

5.0 ENVIRONMENTAL REQUIREMENTS

This Section 5 includes the Environmental Requirements Work for the Region 2 Bridge Bundle Project (Project). This Work shall be completed in accordance with the Contract Documents.

5.1 Administrative Requirements

5.1.1. Standards

The Contractor shall design and construct the Project in accordance with the requirements of the standards in the documents listed in Table 5-1 and those referenced in Book 3. The Contractor shall use the latest adopted edition at the time of the Proposal Due Date.

Table 5-1. Standards for Environmental

Author or Agency	Title
Colorado Department of Transportation (CDOT)	<i>MS4 Construction Program Manual</i>
CDOT	<i>Standard Specifications for Road and Bridge Construction (CDOT Standard Specifications)</i>
CDOT	<i>M&S Standards</i>
CDOT	<i>Roadway Design Guide</i>
Federal Highway Administration (FHWA)	<i>FHWA-CFL/TD-11-003 Wildlife Crossing Structure Handbook</i>

5.1.2 Environmental Laws, Regulations, and Governmental Approvals

The Contractor shall comply with all requirements of all applicable Local, State, and Federal Environmental Laws, Regulations, and Governmental Approvals issued thereunder, whether obtained by CDOT or the Contractor.

FHWA's NEPA implementing procedures (23 CFR part 771) list Categorical Exclusions for certain actions that FHWA has determined do not individually or cumulatively have a significant effect on the human environment and therefore do not require the preparation of an EA or EIS (23 CFR 771.117). All structure segments are Categorical Excluded (CatEx) under 23 CFR 771.117 Section (c)(28).

The Contractor shall be responsible for implementing required control measures, minimization of environmental impacts, and mitigation measures to minimize environmental harm from the Project. The Contractor shall minimize both environmental impacts and impacts to adjacent property owners as design decisions are made in task force meetings or milestone review meetings, and provide documentation of the decisions to CDOT as defined in Book 2, Section 3.

5.1.3. Submittals

All submittals shall be prepared, reviewed, and submitted in accordance with the

requirements set forth in Book 2, Section 3.

5.2 Environmental Management

5.2.1. Environmental Compliance Manager

The Contractor shall employ an Environmental Compliance Manager (ECM) on the Project who shall report directly to the Design Build Project Manager. The ECM shall have experience with environmental documentation and implementing requirements that result from Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, and all associated documents.

The ECM shall:

1. Monitor and ensure full Project compliance with all Environmental Laws, regulations, and Governmental Approvals, including Permits, design, construction, Technical Criteria, and operations.
2. Ensure the implementation of all the environmental, design, construction and operational commitments, and all conditions necessary to achieve the environmental approvals for the Project.
3. Perform formal reviews of changes, design changes, and field design changes to confirm compliance with all Environmental Requirements.
4. Serve as the primary liaison between the Contractor and CDOT on environmental issues during design and construction.
5. Be the lead responder to any noncompliance findings issued by CDOT, the Quality Manager, or the ECM in the case of self-reporting, for the construction Work.
6. Respond to all noncompliances to the Environmental Requirements regardless of severity.
7. Shall conduct final QA/QC reviews on all environmental submittals prior to submittal to CDOT.
8. Have the authority to stop construction if Work Activities violate Environmental Laws, regulations, or Permits; or if they potentially jeopardize human health and safety.
9. Implement quality improvement strategies to reduce the number and severity of noncompliance to the Environmental Requirements.
10. Lead a field review with CDOT to review the Project and environmental issues every month during the construction period.
11. Write and submit any updates to the Environmental Compliance Work Plan (ECWP) for Acceptance.
12. Provide a Mitigation Completion Report that documents and certifies the completion of all Environmental Requirements for Acceptance prior to Final Acceptance.

5.3 Environmental Compliance Documentation

5.3.1. Environmental Compliance Work Plans

The Contractor shall prepare an Environmental Compliance Work Plan (ECWP) for the Project that specifically identifies all of the Environmental Requirements for compliance on the Project and the Contractor's approach to ensure compliance.

5.3.2 Environmental Compliance Work Plan

The first ECWP shall be submitted to CDOT for Approval within 30 Days after First Notice to Proceed. At a minimum, the first ECWP shall include discussion on the following:

1. Environmental Compliance Team
 - A. Provide each team members names, title, contact information, and reporting structure.
 - B. Provide each team members description of role, responsibilities, education, certifications, and other qualifications.
2. Communication Protocol
 - A. Describe and provide an illustrative communication tree for environmental compliance team coordination responsibilities, including the following:
 - i. Design coordination
 - ii. Construction Inspection and coordination
 - iii. Owner controlled QA/QC coordination
 - iv. Environmental permitting and approvals coordination

This should demonstrate how each member of the environmental compliance team is integrated into the overall process and clarify communication protocol with the Contractor's team members; CDOT staff; Federal, State, and Local Agency representatives; and representatives of other relevant organizations.
3. Management Plans
 - A. Provide a list of plans incorporated by reference, including submittal schedule and approval process.
4. Environmental Information on Plans
 - A. Describe what environmental information will be included in the plan sets and/or map book and at what levels of design.
5. Environmental Compliance Plan
 - A. Identify and document all environmental requirements:
 - i. Contract requirements
 - ii. NEPA document requirements
 - iii. Permit requirements
 - B. Identify the applicable locations and phases for each Environmental Requirement.

- C. For each Environmental Requirement applicable to design and preconstruction Activities, describe means and methods to achieve compliance.
 - A. For all other Environmental Requirements (those applicable to construction or post- construction Activities), provide a list of alternative solutions to achieve compliance. This list of alternative solutions shall communicate standard practices, typical approaches, or options the Contractor is considering for implementation on the Project.
 - B. Describe how noncompliance issues, regardless of issuer, will be documented, reported, and tracked to resolution. This shall be consistent with the communication protocol and provide additional detail, including response times, reporting and tracking tools to be used, and documentation to be provided.
 - C. Describe the purpose of the environmental team field reviews.
 - D. Provide an outline of how the 90-Day Environmental Compliance Work Plans (ECWP) will address Site-specific construction Activities.
2. Environmental Compliance Tracking
- A. Identify how compliance with each Environmental Requirement will be achieved.
 - i. Verification method (design review, field review, etc.)
 - ii. Timing/frequency of verification
 - iii. Documentation of compliance
 - B. Describe when and how compliance documentation will be made available to CDOT for review.
 - C. Provide an outline for the ECSR

5.3.3 90-Day Environmental Compliance Work Plan

The first 90-Day ECWP shall be submitted to CDOT for Approval no later than 30 Days prior to NTP2. Approval of the 90-Day ECWP is a condition of issuance of NTP2. Once an ECWP has been Approved, the Contractor shall update the ECWP and submit for Acceptance every 90 Days until Final Acceptance. The 90-Day ECWP shall define how the Environmental Requirements shall be met for construction Activities planned for that 90-day period.

At a minimum, the 90-Day ECWP shall include the following:

- 1. Describe construction Activities for the next 90-Day period and how environmental compliance will be achieved.
 - A. Specify which options identified in the first ECWP will be applied to each Activity for compliance.
 - B. Provide means and methods to accommodate design changes/additions to previously submitted plans.

