

2.0 Project Management

2.1 Administration

The Contractor has the responsibility for management and performance of the Work. The Colorado Department of Transportation (CDOT) shall have the right to visit the Site and observe the Work to determine that the Work is proceeding in conformance with the requirements of the Contract Documents.

2.2 Project Management Plan

2.2.1 General Requirements

The Contractor shall submit a Project Management Plan (PMP) that encompasses the design, construction, and testing and commissioning phases of the Project, for Acceptance by the Department, at least 10 Days prior to the issuance of Notice to Proceed (NTP) 1. The PMP shall provide clear detail of the Contractor's overall approach to its team organization, structure, and management processes, and shall describe the scope, goals, and objectives of Project approach and intended results and be fully compliant with all provisions of the Contract. The PMP shall be approved and signed by the Contractor's Design Build Project Manager, Design Manager, Construction Manager, and Design Build Quality Manager who are responsible for planning, reviewing, approving, reporting, monitoring, controlling, implementing, revising, and issuing the PMP, including revisions. At a minimum, the PMP shall include the following (where applicable relating to both Contractor and its Subcontractors but also, where applicable, clearly identifying the division of roles and responsibilities between the Contractor and its Subcontractors):

1. An organizational chart and description, indicating the Contractor's overall team structure including all Key Personnel, management staff and their reporting relationships for all Work, and including designation of an individual who is (and whose replacement, if any, shall be) a licensed professional engineer in the State who shall at all times when construction Work is being conducted serve as the engineer in responsible charge for the observation of the construction Work;
2. A design organizational chart and description, indicating the roles, responsibilities and structure of the Contractor's design staff, down to and including discipline leads and the staff positions proposed in each discipline;
3. A construction organizational chart and description, indicating the roles, responsibilities and structure of the Contractor's construction staff, down to and including field superintendents and the staff positions proposed under each field superintendent for the Work for all shifts;
4. A quality management organizational chart and description, indicating the roles, responsibilities and structure of the respective quality management, Process Control and IQC staff, down to and including field inspection, and testing for the Work for all shifts;

5. A design management process, including a description of how design personnel will interface with the Department, construction, quality management and CDOT EJMT O&M organizations, in accordance with the Quality Management Plan requirements;
6. A construction management process, including the independence of Process Control (PC) personnel and activities from IQC personnel and activities, interface with the IQC and roles and responsibilities for approvals, Contractor's coordination plan, the Contractor's management approach, the construction management structure, identification of advanced Work, detailed delineation of work zones with identification of design and construction packages, and summary of major Project phases;
7. Detailed description of the interface between the design and construction resources and the allocation of design and construction staff to implement the Project;
8. Process for addressing constructability, durability, maintainability and environmental compliance in the Work;
9. Description of key processes including a description of how design personnel will interface with Contractor's construction, Process Control, IQC and CDOT EJMT O&M organizations in accordance with the Quality Management Plan requirements to ensure durability in the design process;
10. Description of key processes and their reference location within the Contractor's Quality Management Plan, for control of the Release for Construction (RFC) drawings including making changes to the design during construction and ensuring engineering review of the new design and compliance with the Contract. Processes shall demonstrate how the Department and the Contractor's design team are involved in the review and acceptance of deviations from the RFC drawings;
11. Process for construction closeout including the Contractor's approach to satisfaction of Substantial Completion, Final Acceptance, and management of Punch Lists;
12. Description of key processes, and their reference location within the Contractor's Safety Management Plan, for both employees of Contractor and its Subcontractors and the public, including the designation of a safety manager, training procedures, accident investigation procedures and exposure assessment;
13. Description of key processes, and their reference location within the Contractor's Transportation Management Plan, in accordance with Book 2 Section 16 requirements, including interface with the Department and EJMT O&M staff;
14. Description of key processes, and their reference location within the Contractor's Public Information Plan, in accordance with the Book 2 Section 4 requirements, including interface with the Department, FHWA, adjacent contractors, and other stakeholders and the public during the Work, at a minimum the following activities: plans and Permits review; progress,

- workshops, partnering and Utility coordination meetings; construction engineering and inspection; and public involvement and community input;
15. Description of key processes, and their reference location within the Contractor's Environmental Compliance Work Plan, in accordance with the Book 2 Section 5 requirements, including interface with the Department and any Governmental Authority;
 16. Description of key processes, and their reference location within the Contractor's Civil Rights Plan, in accordance with the Book 2 Section 2 and Book 2 Section 3 requirements;
 17. Description of the Contractor's key processes and approach to managing the Contract Schedules, in accordance with the Book 2 Section 2 requirements, including Schedule maintenance and required deliverables management; and
 18. Contractor's approach to non-compliance reporting, evaluation, and resolution with each of its Subcontractors and methodology on how this information will be reported to the Department, in accordance with the Book 2 Section 3 requirements.

2.2.2 Project Management Plan Updates

The Contractor shall monitor and improve the effectiveness of its PMP and resubmit the PMP for Acceptance by the Department annually, upon the anniversary of its initial Acceptance by the Department, or more frequently should any of the following conditions exist:

1. A plan or procedure no longer adequately addresses the matters it was originally intended to address;
2. A plan or procedure does not conform with the Contract;
3. An audit by the Contractor or the Department identifies a deficiency in the PMP requiring an update;
4. Organizational structure changes require revision to the PMP;
5. The Contractor is undertaking, or about to undertake, activities that are not covered within the current PMP; or
6. The Department requires the PMP to be updated at its request.

The Contractor shall clearly identify in a cover sheet what changes were made in a PMP update to expedite the Department's review. Also, a redline copy and a final clean copy shall be submitted to the Department.

2.3 Key Personnel

The Contractor shall provide Key Personnel on the Project. Key Personnel shall include the Design Build Project Manager, Design Manager, Construction Manager, Fire Protection Engineer, Electrical Design Manager, Design Build Quality Manager, and any Additional Key Personnel identified by the Contractor in Book 1 Exhibit D. The Contractor shall not replace any Key Personnel without prior Approval from CDOT. Personnel replacements

must have equal to or better than qualifications as the original personnel, as determined by CDOT.

The Key Personnel shall have, at a minimum, the qualifications outlined in the following sections:

2.3.1 Design Build Project Manager

1. The Design Build Project Manager shall be in direct charge of the design, construction, quality management, and is responsible for the administration and satisfactory completion of the project under the contract. This person shall be assigned to the Project full-time and will be required to be available onsite within 3 hours of CDOT's request (either onsite or via telephone) for the duration of the Project construction, unless otherwise Approved by CDOT.
2. Shall have at least five (5) years of recent experience managing projects of similar complexity to the EJMT DPHT involving interstate highway, tunnels/underground, MEP, or rehabilitation.
3. Shall have the authority and obligation to stop Work if and when they know or has reason to believe that any Work does not meet the standards, specifications, or criteria established for the Project.
4. Shall not be assigned any other Key Personnel duties or responsibilities on the Project, except that the Design Build Project Manager may also assume the role of Design Manager.
5. Must work under the direct supervision of the Contractor's Executive Management team (EMT). The Design Build Project Manager will report to the EMT.

2.3.2 Design Manager

1. The Design Manager will be responsible for ensuring that the overall Project design is completed and design criteria requirements are met. This person shall be available (either onsite or via telephone) to the Project as necessary to facilitate design Work and to address design issues for the duration of the Project.
2. The Design Manager shall work under the direct supervision of the Design Build Project Manager or may fulfill the role of Design Build Project Manager, provided the qualifications for both roles are met. The Design Manager shall not be assigned any other Key Personnel duties or responsibilities on the Project, except as described above.
3. The Design Manager shall be responsible for certifying on the monthly invoice that the construction has been completed in conformance to the stamped/sealed drawings, including stamped field revisions.
4. Shall be a registered Licensed Professional Engineer in the State of Colorado.

5. Shall have at least five (5) years of recent experience managing the design of projects with similar complexity to the EJMT DPHT involving interstate highway, tunnels/underground, MEP, or rehabilitation.
6. Shall have the authority and obligation to stop construction work if and when they know or has reason to believe that any work does not meet the standards, specifications, or criteria established for the Project.

2.3.3 Construction Manager

1. The Construction Manager shall be onsite during all construction activities.
2. Shall have a minimum of five (5) years of recent experience in managing the construction of projects with similar complexity to the EJMT DPHT involving interstate highway, tunnels/underground, MEP, or rehabilitation.
3. The Construction Manager shall work under the direct supervision of the Design Build Project Manager.
4. Shall not be assigned any other Key Personnel duties or responsibilities on the Project.
5. Shall have the authority and obligation to stop construction work if and when they know or has reason to believe that any work does not meet the standards, specification, or criteria established for the Project.
6. Shall ensure all work is constructed in compliance with Project standards, specifications, or criteria established for the Project.

2.3.4 Fire Protection Engineer

1. The Fire Protection Engineer shall be responsible for ensuring that the existing fixed fire suppression system is properly integrated with the proposed improvements and the design criteria requirements are met.
2. Shall work under the direct supervision of the Design Manager.
3. Shall have a minimum of five (5) years of recent experience in managing and designing fixed fire suppression systems in similar environments as the EJMT, including testing, integration, and commissioning.
4. Shall be a registered Licensed Fire Protection Engineer in the State of Colorado.
5. Shall be onsite during all testing, integration, and commissioning activities for the fixed fire suppression system.

2.3.5 Electrical Design Manager

1. The Electrical Design Manager shall be responsible for ensuring that the existing electrical systems at EJMT are properly integrated with the proposed improvements and the design criteria requirements are met.
2. Shall work under the direct supervision of the Design Manager.
3. Shall have a minimum of five (5) years of recent experience in managing and designing electrical systems in similar environments as the EJMT, including testing and integration.
4. Shall be a registered Licensed Professional Engineer, Licensed Master Electrician, or Licensed Journeymen Electrician in the State of Colorado.

2.3.6 Design Build Quality Manager

1. Shall work under the direct supervision of the Design Builder's Executive Management team (to whom the Design Build Project Manager reports). This person is required to be onsite as necessary during construction of the Project to fulfill their responsibilities.
2. Responsible for the Design Builder's quality program (both design and construction), quality personnel, quality planning, ensuring that quality assurance activities are independent of production, enforcement of quality system procedures, development of the quality program objectives, implementation of the quality program objectives, total system quality and management, quality records and documentation, and review and approval of the Quality Management Plan prior to submittal to CDOT.
3. Shall have the independent authority and obligation to stop any and all work that does not meet the standards, specifications, or criteria established for the Project.
4. Shall be responsible for certifying on the monthly invoice that the Work has been completed in conformance with the contract, the Released for Construction Documents (or revisions), and the Design Builder's Quality Management Plan.
5. Shall have a minimum of five (5) years of recent experience developing, implementing, and overseeing quality programs.

2.3.7 Additional Key Personnel

The minimum qualifications and lengths of commitments for any Additional Key Personnel identified by the Contractor are included in Book 1 Exhibit D and subject to the requirements in Book 1 Section 2.4.

2.4 Work Breakdown Structure

The Contractor shall submit to CDOT a detailed Work Breakdown Structure (WBS), including proposed Work segments for Acceptance at least 10 Days prior to NTP1. The WBS shall include a detailed, organized hierarchical division to complete each element of the Work. The Accepted WBS shall be the basis for organizing all Work under the Contract Documents, and shall be used as a basis for the Contract Schedules and other cost control systems. The Contractor’s WBS shall conform to Table 2-1 and Exhibit 2-A, Work Breakdown Structure.

All cost and schedule information shall roll up to Level I through Level VI, as identified in Exhibit 2-A. Further detail shall be provided by the Contractor for Level IV, Level V, and Level VI to ensure a clear understanding of the Contract and the execution of the Work.

~~A methods statement shall be prepared for each of the Level IV WBS Activities listed in the Baseline Schedule for all critical path items, and for any activity not listed that the Contractor considers a controlling factor for timely completion. The methods statement shall be completed in accordance with the CDOT Standard Specifications. The methods statement shall be submitted for review prior to NTP2.~~

2.4.1 WBS Activities Modifications

When it becomes necessary to add, combine, eliminate, or modify Contract-specified WBS Level IV, V, or VI Activities to reflect modifications to the Work, such changes shall be made through a Change Order that has been Approved by CDOT in accordance with the Contract. These changes to the WBS Level IV, V, or VI Activities shall consequently be reflected in subsequent Schedule submittals, as defined in this Section 2. Alternately, if a proposed addition, combination, elimination, or modification of WBS Level IV, V, or VI Activities would not be the subject of a Change Order, then the consequent realignment of funds between Level IV Schedule Activities must be Approved by CDOT in accordance with the Contract and thereafter reflected in the required Contract Schedule submittals.

Table 2-1: WBS Levels

Level I:	EJMT DPHT DESIGN BUILD
Program Level - CDOT use only: The summary of all Design Build Contract components <u>including a tracking of contractual milestones.</u>	
Level II:	MAJOR PROGRAM ELEMENTS
Major Program Elements: <ul style="list-style-type: none"> □ Activities of the Contractor. This is the Contractor’s highest level. 	
Level III:	CONTRACT COMPONENTS
Design Build Contract Components: <ul style="list-style-type: none"> □ Breakdown of all components as shown on Exhibit 2-A. 	

Level IV:	CONTRACT SUBCOMPONENTS
<p><u>Design Build Contract Subcomponents*:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Breakdown of all major subcomponents of the Contract as shown on Exhibit 2-A. <input type="checkbox"/> The Contractor to define certain Activities at this level (Work areas). See Exhibit 2-A for Contract-specified Level IV Activities and other detail. <input type="checkbox"/> Additional Requested Elements (ARE) <p>*Basis for Price Proposal to be submitted as identified on Form J.</p>	
Level V:	CONTRACT SUBCOMPONENTS AND WORK ACTIVITIES
<p><u>Breakdown of the Contract Subcomponents and Work Activities defined by the Contractor:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Minor subcomponents (by phase, etc.) <input type="checkbox"/> Contractor to define certain Activities at this level (Work areas, phases, etc.). <input type="checkbox"/> See Exhibit 2-A for Contract-specified Level V Activities and other detail. <input type="checkbox"/> Basis for all progress payments. 	
Level VI:	WORK SUB-ACTIVITIES
<p><u>Breakdown defined by the Contractor:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> The Contractor to define all Activities at this level. 	
<p><u>Schedules</u> - The following Critical Path Method (CPM) schedules shall be cost-loaded and resource-loaded to this level:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary Baseline Schedule. <input type="checkbox"/> Original Baseline Schedule (or Revised Baseline Schedule, if applicable). <input type="checkbox"/> Current Baseline Schedule. <input type="checkbox"/> Monthly Progress Schedule. <input type="checkbox"/> Recovery Schedule. <input type="checkbox"/> As-Constructed Schedule. 	

