundary of the I-70 Segment of Vail Pass historic district:
 - a) New structures and features constructed or installed in the historic district as part of the design, including bridges, retaining walls, wildlife underpasses, landscape, and signage will be constructed to honor the original design in terms of scale, mass, materials, and workmanship to the extent possible. Design plans for these new structures and features will be submitted to SHPO and the consulting parties for review and comment.
 - b) Existing contributing structures and features of the historic district will be rehabilitated or reconstructed, including the road alignment and shoulders, retaining walls, landscape features, the Vail Pass recreational path, the runaway truck ramps, and median walls, which will be designed to honor the aesthetic of the original design to the extent possible. CDOT will submit plans that include details regarding rehabilitation or reconstruction of contributing features to SHPO and the consulting parties for review and comment.
- 2) **Aesthetic Guidance**: The *I-70 Mountain Corridor Crest of the Rockies Aesthetics Guidance* defines the I-70 Mountain corridor as a whole, rather than defining it in construction phases or funding increments. This ensures that all projects in the I-70 Mountain Corridor follow the guidance during design efforts. The Vail Pass portion is within the Crest of the Rockies Design Segment, which includes numerous approaches to preserving the existing environment and landscape of Vail Pass. Within this design segment, there is also an Area of Special Attention, which is a location or stretch along the I-70 Mountain Corridor that has been identified to have multiple or unique issues. This Project is within the Top of Vail Pass Area of Special Attention.
 - a) CDOT will develop project-specific aesthetic guidance that builds on the Crest of the Rockies Aesthetic Guidance and incorporates information from the historic context study of the I-70 Segment of Vail Pass historic district. The guidance will be keyed to design criteria including alignment, slope cut and fill, bridges, disturbance, and rock cut.
 - b) CDOT will submit the draft aesthetic guidance to SHPO and the consulting parties for review and comment. A meeting will be scheduled to discuss the SHPO and consulting party comments. The revised guidance will then be submitted to SHPO and the consulting parties for final review. A second meeting will be held with SHPO and the consulting parties when the guidance is implemented.

C. INTERPRETIVE MITIGATION

1) Interpretive Panel: CDOT will develop a roadside interpretive sign panel specific to the design and construction of Interstate 70 over Vail Pass. The design, format and content of the display will be determined in consultation with the consulting parties and SHPO. The final location of the panel has not been determined, but it may be installed at the Vail Pass Rest Area on the east end of the project area, near the top of the pass.

II. DURATION

This agreement shall become effective when it is filed with ACHP and shall remain in effect until the completion of the mitigation stipulations that fall under the terms of this Agreement within a five (5) year period. This time frame can be extended if agreed to in writing by the signatories prior to the expiration date. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation V below.

III. MONITORING AND REPORTING

Reporting for this PA supplement shall be included in the Section 106 Annual Tracking Report as provided in Section XIII(B) of the 2014 Programmatic Agreement Among the Federal Highway Administration, Advisory Council on Historic Preservation, Colorado State Historic Preservation Officer, and Colorado Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal Aid Highway Program in Colorado.

IV. DISPUTE RESOLUTION

Should any party to this Agreement object in writing to FHWA or CDOT regarding any action carried out or proposed with respect to the I-70 West Vail Pass Auxiliary Lane Environmental Assessment undertaking or to the implementation of this Agreement, the agency shall consult with that party to resolve the objection.

If after initiating such consultation FHWA or CDOT determines that the objection cannot be resolved through consultation, FHWA shall forward all documentation relevant to the objection to ACHP, including the agency's proposed response to the objection.

Within 30 days after receipt of all pertinent documentation, ACHP shall exercise one of the following options:

- 1) Advise the agency that ACHP concurs in the agency's proposed response to the objection, whereupon the agency will respond to the objection accordingly;
- 2) Provide the agency with recommendations, which the agency shall take into account in reaching a final decision regarding its response to the objection; or
- 3) Notify the agency that the objection will be referred for comment pursuant to 36 CFR 800.7(a)(4), and proceed to refer the objection and comment. The agency shall take the resulting comment into account in accordance with 36 CFR 800.7(c)(4).

V. AMENDMENTS AND NON-COMPLIANCE

If any signatory to this PA supplement determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this supplement pursuant to 36 CFR Section 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with ACHP. If the signatories cannot agree to appropriate terms to amend the supplement, any signatory may terminate the agreement in accordance with Stipulation VI, below:

VI. TERMINATION

If a PA supplement is not amended following the consultation set out in Stipulation V above, it may be terminated by any signatory or invited signatory. Within 30 days following termination, FHWA shall notify the signatories if it will initiate consultation to execute an amendment with the signatories under 36 CFR Section 800.6(c)(1) or request the comments of the Council under 36 CFR Section 800.7(a) and proceed accordingly.

VII. USFS DISCLAIMER

Non-Fund Obligating Document. This Agreement is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This Agreement does not provide such authority. Specifically, this Agreement does not establish authority for non-competitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

Participation in Similar Activities. This instrument in no way restricts the USFS from participating in similar activities with other public or private agencies, organizations, and individuals.

Execution of this First Supplement to the I-70 Mountain Corridor Programmatic Agreement by FHWA and the other signatory agencies, the submission of documentation and filing of this supplement with ACHP pursuant to 36 CFR Section 800.6(b)(1)(iv) prior to FHWA's approval of this undertaking, and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded ACHP an opportunity to comment.

SIGNATORIES:

Federal Highway Administration	
	Date:
John M. Cater, Colorado Division Administrator	
USDA Forest Service, White River National Forest	
	Date:
Scott Fitzwilliams, Forest Supervisor	
Colorado Department of Transportation	
	Date:
Shoshana Lew, Executive Director	
Colorado State Historic Preservation Officer	
By:1	Date:
Steve Turner SHPO	

Concurring:

Breckenridge Heritage Alliance By:	Date:	
Town of Breckenridge Planning Commission		
By:	Date:	
Copper Mountain Consolidated Metropolitan District.		
By:	Date:	
Colorado Preservation, Inc.		
By:	Date:	
Eagle County Historical Society		
By:	Date:	
National Park Service Intermountain Region		
By:	Date:	
National Trust for Historic Preservation, Denver Field Office		
By:	Date:	
Town of Vail Design Review Board		
By:	Date:	· · · · · · · · · · · · · · · · · · ·
Southern Ute Indian Tribe		
Southern Ge mutan Tribe		
By:	Date:	