17.0 Transportation Management Plan

This Section includes the requirements for the Transportation Management Plan Work for the US 160 Elmore's Corner to Dry Creek Design-Build Project (Project). This Work shall be completed in accordance with the Contract Documents.

The Transportation Management Plan (TMP) defines the strategies for managing the Work zone impacts of the Project. The TMP shall include a Maintenance of Traffic Plan (MOT), a Traffic Operations Plan (TOP), Traffic Control Plans (TCP), and Methods of Handling Traffic (MHT).

17.1 Administrative Requirements

17.1.1. Standards

The Contractor shall design and construct the Project in accordance with the Contract, including the Project Special Provisions and Standard Special Provisions in Book 2, Section 21, requirements of the standards in the documents listed in Table 17-1 and those referenced in Book 3. The Contractor shall use the latest adopted edition at the time of the Proposal Due Date.

Table 17-1: Standards

Author or Agency	Title
American Association of State Highway and Transportation Officials (AASHTO)	Roadside Design Guide
American Traffic Safety Services Association (ATSSA)	Quality Guidelines for Work Zone Traffic Control Devices
ATSSA	Guidelines on the Use of Positive Protection in Temporary Traffic Control Zones
Colorado Department of Transportation (CDOT)	Guidelines for the Use of Positive Protection in Work Zones
CDOT	M&S Standard Plans
CDOT	Region 5 Lane Closure Strategy Report (LCS)
CDOT	Standard Specifications for Road and Bridge Construction (Standard Specifications)
CDOT	Roadway Design Guide
CDOT	Guidelines for Developing Traffic Incident Management Plans for Work Zones

Author or Agency	Title
CDOT	The Colorado Supplement to the Federal Manual on Uniform Traffic Control Devices
CDOT	Sign Design Manual
CDOT	Work Zone Safety and Mobility Program: Work Zone Safety — Colorado Department of Transportation
CDOT	Work Zone Safety and Mobility Rule
CDOT	Safety Selection Guide
Federal Highway Administration (FHWA)	Manual on Uniform Traffic Control Devices (MUTCD)
FHWA	Standard Highway Signs (with supplements)

17.2 Transportation Management Plan

The Contractor shall prepare a TMP that defines the strategic plan for traffic management on the Project. The TMP shall address major aspects of the Work for individual construction areas, phases, and stages as defined herein. These aspects shall include, but are not limited to, US 160 closures, county Road and local Road closures, Bridge closures, construction phasing and staging, numbers and type of major traffic shifts, detours, typical section requirements, pullout requirements, emergency and construction access, pedestrian and bicycle accommodations, access points for impacted properties, and detours. The TMP is a planning and policy guide that the Contractor shall use to develop and execute the Project MOT program.

The TMP shall be submitted to CDOT (and the respective Local Agency[ies] where local Streets and facilities are affected) for CDOT Acceptance prior to the Second Notice to Proceed (NTP2). No Work that impacts traffic shall commence until the TMP is Accepted.

The major aspects of the TMP shall include, but are not limited to:

1. An overview and description of the proposed construction, construction phasing, including maintenance of traffic during construction, and major traffic shifts.
2. A detailed approach to the development of TCPs and Methods of Handling Traffic (MHT) on the Project per Book 2, Section 4. MHT drawings shall be submitted to CDOT for Acceptance 7 Days prior to the implementation of each MHT.
3. A list of known or potential Roadway lane closures, traffic shifts, detours, and shoefly detours, including the following information:
    A. Description of traffic shift.
    B. Description of detour:
        i. Specific routes used.

ii. Identification of detour limits to be used in each construction phase.

iii. Contractor's identification and coordination with other construction projects within the vicinity of the proposed detour route. The impact of these construction projects shall be incorporated into the detour route planning and scheduling.

C. Number of shifts expected.

D. Duration of shifts and detours.

E. Lane Closure Policy requirements.

i. Potential variance requests.

4. An approach to the use of existing and temporary Variable Message Sign (VMS) boards and traffic signals, including coordination with CDOT's Public Information Management (PIM) team.