2.4.2 Draw Down Schedules

The Contractor shall submit to the Department, for Information prior to NTP1, two draw down schedules showing the estimated monthly expenditures for the duration of the construction of the Project based off the Accepted Baseline Schedule in MS Excel format. The first draw down estimate shall be based on the early finish dates in the Contractor's Baseline Schedule. The second draw down estimate will be based on the late finish dates in the Contractor's Baseline Schedule. Updated draw down estimates schedules shall be provided within 10 Days after the Department Accepts a Monthly Progress Schedule submittal.

2.5 Schedule Management

2.5.1 General

The Work related to Schedule management includes preparing, progressing, revising, and submitting Contract Schedules.

The Contract Schedules shall represent a practical plan to complete the Work within the Completion Deadlines and convey the intent of the execution and progress of the Work.

The Contract Schedules shall include the planned execution of the Work in accordance with the Contract Documents. The Contract Schedules shall include seasonal and weather constraints; involvement and coordination with other Contractors, Utility Owners, Governmental Persons, Engineers, Architects, Subcontractors, Suppliers, and CDOT EJMT O&M staff; environmental constraints, Right-of-Way (ROW) restrictions, and traffic constraints. All other constraints shall be considered in the development of the Original Baseline Schedule, and updating of subsequent Monthly Progress Schedules. The Contract Schedules shall include delivery dates for critical materials, submittal and review periods, and dates for non-Working periods. No ambiguous Activities shall be permitted.

All Contract Schedule submittals are subject to Review, Acceptance, and/or Approval by CDOT. The Contract Schedules shall represent the requirements of the Contract Documents, and the Work shall be executed in the sequence and duration indicated in the Contract Schedules.

All Contract Schedules shall be developed consistently with the Accepted WBS and the Completion Deadlines. All Contract Schedules shall be cost-loaded and resource-loaded to WBS Level VI. The resource loading shall consist of assigning the Contractor's available materials, equipment, and crews to each schedule activity for the project. The resource loading shall track to the crew and discipline level and shall be structured in a way that allows the Contractor and CDOT to evaluate when planned resources are exceeding the Contractor's available capacity.

All Work and Activities of the Contractor shall be scheduled and monitored by use of a CPM schedule developed and maintained using ~~a scheduling software Approved by CDOT. The Contractor shall submit the proposed~~ scheduling software compatible with Primavera P6 v7 or the current version available on the submission date of the Proposal Documents for CDOT Approval prior to NTP1. The Contractor shall provide CDOT with one license of the scheduling software for use on the Project. All scheduling software settings within the scheduling/ leveling dialog box shall remain default settings unless otherwise Approved by CDOT. ~~In addition, any changes to the scheduling software settings that alter the scheduling calculations shall be clearly identified and provided as part of the Contract Schedule submittals.~~

The Contractor shall designate a Contractor's Scheduler for the duration of the Project. The Contractor's Scheduler must have at least 5 years of previous scheduling experience on similarly sized projects in both scope and complexity (with references

to be provided to CDOT, upon request). If the Contractor's Scheduler is found incapable of performing the schedule management in accordance with this Section 2, CDOT may remove the Contractor's Scheduler from the Project at CDOT's discretion. Upon removal or voluntary termination of the Contractor's Scheduler from the Project, the Contractor shall provide a qualified replacement within 30 Days.

The Contractor shall conduct a schedule development meeting with CDOT within 10 Days after Contract Execution. At this meeting, participants shall discuss details and requirements of the submittals for both the Preliminary Baseline Schedule and the Original Baseline Schedule. This meeting shall, at a minimum, discuss the project risks, resource assumptions, work constraints, and the critical path of the project.

2.5.2 Contract Schedule and Term Definitions

Contract Schedules shall include the Preliminary Baseline Schedule, Original Baseline Schedule, Current Baseline Schedule, Monthly Progress Schedule, Revised Baseline Schedule, Recovery Schedule, and the As-Constructed Schedule.

2.5.2.1 Preliminary Baseline Schedule

The Preliminary Baseline Schedule is defined as the initial schedule for the purpose of initiating Work on the Project. It shall be a CPM schedule with Activities following NTP1 and prior to NTP2. The Preliminary Baseline Schedule shall be in accordance with the Contract requirements; shall conform to the Accepted WBS; shall be cost-loaded and resource-loaded to WBS Level VI; shall include all Contractor-defined WBS Level V and VI Activities; and shall include Contractor-defined detail necessary to provide measurable schedule progress. The Preliminary Baseline Schedule shall provide an intermediate schedule during the production of the Original Baseline Schedule and shall establish a payment/drawdown schedule for the duration between NTP1 and NTP2.

The Contractor shall submit the Preliminary Baseline Schedule to CDOT for Acceptance at least 10 Days prior to NTP1.

2.5.2.2 Original Baseline Schedule

The Original Baseline Schedule is defined as the Contractor's ~~s'~~s original plan for the Project from NTP1 through Final Acceptance. It shall be a detailed CPM Schedule with Work Activities and Completion Deadlines included for the full term of the Project. The Original Baseline Schedule shall be developed from the Accepted Preliminary Baseline Schedule and shall conform to the Accepted WBS and include all Contractor-defined WBS Level VI Activities.

The Original Baseline Schedule shall include a Schedule Narrative Report describing, at a minimum, the Developer's plan and schedule for achieving the Project Agreement requirements and objectives for all Work. The narrative shall describe critical and near critical work activities, the methods of operation, real or perceived risks and assumptions, resources to be employed (including production rates), time frames for Project administration, design, and construction, and time frames for accomplishment of specified milestones and Key Milestones. ~~A Resource~~

~~Plan shall be included, which shall document in detail the types and quantities of resources needed to prosecute all aspects of the work.~~

The Schedule Narrative Report shall include each of the Level VI WBS Activities listed in the Original Baseline Schedule for all Critical Path items, and for any Activity not listed that the Contractor considers a controlling factor for timely completion. The Schedule Narrative Report shall include:

1. Salient feature name
2. Responsibility for the salient feature work
3. Planned work procedures
4. Planned quantity of work per day for each salient feature
5. Anticipated labor force by labor type
6. Number, types, and capacities of equipment planned for the work
7. Planned time for the work including the number of work days per week, number of shifts per day, and the number of hours per shift

The Contractor shall submit to CDOT for Approval the final Original Baseline Schedule no later than 15 Days prior to issuance of NTP2. Once Approved, this schedule shall become the Original Baseline Schedule against which all progress and revisions shall be measured. The Original Baseline Schedule shall not change after Approval.

Upon Approval by CDOT, the Original Baseline Schedule shall be the basis for the Monthly Progress Schedule used by the Contractor in scheduling and performance of the Work.

The Original Baseline Schedule shall be cost-loaded and resource-loaded to WBS Level VI and summarized for the aggregate costs equal to the WBS Level V prices set forth in the Proposal Documents.

The Original Baseline Schedule shall show the sequence and interdependence of Activities required for complete performance of the Work, beginning with the date of the NTP1 and concluding with the date of Final Acceptance, and shall comply with the following:

1. The actual number of Activities in the schedule shall be sufficient to ensure adequate planning of the Work and to permit monitoring and evaluation of progress and the analysis of time impacts. Activity durations shall be expressed in full days of Work and shall not include any fractional days. The Work calendar(s) shall clearly identify Holidays and other non-Working Days.
2. The Contractor shall schedule deliverable review times by CDOT and Governmental Approvals as separate tasks logically tied to the appropriate Activity. Concurrent review of multiple deliverables by one discipline must be agreed to by CDOT prior to inclusion in the Original Baseline Schedule.

The Contractor shall provide a new Activity for review time in the schedule for every resubmittal required due to the Contractor providing incomplete or nonconforming submittals to CDOT or for Governmental Approvals.

3. A ~~graphic representation~~Gantt chart of all Activities necessary to complete the Work shall be provided.
4. All Completion Deadlines set forth in the Contract shall be identified.
5. All required constraints and sequences defined in the Contract shall be included in the Original Baseline Schedule. If the Original Baseline Schedule or any schedule update does not include these constraints and sequences, Acceptance or Approval of the schedule will not waive such requirements.

The Original Baseline Schedule will be Reviewed by CDOT for purposes of determining:

1. Compliance with applicable provisions of the Contract Documents.
2. That the logic of the proposed CPM schedule is sound and consistently developed and demonstrates a logical sequencing and interdependence of Activities required for the timely and orderly achievement of all Work Activities and milestones, including completion of the Work within the Completion Deadlines.

~~A methods statement shall be prepared for each of the Level VI WBS Activities listed in the Original Baseline Schedule for all Critical Path items, and for any Activity not listed that the Contractor considers a controlling factor for timely completion. The methods statements shall include:~~

- ~~1. Salient feature name~~
- ~~2. Responsibility for the salient feature work~~
- ~~3. Planned work procedures~~
- ~~4. Planned quantity of work per day for each salient feature~~
- ~~5. Anticipated labor force by labor type~~
- ~~6. Number, types, and capacities of equipment planned for the work~~
- ~~7. Planned time for the work including the number of work days per week, number of shifts per day, and the number of hours per shift~~

~~The methods statements shall be submitted for CDOT's Acceptance prior to NTP2.~~

2.5.2.3 Current Baseline Schedule

The Current Baseline Schedule is defined as the Original Baseline Schedule with cost and Schedule changes from Approved Change Orders incorporated. It shall be updated monthly with only Approved cost and Schedule changes. The Current Baseline Schedule shall not show progress, but shall maintain the dates from the Original Baseline Schedule. The Current Baseline Schedule shall include a late start cost curve.

The Current Baseline Schedule shall be cost-loaded to WBS Level VI and summarized for the aggregate costs equal to the WBS Level V prices set forth in the Proposal Documents as adjusted for Approved Change Orders.

The Current Baseline Schedule shall be submitted to CDOT for Acceptance concurrent with each Monthly Invoice.

2.5.2.4 Revised Baseline Schedule

The Revised Baseline Schedule is defined as the Contractor's plan for the Project, which is current with progress to date. This Schedule shall reflect the planned execution of the Work for the remainder of the Project, along with a reallocation of the remaining resources and quantities to represent the estimate to complete the Work as adjusted for Approved Change Orders. A Revised Baseline Schedule must be Approved by CDOT. This approval shall only apply to the scheduled Work that is planned after the Schedule's Approval date.

The Revised Baseline Schedule shall be prepared by the Contractor when requested by CDOT. The Contractor may request that CDOT review a Revised Baseline Schedule at any time. However, this review will be undertaken only if CDOT agrees with the need for it.

The Revised Baseline Schedule shall include a revised Schedule Narrative Report describing the Developer's plan and schedule for achieving the remaining Project Agreement requirements and objectives for the Work. The narrative shall include a list of the changes that were made to the Revised Baseline Schedule and why the changes were made. The narrative shall also ~~describe the methods of operation, resources to be employed, time frames for the design and construction, and time frames for accomplishment of specified milestones and Key Milestones. A Resource Plan shall be included, which shall document in detail the types and quantities of resources needed to prosecute all aspects of the Work~~ meet the requirements described in Section 2.5.2.2.

The Revised Baseline Schedule shall be cost, and resource loaded to WBS Level VI and summarized for the aggregate costs equal to the WBS Level V prices set forth in the Proposal Documents as adjusted for Approved Change Orders.

2.5.2.5 Monthly Progress Schedule

The Approved Original Baseline Schedule, or Current Baseline Schedule be used as the basis to establish the Monthly Progress Schedule, which shall be updated every month to show the actual progress of Work and the earned value of Work accomplished, including Approved Change Orders.

The Monthly Progress Schedule shall be cost-loaded and resource-loaded to WBS Level VI and summarized for the aggregate costs equal to the WBS Level V prices set forth in the Proposal Documents, as adjusted for Approved Change Orders. In addition, the Monthly Progress Schedule shall include WBS Level VI detail for the upcoming 3 months of design and construction on the Project, except that cost loading to WBS Level VI is not required for the 3-month look-ahead.

The Monthly Progress Schedule shall include a ~~Schedule-monthly narrative~~Narrative Report describing the status of the Work, in detail. The narrative shall include a list of all the changes made to the schedule, why those changes were necessary, progress made that period, plans for the forthcoming period, all potential delays and problems, their estimated effect on the Project Schedule and overall completion, and whether the Project is on, ahead of, or behind schedule. The ~~Monthly Progress Schedule~~-narrative shall not be considered notification of delays, request for Changes, or other issues. Reference "Monthly Progress Report" in section 2.6.~~23~~.2. The Monthly Progress Schedule shall be submitted each month to CDOT for Acceptance, concurrent with the Monthly Invoice submittal. The Monthly Progress Schedule shall include all current information as of the status date.

For the 3-month look-ahead portion of the Monthly Progress Schedule that establishes the WBS Level VI Activities, the Contractor shall provide sufficient detail to convey a schedule that provides weekly schedule control and shall specifically identify:

1. Completion Deadlines, if any.
2. Phasing of design, construction, testing, and staging of the Work, as specified, giving particular attention to release for construction dates, Site availability, construction staging, public involvement notifications, and maintenance and protection of traffic requirements of the Contract.
3. Procurement, fabrication, preparation of mock-ups, preparation of prototypes, delivery, installation, and testing of Materials and Equipment, including factory testing and demonstration testing, and any orders for Materials and Equipment with long lead times (more than 30 Days).
4. Interface coordination and dependencies with preceding, concurrent, and follow-on Contractors, and Work to be performed by other Contractors and agencies that may affect the schedule. Prior to the progress status meeting, the Contractor shall obtain from the design team, Subcontractors, Suppliers, and field staff the information required to accurately reflect progress to date.