5.3.4 Environmental Compliance Work Plan Amendment

The Contractor shall monitor the effectiveness of the ECWP and resubmit the ECWP at a minimum annually or when any of the following conditions exist for Acceptance.

1. A plan or procedure no longer adequately addresses the matters it was originally intended to address.
2. A plan or procedure does not comply with the Environmental Requirements.
3. An audit by the Contractor or CDOT identifies a deficiency in the ECWP triggering an update.
4. Organizational structure changes.
5. The Contractor is undertaking, or about to undertake, Activities that are not covered within the current ECWP.

5.3.5 Final Environmental Compliance Work Plan

A Final ECWP shall be submitted to CDOT for Approval as a condition for Final Acceptance of the Project. This submittal is the ECWP as it exists at the time of Project Completion.

5.3.6 Environmental Compliance Status Reports (ECSR)

The Contractor shall report on the status of Activities undertaken in accordance with the Environmental Requirements, during the period beginning with NTP2 through Project Completion. The ECM shall submit an ECSR monthly to CDOT for Acceptance, within 21 Days following the end of the reporting period (month).

The ECSR shall:

1. Document any pertinent environmental issues and include a narrative of the compliance actions (i.e. avoidance, minimization, and mitigations) that have occurred during the reporting period.
2. Include a summary of any Stakeholder communications and Governmental communications that have occurred during the reporting period.
3. Include a summary that lists the plan sets and submittals that have undergone environmental cross-disciplinary review since the previous reporting period.
4. Include the summaries from field reviews performed during the reporting period.
5. Include dated photographs documenting environmental compliance, noncompliance, and Work Activities.
6. Document Activities performed by environmental professionals, including the resumes of the individuals performing the Work.
7. Include any audit information documenting the Environmental Compliance efforts within the reporting period.
8. Include an action and decision log for the environmental task force as defined in Book 2, Section 3.

All narratives shall include enough detail to fully document the environmental Activities. The ECSR shall clearly identify, in a cover sheet, what changes were made in the plan update in order to expedite CDOT review.

5.4 Environmental Resources Requirements

5.4.1. Air Quality

The Contractor shall prepare and submit a Construction Air Quality Plan and Fugitive Dust Control Plan to CDOT for Acceptance prior to NTP2. The Contractor shall obtain an Air Pollution Emissions Notice(s) (APEN), including the Fugitive Dust Control Plan, from the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division.

All non-road diesel-powered Equipment shall use ultra-low sulfur diesel fuel. The Contractor shall minimize excessive idling of inactive Equipment and other vehicles. If construction Equipment is creating excessive air quality emissions that have a potential to affect air quality for operators or persons working/living in the area, Equipment shall be taken out of operation until properly serviced, repaired, or replaced. The Contractor shall also locate stationary emissions producing Equipment with consideration of public health and environment, and staging areas shall not be located within 200 feet of residences.

5.4.2. Noise

5.4.2.1 Noise Technical Report

No permanent noise abatement mitigation measures (noise barriers) have been determined for the Project based on the design provided in the Reference Documents. If the Contractor's design varies from the design in the Reference Documents in a manner that results in the need for additional or revised noise mitigation measures, the Contractor shall be responsible for providing the necessary mitigation measures and shall obtain all required Approvals and Permits associated with the Work.

The Contractor shall perform a noise analysis based on its final design if design changes from the design warrant it. Design changes that could trigger a noise analysis include, but are not limited to, the following:

1. Change in vertical profile of 5 feet or more.
2. Change in horizontal alignment that halves horizontal distance between the nearest of travel lane and the existing sensitive receptors.

Preliminary and Final Noise Technical Reports shall document results of the noise analysis and be submitted for Acceptance prior to completing the Benefited Receptor Preference Survey. All noise analysis shall be completed in accordance to the standards and procedures of the applicable CDOT *Noise Analysis and Abatement Guidelines* and *CDOT Traffic Noise Tech Memo issued September 21, 2020*.

The Noise Technical Report shall determine and document the noise effects of any changes to the vertical and horizontal alignment, if they exceed the changes described above, from the Reference Documents. The noise analysis and Noise Technical Report shall include a

detailed description of the locations where the horizontal and vertical Roadway elevations have changed from the Reference Drawings. The noise analysis and Noise Technical Report shall determine if any new receptors have become eligible for noise abatement due to geometrical Roadway changes or changes that would affect line of sight between the noise source and the receptor via design. If any new receptors have become eligible for noise abatement because of changes in the vertical or horizontal alignment, the Contractor shall include that information in the analysis for recommended noise abatement and Noise Technical Report. The Contractor shall ensure proposed mitigation measures are consistent with mitigation standards identified in State and Federal guidelines.

The Contractor shall submit documentation with the noise analysis and Noise Technical Report verifying the analysis was performed by a qualified individual with expertise in the field of highway noise analysis in Colorado. If additional noise abatement is required because of Contractor-initiated changes to the vertical or horizontal alignment, all costs for the additional noise abatement shall be included in the Upset Amount (UA).

5.4.2.2 Construction Noise and Vibration

The Contractor shall comply with all applicable County noise ordinances and regulations, unless the Contractor secures a variance. The Contractor shall acquire the variance prior to the start of any associated construction Activities and be solely responsible for compliance with the Permit requirements.

5.4.3. Cultural/Historical Resources, Archaeological Resources, and Historic Section 4(f) Resources

CDOT has cleared all of the structures included in the Basic Configuration and AREs in compliance with Section 106 of the National Historic Preservation Act (Section 106) and the implementing regulations set forth in 36 CFR Part 800. Three historic resources were identified at three locations and necessitate additional requirements. M-22-U and P-19-G minor span irrigation canals and O-19-D is in proximity to the Earl School. CDOT submitted proposed plans for the replacement of both irrigation structures with potential shoofly detours. CDOT also submitted proposed limits of disturbance for construction proximity to the Earl School. If the contractor should elect to deviate, as determined by CDOT, from the approved plans provided in Book 3, the revised plans must be reviewed by the CDOT historian who may consult with the State Historic Preservation Office (SHPO) and interested consulting parties to ensure compliance with Section 106. The revised plan approval process could require a minimum of ten (10) weeks beginning when a CDOT Historian receives the revised plans. All communication with the SHPO and consulting parties must be conducted through the CDOT Historian. The contractor shall not have any direct contact with the SHPO or the consulting parties.

The CDOT Historian will require 30 calendar days to review the proposed plans and compile appropriate materials for consultation with the SHPO and the consulting parties. The CDOT Historian may request changes to the plans to ensure that the work will not adversely affect the historic resources of the Otero Canal (at bridge M-22-U), the Picketwire Ditch (at bridge P-19-G Minor), or the Earl School (at bridge O-19-D). Once received, SHPO and the consulting parties will require 30 calendar days to review the materials. If the consulting parties do not have any comments and SHPO concurs that the project results in no adverse

effect to the resources, the project can move forward as designed. If, in consultation with SHPO and the consulting parties, the CDOT Historian determines the project will result in an adverse effect to one or more resources, changes to the proposed plans may be requested to avoid or minimize effects. If, after further consultation with SHPO, CDOT determines that the proposed work will result in an adverse effect to one or more resources, steps must be taken to ensure compliance with both Section 106 and Section 4(f) of the Department of Transportation Act of 1966. These steps include, but are not limited to, notifying the Advisory Council on Historic Preservation of the adverse effect, taking measures to avoid or minimize the impacts to the resource(s), and completing a Memorandum of Agreement to outline mitigation for the adverse effect to the resource(s). The process for determination and resolution of an adverse effect could require from 285 to 320 calendar days.