5. The Contractor's plan for coordinating the TMP Activities with those Activities required under Book 2, Section 5.

A. A checklist identifying specific items that shall be provided to the CDOT's PIM team every Thursday by 10:30 AM for public information data collection and management Activities on the Project. The checklist shall include supporting information relevant to public messaging and public awareness and shall meet the requirements of Book 2, Section 5.

6. An approach to night Work that addresses the nighttime Work requirements of Book 2, Section 6. Any night Work will require written Approval from CDOT.

7. Additional elements:

A. An approach to coordination and cooperation with construction being performed by other projects along US 160.

B. Approach to coordination and cooperation with construction being performed by Utility Companies or other Utility Relocations, as required in Book 2, Section 8.

C. Approach to coordination and cooperation with construction being performed by Local Agency projects that are occurring on possible detour routes.

D. An approach to traffic access management, including restrictions.

E. Relevant portions of the Incident Management Plan (IMP) described in Section 17.2.2.2.

F. An approach to handle oversized loads through the Project.

8. Typical section requirements.

9. Emergency requirements:

A. Pullout locations.

B. Emergency access.

10. Temporary closure scenarios:

A. Location.

B. Time and duration.

C. Lane Closure Policy requirements.

i. Potential variance requests.

11. Access:
    A. Business/home/property.
    B. Work Site (area).
    C. Colorado State Patrol (CSP).
12. Construction zone temporary speed reduction.
    A. The Contractor shall submit a Form 568 to CDOT for Approval 14 Days prior to the date when speed reduction is to be implemented with each phase specific MHT .
13. MHT requirements.
    A. MHT drawings shall be sealed by the Engineer in Responsible Charge.
14. Traffic control device maintenance:
    A. A Work plan to meet all requirements of Section 17.4.3 shall be provided to CDOT with the TMP submittal. This Work plan shall include, at a minimum, detailed staff commitments and contacts, along with a plan to deploy equipment and resources.

17.2.1. Maintenance of Traffic Plan

The following elements shall be considered part of the MOT plan and shall be addressed in the TMP.

17.2.1.1 Transportation Management Plan Task Force

The Contractor shall establish a TMP task force to assure proper coordination, including with affected Local Agencies. The TMP Task Force shall include, at a minimum, the CDOT PIM team, CDOT RCM, the Contractor's Representative (CR), Contractor's TCS, the Contractor's superintendent, La Plata County, and others as needed if Local Agency streets and facilities are impacted. The Contractor shall submit the proposed list of TMP task force members to CDOT for Acceptance within 30 Days after NTP1.

Within 14 Days after CDOT's Acceptance of the TMP task force members, the Contractor shall convene a TMP kick-off meeting. The meeting shall be used to develop an agreed-upon level of detail required for the TMP, as described in this Section 17.

The TMP task force discussions shall be included in the weekly status meetings as required in Book 2, Section 2.

17.2.1.2 Business and Private Access

The Contractor shall maintain public and private access to the local Street and Highway systems at all times. Temporary signage to business entrances shall be provided during construction to draw attention to Highway access points.

The TCP and MHT drawings shall incorporate Stakeholder information in coordination with CDOT's PIM team as outlined in Book 2, Section 5, relating to business and private access to the local Street system and the Highway.

The Contractor shall coordinate with the CDOT PIM team to communicate and document the following information relevant to business and private access:

1. Access points impacted by a particular construction phase or stage.

2. All notifications of affected businesses and landowners.
3. Schedule of closures and estimated durations.
4. Site-specific access or delivery requirements for local businesses (deliveries, wide load vehicles, etc.).
5. Proposed access mitigation efforts.

17.2.1.3 Maintenance of Traffic Variance Process

The Contractor may request a MOT variance for any closure, detour, or other restriction beyond the specified limits defined herein. The following information shall be included in each MOT variance request:

1. Summary of the variance request.
2. Justification for the variance request, including a list of the criteria that cannot be met and the reason(s) for not being able to meet them.
3. List of affected emergency services and the schedule for notification.
4. List of affected Local Agencies or private owners and the method(s) and schedule for notification.
5. Description of additional public information surveys to be performed by the CDOT PIM team, if required.
6. List of any potential safety hazards to which the public may be exposed.
7. Proposed revisions to the Accepted TCP drawings or current MHT drawings.
8. Proposed duration of closure, detour, or phasing change for which a variance is requested.