4.5. The 3-month look ahead schedule shall be consistent with all other Contractor distributed schedules on the project.

2.5.2.6 Recovery Schedule

The Recovery Schedule is defined as the Contractor's program and proposed plan for the recapture of lost schedule progress and to achieve Project Completion or Final Acceptance by the applicable Completion Deadlines. The Recovery Schedule shall be based on the latest Accepted Monthly Progress Schedule and shall include equivalent detail. The Recovery Schedule shall show the proposed changes to the Schedule, include cost loading and additional detail to substantiate the recovery plan, and shall reflect all proposed changes to WBS Level VI Activities through Project Completion.

The Recovery Schedule shall be cost-loaded and resource-loaded to WBS Level VI and summarized for the aggregate costs equal to the WBS Level V prices set forth in the Proposal Documents, as adjusted for Approved Change Orders.

If the Work is lagging behind the late start cost curve in the Current Baseline Schedule for a period that exceeds the greater of: (a) 15 Days in the aggregate, or (b) that number of Days in the aggregate that equals 5% of the Days remaining until the Project Completion Deadline, CDOT may request that the Contractor ~~shall~~ prepare and submit to CDOT for Approval a Recovery Schedule ~~within 14 Days after the Contractor first becomes aware of this schedule delay.~~

The Recovery Schedule shall demonstrate the Contractor's program and proposed plan to regain lost schedule progress, as well as demonstrate how Project Completion and Final Acceptance of the Project shall be achieved by the deadlines specified in Book 1, Exhibit B.

CDOT will notify the Contractor within 14 Days after receipt of the Recovery Schedule whether the Recovery Schedule is Approved, or will describe changes that CDOT believes should be made to the Recovery Schedule. The Contractor shall incorporate and fully include the Recovery Schedule (including CDOT's comments) into the next scheduled Monthly Progress Schedule (or, if the next scheduled Monthly Progress Schedule is due within seven (7) Days of Approval of the Recovery Schedule, then the Recovery Schedule shall be incorporated into the subsequent Monthly Progress Schedule).

2.5.2.7 As-Constructed Schedule

The last Monthly Progress Schedule submitted shall be identified by the Contractor as the ~~As-~~Constructed Schedule. The As-Constructed Schedule shall reflect the exact manner in which the Contractor executed the Work (including start and completion dates, Activities, actual durations, sequences, and logic), and shall be signed and certified by the Contractor's Engineer and Scheduler as being a true reflection of the way in which the Work was executed through Final Acceptance. This certified As-Constructed Schedule must be Accepted by CDOT before the final Retainage is released.

2.5.2.8 Float

Float is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every Activity in the Schedule. Float shall not be for the exclusive use or benefit of either CDOT or the Contractor, but shall be a jointly owned expiring resource available to both parties, as needed, to meet Contract Deadlines. Suppression or consumption of Float by extended Activity duration, dummy Activities, or preferential sequencing will not be allowed.

2.5.2.9 Near Critical Activities

Near critical activities shall be defined as Activities with a total Float less than 10 Days.

2.5.3 Schedule Requirements

2.5.3.1 Scheduling Development

All Contract Schedules shall include the following data:

1. Unique Activity ID;
2. Unique Activity description;
3. Start date (actual start date for started activities);
4. Finish date (actual finish date for completed activities);
5. Original duration;
6. Remaining actual duration (for those activities started but not completed);
7. Variance from Baseline Schedule or Monthly Progress Schedule start dates;
8. Total Float (which shall be separately and clearly identified in respect of the Critical Path and in respect of each Completion Deadline); and
9. Critical Path activities highlighted in red;

2.5.3.2 General Scheduling Constraints

1. All Contract Schedules shall be in the same master data file, including design, submittals, procurement, and construction Schedules. These Work Activity Schedules shall all tie together logically to present a total Critical Path analysis in the same master data file.
2. All Float shall be shown on the Contract Schedules, with the Float in respect of the Critical Path separately and clearly identified.
3. The Contract Schedules shall divide the Work into activities with appropriate logic ties to show the Contractor's overall approach to planning, scheduling, and executing the Work. The duration and the logical relationships of the activities and summaries at Work phase level shall be based on the actual durations and relationships anticipated. The Contractor shall not use calendar dates to "logically" begin or complete any activity unless those specified calendar dates are identified in the Contract.
4. The Contractor shall allow for ~~at least two~~ at least one workshop sessions with the Department during development of the Baseline Schedule and at least one workshop session for each Recovery Schedule. For all Monthly Progress Schedules, the Developer shall meet with the Department at least once per month and as otherwise requested by the Department.
5. The only constraints allowed to be included in the Schedule are the Contract Deadlines. No intermediate completion constraints or start constraints shall be allowed unless they are included in the Contract or Approved by CDOT. The Contractor shall submit, for CDOT Review, a list of any Contractual constraints, including Contract section references, with the Contract Schedules. Unless Approved by CDOT, all Activities must have at least one predecessor and one successor, except for the NTP1 (no

predecessor) and Final Acceptance (no successor). No lead or lag relationships shall be permitted.

6. All Activities that start or complete out of sequence shall be rescheduled (logic corrected) to reflect the actual sequence of events.
7. Not use unnecessary logic ties.
8. Identify all design packages intended to be included as Release for Construction (RFC) Documents, which, at a minimum, shall have logical ties to the submittals and construction work anticipated for the respective design package.
9. Show maintenance of traffic activities.
10. Utilize activities and calendars instead of duration lags, and contain no negative ~~float~~lag.
11. Actual start and completion dates shall be accurately entered. The Contractor shall submit to CDOT for Approval a narrative describing any changes or corrections of any previous actual dates or dates required in the Contract prior to any changes or corrections to the schedule dates.
12. If any logic is changed after the Approval of the Original Baseline Schedule, a narrative by Activity identification code (ID) shall accompany the Monthly Progress Schedule stating the reason the logic changed and the benefit to CDOT. If CDOT does not agree with the reason for the logic change, the Monthly Progress Schedule will not be Accepted.
13. All Activity ID codes for a specific Activity description created in any Contract Schedule shall remain unchanged and connected to its original Activity description through Final Acceptance. An Activity description may be changed only to clarify an Activity's original scope.
14. The Contract Schedules shall appropriately account for weather based on historic data.

2.5.3.3 CPM Requirements

1. The Critical Path shall be determined according to CPM principles and shall be highlighted in red on all Schedules to distinguish the critical path from other Activities.
2. A diamond, flag, or other symbol shall highlight milestones.
3. The CPM shall have all major procurement Activities identified for any item with more than 30 Days lead time for delivery. This includes Shop Drawing submittal and approval, lead times for the fabrication and delivery of Materials and Equipment, and installation of Materials and Equipment.
4. The CPM shall be sufficiently detailed to accurately depict all the Work. Activity durations shall be an estimate in Days of the time required to perform each Activity. No individual Activity will have a duration exceeding 15 Days without prior approval from the CDOT Project Manager. ~~Activities with durations of less than 5 Days shall be held to the absolute minimum.~~ For an Equipment or Material fabrication item whose duration exceeds 30

Days, several Activities, none exceeding 30 Days, shall be used. Each Activity shall have a detailed description.

5. Contract Completion Deadline dates shall be shown on the CPM. These dates shall be input as finish constraint dates and shall agree with the dates specified in the Contract.

2.5.3.4 Schedule Output Format

The Contractor shall submit the electronic output files of the Schedule (e.g., XER). Schedule charts and graphs shall be submitted in a format compatible with Adobe Acrobat Reader .PDF, and Microsoft® Excel. These files shall be submitted with the Monthly Progress Schedule.

2.6 Cost Management

2.6.1 Progress Payment Calculations

CDOT will base progress payments on a mutually agreed estimate of physical percent complete of the Work, not on measured quantities. The Contractor shall progress the Activities identified on the Approved Original Baseline Schedule, the Current Baseline Schedule, or the Approved Revised Progress Schedule (if applicable), for determining the Monthly Progress Schedule. The Accepted Monthly Progress Schedule will determine the amount of the Contractor's progress payments. Percent complete shall be calculated using project scheduling software meeting the requirements of this section, where progress is measured based on percent complete/Days remaining.

Partial payment for stored Materials shall only be made as allowed in the Contract.

The Contractor's Monthly Invoice shall not include a request for payment for Nonconforming Work documented by the Contractor's Design Build Quality Manager or CDOT. The payment to the Contractor will be in the amount shown on the Contractor's Approved invoice less Retainage and any deductions.

2.6.2 Monthly Invoice Submittals

The Contractor shall submit invoices to CDOT each month. Each Monthly Invoice shall be submitted in draft form for review within 10 Days following the prior month's end. Draft Monthly Invoice submittals shall be made electronically in a format compatible with Microsoft® Excel.

The Contractor shall submit to CDOT for Approval each final Monthly Invoice in accordance with this Section. Final Monthly Invoice submittals shall be made electronically in an uneditable format, such as Adobe Acrobat Reader .PDF.

2.6.3 Invoice Document Content

The Contractor shall consult with CDOT on the requirements for the supporting documents to be included with the invoice form. The Contractor shall submit the invoice format requirements to CDOT for Approval prior to NTP1. The Contractor shall submit variations to the Approved invoice format to CDOT for Approval at least 15

Days prior to the submittal of the first invoice and prior to NTP2. Once the Monthly Invoice format has been Approved by CDOT, the format shall not change unless subsequently Approved by CDOT.

The invoice documents shall include:

2.6.3.1 Invoice Cover Sheet

The Cover Sheet shall indicate the following information:

1. Project number and title
2. Invoice number (numbered consecutively starting with “1”)
3. Period covered by the invoice (specific calendar dates)
4. Total earned to date for the Project as a whole and for each Level IV WBS Activity
5. Nonconforming Work and amount withheld identified
6. Authorized signature and title of signatory
7. Date that invoice was signed

2.6.3.2 Monthly Progress Report

The Monthly Progress Report shall include the following:

1. Brief narrative description of Level VI Activity and progress for the Project as a whole, including maintenance, design, and construction start dates and completion dates identified.
2. Update of progress with respect to Utilities (if any)
3. Identify whether any Completion and Final Acceptance Deadlines are achieved or revised during the period
4. Quality Status Report, including summary of Independent Quality Control (IQC)/Process Control (PC) efforts and results of design reviews
5. A list of all executed and pending Change Orders (if any)
6. Problems/issues that arose during the period and remaining issues to be resolved along with proposed resolution and timetable for completion
7. Summary of resolution of problems/issues raised in previous Monthly Progress Reports or resolved during the period
8. Summary of nonconformance correction status
9. Summary of Project accidents (frequency and severity) and corrective actions taken
10. Critical Schedule issues and proposed resolution
11. Discussion of schedule variations from Completion Deadlines that have slipped or improved

12. Summary of public outreach during the period
13. Summary of any required Permits during the period
14. Summary of Environmental Compliance Work Plan (EWCP) Activities during the period
15. Monthly Civil Rights Plan Report and tracking
16. Progress photographs, as further described in this Section.
17. Three-month look-ahead portion of the Monthly Progress Schedule, as further defined in this Section
18. A predecessor and successor report defining all schedule logic and clearly indicating all logical relationships and constraints (submitted with each CPM schedule)
19. An early start report listing all Activities, sorted by actual/early start (submitted with each CPM schedule).
20. A total float report listing all Activities, sorted in ascending order of total float (submitted with each CPM schedule).
21. A no-Work Days report listing all legal Holidays and no-work Days that were accounted for in the preparation of the schedule (submitted with each CPM schedule)
22. A narrative report listing all changes to the CPM schedule since the last submittal.
23. Payment Schedule Update as further defined in this Section.
24. Summary of Subcontractor payments sent during the period, including identification of the source CDOT payment for each Subcontractor payment.

The format and detail level required for submittal of the Monthly Progress Report shall be developed by the Contractor and submitted to CDOT for Acceptance within 10 Working Days after NTP1. The Monthly Progress Report shall be on Contractor 8.5 x 11-inch letterhead and submitted for Acceptance by CDOT concurrent with the Monthly Invoice.

2.6.3.3 Updated Monthly Progress Schedule

No invoice shall be Approved nor payment made if there is not a current Accepted Monthly Progress Schedule and Current Baseline Schedule in place. The status date of the Monthly Progress Schedule, coinciding with the payment invoice date, is the last day of each month, unless otherwise Approved by CDOT. The data date for use in calculating the Monthly Progress Schedule shall be the first Working Day of the following month, unless otherwise Approved by CDOT.

The Contractor shall submit all changes to the logic, calendar, durations, actual starts, actual finishes, constraints, or Activities in the Monthly Progress Schedule or Current Baseline Schedule to CDOT for Approval.

The Contractor shall make all corrections to the Monthly Progress Schedule requested by CDOT and resubmit the Monthly Progress Schedule for Approval. If the Contractor does not agree with CDOT's comments, the Contractor shall provide written notice of disagreement within seven (7) Days from the receipt of the comments. The items in disagreement shall be resolved in a meeting held for that purpose, if necessary.

2.6.3.4 Certification by Contractor's Design Build Quality Manager

The Contractor shall submit to CDOT for Review a certification signed by its Design Build Quality Manager accompanying each Monthly Invoice request certifying that:

1. All Contract Work, including that of designers, Subcontractors, Suppliers, and fabricators, has been checked and/or inspected by the Contractor's quality program staff, and that all Work, except as specifically noted in the certification, conforms to the requirements of the Contract Documents.
2. The Quality Management Plan (QMP), and all of the measures and procedures provided therein, are functioning properly and are being followed.
3. In conformance with the Project Safety Management Plan (PSMP) as further described in the CDOT Standard Specifications, all safety-critical Work, has been reviewed and sealed by the Professional Engineer of responsible charge before construction begins.