All areas of existing ROW have been surveyed, and the Project, as described in Book 2, Section 1, requires no further survey for cultural resources. If the area of construction disturbance increases beyond what has been evaluated, the ultimate extent of construction shall be submitted for Approval. If modifications to the Project cause new impacts and/or require mitigation. The Contractor shall be responsible for coordinating the new impacts and/or required mitigation with CDOT to obtain the State Historic Preservation Office (SHPO) approval. The cost of the new impacts and/or required mitigation shall be included in the UA.

The Contractor shall notify CDOT of any previously unidentified historic, eligible for listing on the National Register of Historic Places, or Archaeological resources encountered or unearthed during construction. Upon discovery of any historic or Archaeological resources, the Contractor shall immediately cease Work in the vicinity of the discovery, fence off the area, and notify the CDOT Project Manager who will then notify the archaeologist or cultural resource staff by calling the Cultural Resource Program Manager at 303-757-9631. CDOT will determine the resource mitigation requirements the Contractor shall implement. The Contractor shall not resume Work in the area until receiving formal notification from CDOT allowing Work to recommence.

The Santa Fe Trail located on US 350 was designated a National Historic Trail in 1987 and the trail through Otero County was determined eligible for listing in the National Register of Historic Places in 1992. In Otero County, the trail has been recorded under site number 5OT234, located approximately 750 ft. southeast of the project area and Area of Potential Effects. Daughters of the American Revolution (DAR) placed stone markers along segments of the trail to commemorate the site. One of these markers is located along the right-of-way fence west of US 350 at milepost (MP) 69.4, roughly 1,500 ft. south of the project area. If any archaeological resources are uncovered during construction, specifically those related to the Santa Fe Trail, construction shall stop and a CDOT archaeologist shall be notified and be provided time to survey the finding. Workers will be made aware of the DAR trail marker at US 350 MP 69.4, and the area will be avoided by all construction activities. It shall not be used as a staging area or for any other purposes during construction.

Refer to CDOT *Standard Specification* 107.23, if encountering Archeological resources during earthwork Activities.

The Contractor shall clearly delineate environmentally sensitive areas on all RFC Documents; these areas will be shown as “No Parking and No Staging Areas”. This includes areas located

outside the limits of disturbance, as well as areas within the construction limits that require construction monitoring.

5.4.4. Paleontology

All areas of existing ROW have been surveyed, and the Project, as described in Book 2, Section 1, requires no further survey for paleontological resources. If modifications to the Project cause new impacts and/or require mitigation, the Contractor shall be responsible for coordinating the new impacts and/or required mitigation with CDOT, who will coordinate with the State Historic Office (SHPO) for approval. The cost of the new impacts and/or required mitigation shall be included in the UA.

If paleontological resources are uncovered during Project construction, the Contractor shall immediately notify the CDOT Project Manager who will then notify the paleontological staff by calling the Cultural Resource Program Manager at 303-757-9631 and follow procedures in Section 107.23 of the CDOT *Standard Specifications*.

5.4.5. Trails, Parks, and Recreation

Trails, parks, and recreation resources will not be impacted or require mitigation by the Project. If the Contractor causes impact to these environmental resources, including Comanche Grasslands, the Contractor shall be responsible for the Work needed to obtain clearance from CDOT, any mitigation required as a result of the impact, and any Permits necessary to complete the Work. The cost of the new impacts and/or required mitigation shall be included in the UA.

5.4.6. Vegetation

The Contractor shall enhance and incorporate impacted landscape areas (irrigated or otherwise) to optimize the longevity and maintainability of the existing vegetation. The contractor shall supply a native seed mix recommendation for CDOT for Review and Approval with RFC plan submittals for each structure segment. All seed, mulch and mulch tackifier shall be applied in accordance with requirements of the Contract.

Disturbance Areas

The Contractor shall reseed and protect temporary disturbance areas with approved control measures to avoid disturbance to existing vegetation. See Book 2, Section 17 for the seeding requirements.

5.4.6.1 Weed Management

The Contractor shall take actions necessary to control all State listed noxious weeds within the Project limits. Prior to construction, the Contractor shall perform an initial noxious weed survey, and prepare a Integrated Noxious Weed Management Plan for inclusion in the ECWP. The Integrated Noxious Weed Management Plan shall be submitted for Acceptance prior to NTP2.

The plan shall include a variety of species-specific control methods based on the size of the

weed populations and the surrounding landscape. Weed mitigation efforts shall take place at a minimum twice per year (spring and fall). The plan shall be implemented throughout Project construction as appropriate. The plan shall include monthly noxious weed surveys during the growing season, March through October, to identify and treat noxious weeds. Weed-infested staging areas shall not be allowed. Staging areas shall be mowed and cleared of noxious weeds and sprayed with the appropriate herbicide, or as referenced in the Colorado Department of Agriculture species fact sheets. Topsoil salvaged from the Site and stockpiled for reuse on the Site shall be treated in accordance with the methodology described in the first ECWP to eliminate noxious weeds prior to salvage. Topsoil stockpiles shall be monitored during the monthly noxious weed Surveys and treatment shall be implemented as needed. If imported topsoil is used for any part of the Project, the topsoil shall be inspected and certified noxious weed free. Mitigated sites shall be monitored at least twice over the first growing season following construction, and follow-up weed control shall be provided where needed.

5.4.7. Wildlife

In order to avoid any delays in the project's delivery, the following guidelines must be included in the plans and implemented during construction of the Project:

For structure G-12-C, the following guidelines must be met:

1. Construction should be conducted as to not permanently impede movement of lynx and prevent it from accessing habitats necessary for breeding, feeding, sheltering, and dispersal. This determination shall be made by a CDOT approved biologist.
2. Construction should be concentrated to as small of an area as possible in order to minimize the amount of habitat affected at one time and keep adjacent habitat areas available for use by lynx to forage, hide, or travel. Re-contour and restore all temporarily impacted habitats on the project site so that they become available for use.
3. The width and height of proposed concrete box culverts (CBC) must be equal to or larger than the existing size in order to not impede movement for lynx and maintain access to habitats used for breeding, feeding, sheltering, and dispersal. If a CBC will be longer than the existing CBC, the openness ratio of the original culvert must be maintained. The openness ratio is calculated by $((\text{height} \times \text{width}) / \text{length})$ in meters. This measure does not apply to corrugated metal pipe (CMP).
4. Installation of concrete barrier shall not be allowed.
5. This segment is within 0.25 mile of alpine or sub-alpine habitat, as defined by the U.S. Geological Surveys' (USGS) Ecoregions of Colorado (level IV), construction activities shall be limited to outside of the rearing season (May through July) to reduce the effects of the project on reproducing Canada lynx to an insignificant level. Work initiated prior to May 1 and sustained until completion may continue into the rearing season.