The Contractor shall allow CDOT a minimum of 14 Days for Approval of any MOT variance requests. CDOT, in its sole discretion, will determine if the MOT variance request is Approved, rejected, or incomplete and requiring resubmission. The Contractor shall coordinate with CDOT's PIM team for public notification and schedule for any MOT variance request.

17.2.1.4 Detour Routes

Detour routes shall be submitted to CDOT for Approval and shall be submitted to the Local Agency as required prior to implementation. Detour routes shall be the shortest, most direct routes feasible and shall not utilize County Roads, with adequate signing to limit additional travel to the greatest extent possible.

The Contractor shall obtain prior Local Agency approval for detours utilizing non-State-owned facilities. If Local Agency approvals are necessary, they shall be obtained prior to submittal of the MOT plans to CDOT. If approved by the Local Agency, the Contractor is responsible for ensuring the detour route can accommodate the highway traffic design vehicle. The Contractor is responsible for any damage resulting from the use of the facility.

Detour routes shall be video-recorded by the Contractor prior to and after construction. The Contractor and CDOT shall be present for video-recording. Any damage to the routes as a result of the use of the route shall be repaired by the Contractor in a time and manner as negotiated with CDOT and the Contractor. All repairs associated with damage to the detour route shall be done at no additional cost to the Project or CDOT.

17.2.1.5 Shoo-fly Detour Routes

If the Contractor elects to utilize a shoo-fly detour route during construction, the Contractor shall submit the design criteria and shoo-fly detour design package for each shoo-fly detour route to CDOT for Acceptance prior to the RFC Documents submittal.

The design criteria shall include the design speed, minimum radius, maximum superelevation, minimum vertical grade, maximum vertical grade, and minimum k-values. The design criteria shall clearly document the Standards used for each design criteria. The design criteria shall include the proposed typical section of the shoo-fly detour with lane and shoulder widths, along with the proposed pavement section per Section 17.4.4 and Book 2, Section 11.

The design vehicle for the shoo-fly detour shall be a WB-67.

The shoo-fly detour route package shall include the design criteria, pavement section, typical section(s), plan view, profile view, signing and striping, and cross sections. The shoo-fly detour route submittal shall be prepared, Reviewed, and submitted in accordance with the requirements set forth in Book 2, Section 4.

17.2.1.6 Pedestrian and Bicycle Impacts

Existing pedestrian and bicycle accommodations along US 160 and County Roads shall be maintained at all times.

An ADA-compliant pathway with a firm, stable, and slip-resistant surface is required for the residents of the Los Prados neighborhood to CR 222 per Book 2, Section 14.2.2.16.

17.2.2. Traffic Operations Plan

The TOP shall address the operations and management of the transportation system in the Work zone impact area. The TOP shall address the components described below.

17.2.2.1 Variable Message Signs (VMS)

Public notices shall be provided through VMS boards to warn motorists of major traffic shifts, detours, and Road closures 1 week prior to and 2 weeks after a change in the traffic pattern. The VMS boards shall be placed on the affected route in advance of the construction zone.

Routine requests to use the CDOT Traffic Management Center (CTMC) VMS boards shall be submitted to CDOT by 10:30 AM on Thursday of the week prior to when the VMS boards will be needed (Monday through Sunday of the following week). Requests for routine use of the CTMC VMS boards will be Reviewed by noon Friday of the same week of the submittal. The Contractor shall coordinate directly with the CTMC following Review by CDOT.

The CTMC is available to the Contractor to modify VMS messages 24 hours a Day, 7 Days a week, and may be contacted at (303) 512-5826.

The Contractor shall coordinate with CDOT and the CTMC for emergencies in accordance with the Accepted IMP.

CDOT has ultimate right of use of and first priority to the CTMC.

17.2.2.2 Incident Management Plan (IMP)

The Contractor shall develop a detailed IMP as a companion to the TOP to manage traffic incidents and emergency operations on the Project Site. Emergency service providers shall be contacted and provided an access plan during construction to minimize delays and response times for emergency services.

The IMP shall comply with the CDOT Guidelines for Developing Traffic Incident Management Plans for Work zones.