No invoice will be Approved (payment made) without completion and implementation of the QMP, as outlined in Book 2, Section 3.

2.6.3.5 Monthly Maintenance Progress Report

The Contractor shall submit to CDOT the current Monthly Maintenance Progress Report, as required in Book 2, Section 18.

No invoice will be reviewed or processed until all invoice documents and certifications, as identified in this Section, are received by CDOT.

2.6.4 Progress Status Meetings

The Contractor shall schedule and conduct a Progress Status Meeting three (3) Days following draft Monthly Invoice submittals. The meeting shall be used to verify, address, and finalize the following:

1. Actual start dates
2. Actual and planned Project Completion Deadlines
3. Earned value of Work that has been Accepted and reported in-place, based on installed quantities and Material on Hand (stockpiled Materials)
4. Activity percent complete
5. Incorporation of Approved Change Orders

~~6. Verification of unit-price items, if any~~

~~7.6.~~ _____ Status of outstanding Nonconforming Work

~~8.7.~~ _____ Completion of Value Engineering Change Proposals, if any

~~9.8.~~ _____ Work performance

~~10.9.~~ _____ Monthly Progress Schedule, including changes from previous month's
Monthly Progress Schedule.

~~11.10.~~ _____ Critical Path(s)

Following the Progress Status Meeting, CDOT shall have up to seven (7) Days to review, verify, and comment on the draft Monthly Invoice submittal. After reviewing, CDOT will return the draft for the Contractor to revise and correct, as necessary. The Contractor shall then submit a corrected and final Monthly Invoice to CDOT for Approval.

Approval of the final Monthly Invoice will be issued within seven (7) Days, contingent upon the Contractor's satisfactory resolution of CDOT's comments of the draft Monthly Invoice submittal.

2.7 Meetings

2.7.1 Task Force Meetings

At a minimum, the Contractor shall conduct weekly Task Force Meetings, or at a frequency requested by the Department, for the following disciplines to facilitate "Over the Shoulder" review of the design:

1. Tunnel Enhanced Fire Safety System
2. Electrical Work
3. SCADA and systems modifications
4. Freeze protection/heat trace installations
5. Water Treatment System upgrades
6. Transportation Management Plan

2.7.2 Safety Meetings

The Contractor shall conduct regularly scheduled Project Safety Meetings, tool box talks, etc., as specified in their Project Safety Management Plan and as per the Standard Specifications.

2.7.3 Weekly Status Meetings

The Contractor shall hold weekly status meetings that include appropriate Stakeholders. At a minimum, the following topics shall be addressed:

1. Three-week look-ahead schedule

2. Issues matrix/Change Orders
3. Quality
4. Transportation Management Plan
5. Maintenance during Construction
6. Environmental
7. Public Involvement
8. Civil Rights

2.7.4 EJMT Coordination Meetings

The Contractor shall participate in ~~regularly scheduled~~weekly coordination meetings with CDOT EJMT operations and maintenance staff and other CDOT projects at or adjacent to EJMT.

CDOT has identified the following improvement projects at or adjacent to EJMT which may or may not affect the Work:

1. EJMT Plenum Liner Seal Project
2. EJMT Panel Grout Beds and Panel Reset Project
3. EJMT Service Areas Repair Project
4. EJMT ITS Project
5. EJMT Roof Repair Project
6. EJMT Maintenance Barn Construction Project
7. EJMT Tunnel Inspection
8. Bakerville Climbing Lanes Project
9. I-70 Eastbound Auxiliary Lane Project
10. I-70 Silverthorne to EJMT Phase 1 Project
11. I-70 Silverthorne to EJMT Phase 2 Project
12. EJMT Vehicle Bay Ventilation Upgrades Project
13. I-70 Box Structure Replacement Project

This list not intended to be comprehensive and CDOT reserves the right to modify this list at any time over the course of the Project.

2.8 Photographs

2.8.1 Pre-Construction Photographs

Immediately after NTP1, the Contractor shall take and label a sufficient number of pre-construction photographs and a high-quality video of the Site, including roadways within the tunnels, parking lots, tunnel interiors, plenums of both tunnels, existing domestic water supply treatment plant, structures, existing fixed fire suppression system, drainage pipe network, existing landscape, electrical rooms and equipment, ventilation fans, and all areas necessary and/or anticipated to be impacted by the Work in HD format so as to resolve any disputes which may arise regarding the conditions prior to and subsequent to construction. This pre-construction photograph and video survey shall be submitted to CDOT for Acceptance prior to NTP2. If a dispute arises where no or insufficient photographic or video evidence of the existing condition is available, the disputed area shall be restored to the extent directed by CDOT at no additional cost to CDOT. Photos shall be sequentially taken. Files shall be individually labeled to describe Project location and asset being documented. File dates should show a date prior to construction.

2.8.2 Progress Videos and Photographs

The Contractor shall provide progress photographs of the Work Site on a monthly basis for Review. Photographs shall document Work as it progresses, capturing before, during, and after conditions for both temporary and permanent construction. CDOT's confirmation shall be sought regarding views to be taken and the approximate time at which they will be taken.

The Contractor shall provide high quality digital format photographs ~~on a USB memory, or alternate storage device through an online cloud based file sharing program, or as Approved to be determined~~ by CDOT, when taken. The file format shall be .jpg, .gif, or .tiff.

The Contractor shall provide interior and exterior photographs of each buried structure just prior to burial. Provide a minimum of four internal views (as applicable) and four external views of each structure.

The following information shall be provided for each digital photograph:

1. Date photograph was taken
2. Structure identification, if available
3. Title of Project
4. Description of view shown in photograph
5. Identification of photographer
6. Sequential number of photograph

2.9 Office Facilities and Options

2.9.1 Office

The Contractor and CDOT shall be co-located for the duration of the Project construction. Co-location of the design team is not required. The Contractor and CDOT offices within the co-located office space shall not be intermingled. The Contractor may consult with CDOT about availability of suitable local sites and office facilities.

The Contractor shall provide office space (the CDOT office) and equipment for 5-10 CDOT personnel, including at least 2 private offices. This office space will be utilized by CDOT staff for the EJMT DPHT project, as well as CDOT staff managing other EJMT projects happening concurrently.

The Contractor shall make available its proposed facilities for inspection and Approval by CDOT prior to CDOT occupying any Contractor-provided facilities not later than 30 Days after NTP1. The Contractor shall furnish CDOT's staff with offices that are in good and serviceable condition (condition comparable to the Contractor's office space). The office space shall be located within 20 miles of the EJMT. CDOT has made available a lot for Contractor use near the westbound I-70 on ramp of Exit 226 in Silver Plume, as shown in the Book 4 - EJMT DPHT Silver Plume Site Conceptual Layout. Access to CDOT building within lot shall be provided at all times. Both parties shall participate in a facility condition inspection prior to and at the completion of occupancy.

CDOT will return possession of Contractor-provided facilities to the Contractor in essentially the same condition as when CDOT initially occupied the facilities, except for reasonable wear and tear.

The Contractor shall secure the Site; obtain all Site permits; install, set up, and provide Utility services; and maintain the facilities as part of the Work.

In the event that office spaces or appurtenant facilities are stolen, destroyed, or damaged during the Work, except by fault of CDOT, the Contractor shall at its expense repair or replace those items provided to their original condition within 7 Days. If loss or damage is caused by CDOT personnel, the Contractor shall replace the facilities within 7 Days, except CDOT will be responsible for costs incurred.

The Contractor shall maintain the CDOT Offices until at least 90 Days following the Final Acceptance of the Project unless otherwise agreed to by CDOT. CDOT may, at its option, vary the number of its staff throughout the duration of the Project. However, the Contractor shall maintain the initial number and size of the CDOT Offices, conference rooms, reception area, and break room (the CDOT Office Facilities) until 90 Days following the Final Acceptance of the Project.

The Contractor shall be responsible for disposal or removal of all CDOT Office facilities and any Site restoration Work required.

The Contractor shall provide:

1. Telephones and telephone service with at least 2 lines for CDOT Offices, conference rooms, and break room.
2. High-speed Internet connection (30 megabits per second [Mbps] download and upload speed or greater) for all CDOT staff workstations within the CDOT Office. CDOT will provide router and switch for all CDOT staff offices.
3. Networking for all CDOT workstations within the CDOT Office.
4. For CDOT staff, 2 networked color laser printer/copiers, with additional 11- x 17-inch paper tray, including paper, toner, parts, service, and repairs. The printer shall be capable of scanning documents to 11- x 17-inch size and transmitting the scanned file to multiple email addresses.
5. Overhead lighting meeting Occupational Health & Safety Administration (OSHA) and code requirements for office space.
6. Office space not less than the size indicated below:
 - a. Private offices: 150 square feet of enclosed office space (with door)
 - b. Partitioned offices: minimum 36 square feet enclosed office space per office (cubicles/partitions are acceptable, and comparable to Contractor staff space).
 - c. One enclosed conference room with doors capable of accommodating a 30-person meeting, with at least 50% of seating capacity at the conference table. This can be a shared conference room between the Contractor and CDOT.
 - d. One enclosed conference room with doors for CDOT's exclusive use capable of accommodating a 20-person meeting, with 12-person seating capacity at the conference table. The conference room shall be in an adjacent space to the CDOT Offices.
 - e. Break room: 150 square feet with sink, counter, table with chairs, microwave, and 20-cubic-foot refrigerator, and drinking water with dispenser.
 - f. One reception area with common access to the CDOT Office.
 - g. Storage room: 150 square feet with file cabinets and book shelves, enclosed with lockable door.
7. Furnishings, as follows:
 - a. Conference Rooms
 - i. Conference table and chairs.
 - ii. Wastebasket.
 - iii. Hanging, erasable white board (6 foot minimum width).
 - iv. Projector or 65" Video Monitor with compatibility to all CDOT computers.
 - b. Offices

- i. Desk that is minimum size 76 x 36 inches with locking drawers.
 - ii. Computer workstation desk capable of holding a desktop printer, monitors, keyboard, and any accessories.
 - iii. Worktable (private offices only).
 - iv. Ergonomically correct, OSHA-approved chairs.
 - v. Extra office chair.
 - vi. Hanging, erasable white board, 4 feet wide, minimum (private offices only).
 - vii. Bookshelf.
8. Indoor restrooms suitable for the office space.
 9. All-weather parking, 1 space per employee, plus 5 visitor spaces (150 total).
 10. Weekly janitorial service.
 11. Maintenance of the exterior area of office, including access to parking and snow removal.
 12. Facilities that meet American with Disabilities Act (ADA) access requirements and meet all local code requirements for office space.
 13. Heating, ventilation and air conditioning/cooling systems adequate for office use.
 14. 24 hours a day, 7 days a week secure access

2.9.2 Design Build Field Laboratory (Owner Verification Testing)

Reserved.

2.9.3 Field Facilities (Field Office Only)

Reserved.

2.9.4 Communications Equipment

Communications in the EJMT are critical. The Contractor and CDOT shall be required to be in constant communication during the course of the Project.

The Contractor shall supply hand held portable radios to be used by all Contractor personnel when on the Project for communications with CDOT. The radios shall be 16 channel/scanning, five watt hand held, capable of being programmed for selected frequencies in the vicinity of 453.200 MHz. The radios shall be in good working order. The radios shall be capable of operation remotely or from a vehicle. The Motorola Radio HT 1250 UHF version model # AAH25SDH9DP5AN with required attachments is known to meet these requirements. Prior to ordering, the Contractor shall submit trade numbers and specification of radios to CDOT for Acceptance. The necessary UHF

frequencies will be furnished by CDOT. The number of radios required shall be sufficient to supply each active Contractor personnel a radio while on the Project.

2.9.5 Project Vehicles

Reserved.

2.9.6 Project Directory

The Contractor shall maintain and furnish to CDOT a Project Directory listing the names, addresses, and telephone numbers (office, home, cellular, etc.) of the Key Personnel and critical support staff of the Contractor and each Subcontractor. The Project Directory shall be submitted to CDOT for review prior to issuance of NTP2. The Contractor shall update the Project Directory quarterly for the duration of the Work.

2.10 Safety Management

2.10.1 Project Safety Management Plan

The Contractor's Project Safety Management Plan (PSMP), per CDOT Standard Specifications, Section 107.06, shall be submitted for Acceptance prior to NTP2 or any work element requiring implementation of the Project Safety Management Plan.

The PSMP is a living document and shall be updated when a process, method, chemical, or other Work criteria changes that affects the safety of a person or property. The Contractor shall submit to CDOT for Acceptance any updated portions of the PSMP.

2.10.1.1 Project Safety Management Plan Criteria

The PSMP must answer the "who, what, and how" based upon the Technical Criteria contained within Book 2 of the RFP and the 12 elements identified in the CDOT Standard Specifications, Subsection 107.06.

The PSMP shall also reference all established CDOT safety plans and procedures for EJMT operations and maintenance including the EJMT Tunnel Safety Rule provided in Book 3.

2.10.1.2 Project Safety Management Plan Training and Communication

All Project staff, including CDOT, Contractors, and Subcontractors, must be trained on the elements of the Contractor's Accepted PSMP submittal.

2.11 Document Management

The Contractor shall establish and maintain its own Document Control System (DCS) to store and record all correspondence, drawings, progress reports, technical reports, specifications, Contract Documents, deliverables, calculations, and administrative documents generated under the Contract. The Contractor shall also establish correspondence routing, filing, control, and retrieval methods that are compatible with the Department's DCS. Document Control, storage, and retrieval methods shall include

the use of both hard copies and electronic records. The Contractor's DCS shall handle all Project documents.

The Department will use the online Bentley based software platform, ProjectWise Deliverables Management, as its DCS, a cloud-based information management system. The Department's DCS will be the only recognized method for transmittal of formal project correspondence, documents, and information (other than for service of legal process). Where it is necessary to transmit original signed documents, these shall be acceptable forms of correspondence only when they have been issued via the Department's DCS first. The Contractor and its Subcontractors are responsible for providing their own licenses to ProjectWise Deliverables Management prior to NTP1.