For structure I-17-X, the following guidelines must be met:

1. Schedule construction activities outside the breeding season. Breeding season is from March 1 to August 31. Factors such as increased noise, lighting, and human activity could disrupt the species' breeding and foraging activities. Non-breeding season is September 1 - February 28.
2. Design project such that the amount of habitat disturbed is kept to a minimum.
3. Locate staging areas in previously disturbed areas

4. Use the minimum amount of lighting necessary to meet the objectives of the project. Where temporary artificial night lighting is necessary, design lighting to illuminate the minimum area needed for operational purposes, minimize the number of lights used, use the lowest illumination necessary for human safety, and selectively place, shield, and direct lighting away from Mexican Spotted Owl habitat. Use Dark Sky compliant lighting. Ensure that lights are in use only when necessary.

If any of these guidelines cannot be met, no work on G-12-C and I-17-X can proceed. The Contractor shall be responsible for coordinating the impacts with CDOT, who will coordinate with the US Fish and Wildlife. The consultation process could require a minimum of 165 calendar days. The Contractor shall be responsible for the Work and any mitigation required as a result of the impact.

5.4.7.1 Federally Listed Species

The Project, as described in Book 2 Section 1 and section 5.4.7 above, requires no further coordination with the U.S. Fish and Wildlife Service (USFWS). If modifications to the Project cause new impacts and/or require mitigation, the Contractor shall be responsible for coordination with CDOT for USFWS concurrence of a Biological Assessment. The cost of the impacts and/or mitigation due to the new impacts and/or required mitigation shall be included in the UA.

5.4.7.2 Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Contractor shall comply with the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act at all times, including conducting preconstruction surveys for nesting birds set forth by USFWS, CPW, and Project Special Provision Revision of Section 240.

The Contractor shall schedule Work to avoid taking (pursue, hunt, take, capture or kill; attempt to take, capture, kill or possess) migratory birds protected by the MBTA. The incidental taking of a migratory bird shall be reported to CDOT. The Contractor shall be responsible for all penalties levied by the USFWS for the taking of a migratory bird.

The Contractor shall retain a qualified wildlife biologist, with a minimum of 3 years of experience conducting migratory bird and raptor surveys, to implement the requirements of the MBTA. The Contractor shall submit documentation of the biologist's education and experience to CDOT for Acceptance prior to commencement of any associated Work.

To the extent possible, vegetation removal Activities will be timed to avoid the migratory bird breeding season (April 1 through August 31). Areas that must be scheduled for vegetation removal between April 1 and August 31 shall be surveyed for nests, and a Migratory Bird Nest Survey Memorandum shall be submitted to CDOT for Acceptance prior to removing vegetation at each structure segment. Work buffers and Work exclusion zones shall be implemented as necessary to avoid impacts to nesting birds. Appropriate inactive nest removal and hazing/exclusion measures shall be incorporated into the Work to avoid the need to disturb active migratory bird nests.

The Contractor shall complete raptor nest surveys to evaluate for the presence of active raptor nests within 0.5 mile of the Project segment. This survey shall be completed

between February 1 through July 15. Raptor nest surveys shall be conducted no more than 7 Days prior to starting construction of the Project. Surveys for nocturnal bald eagle roosts shall be conducted between November 15 and March 15 prior to starting construction. If an active nest or roost is located in or near the Project area, the Contractor shall contact CDOT regarding use of seasonal buffers to prevent disturbance to nesting birds during construction. A Raptor Survey Memorandum shall be submitted to CDOT for Acceptance prior to construction occurring within 0.5-mile of a raptor nest.

5.4.7.3 Prairie Dogs

The Project area is within the range and offers suitable habitat for occupation by prairie dogs. Active prairie dog burrows may be present within the agricultural fields, grazed pastureland, vegetated ROW, as well as woodland edges and openings within the Project area. Prairie dogs may be present as a clan or single family group with several characteristic burrows and mounds marking their home territory, or several clans may reside adjacent to one another forming a larger colony displaying a complex of burrows.

The Contractor shall follow all applicable Local, State and Federal laws, policies and regulations including the *CDOT Impacted Black-Tailed Prairie Dog Policy* (CDOT, 2009), Project Special Provision Revision of Section 240, and the CPW regulations (*CPW General Provisions*). At no time shall earth-moving Activities be performed that result in the burial of living prairie dogs. To achieve this guideline, the prioritization of prairie dog management is:

1. Avoidance and minimization of impacts.
2. Passive relocation.
3. Active relocation, although this may not be feasible as an appropriate relocation site may not be found.
4. Humanely euthanize in coordination with CPW.

The presence of active prairie dog burrows within 150 feet of the Project limits will necessitate pre- construction surveys for burrowing owl following guidelines developed by the CPW, *Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls When Conducting Prairie Dog Control*. Surveys shall be performed of active prairie dog burrows within 150 feet of the Project area between March 15 and October 31. Surveys shall be performed by the Contractor's biologist. Guidelines recommend a minimum of 3 surveys separated by approximately 1 week. If burrowing owls are detected during the survey effort, the CDOT regional biologist in coordination with the CPW, will determine if construction Activities need to be modified or limited in certain areas of the Project in order to comply with the CPW, *Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors* and the State of Colorado's Endangered-Threatened Species Conservation Act.

The Contractor shall submit a burrowing owl survey to CDOT for Acceptance within 7 Days prior to disturbance of prairie dog colonies. The Contractor shall submit burrowing owl survey documentation to CDOT for Acceptance prior to impacts to prairie dog habitat or species.

5.4.8. Water Quality

Permanent water quality for the Project is not required. The Contractor shall prevent and/or minimize erosion, sedimentation and pollution of any State waters.

The Contractor shall comply with all aspects of:

1. The Colorado Discharge Permit System – Stormwater Construction Permit (CDPS-SCP) issued by CDPHE.
2. CDOT's Water Quality Specifications CDOT *Standard Specifications* Subsection 107.25 and Sections 208, 213 and 216.
3. CDOT *M&S Standards* M-208-1 and M-216-1.

Refer to Section 5.4.9 for waters of the U.S. requirements; Book 2, Section 3, for quality requirements; Book 2, Section 12, for drainage requirements; and Book 2, Section 17, for Landscape stabilization and Warranty requirements.

The Contractor shall submit Stormwater Management Plans (SWMP) to CDOT for Review in accordance with the CDOT SWMP over 1-acre or under 1-acre Template requirements with RFC plan submittals for each structure segment. In the case where more than one structure location is less than a quarter mile apart, all structures in that quarter mile vicinity shall account for disturbance area and help in determining whether an over 1-acre or under 1-acre CDOT SWMP Template will be required. See CDOT Bulletin 20-001.

The Contractor shall fill out the current CDOT SWMP template, including BMP narratives. The SWMP shall clearly describe the relationship between the phases of construction and the implementation and maintenance of the stormwater management controls. Any major modifications (i.e., change modification orders or minor changes revisions) to the CDOT SWMP template shall be submitted to CDOT for Acceptance. The Contractor shall revise the SWMP Site Map as necessary based on actual construction activities throughout the duration of the CDPS-SCP. All BMPs shall be listed on the SWMP Site Map per the requirements of the CDPS-SCP.