At a minimum, the IMP shall include the following components:

1. Coordination with the CDOT PIM team, as described in Book 2, Section 5.
2. Incident detection and identification.
3. Incident response.
4. Incident Site management.
5. Incident clearance.
6. Dissemination of traveler information regarding incidents.
7. Emergency services notification, including local area police departments, the Colorado State Patrol, local area fire departments, ambulance services, and any other emergency response providers.
8. Notification of local school districts about possible impacts to school bus routes, student drop-offs, and/or pedestrian facilities.
9. Geographic and other special constraints.
10. Available resources.
11. Operational procedures.

The IMP shall be submitted to CDOT for Acceptance within 30 Days after NTP2. No Work that impacts traffic shall commence until the IMP is Accepted.

17.2.2.3 Contractor Response Time

The Contractor shall have at least 1 employee on call 24 hours a day, 7 days a week via cell phone, who shall respond to an incident within 30 minutes. Upon arrival at the incident site, that employee shall assess the situation, shall be empowered to direct Work, and shall immediately notify the appropriate personnel to implement the IMP. Upon notification of the incident, the Contractor shall immediately undertake all actions necessary to restore traffic operations to the maximum extent practicable.

17.2.2.4 Coordination with Adjacent Projects

Other projects along US 160 may occur during the construction of this Project. The Contractor shall coordinate construction traffic and detour impacts with CDOT and contractors on those projects to minimize simultaneous closures or impacts to adjacent or alternate routes.

17.2.2.5 Coordination with Adjacent Neighborhoods

No construction traffic shall be allowed in residential neighborhoods adjacent to the Project.

17.2.3. Communications Plans

The TMP shall reference the appropriate sections of CDOT's PIP and the Crisis Communications Plan (CCP) per Book 2, Section 5, and shall ensure the necessary communications support.

17.3 Design Requirements

17.3.1. Submittals

All submittals shall be prepared, reviewed, and submitted in accordance with the requirements set forth in Book 2, Section 4.

The Contractor's Engineer in responsible charge of the MOT design shall prepare, review, and approve the TCP, Released for Construction (RFC) Documents, Field Design Changes, and the MHT drawings. These plans shall be in conformance with the TMP described in this Section.

17.3.2. Maintenance of Traffic Design Thresholds

The following thresholds shall be used to determine if a lane closure is acceptable. For the Project, the following mobility thresholds shall be maintained:

1. Level of Service (LOS), LOS D or better for intersections.
2. LOS E or better for individual approaches at impacted intersections during peak hours.
3. Travel time impacts for out-of-direction travel shall be less than 20 minutes.
4. Queues shall be maintained within existing storage lengths.

17.3.3. Traffic Control Plans

The Contractor shall prepare TCPs to control traffic on the Project. The TCPs shall conform to the requirements specified herein, the CDOT Standard Specifications, and the most current version of the Manual on Uniform Traffic Control Devices (MUTCD). The TCPs shall generally describe all lane and shoulder configurations, including widths, traffic control signing, pavement markings, traffic control devices, temporary signalization, flagger locations, construction access, construction parking, emergency access, Work areas, and pedestrian/bicycle accommodations necessary for each construction phase.

Flaggers shall be placed immediately adjacent to Work areas to optimize traffic flow during periods of construction activities and to reduce delays.

The TCP shall be submitted to CDOT for Acceptance 14 Days prior to implementation of the particular TCP.

Any major revision to a TCP, as determined by CDOT, shall require submission of a new TCP for Acceptance.

17.3.4. Design Vehicle

The design vehicle shall be a WB-67.

17.3.5. Design Speed and Posted Speed

Work zone design speeds shall in all cases be equal to or greater than the work zone posted speed. The Contractor shall provide existing posted speed whenever it can be reasonably maintained. CDOT will grant a construction work zone speed reduction to 45 MPH provided a Form 568 speed reduction package request is submitted thoroughly filled in and complete with all requested supporting documentation from the CDOT Traffic Unit. CDOT will consider lower speeds for isolated areas on a case-by-case basis. For any speed reduction below posted speed, the Contractor shall submit Form 568 to CDOT for Approval at least 14 Days prior to implementation with phase specific MHT's. The reduction must be based on an assessment of how the construction or work activity will impact traffic flow through the work zone. The traffic assessment or traffic investigation must be documented with the 568. Speed reductions shall only apply while the conditions exist that warrant the reduction. If no work is occurring, temporary traffic control speed limit signs must be removed or masked within one hour of the completion of work. The Contractor shall provide existing highway speed whenever it can be reasonably maintained. The permanently posted speed limits shall be effective upon completion of the speed reduction and signs shall be either unmasked or re-installed. Minimum Lane and Shoulder Requirements