The Contractor shall use the Department's DCS when communicating with the Department. This includes use for all Document Control related documents, transmitting deliverables, and email correspondence purposes for the duration of the Project. Concurrent review of documents requiring Department review shall be limited to (5) at any single time, regardless of discipline. The Department's DCS will be used by all participants engaged on this Project, including Subcontractors of any tier, Suppliers and their subsequent legal successors in title. It is the Contractor's responsibility to ensure consistency with this procedure.

Document Management shall also conform to the requirements of Book 2, Section 3.

The Contractor shall use LCPtracker as the designated software and repository for payroll records required for the Project pursuant to this Section 2.

The Contractor shall use B2GNow as the designated software and repository for Subcontractor and supplier payment records required for the Project pursuant to this Section 2.

Access to the Department's DCS and web-based certified and payroll and contractor compliance system will be provided to the Contractor and all Subcontractors for the duration of the Project.

The Department, at its sole discretion, may elect to use an alternative DCS during the course of the Project. In such case, the Contractor shall use this alternative DCS for all correspondence with the Department as described herein.

All correspondence of the Contractor to and from CDOT and its representatives with respect to the Contract shall be serialized by a method Accepted by the Department. The Contractor shall maintain separate incoming and outgoing correspondence logs. The Contractor correspondence serialization shall be submitted for Acceptance by the Department prior to NTP1. At a minimum, a serialization similar to the following is required:

DATE: _____
DBC Assigned No.: _____

DB-(year): _____
Addressee: _____
Address: _____
Subject: _____
Reference: _____
Copies: _____

Example Document Serialization

All correspondence shall include the Project name, Contract name and number, along with the specific subject of the letter. All replies shall refer specifically to prior correspondence to which it relates.

The following is the minimum criteria that the Contractor's DCS shall provide:

1. Access shall be provided to the Department on a real-time basis that can only be attained through the Internet. The Contractor shall maintain industry standards for Internet connectivity as determined by the Department.
2. The Contractor shall make available within 24 hours through a single point of contact, when requested by CDOT, copies of its incoming and outgoing correspondence logs and any other document requested.
3. Documents within the Contractor's DCS must be transferable to the Department's DCS. The transfer of documents shall be performed through the Internet.
4. The Department shall have read only access to the latest set of drawings that are produced during construction.
5. Process Control (PC) and Independent Quality Control (IQC) data, such as test results, daily inspection records, non-conformance reports, etc., shall be stored by the Contractor within their DCS. Real-time access by the Department to PC/IQC data shall be required. PC/IQC data shall be transferred to the Department's DCS on a monthly basis.

2.12 Civil Rights and Contractor Compliance

2.12.1 Civil Rights Plan Requirements

The Contractor shall prepare and submit to CDOT a Civil Rights Plan (CRP) ~~for Approval no later than 3 weeks prior to NTP2~~ in accordance with Book 1, Section 7.1.2. Submission-The requirements for the Civil Rights Plan are contained in Book 1, Section 7.1.2 provided below. The CRP shall include, at a minimum, the following elements:

1. General Plan Requirements

- A. A description of the purpose of the Civil Rights Plan to include how it will be used to document procedures established for both process and quality control to ensure compliance with the Civil Rights related requirements of the Contract Documents.
 - B. A description of the scope of the Civil Rights Plan to include the programmatic compliance areas that will be addressed and implemented by the plan.
 - C. A list of Definitions and Acronyms that will be used throughout the Civil Rights Plan including but not limited to: (1) reports, checklists, spreadsheets and logs that will be used to evidence compliance with the CRP requirements and (2) IT systems and/or programs that will be used to implement the Civil Rights Plan and provide reporting to CDOT on compliance statuses.
 - D. An organizational chart of the roles of the civil rights team members that will implement the Civil Rights Plan and their reporting hierarchy.
 - E. A list of roles and defined responsibilities of the Civil Rights Compliance Manager and other civil rights team members responsible for implementing the CRP, including the name of each team member and a description of the roles' responsibilities on the Project.
 - F. An overall strategy and approach by the Contractor to establish and implement the CRP across the Contractor's management team and Subcontractors on the Project to ensure compliance at all Project participant levels, including but not limited to: (1) organization of the management team, including integration of subconsultants (if utilized) as a part of that management team, and coordination to ensure a cohesive approach (2) approach to indoctrinating Subcontractors and providing training to ensure a cohesive understanding of requirements and reporting (3) establishment and implementation of a culture of civil rights compliance across the Contractor's team (4) utilization of lines of communication and authority across process and quality controls to implement the CRP (5) and escalation of issues in a timely manner, when required.
 - G. A description of how the CRP will be incorporated into the Contractor's process -management and quality management programs and the reporting and coordination across the two groups.
2. Management of Subcontractors. The FHWA-1273 states that the Contractor shall be responsible for the compliance of any Subcontractor, lower-tier Subcontractor, or service provider on the Project.
 - A. A description of the training events and processes that will be established to train Subcontractors on the civil rights requirements for the Project to ensure compliance and Subcontractor success for meeting those compliance requirements, including, but not limited to:
 - i. Planned communication and training events (including calendars and timing relative to construction start dates), to include mandatory attendance of each subcontractors' personnel, responsible for

implementing and reporting on civil rights requirements, to a compliance training event prior to beginning Work on the Project. Additionally, describe the processes to be used by the Contractor to monitor and ensure attendance prior to the Subcontractor beginning Work on the Project.

- ii. The technical components of the Civil Rights Plan compliance requirements that will be discussed including, but not limited to
 1. Lower Tier Subcontractor reporting
 - a. The requirements for incorporation and attachment of FHWA 1273 to all subcontracts.
 - b. The required approval by CDOT of all Subcontractors and Suppliers in B2GNow prior to beginning Work.
 - c. The process and timeline for reporting of lower tier Subcontractors to the Contractor for timely and accurate reporting into B2GNow.
 2. Subcontract requirements
 - a. A list of all federal provisions to be included in subcontracts (all tiers) as per Book 1, Exhibit C..
 - b. The process for executing change orders to correct Subcontract language upon identification of non-compliance issues.
 3. Davis Bacon and Related Act requirements
 - a. DBRA reporting requirements and frequencies (including timeliness, wage classifications, fringe benefits, USDOL approved deductions, requesting USDOL deduction approval, Owner Affidavit, wage restitution).
 - b. The processes for using LCPtracker for DBRA reporting.
 - c. Identification of the need for additional wage classifications and how to submit a request. (USDOL Form 1444)
 - i. In cases where a project spans multiple counties and where a job classification is not offered for all of the applicable counties, an Additional Wage Conformance shall be requested by the contractor for any missing applicable county to determine the higher minimum wages and fringe benefits that shall apply.
 4. EEO/Affirmative Action
 - a. Implementation by the Subcontractor of requirements set forth in FHWA 1273, Parts II and III and how to document compliance with those provisions, including:
 - i. EEO/Affirmative Action Plan.
 - ii. EEO Officer identification.

- iii. Dissemination of EEO/AA Plan to supervisory and project personnel.
 - iv. Nondiscrimination.
 - v. Training and opportunities for upgrade and promotion.
 - vi. A periodic analysis of spread of raises.
 - vii. DBE subcontracting.
5. Prompt Payment
- a. The timeline requirements for payments to Subcontractors.
 - b. The Contractor's process to establish and communicate payment request requirements to Subcontractors (including when and where to submit payment requests, a list of documents to be included to constitute a satisfactorily complete payment package, applicable cut off dates for submission of payment requests for processing).
 - c. B2GNow
 - i. The processes for reporting payments in B2GNow.
6. Release of Retainage
- a. The requirements for payment and reporting of release of retainage.
7. OJT
- a. OJT participation and reporting requirements, for those participating Subcontractors.
- iii. Training that will be provided by the Contractor on the use of the systems and software programs that Subcontractors will be required to utilize during the Project for reporting requirements (including but not limited to LCPtracker and B2GNow).
- iv. Training agendas and/or presentations shall be submitted to CDOT as a part of this Civil Rights Plan.
- B. A description of the Contractor's processes and example checklists (or spreadsheet) that will be used to ensure all training, reporting and submissions, as required, have been completed prior to the Subcontractor beginning Work.
- C. A description of how the Contractor will report Subcontractors into B2GNow and submit CDOT Forms 205 and CDOT Form 1425, as appropriate, for approval within B2GNow by CDOT prior to Subcontractors beginning Work on the Project.
- D. A description of the Contractor's process and documentation of that process that will be used to ensure that all federal requirements (including, but not limited to, Required Federal Provisions, Federal-Aid Construction Contracts, for FHWA 1273 and Prevailing Wage Decisions) shall be included

in all subcontracts (all tiers) prior to Subcontractor beginning Work on the project. A Nonconformance Report (NCR) shall be issued by the Contractor for any non-conforming work identified that requires a Subcontract amendment to correct any nonconforming subcontract language.

- E. The processes and documentation that will be used to prevent Subcontractors that have been debarred or suspended from governmental contracting from participating in the Project, prior to submitting a CDOT Form 205 or CDOT Form 1425. Debarred or suspended contractors can be found on SAM.gov:
<https://sam.gov/SAM/pages/public/searchRecords/search.jsf>
- F. A description of the monitoring, tracking and reporting mechanisms that will be used to identify and document Subcontractor daily field activity on the Project (to include the specific subcontractors on site daily) to (1) ensure Subcontractors (all tiers) that have begun Work on the project and identified on site have been approved by CDOT in B2GNow, (2) compare field data to submission of certified payrolls to ensure completeness and timeliness of DBRA compliance reporting, (3) compare to on site trucking operations to ensure compliant reporting with DBRA, (4) compare to bona fide owner operator reporting to ensure compliant reporting with DBRA, (5) compare to DBE CUF monitoring to ensure CUF observations have been performed for all DBE's at least annually for construction, 35%-50% of completion for design and (6) provide a reporting of this Subcontractor field activity to CDOT on a weekly basis.
- G. Civil Rights Quality Control (CRQC) Subcontractor Audits
 - i. A description of the risk-based auditing approach to be used that identifies the population (and data source of that population), sample quantity (or percentage), sample methodology to select sample items, testing frequency and audit criteria to be applied to sample items, to test:
 - 1. All Subcontractors Working on the Project Site:
 - a. Have been CDOT Approved in B2G.
 - b. Have received the required training prior to beginning Work on the Project.
 - c. Have an executed Subcontract that include all required Federal provisions.
 - ii. An NCR will be issued by Quality Control for any sample items determined to not be in compliance by risk-based auditing methods applied.
 - 3. Davis-Bacon and related acts (DBRA)
 - A. A description of how the Contractor will monitor timely and accurately compliance with DBRA by the Contractor and all Subcontractors, including:

- i. Timely and accurate payment by the Contractor and Subcontractors, to employees covered by DBRA, within seven (7) days after the payroll period end.
- ii. Timely submission of certified payrolls to CDOT in LCPtracker within seven (7) days after the Contractor and Subcontractor's regular payment date for the payroll period end.
- iii. Review process and action to be taken (Approval or Rejection) of all certified payrolls by the Contractor's designated Prime Approver within seven (7) days after submission into LCPtracker
- iv. A communication process, including an escalation matrix with a timeline, for notifying Subcontractors that certified payrolls are late and/or in non-compliance with regulatory requirements and methods for remedying such late submissions and/or non-compliant payrolls that escalates to the Contractor's issuance of an NCR if the noncompliance issue is not rectified within seven (7) days after notification by the Contractor to the Subcontractor.
- v. A description and example of the monitoring document/tool that will be used to track (1) payroll submissions (timely and late) in accordance with payroll submission requirements (within seven (7) days after the Contractor's regular pay date), (2) implementation of the escalation and communication processes including process control and quality control, (3) status of certified payrolls that require correction and or wage restitution, and (4) issuance of an NCR, as necessary. Request example.
- vi. A description of the Contractor's process to issue late payroll notices for all payrolls determined to be late on submission and the communication platform (i.e. email) to be used. Late payroll notices issued shall be uploaded into LCPtracker eDocuments (with the subject week ending field appropriately selected) and include: (1) the subject payroll week ending date, (2) a description of the non-compliance issue (i.e., late payroll), (3) actions to be taken (i.e., submit payroll) to correct the issue, and (4) a deadline for response of seven (7) days from issuance.
- vii. A description of the Contractor's process to issue Administrative Notices within LCPtracker in response to a Rejection of a certified payroll determined to be in noncompliance, including: (1) subject week ending date, (2) initials or name of the person issuing the Administrative Notice, (3) a description of the noncompliance issue, (4) actions to be taken to correct the payroll, and (5) a deadline for response of seven (7) days from issuance of the notice.
- viii. A list of audit requirements not audited by the LCPtracker system that will be utilized by the Contractor's Prime Approver and Quality Control representative when reviewing each certified payroll submitted to ensure compliance with all requirements. Request example.
- ix. A description of the Contractor's process to ensure compliance with the Copeland Act to ensure employee payroll deductions are within those

allowed by the U.S. Department of Labor (USDOL), or otherwise contractors have obtained USDOL approval as documented in a USDOL Approval Letter.

- x. A description of the Contractor's processes to ensure supporting documents (including but not limited to, wage garnishment orders, child support court orders, loan documentation, etc., as detailed in CDOT Certified Payroll Memo (issued June 12, 2018) available online at <https://www.codot.gov/business/civilrights/compliance/labor/payroll> are uploaded to LCPtracker e-Documents and available upon review of the subject certified payroll.
 - xi. A description of the process to be used to identify the need to request non-standard classification wages (USDOL Form 1444, Request For Authorization of Additional Classification and Rate) in a timely manner (i.e., prior to submission of the applicable contractors certified payroll that requires an additional classification request for accurate DBRA reporting).
 - xii. A description of the Contractor's processes to ensure that the Contractor and all Subcontractors have a certified payroll marked as Final in LCPtracker upon completion of their respective Work.
- B. CRQC DBRA Audits. A description of the processes that will be used to implement the following quality control components.
- i. Within LCPtracker, Quality Control will be responsible for reviewing (and issuing an Acceptance or Rejection) 100% of all certified payrolls submitted within seven (7) days after the Contractor has issued Prime Approval.
 - ii. Quality Control will apply the same requirements criteria as the Contractor's Process Control to ensure the certified payroll is in compliance with DBRA requirements.
 - iii. An NCR will be issued by Quality Control for any certified payrolls determined to not be in compliance and rejected in LCPtracker.
4. Equal Employment Opportunity
- A. A description of how Subcontractors will be monitored, mentored and trained (prior to beginning Work on the Project) on compliance with the Equal Employment Opportunity (EEO) requirements contained in FHWA 1273 Parts II and III, to ensure compliance and responsiveness to subject Contractor compliance reviews conducted by CDOT, including but not limited to:
 - i. EEO/Affirmative Action Plan.
 - ii. EEO Officer Identification.
 - iii. Dissemination of EEO Plan to supervisory and project personnel
 - iv. Nondiscrimination.
 - v. Training and opportunities for upgrade and promotion.