All documents pertaining to the CDPS-SCP shall be kept on-site in the CDOT Stormwater Management Plan (SWMP) Notebook (provided by CDOT) to maintain compliance with the SCP. Upon permit inactivation, the SWMP Notebook shall be turned over to CDOT and become the property of CDOT Project files.

Erosion Control Measures

The Contractor shall install and maintain the construction erosion control measures for the Project in accordance with the CDOT Erosion Control and Stormwater Quality Guide and Sections 101, 107, and 208 of the Standard Specifications. Construction erosion control measures for the Project shall include, but are not limited to, those listed in the Standard Specifications, as well as, preservation of existing vegetation, surface roughening, tackifier or soil binder, soil retention blankets, temporary clean water diversions, storm drain and basins, protection of trees, hazardous waste and spill containment and saw water disposal, stabilized construction entrances, and pavement sweeping of the affected Project areas. The Contractor shall add an erosion control measure narrative to the SWMP on how it is being used, and shall supply the manufacturer details to be placed in the SWMP Notebook. The Contractor shall have a complete supply of all necessary construction erosion control measure Materials on Site at all times in preparation for construction water quality control emergencies.

The Contractor shall use erosion control blankets to promote the establishment of vegetation

on slopes steeper than 4H:1V to control erosion.

Slopes shall be roughened at the end of each day. Concrete washout shall be contained.

Non-structural erosion control measures may include litter and debris control, street sweeping, and landscaping and vegetative practices.

Site Inspections

During the Project, multiple inspections by CDOT and the Contractor and his ECM will be occurring. Inspections shall be on the appropriate CDOT Forms and shall follow the requirements in CDOT *Standard Specifications*, Section 208. Prior to work commencing, a pre-construction conference shall be held with CDOT's Region Water Quality personnel. In addition, when the first phase of BMPs has been installed at each structure segment, the Contractor shall notify CDOT's Region Water Quality personnel to come out and inspect the BMPs for proper installation. Work shall not begin until the BMP installation inspection has occurred. CDOT's Region Water Quality personnel will be inspecting the Site on a monthly basis, as well as during the surprise Regional Erosion Control Assessment Team inspections. The Region Water Quality personnel may inspect the Project at any time and document any non-compliance issues that need to be resolved immediately by the Contractor. Fines may be assessed to the Contractor with the potential of Project shut downs, depending on the severity of the non-compliance. Prior to Substantial Landscape Completion at each structure segment, CDOT's Region Water Quality personnel shall be notified to perform a final walkthrough inspection. Any items identified for maintenance, replacement, or removal shall be done immediately or liquidated damages may be incurred upon the Contractor.

Based on the Consent Order, the Project Superintendent or ECM shall perform inspections of all BMPs to observe, record, and determine the effectiveness of all BMPs and to order their maintenance if needed. The results of the inspections shall be recorded in a stormwater log, which will be provided by CDOT. The Contractor shall cooperate with Local Agencies that may perform their own stormwater inspections on this Project.

5.4.8.1 CDPHE & CDPS

The Contractor shall obtain the CDPS and NPDES permits, if required, a minimum of 10 Days prior to the start of construction. CDOT and the Contractor will be co-owners for the CDPS permit and CDOT will be the owner of the NPDES permit.

All stormwater requirements, including the Stormwater Management Plan (SWMP), shall be fulfilled in accordance with CDPS-SCP, Specification 208 of the CDOT Standard Specifications, and in accordance with the NPDES Permit. CDOT will perform monthly audits.

The Contractor shall have properly trained and certified staff on Site who will manage, administer and inspect the Project to ensure the construction control measures are adequate for the Site conditions of the Project and are in good working condition. The Contractor shall prevent the discharge of any sediment or pollutants from the construction Activity into any storm drains or receiving waters during the life of the CDPS-SCP and NPDES Permit.

5.4.8.2 Dewatering Permit

The Contractor shall obtain a Construction Dewatering, Remediation, or Individual Permit(s) from the CDPHE for any dewatering of groundwater during construction in accordance with Water Quality Control Division (WQCD) requirements. The Permit(s) shall be obtained prior to the start of discharge Activities. The Contractor shall provide all information needed to assist the WQCD in their evaluation and setting of a water quality standard for the Permit(s), which may include monitoring of the discharged water. If the Contractor's Activities require a permanent dewatering system, any such system will require the Approval of CDOT prior to submitting a Subterranean Dewatering Permit.

If the Contractor's Activities result in a consumptive use during construction, the Contractor shall obtain a Substitute Water Supply Plan from the Division of Water Resources. If any dewatering Activities are required after construction, the Contractor shall design, operate, and maintain the dewatering system so that no consumptive use of the water occurs.

The Contractor shall monitor for any settlement caused by dewatering. The Contractor shall conduct a preliminary survey of any private property or buildings that may be affected by dewatering to establish existing conditions. The Contractor shall repair any damage caused by dewatering operations.

5.4.9. Wetlands and Waters of the U.S.

Wetland delineations were completed for the Project. Wetland maps, wetland shape files and Wetland Determination Forms are available in the Reference Documents and shall be used in determining wetland impacts during design and construction.

The Contractor shall replace all wetlands at a 1:1 ratio regardless if the wetland is jurisdictional or non-jurisdictional per Executive Order 11990 "Protection of Wetlands".

The wetlands within the Project area are estimated as follows:

Table 5-2 Wetlands and Waters of the U.S. for the Project

Structure	Wetland (acre)	WOUS (linear ft; ac)
G-12-C	0.12	414 lf; 0.16 ac
I-13-G	0.06	680 lf; 0.44 ac
H-13-N	0.7	102 lf; 0.09 ac
I-15-AO	0.15	640 lf; 0.18 ac
I-15-T	n/a	120 lf; 0.04 ac
J-14-C	n/a	115 lf; 0.03 ac
J-15-G	n/a	370 lf; 0.28 ac
M-21-B	n/a	n/a
M-21-C	n/a	635 lf; 0.58 ac
M-21-J	n/a	n/a
M-22-U	n/a	1,310 lf; 0.33 ac
M-22-Y	n/a	n/a
N-21-C	n/a	n/a
N-21-F	n/a	n/a
I-17-X	n/a	430 lf; 0.2 ac

I-13-H	0.73	n/a
M-21-I	n/a	n/a
O-19-D	n/a	245 lf; 0.1 ac
P-19-G	n/a	250 lf; 0.11 ac

1. It is assumed that impacts to Waters of the US (WOUS) can be permitted under Nationwide Permit #3 Maintenance or #14 Linear Transportation. All Preconstruction Notification documentation required by these permits shall be prepared by the Contractor.

5.4.9.1 Wetlands Field Identification

If the Contractor proposes to work in areas outside of the wetland delineation conducted in each CatEx, then the Contractor shall delineate the additional Project area for waters of the U.S., including wetlands.

5.4.9.2 Wetlands Inspection, Establishment, Acceptance, and Warranty Period

Inspection, Landscape Establishment, Acceptance and the Landscape Warranty Period for wetland areas shall be subject to the applicable requirements of Book 2 Section 17 - Landscaping.

Substantial Landscape Completion, Landscape Establishment Periods, and Acceptance for wetlands areas shall be subject to compliance of the requirements of all applicable permits.