17.3.5.1 Lane and Shoulder Restrictions

Minimum lane and Shoulder widths during construction shall be according to Table 17-2.

Table 17-2: Minimum Lane and Shoulder Widths

Location	Travel Lanes	Shoulders	
		Inside	Outside
US 160	11 ft.	2 ft.	2 ft.
County Roads 223, 225, and 229	10 ft.	0 ft.	0 ft.

Short-term modifications of existing traffic signals in conjunction with construction phasing may be needed and shall be the responsibility of the Contractor to build and maintain through the construction phase. Where signal detection and communications are present, they shall be maintained.

17.3.5.2 Lane Closures

Allowable lane closures for the Project are per the CDOT Region 5 Lane Closure Strategy Report (LCS), in Book 3, until Notice of Final Acceptance . The restricted times are also listed in Table 17-3, Table 17-4, and Table 17-5. Summer months shall be May through September and off-season months shall be October through April.

During lane closures, the Contractor shall monitor travel time delays and the queue length. If delays exceed 20 minutes, the lane shall be opened to traffic until the queue has dissipated.

When US 160 is reduced to a single lane, the Contractor shall provide a minimum clear width of 16 feet to accommodate oversized vehicles. When a County Road is reduced to a single lane, the Contractor shall provide a minimum clear width of 12 feet.

The Contractor may request lane closures that are outside of the restricted hours per the LCS and Tables 17-3 through 17-5. The request for the lane closures shall be submitted to CDOT for Acceptance at least 7 Days in advance of the closure.

Table 17-3: Restricted Hours for US 160 Lane Closures (Less than 1-Mile)

Weekday		Weekend	
Summer	**Off-Season**	**Summer**	**Off-Season**
7 AM to 6 PM (MP 91.5 to MP 103.6)	7 AM to 9 AM & 3 PM to 6 PM (MP 91.5 to MP 93.1) 7 AM to 9 AM & 4 PM to 6 PM (MP 93.1 to MP 103.6)	8 AM to 7 PM (MP 91.5 to MP 93.1) 10 AM to 12 PM (MP 93.1 to MP 103.6)	None (MP 91.5 to MP 103.6)

Table 17-4: Restricted Hours for US 160 Lane Closures (1-mile to 2-miles)

Weekday		Weekend	
Summer	**Off-Season**	**Summer**	**Off-Season**
7 AM to 7 PM (MP 91.5 to MP 103.6)	7 AM to 7 PM (MP 91.5 to MP 93.1) 7 AM to 6 PM (MP 93.1 to MP 103.6)	8 AM to 7 PM (MP 91.5 to MP 93.1) 8 AM to 6 PM (MP 93.1 to MP 103.6)	9 AM to 6 PM (MP 91.5 to MP 93.1) 9 AM to 5 PM (MP 93.1 to MP 103.6)

Table 17-5: Restricted Hours for US 160 Lane Closures (Greater than 2-Miles)

Weekday		Weekend	
Summer	**Off-Season**	**Summer**	**Off-Season**
6 AM to 9 PM (MP 91.5 to MP 103.6)	6 AM to 8 PM (MP 91.5 to MP 103.6)	7 AM to 9 PM (MP 91.5 to MP 103.6)	7 AM to 8 PM (MP 91.5 to MP 93.1) 8 AM to 7 PM (MP 93.1 to MP 103.6)

17.3.5.3 Emergency Pullouts

The Contractor shall provide pullouts along US 160 for disabled vehicles and law enforcement vehicles per Table 17-6. The pullouts shall have a firm and stable surface, shall be a minimum of 50-feet in length, and shall be a minimum of 14-feet including the shoulder width. The transitions for the ingress of the pullout shall be 6:1 or greater.