- vi. Periodic analysis of spread of wages.
 - vii. DBE subcontracting.
 - B. A description of the Contractor's processes for establishing and continually monitoring a jobsite bulletin board(s) within the Project limits that is accessible to the public and potential employment applicants, including but not limited to: (1) a checklist that will be used to ensure that all required posters are posted and readable at all times, to including pictures of the board and posters during inspection, (2) an inspection schedule for the board(s) no less frequently than quarterly (or as needed to ensure current and updated compliance information or to replaced damaged or unreadable posters), and (3) the manner in which these inspections will be provided to CDOT within 14 Days after the inspection is conducted.
 - C. A description of how both the Contractor's Project personnel and Subcontractors Project personnel will be made aware of the jobsite bulletin board location, the information contained on the board, the prevailing wage decisions applicable to the Project, and EEO Officer information within 30 days of starting Work on the Project and subsequently at least twice a calendar year thereafter.
 - D. CRQC EEO Audits
 - i. A description of the risk-based auditing approach to be used that identifies the population (and data source of that population), sample quantity (or percentage), sample method to select sample items, testing frequency and audit criteria to be applied to sample items, to test:
 - 1. The Jobsite Bulletin Board has been timely and accurately inspected and appropriate actions were taken upon identification of any instances of non-compliance.
 - 2. Periodic meetings were held with project personnel to inform them of EEO requirements and jobsite bulletin board information.
 - 3. An NCR will be issued by Quality Control for any sample items determined to be in non-compliance by risk-based auditing methods applied.
5. Prompt Payment and Release of Retainage
- A. A description of the Contractor's process to establish and communicate payment request requirements to Subcontractors (including when and where to submit payment requests and a list of documents that must be included to be considered a satisfactorily complete payment request) prior to beginning Work.
 - B. A description and example of the Contractor's tracking and documentation mechanism to monitor the life cycle of a payment request(s) that includes: (1) the Contractor's date of receipt of the payment request(s), (2) payment request date, (3) date Contractor deemed payment request approved for payment, (4) date(s) of Contractor's communication to Subcontractor or Supplier of payment request issues noted requiring resolution, (5) date

Contractor received payment from CDOT that includes Subcontractor or Supplier payment request, and (6) date payment was made to Subcontractor or Supplier. Request example.

- C. A description of the Contractor's process to monitor prompt payment reporting within B2GNow of all Subcontractor and Supplier payors. The process shall include an escalation matrix for tracking and communicating to lower tier Subcontractors and Suppliers that have not reported payments by the 15th day of the month for the audit period. Subcontractors and Supplier payors shall be given seven (7) days after the 15th day of the month to respond to the Contractor's communication and report payments accordingly. The Contractor shall issue an NCR for those Subcontractors and suppliers that remain in non-compliance with prompt payment reporting requirements as of the 24th day of the month for the audit period.
- D. A description of the Contractor's process to monitor, document, and ensure the timely release of retainage to Subcontractors for satisfactorily complete Work.
- E. CRQC Prompt Payment Audits
 - i. A description of the CRQC risk-based auditing approach to be used that identifies the population (and data source of that population), sample quantity (or percentage), sample method to select sample items, testing frequency and audit criteria to be applied to sample items, to ensure that all Subcontractors and Suppliers were promptly and accurately paid for each audit period in B2GNow.
 - ii. An NCR will be issued by CRQC for any sample items determined to be in non-compliance based on risk-based auditing methods applied.
- 6. Disadvantaged Business Enterprise (DBE) and Emerging Small Business (ESB)
 - A. A description of the Contractor's monitoring processes and example of the monitoring tool to be used to track compliance with completion of DBE CUFs within the required timeframes as per Book 2, Section 2.5.2.6.H. as compared to start of Work based on daily field activity monitoring and certified payroll reporting.
- 7. CRQC DBE Audits
 - A. A description of the CRQC risk-based auditing approach to be used that identifies the population (and data source of that population), sample quantity (or percentage), sample method to select sample items, testing frequency and audit criteria to be applied to sample items, to ensure that CUF's were completed for all Subcontractors and Suppliers timely and accurately.
 - B. An NCR will be issued by CRQC for any sample items determined to be in non-compliance based on risk-based auditing methods applied.
- 8. Trucking
 - A. A description of how the Contractor will monitor and document daily trucking operations (performing construction onsite) using a unique

- identifier for each truck to ensure the reporting of Contractor (or Subcontractor) relationships (all tiers) in B2GNow, compliance with DBRA reporting for certified payrolls, identification of Owner Operators (including submission of Owner Affidavit, with active drivers' license and vehicle registration(s)). Daily field reports for trucking operations shall be provided to CDOT no less than weekly.
- B. For workers of a material supply company (including a driver) who performs actual construction work on the site of work (such as warranty or repair work), a description of how that work will be identified for compliance with DBRA reporting.
 - C. For Contractors who perform both Subcontractor and Supplier activities, a description of how those activities will be monitored to ensure accurate and timely DBRA reporting, for those activities subject to DBRA reporting.
 - D. CRQC Prompt Payment Audits:
 - i. A description of the CRQC risk-based auditing approach to be used that identifies the population (and data source of that population), sample quantity (or percentage), sample method to select sample items, testing frequency and audit criteria to be applied to sample items, to ensure that DBRA reporting requirements were timely and accurately complied with for all trucking contractors, as required.
 - ii. An NCR will be issued by CRQC for any sample items determined to be in non-compliance based on risk-based auditing methods applied.
9. On-the-Job Training (OJT)
- A. Identification of the number and description of the skilled craft areas where trainees and apprentices will be used during the Project. The Contractor shall provide a description of the type of training that will be provided for each position.
 - B. A description of how the Contractor will monitor hours completed, training provided, and how the Contractor will alleviate barriers to employment, graduation, and successful permanent placement.
 - C. A description of the Contractor's approach to graduating participants. The Contractor shall identify a target number of graduates to maximize participant graduation rates on the Project.
 - D. A description of the Contractor's approach to utilize Subcontractors to achieve the OJT goal.
 - E. A quarterly schedule indicating the expected distribution of training hours for the duration of the Project to achieve the goal. The quarterly schedule shall indicate specific areas of Work that will be used for training hours.
 - F. A description of actions the Contractor will take should actual achievements be less than projected achievements per the Contractor's quarterly schedule of forecasted training hours per the OJT schedule.

2.12.2 Disadvantaged Business Enterprise (DBE) and Emerging Small Business (ESB) Requirements

1. Contract Participation Calculations

- A. The dollar value of each DBE and ESB goal shall be calculated as follows:
 - i. For purposes of this section 2.5.2, the Work to be performed shall be separated (i) into design-related activities (“Design Services”) (as further defined below) and (ii) construction-related activities (“Construction Services”).
 - ii. “Design Services” shall be comprised of all program management, construction management, feasibility study, preliminary engineering, design, engineering, surveying, mapping, and architectural related services; provided, however, that, (i) the following (or equivalent) Design Services performed by the Contractor or its Subcontractors such as construction surveying, erosion control consulting, health and safety plans, and public involvement may, at the Contractor’s reasonable discretion, be considered Construction Services and (ii) the Contractor may request that any other design-related activities be included in Design Services subject to the Department’s consent (excluding Process Control for Construction Services). The Contractor must identify and establish what activities will be considered Design Services or Construction Services and make any other requests for modifications to these categories in its SDBPP. The Department may request additional data to verify the value of the Design Services. For purposes of this section, the total value of Design Services and Construction Services shall equal the total contract value.
- B. DBE Design Goal. The dollar value of the DBE Design Goal shall be determined by multiplying the percentage of the goal set out in Book 1, Section 7.6 by the total value of the Design Services as calculated in this Book 2, Section 2.5.2. DBEs at any tier performing Work of Design Services as defined by this Book 2, Section 2.5.2, shall count toward achieving the DBE Design Goal. Participation in the performance of those Design Services by a firm that is certified as both a DBE and an ESB shall count towards the achievement of both goals.
- C. DBE Construction Goal. The dollar value of the DBE Construction Goal shall be determined by multiplying the percentage of the goal set out in Book 1, Section 7.6 by the total value of the Construction Services as calculated in this Book 2, Section 2.5.2. DBEs at any tier performing Work of Construction Services as defined by this Book 2, Section 2.5.2 shall count toward achieving the DBE Construction Goal. Participation in the performance of those Construction Services by a firm that is certified as both a DBE and an ESB shall count towards the achievement of both goals.
- D. ESB Goal. The dollar value of the ESB Goal shall be determined by multiplying the percentage of the goal set out in Book 1, Section 7.7 by the total contract value, including both Design Services and Construction Services, as calculated in this Book 2, Section 2.5.2. ESBs at any tier

performing Work, shall count towards the achievement of the ESB Goal. The participation in performance of Work by a firm that is certified as both a DBE and an ESB shall count towards the achievement of both goals.

2. Small and Disadvantaged Business Performance Plan (SDBPP)
 - A. The Contractor shall submit its SDBPP no later than 30 Calendar Days prior to issuance of NTP1. CDOT will not issue NTP1 until CDOT has Approved the SDBPP and Accepted the Contractor's DBE Design Goal Utilization Plan and ESB Goal Utilization Plan for Contract Year 1, along with corresponding Commitment Confirmations (CDOT Design Build Form 1415). For Contract Years thereafter, the SDBPP shall be updated with current achievements of the DBE and ESB Goal and submitted to CDOT no later than 30 Calendar Days prior to the start of each Contract Year (July 1) and concurrently with each DBE and ESB Utilization Plan for the upcoming Contract Year.
 - B. The SDBPP shall establish an Annual Participation Target for each DBE and ESB Goal by Contract Year sufficient to meet or exceed each DBE and ESB Goal and that is at least reflective of the Contractor's commitment included in the Proposal to achieve those DBE and ESB Goals. The Annual Participation Targets shall set the framework for achieving the DBE and ESB Goals across the Project by Contract Year and shall be further detailed by scope of work and anticipated dollar value. The Annual Participation Targets for each DBE and ESB Goal by Contract Year must reflect a reasonable approach to meeting the goals with ready, willing and able DBEs and ESBs to perform the applicable Work. The Contractor shall consult the respective directories at www.coloradodbe.org and www.coloradoesb.org to ensure availability of DBEs and ESBs to meet the goals.
 - C. Modification of an Annual Participation Target for each DBE or ESB Goal. The Contractor's request to modify an Annual Participation Target for a particular DBE or ESB Goal and Contract Year shall be made by submitting CDOT Design Build Form 1420, Participation Plan Modification Request, and shall be submitted no later than 30 Calendar Days prior to the start of the affected Contract Year and concurrently with the SDBPP update for the affected Contract Year. The Contractor's anticipation of a modification request to an Annual Participation Target should be discussed in the Quarterly Civil Rights Progress Report prior to the submission of the modification request. The modification request should include supporting information that shows the impact to the overall achievement of the DBE and ESB Goals by Contract Year and for all Contract Years, the reasoning for the modification request, and a description of good faith efforts put forth by the Contractor, as appropriate, for any requests to reduce annual participation targets.
 - D. The Contractor shall submit, a Final SDBPP for Approval by the Department no later than 30 Calendar Days prior to the Substantial Completion Date. The final report shall include all of the information as required in this Book 2, Section 2.5.2.3. for the annual submission of the SDBPP, as well as an additional section entitled Final Report to include a detailed description of the Contractor's DBE and ESB Goal achievements and implementation of the

strategies described in the SDBPP to achieve the DBE and ESB Goals. In the event that Contractor failed to achieve any of the DBE and ESB Goals, as of the Substantial Completion Date, the Contractor shall submit, for Approval by the Department, an updated report no later than 30 Calendar Days prior to the Final Acceptance Date and to include final payments and release of retainage to all Subcontractors and Suppliers.

- E. The Contractor's SDBPP shall include, at a minimum, the following:
- i. Table of Contents. A list of the sections of the SDBPP as organized, including the page number reference that each section begins on within the SDBPP.
 - ii. Definitions and Acronyms. A list of definitions of terms and acronyms that may be used throughout the SDBPP, including but not limited to: entity names, reports, documents, terms, systems, meetings, etc.
 - iii. Roles and Responsibilities.
 1. Identification of the Civil Rights Compliance Manager (CRCM) and the other Contractor team members responsible for achievement of the DBE and ESB Goals, including names of the team members and each team members' experience working with the DBE program on similar projects.
 2. The roles and responsibilities of the team members, including: (1) descriptions of their activities, (2) delegated authority, (3) integration with Key Personnel on the Project, and (4) identification of meetings they will be in attendance to.
 - iv. DBE Plan Policy Statement. A description of the DBE program requirements to be met and the Contractor's commitment to achieving those requirements and Contract Goals, including the name and signature of Contractor's authorized person to make that commitment statement.
 - v. Strategic Approach for Meeting the DBE and ESB Goals during the Project, including:
 1. DBE and ESB Goals. Identification and acknowledgement of the contract DBE and ESB goals.
 2. Calculation of Contract Values for each DBE and ESB Goal. Details of the Contractor's proposed calculation of design-related activities ("Design Services") and construction-related activities ("Construction Services"), in accordance with this Book 2, Section 2.5.2, and associated contract values for which the DBE Design Goal, DBE Construction Goal and ESB Goal percentages shall be multiplied by to determine the dollar value of the goals, respectively, including individual scopes of Work and associated dollar values that comprise the proposed contract values for Design Services and Construction Services.
 3. Schedule for DBE and ESB Participation by Goal and Contract Year. A schedule of the Contractor's Annual Participation Target for each

DBE and ESB Goal by Contract Year and further detailed by scope of work and associated dollar value across Contract Years that is sufficient to meet or exceed the DBE and ESB Goals. For annual updates of the SDBPP, the schedule should be expanded to include a comparison of actual DBE and ESB Goal achievements by Contract Year to Annual Participation Targets, similar to the format described in this Book 2, Section 2.5.3 for the Quarterly Civil Rights Progress Report. Actual DBE and ESB participation amounts should be based on data available at the time of report submission.