The Landscape Establishment Period for wetlands areas shall commence upon receipt of a written "Notice of Substantial Landscape Completion" for wetlands areas from CDOT, and is not subject to prior Final Acceptance of the Project.

The Landscape Establishment Period for wetlands areas will last for 24 months, and will begin the following spring if Substantial Landscape Completion for the wetlands areas is issued in the fall.

The Contractor shall provide CDOT with annual mitigation progress reports. The reports shall be submitted to CDOT for Review December 21st of each year, and shall include the following:

1. Project number, 404-permit number, and county where project is located.
2. Summary on the status of the wetlands.
3. Percent of ground surface area that is vegetated.
4. Percent of the vegetated area that contains wetland vegetation.
5. List of prevalent plant species and their wetland establishment status.
6. Location map.
7. Drawings as needed for illustration.
8. Photographs of mitigation area for each report.
9. Percent cover of noxious weeds.
10. Acreage determination of successful mitigation sites.

Upon completion of the Landscape Establishment period for wetlands areas, at the Contractor's request, CDOT will inspect the wetlands to determine compliance to the requirements of the Contract Documents. Wetlands areas will not be Accepted until a minimum of 70 percent of the mitigation site consists of wetland species and noxious weeds comprise of less than 5% of the total cover.

Acceptance of the wetlands areas will initiate the one (1) year Landscape warranty period and maintenance period. Throughout the warranty and maintenance period the Contractor shall be responsible for remedial action and restoration of created wetlands.

Remedial action is defined action taken to correct failed wetland construction. This can include but is not limited to:

1. Re-evaluation of hydrology source.
2. Groundwater monitoring to identify and correct improper grade elevations.
3. Additional excavation or fill.
4. Replanting vegetation.

Restoration of created wetlands is defined actions taken to improve the conditions of an existing wetland that has limited functions. Techniques can include, but are not limited to:

1. Replanting vegetation.
2. Re-configuration of improper ground elevation
3. Enhancing hydrology.

Senate Bill 40/Wildlife

The Senate Bill 40 Wildlife Certification (SB 40) will be required for construction Activities that impact streams and their associated riparian areas. The Contractor shall not perform construction Activities within the impacted riparian areas until Colorado Parks and Wildlife accepts the SB 40 Certification. The Contractor shall be responsible for preparing the SB 40 Certification on the behalf of CDOT. Submittal requirements for the SB 40 certification will include the following:

The Contractor shall comply with the Memorandum of Understanding between CDOT and Colorado Parks and Wildlife (Formerly Colorado Division of Wildlife) regarding avoiding and minimizing wetland impacts. The document is available in the Reference Documents.

Consultation for SB 40 permitting may require natural bottoms as a requirement for structures. Structures that are required to have a natural bottom shall include a minimum of 12 inches of cover consisting of native material. Native material fill shall be existing or comparable stream bottom material, however, such material shall not be obtained from the live water area in the stream in accordance with Senate Bill 40 Wildlife Certification Guidelines.

Contractor Requirements

1. The Contractor shall submit RFC plans to CDOT for all construction that impacts the riparian areas for the purpose of obtaining the SB 40 Certification. The Contractor shall

prepare an Individual SB 40 Certification package on CDOTs behalf to Colorado Parks and Wildlife. Individual SB 40 Requirements and an example of an Individual SB 40 Certification Package are available in the Reference Documents.

2. The Contractor shall incorporate the Colorado Parks and Wildlife recommendations.

CDOT Requirements

1. CDOT will coordinate directly with the Colorado Parks and Wildlife and will submit Contractor prepared SB 40 Certification documents.
2. CDOT will notify the Contractor when the SB 40 Certification is issued. Issuance of the SB 40 Certification allows the Contractor to begin Work in impacted stream and riparian areas.

Senate Bill 40 Permit Mitigation Requirements

Impacted riparian areas shall be identified in design plans. The requirements of the SB 40 Certification that the Contractor shall be responsible for complying with are as specified in this Section.

The Contractor shall fence off riparian areas that are not to be impacted by the Project prior to beginning construction adjacent to the riparian areas. Location of fencing to define and protect riparian areas shall be subject to the Approval of CDOT and shall be submitted 5-Days prior to placing fence.

Trespassing, parking, or storing equipment within riparian areas by the Contractor shall be considered an impact that requires appropriate mitigation.

Non-native riparian areas that are impacted shall be cut and sprayed to prevent future non-native plant establishment.

The locations of replacement species for mitigation of impacted riparian areas shall be subject to CDOT Approval. The Contractor shall submit a Landscape Plan and plant establishment plan for all riparian replacement areas to CDOT for Approval prior to performing the Work.

Impacted riparian areas shall be mitigated within the same natural drainage system, and within the Project limits.

The Contractor shall install beaver guards for all new trees.

Mitigation of riparian areas shall be subject to the requirements of the Landscaping Section.

Mitigation of Non-Native Riparian Areas

The Contractor shall provide 2:1 ratio of native to non-native tree replacement with native 1.5-inch or greater caliber Eastern Cottonwood Trees per acre for impacts to riparian areas that contain non-native tree species.

Non-native tree species include, but are not limited to, the following:

1. Siberian Elms

2. Russian Olive
3. Crack Willow
4. Black Locust
5. Tamarisk (Tree Form)

Non-native shrub species shall be replaced with Coyote Willow or Sandbar Willow where proper hydrology exists to support willow species.

Tamarisk in shrub form shall be replaced with coyote and/or sandbar willow.

Mitigation of Native Riparian Areas

The Contractor shall provide one to one in-kind replacement for native tree species and use native seed or other methods to restore the herbaceous cover within impacted riparian areas.

Native species include, but are not limited to, the following:

1. Cottonwood Trees
2. Willow Trees (Peachleaf)
3. Willow Shrubs (coyote or sandbar)
4. Herbaceous riparian cover (sedges, rushes, and mesic grasses)

5.4.9.3 Section 404 Permit

The Contractor is required to obtain the necessary Section 404 permits for this project. Section 404 permits will be required for all Waters of the US including jurisdictional wetlands. The US Army Corps of Engineers (USACE) has indicated that the use of Nationwide Permits #3 Maintenance and #14 Linear Transportation, will be utilized where appropriate. CDOT anticipates that the entire Project can be permitted under multiple nationwide permits, but this is dependent upon final design and amount of impacts to jurisdictional waters and wetlands. The USACE is the regulatory agency and decides whether or not this Project will meet the Nationwide Permit or Individual permit requirements. The Contractor shall be responsible for complying with all of the requirements of the Section 404 permit(s), including those requirements as specified in this Section. The Contractor shall submit a Section 404 Individual or Nationwide Permit Application to CDOT for Review and Approval before it is submitted to the USACE. The Contractor shall be responsible for preparing preconstruction notification documentation as required by Nationwide Permits guidelines.

The Contractor shall be responsible for submitting a Wetland Finding Report if impacts exceed the thresholds identified in the 2006 Memorandum of Agreement between FHWA and CDOT regarding the programmatic approval of Wetland Findings. The Wetland Finding Report shall be Accepted by CDOT. A Functional Assessment of Colorado Wetlands (FACWet) analysis shall be performed if permanent wetland impacts meet or exceed 0.10 acre.