If pullout areas are required along both westbound and eastbound travel lanes, the pullout areas shall be staggered through the Work zone so they are not directly across from each other.

Table 17-6: Spacing for Emergency Pullouts

Shoulder Width	Emergency Pullout Spacing
Barrier constrained	One half mile

Barrier constrained for US 160 is defined as follows:

Case 1: Barrier is on both sides of US 160 with less than 8 foot Shoulders on either side and a barrier run longer than 0.5 mile.

Case 2: Barrier only on one side with less than 8 foot Shoulder and a barrier run longer than 0.5 mile. Pullouts would only be required on the barrier constrained side.

17.3.5.4 Local Roads

Any and all variances for local street lane closures and lane reductions shall be approved by the respective jurisdiction.

17.4 Construction Requirements

17.4.1. Smart Work Zones

The implementation of smart work zones is highly encouraged. Additional information is provided in the Reference Documents that includes a sample CDOT specification and a selection tool in excel format provided by CDOT.

17.4.2. Temporary Traffic Control Devices

The Contractor shall install, maintain, and remove all temporary traffic control devices.

17.4.2.1 Construction Signing

Construction signing within the Project limits and all detours shall comply with CDOT Standard Specifications, the MUTCD, and all other applicable standards. The Contractor shall maintain all existing guide signs, warning signs, and regulatory signs during construction. Construction signing and construction signing maintenance shall be the responsibility of the Contractor.

All signs in place for more than 3 Days shall be post-mounted.

17.4.2.2 Temporary Barriers

The Contractor shall maintain a clear zone in accordance with the AASHTO Roadside Design Guide. When clear zone cannot be obtained, the Contractor shall use barriers to positively separate traveled lanes from Work zones.

Temporary barriers within the Project limits and all detours shall comply with CDOT Standard Specifications, CDOT M&S Standards, and the AASHTO Roadside Design Guide. All barrier termini within the clear zone shall have an end treatment. A barrier is to be installed per CDOT Standard M-606-14 when adjacent to roadside Work zone, obstructions, obstacles, hazards, and vertical drop-offs. Temporary barriers shall be located so as to not negatively affect temporary drainage in current or future phases. Pinning of temporary barriers into new permanent pavement is not allowed.

17.4.2.3 Temporary Marking Paint and Signs

The Contractor shall furnish, apply, and remove temporary pavement marking paint in accordance with CDOT Standard Specifications. Temporary paint striping shall meet the conformity of lines (including no overspray), dimensions, patterns, locations, retroreflectivity, and details established in the Contractor's TCP and MHT drawings.

All temporary edge line shall be a minimum of 4 inches wide.

1. Temporary pavement paint striping shall be restriped as required to meet retroreflectivity standards and maintain safe traffic operations.
2. Hydroblasting, or other methods that do not result in scarring of permanent pavements, shall be used for removal of temporary striping.
3. For temporary alignments in place for 3 months or more, High Build (Temporary) is CDOT's preferred application for striping pursuant to the latest SSP Revised Section 627 Pavement Marking.

Barrier reflector strips shall be installed on all temporary barrier when the barrier is within 4 feet of the traffic, per the CDOT Standard S-612-1. The spacing between each 3-foot panel shall be no more than 50 feet.

Delineation shall be placed and maintained through all phases of Work, including lighted areas.

17.4.2.4 Temporary Traffic Signals

Temporary traffic signals shall comply with the Project Special Provisions in Book 2, Section 21.

17.4.2.5 Temporary Walls

Temporary walls shall comply with Book 2, Section 16.

17.4.2.6 Temporary Bridges

Temporary Bridges shall comply with Book 2, Section 16.

17.4.2.7 Temporary Lighting

Temporary Lighting shall comply with Book 2, Section 15.

17.4.3. Maintenance of Temporary Traffic Control Devices

The Contractor shall be responsible for the maintenance of all temporary traffic control devices within the Project limits, including the local Street and county Road systems. All traffic control devices shall meet MUTCD requirements, including retroreflectivity standards, and shall meet the acceptable

standard as defined by the ATSSA Quality Guidelines for Work zone Traffic Control Devices. All devices shall be cleaned a minimum of every 2 weeks.