F. Reporting and Compliance.

- i. A description of how participation will be monitored and tracked on a real-time basis, including the methods and reports that will be used to collect and confirm data to validate eligible participation.
- ii. Describe the internal procedures through which the Contractor will ensure the DBE and ESB Goals are met. This will include distribution of the goal responsibilities to Subcontractors, collecting data on Subcontractor participation and performance, ensuring only valid performance is counted, etc.
- iii. Describe the processes to be used by the Contractor to monitor CUF, including conducting CUF's in accordance with Book 2, Section 2.5.2.6.H.
- iv. A description of Contractor processes and checklists to be used, at such time as each DBE or ESB completes their Work, to ensure all required and final documentation is complete and documented in project record for the required retention period, including, subcontracts, change orders, commitment confirmations, payments and CUFs.

G. Procurement Process. The Contractors strategic approach to integrating achievement of DBE and ESB participation into the overall approach to subcontracting, including discussion of how the Contractor will identify and develop opportunities, communicate opportunities, create a transparent bidding process, and unbundling of work to establish opportunities for small businesses, or take other actions to secure DBE and ESB participation.

H. Bonding and Insurance. A description of any measures to be implemented by the Contractor or its team members to assist DBEs and ESBs with bonding and insurance while maintaining compliance with the applicable provisions of this Agreement and the requirements of Law. This may include any of the following: adding DBEs and ESBs to insurance plans; waiving bond requirements; phased bonding; and limitations on bond and insurance requirements imposed by Subcontractors.

I. Outreach and Training Efforts. A description of the Contractor's planned DBE and ESB outreach, training, and development, including at a minimum a description of how Contractor will:

- i. conduct a mandatory outreach event directed at DBE and ESB firms after the agreement Date, prior to the issuance of NTP2 and at least quarterly thereafter;
 - ii. collaborate with and utilize CDOT's established Connect2DOT Program (www.connect2dot.org);
 - iii. on a monthly basis, provide a list of upcoming subcontracting opportunities and events for distribution via the Connect2DOT newsletter;
 - iv. conduct any other measures of outreach, training and development and the resources dedicated to such measures which may include small business orientation meetings, advertisement of project opportunities, email notifications of upcoming and specific project opportunities, website postings, attendance at small business organization events, one on one meetings with DBEs and ESBs, vendor database, identification of new DBE and ESB eligible firms; and
 - v. conduct any other activities or efforts not included in the above related to achievement of the DBE and ESB Goals.
- J. Good Faith Efforts. A description of the Good Faith Effort (GFE) activities the Contractor will perform over the course of the Contract to achieve the DBE and ESB Goals, including, the type of activity, a detailed description of the activity and persons conducting the activity, the frequency of the activity, the audience that will be targeted, and how GFE will be documented. GFE may include pre-bid meetings, unbundling of work, maintaining a bidders list, technical assistance and support, negotiating in good faith, alignment of scopes with available DBE and ESB participation, and debriefings with non-awarded firms.
- K. Prompt Payment. Methods for ensuring prompt payment to all Subcontractors (for certainty, not only DBE or ESB Subcontractors), including a description as to whether and how the Contractor will implement any additional prompt payment requirements, beyond those mandated in Book 2, Section 2.5.5, as well as the process by which the Contractor will track and monitor the following: invoicing by Subcontractors; prompt payment to Subcontractors; and release of retainage. This portion of the plan shall include any efforts that the Contractor and Subcontractors that are not themselves DBEs or ESBs will make to assist with mobilization efforts and early purchase of materials, or any other payment measures that will aid the viability of DBE and ESB participation in the Work.
- L. Mentor-Protégé program. A plan for encouraging mentor-protégé relationships between contractors on the Project, including an approach for encouraging firms to apply for CDOT's ESB Mentor-Protégé Program (<http://crbr.org/mp>).
- M. Final Report. This section shall be included in the final submission of the SBDPP as further described in this Book 2, Section 2.5.2.2.D.

N. DBE and ESB Utilization Plans

O. DBE Design Goal Utilization Plan

- i. The Contractor shall submit its DBE Design Goal commitments in a Utilization Plan for Acceptance in B2GNow for each Contract Year. For Contract Year 1, the DBE Design Goal Utilization Plan shall be submitted concurrently with the SDBPP and no later than 30 Calendar Days prior to the issuance of NTP1. For Contract Years thereafter, the DBE Design Goal Utilization Plan shall be submitted no later than 30 Calendar Days prior to the start of each Contract Year (July 1) and concurrently with the SDBPP. Each DBE Design Goal Utilization Plan shall be sufficient to meet or exceed the annual participation target established for the Goal and Contract Year by the Contractor in its SDBPP, as Approved by CDOT.
- ii. CDOT will not issue NTP1 until CDOT has Accepted DBE Commitments from the Contractor sufficient to achieve the DBE Design Goal for Contract Year 1 as Approved by CDOT in the SDBPP for Contract Year 1, or the Contractor has demonstrated sufficient good faith efforts to meet the DBE Design Goal for Contract Year 1.
- iii. In order to complete the Contractor's submission of the DBE Design Goal Utilization Plan for each Contract Year, the Contractor shall submit Commitment Confirmations (CDOT Design Build Form 1415) for Acceptance in B2GNow for each DBE that the Contractor intends to make a commitment to use and as reported in the DBE Design Goal Utilization Plan for that Contract Year. Each CDOT Design Build Form 1415 must at least equal the Contractor's commitment in the DBE Design Goal Utilization Plan for that DBE. The Contractor shall complete Section 1 of the CDOT Design Build Form 1415 and the DBE shall complete Section 2 of the CDOT Design Build Form 1415.

P. DBE Construction Goal Utilization Plan

- i. The Contractor shall submit its DBE Construction Goal commitments in a Utilization Plan for Acceptance in B2GNow for each Contract Year. For Contract Year 1, the DBE Construction Goal Utilization Plan shall be submitted no later than 30 Calendar Days prior to issuance of NTP2. For Contract Years thereafter, the DBE Construction Goal Utilization Plan shall be submitted no later than 30 Calendar Days prior to the start of each Contract Year (July 1) and concurrently with the SDBPP. Each DBE Construction Goal Utilization Plan shall be sufficient to meet or exceed the annual participation target established for the Goal and Contract Year by the Contractor in its SDBPP, as Approved by CDOT.
- ii. CDOT will not issue NTP2 until CDOT has Accepted DBE Commitments from the Contractor sufficient to achieve the DBE Construction Goal for Contract Year 1 as Approved by CDOT in the SDBPP for Contract Year 1, or the Contractor has demonstrated sufficient good faith efforts to meet the DBE Construction Goal for Contract Year 1.
- iii. In order to complete the Contractor's submission of the DBE Construction Goal Utilization Plan for each Contract Year, the

Contractor shall submit Commitment Confirmations (CDOT Design Build Form 1415) for Acceptance in B2GNow for each DBE that the Contractor intends to make a commitment to use and as reported in the DBE Construction Goal Utilization Plan for that Contract Year. Each CDOT Design Build Form 1415 must at least equal the Contractor's commitment in the DBE Construction Goal Utilization Plan for that DBE. The Contractor shall complete Section 1 of the CDOT Design Build Form 1415 and the DBE shall complete Section 2 of the CDOT Design Build Form 1415.

Q. ESB Goal Utilization Plan

- i. The Contractor shall submit its ESB Goal commitments in a Utilization Plan for Acceptance in B2GNow for each Contract Year. For Contract Year 1, the ESB Goal Utilization Plan shall be submitted concurrently with the SDBPP and no later than 30 Calendar Days prior to the issuance of NTP1. For Contract Years thereafter, the ESB Goal Utilization Plan shall be submitted no later than 30 Calendar Days prior to the start of each Contract Year (July 1) and concurrently with the SDBPP. Each ESB Construction Goal Utilization Plan shall be sufficient to meet or exceed the annual participation target established for the Goal and Contract Year by the Contractor in its SDBPP, as Approved by CDOT.
- ii. CDOT will not issue NTP1 until CDOT has Accepted ESB Commitments from the Contractor sufficient to achieve the ESB Goal for Contract Year 1 as Approved by CDOT in the SDBPP for Contract Year 1, or the Contractor has demonstrated sufficient good faith efforts to meet the ESB Goal for Contract Year 1.
- iii. In order to complete the Contractor's submission of the ESB Goal Utilization Plan for each Contract Year, the Contractor shall submit Commitment Confirmations (CDOT Design Build Form 1415) for Acceptance in B2GNow for each ESB that the Contractor intends to make a commitment to use and as reported in the ESB Goal Utilization Plan for that Contract Year. Each CDOT Design Build Form 1415 must at least equal the Contractor's commitment in the ESB Goal Utilization Plan for that ESB. The Contractor shall complete Section 1 of the CDOT Design Build Form 1415 and the ESB shall complete Section 2 of the CDOT Design Build Form 1415.

R. DBE and ESB Utilization Plan Modifications by Contract Year

- i. The Contractor shall utilize the specific DBE or ESB listed on the Accepted Utilization Plans by Contract Year to perform the Work and supply the Materials for which it is listed unless the Contractor obtains CDOT's written consent to terminate, reduce, or modify the commitment. The Contractor shall use CDOT Design Build Form 1420, Participation Plan Modification Request to communicate all requests for termination, reduction, substitution, and waivers to CDOT. One CDOT Design Build Form 1420 may include multiple requests and must be submitted at the time of the occurrence or, if that is not possible, within a reasonable time of the occurrence requiring termination,

reduction, substitution or waiver. Failure to carry out the requirements of this section is a material breach of the Contract and may result in the termination of the Contract or other remedies established by CDOT.

- ii. Terminations and Reductions. A termination occurs when a Contractor no longer intends to use a DBE or ESB for fulfillment of a commitment. A reduction occurs when the scope of the commitment changes and constitutes a partial termination. Terminations and reductions include, but are not limited to, instances in which a Contractor seeks to perform the Work originally designated for a DBE or ESB Subcontractor with its own forces, those of an affiliate, a non- DBE or ESB firm or with another DBE or ESB firm.
 1. CDOT cannot accept a termination or reduction unless the Contractor has good cause to terminate or reduce the commitment. Good cause includes: the DBE or ESB fails or refuses to execute a written contract; the DBE or ESB fails or refuses to perform the Work of its Subcontract consistent with normal industry standards, provided that such failure is not the result of bad faith or discriminatory actions of the Contractor or one of its Subcontractors; the DBE or ESB fails to meet reasonable, nondiscriminatory bond requirements; the DBE or ESB becomes bankrupt, insolvent, or exhibits credit unworthiness; the DBE or ESB is ineligible to work because of suspension or debarment proceedings or other state law; the DBE or ESB is not a responsible contractor; the DBE or ESB voluntarily withdraws from the Project and provides written notice to CDOT, the DBE or ESB is ineligible to receive DBE or ESB credit for the Work required; the DBE or ESB owner dies or becomes disabled and is unable to complete the Work; the DBE or ESB ceases business operations or otherwise dissolves; or other documented good cause that compels termination. Good cause does not exist if the Contractor seeks to terminate a DBE or ESB it relied upon to obtain the Contract so that the Contractor can self-perform the Work for which the DBE or ESB was engaged or so that the Contractor can substitute another DBE or ESB or non-DBE or ESB contractor after Contract award.
- iii. The Contractor shall provide the DBE or ESB notice of the Contractor's intent to terminate or reduce the commitment and the reason for such termination or reduction, with a copy to CDOT. In the notice of intent, the Contractor shall provide the DBE or ESB at least 5 Calendar Days to respond to the notice and inform CDOT and the Contractor of the reasons, if any, why it objects to the proposed termination or reduction and any reasons that it shall not be approved. The Contractor is not required to provide the DBE or ESB 5 Days' written notice in cases where the DBE or ESB in question has provided written notice that it is withdrawing from the Subcontract or purchase order, but is still required to notify CDOT. The notice period may be reduced by CDOT if required by public necessity.