5.5 Recognized Hazardous Materials

Recognized Hazardous Materials (RHM) are defined as the presence or suspected presence of Hazardous Substances which may require management and/or disposal. Hazardous Substances may exist on the surface, subsurface, in groundwater, or on structures to be demolished, and may be mixed with soil, water, and/or other waste materials.

The Contractor is advised to thoroughly read and understand the findings and requirements in the Categorical Exclusions, for any RHMs within the Project limits.

Structures identified to have asbestos or lead based paint, refer to Exhibit 5-A Asbestos and Lead Based Paint Summary Table.

5.6 Materials Management Plan

The Contractor shall develop a Materials Management Plan (MMP) to be submitted for Approval by CDOT prior to issuance of NTP1. The Contractor shall comply with all provisions set forth within the Approved MMP.

The MMP shall identify potential RHMs: locations, extent of impact, proposed Remediation Work, avoidance measures, investigation measures, as well as contingency planning for addressing unforeseen conditions. The plan shall identify the Contractor's representative responsible for environmental compliance, the proposed design and construction staff, and approach to implementation of the MMP. The plan should also include a narrative describing how the MMP will inform the design, and how the MMP will raise awareness during construction. In addition to meeting the requirements of Section 250 of the *CDOT Standard Specifications*.

The MMP shall include the following provisions:

1. The Contractor shall manage all RHMs including soils, groundwater, surface water, and other contaminated substances to prevent exposure to Project personnel and the public, and to prevent any contamination of non-contaminated areas.
2. Contractor shall manage the design such that RHM location avoidance is considered a primary consideration.
3. The Contractor shall classify such wastes according to one of the following categories:
 - A. Hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) requiring off Site disposal and/or treatment.
 - B. Contaminated soils requiring off Site disposal.
 - C. Soils to be stockpiled for further characterization.
 - D. Soils with concentrations of waste constituents below regulatory concern that can be reused without restriction.
 - E. Wastewater requiring off Site disposal and/or treatment.
 - F. Impacted water to be held for further characterization.
 - G. Asbestos containing material discovered during construction or demolition.
 - H. Lead-based paint associated with Structures, signage, light posts, etc.
 - I. Waste material to be contained for further characterization.
 - J. Contaminated groundwater requiring on Site treatment or off Site disposal.
4. Prior to commencing any Remediation Work, a scope of work shall be submitted to CDOT for Approval. The Contractor shall utilize the most cost-effective approach in the

performance of any remedial action deemed necessary. Remediation Work shall not include sampling, characterization, stockpiling or disposal of materials that are determined not to require off Site disposal and/or treatment.

5. The Contractor shall not allow Hazardous Substances to be spilled or tracked off Site at any time during the Project.
6. The Contractor shall be responsible for locating storage facilities and disposal sites for RHMs that are to be removed from the Work Site.
7. The Contractor shall maintain documentation of completed waste profiles, manifest forms, and bill-of-lading forms for proper transportation and disposal of materials off Site. This information shall be available at all times for review by CDOT. The Contractor shall be held responsible for ensuring that all requirements of the transporter and receiving disposal facility and Federal, State, and Local statutes, rules, regulations and ordinances are complied with and properly documented.

5.6.1 Health and Safety Plan

The Contractor shall develop a Health and Safety Plan (HASP) for the Work, according to the requirements of Section 250 of the 2019 CDOT *Standard Specifications for Road and Bridge Construction, Environmental, Health, and Safety Management*. The HASP shall be submitted to CDOT for Acceptance prior to NTP2.

Asbestos and Lead Based Paint Surveys

Demolition of structures will require a demolition permit from the CDPHE. A requirement of the permit is a certified asbestos inspection of the structure. CDOT has a demolition permit application for each of these structures with the signature of the certified asbestos inspector that performed the asbestos inspection. These permit applications are available in the reference documents.

Required Personnel

The Contractor shall designate a Health and Safety Officer (HSO) in accordance with subsection 250.03 of the Standard Specifications. The HSO shall have a thorough knowledge of all applicable OSHA, EPA, State, including but not limited to the CDPHE - Colorado Department of Public Health and Environment, and local regulations as they pertain to the protection of the environment and the safety and health of the workers.

The Contractor shall designate a monitoring technician as per Subsection 250.03. The monitoring technician will be responsible for the monitoring of hazardous substances during work on the project.

The Contractor shall provide certification indicating that the procedures, protection and work described in the method statement are in accordance with the OSHA and EPA standards and applicable federal, state and local regulations.

The Contractor shall develop a Health and Safety Plan (HASP) for the Work, as required by Section

250.03 of the 2019 CDOT *Standard Specifications*, CDOT MMP, and the CDOT Asbestos-Contaminated Soil Management SOP, as appropriate.

The Contractor shall distribute the HASP to all employees that could be potentially exposed to RHMs. The HASP shall be displayed or made available on Site at all times. The Contractor shall develop and maintain all industrial hygiene information on Site, including “right-to-know” information. In addition to meeting the requirements of Section 250 of the CDOT *Standard Specifications*, the HASP shall include the following provision:

“The Contractor shall maintain documentation and provide information to CDOT, as requested, regarding potential or actual exposure to the public. The Contractor shall maintain records of all related incidents and notify CDOT and appropriate State authorities immediately.”

The Contractor shall provide to CDOT identification of all Subcontractors to be used in the performance of Work required within this Section prior to performing any such Work. The Contractor shall maintain documentation of all pertinent certifications of all subcontractors and make it available to CDOT upon request.

5.6.2 Spill Response Plan

The Contractor shall develop a Spill Response Plan (SRP) for the Work, as required by Section 208 of the CDOT *Standard Specifications*, CDOT MMP, and the CDOT Asbestos-Contaminated Soil Management SOP as appropriate. The SRP shall be submitted to CDOT for Acceptance prior to NTP2.

The SRP shall establish operating procedures for handling pollutants and preventing spills. Pollutant sources include, but are not limited to, exposed and stored soils, paints, solvents, fertilizers or chemicals, vehicle tracking, management of contaminated soils, loading and unloading operations, outdoor storage, vehicle/Equipment maintenance and fueling, significant dust or particulate generation, on Site waste management practices, concrete truck/Equipment washing, dedicated asphalt and concrete batch plants, and non-industrial waste sources that may be significant, such as trash and portable toilets.

During the environmental task force meetings, the Contractor shall discuss the submittals of the MMP, SAP, HASP, and SRP. The Contractor’s ECM and the Contractor’s Safety Manager shall be present at the meeting. The Contractor shall incorporate comments into the submitted MMP, SAP, HASP, and SRP as agreed to during this meeting.

The Contractor shall comply with all provisions set forth in the Approved MMP, SAP, HASP, and SRP and shall maintain documentation of all pertinent certifications of all Subcontractors, which shall be available upon request by CDOT. The Contractor shall comply with all applicable requirements, including, but not limited to, all Federal, State, and Local Environmental Laws and regulations and CDOT *Standard Specifications*, Section 250, Environmental, Health and Safety Management; Section 208, Erosion Control; and any Project Special Revisions for the management and disposal of the RHMs. The Contractor shall notify CDOT within 24 hours if contacted by any regulatory agencies or Third Parties concerning RHMs associated or potentially associated with the Contract requirements. The

Contractor shall coordinate all Work with CDOT and shall not discuss or negotiate with any regulatory agencies or Third Parties on behalf of CDOT. The Contractor shall support CDOT with necessary information, data and exhibits if any discussions or negotiations with any regulatory agencies or Third Parties are necessary.