17.4.4. Detour Pavement

The Contractor shall provide a paved surface for all detours and shoo-fly detours. Design and construction of detour pavement shall conform to the requirements of Book 2, Section 11. Detour pavement locations shall be generally described in the Contractor's TMP and detailed in the Accepted TCP.

The Contractor shall maintain the detour pavement for the entire period that it is open to the traveling public, including all temporary approaches, accesses, crossings, and intersections with adjacent Roads and Streets. Detour pavements shall be maintained in good operating condition, devoid of potholes, uneven surfaces, and rutting. CDOT may direct the Contractor to repair or replace detour pavements if, at CDOT's sole discretion, detour pavements are determined to be in poor condition. Detours that use existing Roads shall be subject to pavement repair or replacement where it is determined that the condition of the existing pavement has noticeably deteriorated over the duration of its use as a detour.

The Contractor shall be responsible for the complete removal, regrading, revegetation, and disposal of all temporary detour pavement.

17.4.5. Queue Delays During Construction

The Contractor shall monitor queue lengths and durations on all Roads within the Project limits whenever a lane closure is in effect. If the queue times exceed 20 minutes, the Contractor shall notify CDOT and adjust the detours, lane closures, and traffic control devices, including advanced warning signage, to minimize delay. If queue lengths extend beyond the location of the advance warning signs, the Contractor shall adjust the detours, lane closures, traffic control devices, including advanced warning signage, and shall provide advance warning to motorists of stopped traffic.

17.4.6. Working Time Violation Incidents

If there is a violation of the working time limitations for traffic control as allowed for in this Section 17, the Contractor will first be issued a written notice to stop Work at the start of the next Day. Work shall not resume until the Contractor ensures CDOT, in writing, there will not be a recurrence of the working time violation. Subsequent Incidents, beyond this first written notice, will be assessed a price reduction. The working time violation incident (WTVI) price reduction charges shall be reflected on the Contractor's Monthly Invoice. Price reductions will not be considered a penalty, but will be a price reduction for failure to perform traffic control in compliance with the Contract.

A WTVI is any violation up to 30 minutes in duration. Each 30 minutes or increment thereof will be considered a WTVI. A price reduction will be assessed for each successive or cumulative 30-minute period in violation of the working time limitations, as determined by CDOT.

WTVI charges shall be as follows:

1. $1,200 per WTVI for US 160.
2. $600 per WTVI for CR 223, CR 225, and CR 229.

17.4.7. Uniformed Traffic Control

The Contractor shall contract with the Colorado State Patrol for uniform traffic control (UTC) services. The Contractor shall provide a copy of the Contract with Colorado State Patrol (CSP) to CDOT for Review. Uniformed law enforcement coordination shall comply with the Project Special Provisions in Book 2, Section 21.

17.5 Deliverables

The Contractor shall submit the following to CDOT (and Local Agencies when applicable) for Review, Acceptance, or Approval:

Table 17-7: Deliverables

Deliverable	Review, Acceptance, or Approval	Schedule
Transportation Management Plan (TMP)	Acceptance	Prior to NTP2
Method of Handling Traffic (MHT)	Acceptance	7 Days prior to implementation of each MHT
CDOT Form 568 for temporary speed reduction	Approval	At least 14 Days prior to the date when speed reduction is to be implemented with each phase specific MHT.
TMP task force members	Acceptance	Within 30 Days after NTP1
Maintenance of Traffic (MOT) variance request	Approval	14 Days prior to implementation of each TCP.
Detour routes	Approval	Prior to implementation and after Local Agency approval
Shoo-fly detour design package	Acceptance	Prior to RFC Documents submittal
Requests to CDOT for modifications to CTMC VMS messages	Review	By 10:30 AM on Thursday of the week prior to when the VMS boards will be needed
Incident Management Plan (IMP)	Acceptance	Within 30 Days after NTP2
Traffic Control Plan (TCP)	Acceptance	At least 14 Days prior to implementation of each TCP
Requested lane closure that are outside of the restricted hours per the LCS	Acceptance	At least 7 Days prior to implementation of closure

Deliverable	Review, Acceptance, or Approval	Schedule
Copy of Contractor's contract with CSP	Review	As needed for UTC