5.7 Categorical Exclusion and Environmental Certification

5.7.1 Categorical Exclusion

If the Contractor proposes or creates a design change beyond the Project, as described in Book 2, Section 1, these changes shall be tracked, documented, and assessed as to whether or not they have resulted in a new impact or changed the impact to an already accounted for environmental resource. The changes shall be assessed per policies, procedures, guidelines, or regulatory requirements specific to that resource. If necessary, per input from CDOT, the Contractor shall be responsible for documenting that change through the requirements and conditions of CDOT Categorical Exclusion.

In addition, the Contractor shall be responsible for additional environmental documentation, Permits, and mitigation resulting from impacts associated with any Project change at the Contractor's expense. The Contractor shall accept responsibility for any additional schedule impacts required to obtain the appropriate approvals and regulatory clearances throughout the Project.

5.7.2 Environmental Certification

Even if there are no changes, the Contractor shall complete a final environmental certification prior to the Work. This certification is documented via the CDOT Form #128. While CDOT is responsible to populate the form, the Contractor shall be responsible to submit all documentation and obtain all necessary Approvals that support this certification.

5.8 Environmental Permits

The Contractor shall be responsible for obtaining all governmental and agency Permits required for the Work, not otherwise obtained by CDOT, including, but not limited to, the Permits in Table 5-2.

Permits that have been obtained by CDOT during the development of the Project, as described in Book 2, Section 1, are included in the Reference Documents. Permits are subject to final review and approval by the appropriate Permitting Agency.

Table 5-2 Required Environmental Permits

Permits/Approvals	Permitting Agency	Permit Responsibility (CDOT or Contractor)
Colorado Discharge Permit System (CDPS - SCP) Stormwater Construction Permit	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor will obtain permit(CDOT will be a co-owner)

NPDES Permit (if required)	U.S. Environmental Protection Agency	Contractor will obtain permit (CDOT will be a co-owner)
Clean Water Act, Section 404 Permit	U.S. Army Corps of Engineers	Contractor
Senate Bill SB40 Certification	Colorado Parks & Wildlife	Contractor to prepare draft certifications. CDOT to submit to CPW
Section 401 Water Quality Certification	Colorado Department of Public Health and Environment	Contractor
Section 401 Water Quality Certification	U.S. Environmental Protection Agency	CDOT
Clean Water Act Section 402 Construction Dewatering Permit, Remediation, or Individual Construction Dewatering Permit, if contaminated groundwater is expected to be encountered.	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor
Subterranean Groundwater Permit	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor
Non-Extractive Industries Storm Water Permit	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor
Remediation Activities Discharging to Surface Water Permit	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor
Remediation Activities Discharging to Groundwater Permit	Colorado Department of Public Health and Environment – Water Quality Control Division	Contractor
Notification as Resource Conservation and Recovery Act (RCRA) hazardous waste generator	Colorado Department of Public Health and Environment – Hazardous Materials and Waste Management Division	Contractor

Air Pollution Emission Notice (APEN) and Construction Permit	Colorado Department of Health and Environment – Air Pollution Control Division	Contractor
Stationary Source Air Quality Permit (Emissions from portable units, such as rock crushers, generators, asphalt plants, and concrete plants, used during construction)	Colorado Department of Health and Environment – Air Pollution Control Division	Contractor
Noise Variance (as needed)	Local Agencies	Contractor

5.9 Deliverables

The Contractor shall submit the following to CDOT for Review, Acceptance, or Approval:

Table 5-1 Deliverables

Deliverable	Review Acceptance or Approval	Schedule
Environmental Compliance Work Plan (ECWP)	Approval	Within 30 Days after NTP1
90-Day Environmental Compliance Work Plan (ECWP)	Approval	No later than 30 Days prior to NTP2, and every 90 Days until Final Acceptance
Environmental Compliance Work Plan (ECWP) Amendment	Acceptance	Annually upon the anniversary of the first Approval of the ECWP or in accordance with 5.3.4
Environmental Compliance Status Reports	Acceptance	Monthly, within 21 Days following the end of the reporting period (month)
Final Environmental Compliance Work Plan	Approval	Required for Final Acceptance of the Project
Construction Air Quality Plan and Fugitive Dust Control Plan	Acceptance	Prior to NTP2
Preliminary Noise Technical Reports (as needed)	Acceptance	Prior to completing the Benefited Receptor Preference Survey
Planning Activities for the Benefited Receptor Preference Survey (as needed)	Acceptance	14 Days before initiating the survey
Final Noise Technical Report (as needed)	Acceptance	As part of the RFC Documents submittal
Construction Noise and Vibration Mitigation Plan	Acceptance	Prior to NTP2

Revised Plans that deviate from Book 3 (as needed)	Approval	As soon as revised plans are generated
RFC Documents	Review	At least 14 Days prior to associated construction Activities
Native Seed Mix Recommendation for each structure segment	Review and Approval	With RFC Documents
Integrated Noxious Weed Management Plan	Acceptance	Prior to NTP2
Biological Assessment (as needed)	Approval	As soon as known modifications to the Project cause new impacts and/or require mitigation
Biologists Education and Experience	Acceptance	Prior to commencement of any associated work with MBTA
One Migratory Bird Nest Survey Memorandum for each structure segment	Acceptance	No more than 7 Days prior to vegetation removal occurring between April 1 and August 31
Raptor Survey Memorandum	Acceptance	Prior to impacts to habitat
Burrowing Owl Survey	Acceptance	Within 7 Days Prior to disturbance
Burrowing Owl Documentation	Acceptance	Prior to impacts to prairie dog habitat or species
SWMP Plan	Review	With RFC Documents
Permanent Dewatering System (as needed)	Approval	Prior to submitting a Subterranean Dewatering Permit
Annual Mitigation Progress Reports	Review	10 Days prior to December 31 st of each year
Location of Fencing to Define and Protect Riparian Areas	Approval	5-Days prior to placing fence
Landscaping Plan and Plant Establishment Plan for all Riparian Replacement Areas	Approval	Prior to performing the Work
Section 404 Permit Individual or Nationwide Permit Application	Review and Approval	Prior to being submitted to USACE
Wetlands Finding Report	Acceptance	As soon as wetlands impacts are known
Materials Management Plan	Approval	Prior to issuance of NTP1

Sampling and Analysis Plan	Acceptance	30 Days prior to NTP2
Health and Safety Plan	Acceptance	Prior to NTP2
Spill Response Plan	Acceptance	Prior to NTP2
Regulated Hazardous Materials Management Repots	Review	Monthly
Quarterly Summary of Hazardous Materials Management	Review	Quarterly
Documentation and Necessary Approvals for Environmental Certification	Approval	Prior to Work

5.10 Exhibits

Exhibit 5-A: Asbestos and Lead Based Paint Summary Table