- iv. Following the notice period, the Contractor shall submit a CDOT Design Build Form 1420 for Acceptance. If the Contractor does not obtain Acceptance, the Contractor shall make additional good faith efforts with the DBE or ESB.
 - S. Substitutions: When a commitment is terminated or reduced (including when a DBE or ESB withdraws), the Contractor shall make good faith efforts to find another DBE or ESB to substitute for the original DBE or ESB. These good faith efforts shall be directed at finding another DBE or ESB to perform at least the same amount, but not necessarily the same type of Work under the Contract as the participation that was terminated or reduced up to the Contract goal. To make a substitution, the Contractor shall request the addition of a new DBE or ESB using CDOT Design Build Form 1420 and provide a Commitment Confirmation (CDOT Design Build Form 1415) with the request. If the Contractor has not obtained substitute participation, the Contractor shall submit evidence of good faith efforts to substitute. The Contractor shall have seven (7) Days to submit such information prior to work being performed.
 - T. Increases in Commitments: If the Contractor seeks to increase the Work to be performed under a DBE or ESB commitment, it shall submit a revised CDOT Design Build Form 1415 with the request for the modification.
 - U. Change Orders. The Contractor shall be required to meet the goals based on the total earnings amount of the applicable Work. Therefore, if a change increases or adds scope to the Design/Build Contract, the Contractor shall ensure that it has obtained sufficient DBE or ESB participation, as appropriate for the subject Goal, to meet the applicable goal on the increased amount. If the Contractor is unable to meet the goal it will be required to demonstrate a good faith effort to do so. If the Contractor determines that additional DBE or ESB participation cannot be obtained, the Contractor shall request a waiver of the participation using CDOT Design Build Form 1420, within 14 Calendar Days prior to the execution of the change order. The Contractor shall include its justification for not obtaining additional participation and, at its discretion, CDOT may require additional information regarding the efforts of the Contractor.
3. Commitments. A commitment is a portion of the Contract, identified by dollar amount, designated by the Contractor for participation by a particular DBE or ESB. A commitment may be made to a firm at any tier. A commitment is not a subcontract; however, the Contractor must have received a quote from the DBE in order to claim a commitment to the DBE.
4. Good Faith Efforts
- A. The Contractor is required to make good faith efforts to achieve the DBE and ESB Goals. Good faith efforts mean all necessary and reasonable steps to achieve the relevant goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to achieve the goal, even if not fully successful. Good faith efforts of the Contractor should include, but are not limited to, reaching out to DBEs or ESBs that could perform subcontracting opportunities on the Project, unbundling

Work the prime would self-perform to create opportunities for DBEs or ESBs, negotiating in good faith with DBEs and ESBs and not refusing to utilize a DBE or ESB for price alone, and other efforts to obtain DBE or ESB participation on the Contract. For additional guidance on how the Department will determine whether or not it considers that the Contractor has made good faith efforts, see 49 CFR Part 26.

- B. The Contractor's good faith efforts toward achieving the DBE and ESB Goals shall be evaluated annually at a minimum, with a final determination by the Department as to whether the Contractor has complied with its obligation to make good faith efforts to be made at Substantial Completion. The Department may issue a written non-compliance warning as it deems necessary if it believes the Contractor is not making good faith efforts at any time during the Project.
- C. If the Contractor cannot meet the DBE or ESB Contract goals by Project Completion, it may seek a waiver to amend the goals by submitting CDOT Design Build Form 1416 and other supporting documentation. The burden is on the Contractor to demonstrate it utilized good faith efforts in its attempts to achieve the goals.

5. Counting Eligible DBE Participation

In order for Work performed by a DBE to count as DBE credit toward any of the DBE Goals, the following criteria must be met:

- A. DBE Certified to Perform the Work.
 - i. The DBE must be certified by the Colorado Unified Certification Program (UCP) in the Work to be performed. DBEs are certified in particular areas of Work which are designated by a six digit North American Industry Classifications System code plus a descriptor. Each DBE's work codes can be found in its profile on the Colorado UCP DBE Directory at www.coloradodbe.org.
 - ii. The DBE must be certified to perform the Work, and not under suspension, upon submission of the commitment and upon execution of the DBE's Subcontract. When a commitment has been made, but upon review of the sublet request the DBE is no longer certified in the work code which covers the Work to be performed, the Contractor may not use the DBE's participation toward the Contract goal. The Contractor shall terminate the DBE commitment and seek substitute DBE participation. However, a DBE's Work will continue to count as eligible participation if the DBE was certified upon approval of the sublet request but the certification status changes during the performance of the Work. Suppliers must be certified upon execution of the purchase order.
- B. Work Included in Commitment
 - i. The Work performed by the DBE must be reasonably construed by CDOT to be included in the Work area and work code identified by the Contractor in an Accepted commitment.

- ii. If the Contractor intends to use a DBE for Work that was not listed in the original commitment, the Contractor shall submit a request for modification. Unapproved Work will not count toward the Contract goals. A DBE commitment cannot be modified to include Work for which the DBE was not certified at the time of the Acceptance of the original commitment unless such Work is in addition to the original commitment.
- C. Work Performed by DBE
- i. The Work must be actually performed by the DBE with its own forces. For purposes of this specification, Work performed by the DBE with its own forces includes work by temporary employees, provided such employees are under the control of the DBE, the cost of supplies and Materials obtained by the DBE for its Work on the Contract, provided that such supplies are not purchased or leased from the Contractor or a Subcontractor that is subletting to the DBE, the cost any equipment leased by the DBE, provided that such equipment is not leased from the Contractor or a Subcontractor that is subletting to the DBE.
 - ii. When a DBE subcontracts part of the Work, the value of the subcontracted Work shall be counted toward the goal only if the lower-tiered Subcontractor is a DBE and meets the criteria of this standard special provision. Performance by nonDBE Subcontractors, including non-DBE trucking firms and owner-operators, shall be deducted from the DBE's participation.
- D. Payment Received for Work. The DBE must receive payment, including the release of its retainage, in order for the Work to count toward the goal.
- E. Special Calculations for Suppliers. When a DBE supplies goods or materials for a project, the DBE may be classified as a manufacturer, dealer or broker. The DBE's status as a manufacturer, dealer or broker is determined on a contract-by-contract basis by CDOT, based upon the actual Work performed, in accordance with 49 CFR Part 26.531. When a DBE is deemed to be acting as a manufacturer, 100% of the commitment will count as eligible participation. When a DBE is deemed to be acting as a regular dealer (i.e., non-manufacturer supplier), only 60% of the commitment will count as eligible participation. When a DBE is deemed to be acting as a broker, only the reasonable brokerage fee will count as eligible participation.
- F. Reasonable Service Fees. For a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, the fees and commissions charged by the DBE shall count toward the Contract goal, provided CDOT determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. In the case of DBE temporary employment placement agencies, only the placement fee for a temporary employee that will be specifically and exclusively used for Work on the Contract shall count as

DBE credit; the hourly fee does not count toward the Contract goal unless the firm is also certified in the Work to be performed.

- G. Joint Venture Calculation. When a DBE is a participant in a joint venture, the DBE must apply to CDOT to determine how much of the Work performed by the joint venture will count toward the Contract goal. The DBE shall complete CDOT Form 893, Information for Determining DBE Participation when a Joint Venture Includes a DBE. To ensure sufficient time for CDOT review and Acceptance, CDOT Form 893 shall be submitted to CDOT no less than 10 Calendar Days before the DBE will begin Work.
- H. Commercially Useful Function.
- i. All DBEs must perform a commercially useful function as defined by 49 CFR § 26.55.
 - ii. If CDOT determines that a DBE has not performed a commercially useful function (CUF) on the Project, no participation by such DBE shall count toward the Contract goal. CUF means responsibility for the execution of the Work and carrying out such responsibilities by actually performing, managing and supervising the Work. CDOT will monitor performance during the Contract to ensure each DBE is performing a CUF. If CDOT determines that a DBE is not performing a CUF, no Work performed by such DBE shall be counted as eligible participation. The DBE, Contractor, and any other involved Third Parties may also be subject to additional enforcement actions.
 - iii. When determining whether a DBE is performing a CUF, CDOT will consider the amount of Work subcontracted, industry practices, the amount the firm is to be paid compared to the Work performed and eligible participation claimed, and any other relevant factors. With respect to Material and supplies used on the Contract, in order to perform a CUF the DBE must be responsible for negotiating price, determining quality and quantity, ordering the Material, installing the Material, if applicable, and paying for the Material itself.
 - iv. With respect to trucking, in order to perform a CUF, the DBE trucking firm must own and operate at least one fully licensed, insured and operational truck used on the Contract. Additionally, the DBE trucking firm must be responsible for the management and supervision of the entire trucking operation for which it is responsible on the Contract. CDOT only permits a DBE trucking firm to count the Work performed with trucks it owns, insures and operates using drivers it employs or with trucks it leases from another DBE firm, including owner operators who are certified DBEs. The DBE who leases trucks from another DBE receives credit for the transportation services the lessee DBE provides on the contract.
 - v. A DBE does not perform a CUF when its role is limited to that of an extra participant in a transaction, contract or project through which funds are passed in order to obtain the appearance of DBE participation. CDOT will evaluate similar transactions involving non-DBEs in order to

determine whether a DBE is an extra participant. If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its Contract with its own work force, or the DBE subcontracts a greater portion of the Work than would be expected on the basis of normal industry practice for the type of Work involved, CDOT will presume that the DBE is not performing a CUF. The DBE may present evidence to rebut this presumption.

- I. CDOT Design Build Form 1432, Commercially Useful Function Questionnaire.
 - i. The Contractor shall monitor all DBE firms whose participation counts toward the goal to ensure those firms are performing a CUF and complete a CDOT Design Build Form 1432 for each DBE (for each subcontract) to be submitted to CDOT. For DBEs performing construction activities on the site of Work, a Commercially Useful Function (CUF) Questionnaire (CDOT Design Build Form 1432) shall be completed by the Contractor within 10 Calendar Days of the DBE commencing Work. For DBEs performing services off the site of Work (including but not limited to professional services, suppliers, manufacturers, brokers, and other services), CDOT Design Build Form 1432 shall be completed by the Contractor no later than within 35-50% of the DBEs completion of Work. All CUF Questionnaires (CDOT Design Build Form 1432) shall be submitted to CDOT no later than 14 Calendar Days after completion of CDOT Design Build Form 1432 by both the Contractor and the DBE.
 - ii. Based on CDOT's review of CDOT Design Build Form 1432 and any requested supporting documentation, as deemed necessary, CDOT shall determine whether a DBE firm has performed a CUF on the Project and document its determination on CDOT Design Build Form 1432. If CDOT determines that a DBE firm is not performing a CUF pursuant to 49 CFR § 26.55, no work performed by such firm shall count toward achieving the DBE Goal.
- J. Payment Reduction.
 - i. The Contractor's retainage amount will not be released until CDOT has determined whether the Contractor will be subject to a payment reduction. The Contractor will be subject to a payment reduction for any commitment termination or reduction, which was not Approved, for the same dollar amount in the commitment that was not honored. Additionally, the Contractor will be subject to a payment reduction for the portion of the DBE or ESB Contract Goal that was not met and not waived. The Contractor will not be subject to duplicate reduction for the same offense.

6. Counting Eligible ESB Participation

The following criteria must be met for Work performed by an ESB to count as credit toward the ESB Contract Goal:

- A. The ESB firm must perform a bona-fide service in furtherance of the Work pursuant to the Contract.

- B. The ESB's Work must be actually performed by the ESB with its own forces under its direct control.
 - C. The ESB must self-perform at least 30% of its Subcontract.
 - D. When the ESB subcontracts part of its Work, the value of the subcontracted Work shall be counted toward the goal only if the Subcontractor is a certified ESB. Performance by non-ESB Subcontractors shall be deducted from the ESB's participation.
 - E. The ESB must receive payment, including the release of its retainage, in order for the Work to count.
 - F. When an ESB is acting as a broker, only the reasonable brokerage fee will count as eligible participation.
 - G. Reasonable Service Fees: For an ESB firm providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, the fees and commissions charged by the ESB shall count toward the ESB Contract goal, provided CDOT determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. In the case of ESB temporary employment placement agencies, only the placement fee for a temporary employee that will be specifically and exclusively used for Work on the Contract shall count as ESB credit; the hourly fee does not count toward the ESB Contract goal unless the firm is also certified in the Work to be performed.
 - H. Joint Venture Calculation: When an ESB is a participant in a joint venture, the ESB must apply to CDOT to determine how much of the Work performed by the joint venture will count toward the ESB Contract goal. The ESB shall complete CDOT Form 893, Information for Determining ESB Participation when a Joint Venture includes an ESB. To ensure sufficient time for review, CDOT Form 893 shall be submitted to CDOT no less than 10 Calendar Days before the ESB will begin work.
 - I. An ESB's Work will not count toward the goal when its role is limited to that of an extra participant in a transaction, contract or project through which funds are passed in order to obtain the appearance of ESB participation.
7. Joint Checks. The use of joint checks to DBEs and ESBs must be Approved by the Department before used to make a payment. The Contractor shall request Approval for the use of a joint check in a written letter signed by the DBE or ESB and the Contractor, stating the reason for the joint checks and the approximate number of checks that will be needed.
8. Payment Reduction. The Contractor's retainage amount will not be released until CDOT has determined whether the Contractor will be subject to a payment reduction. The Contractor will be subject to a payment reduction for any commitment termination or reduction, which was not Approved, for the same dollar amount in the commitment that was not honored. Additionally, the Contractor will be subject to a payment reduction for the portion of the DBE or

ESB Contract Goal that was not met and not waived. The Contractor will not be subject to duplicate reduction for the same offense.

9. Other Enforcement

- A. As it determines necessary, CDOT may conduct reviews or investigations of participants. All participants, including, but not limited to, DBE or ESB firms and applicants for DBE and ESB certification, complainants, and contractors using DBE or ESB firms to meet DBE or ESB Contract goals, are required to cooperate fully and promptly with compliance reviews, certification reviews, investigations, and other requests for information.
- B. Participants shall not intimidate, threaten, coerce, or discriminate against any individual or firm for the purpose of interfering with any right or privilege secured by the DBE or ESB program or because the individual or firm has made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under the DBE or ESB program. Failure to comply with this paragraph shall be a ground for appropriate action against the party involved (e.g., with respect to recipients, a finding of noncompliance; with respect to DBE or ESB firms, denial of certification or removal of eligibility and/or suspension and debarment; with respect to a complainant or appellant, dismissal of the complaint or appeal; with respect to a contractor which uses DBE or ESB firms to meet goals, findings of non-responsibility for future contracts and/or suspension and debarment)
- C. If CDOT determines that a Contractor or Subcontractor was a knowing and willing participant in any intended or actual subcontracting arrangement contrived to artificially inflate DBE or ESB participation or any other business arrangement determined by CDOT to be unallowable, or if the Contractor engages in repeated violations, falsification or misrepresentation, CDOT may refuse to count any fraudulent or misrepresented DBE or ESB participation; withhold progress payments to the Contractor commensurate with the violation; suspend or reduce the Contractor's prequalification status; or seek any other available contractual remedy.

10. Reporting Requirements

- A. Disclosure of information: In order for the Department to monitor and enforce the requirements of this Book 2, Section 2.5.2, the Contractor shall accurately track and disclose to CDOT the cumulative value of the Design Services and Construction Services and the value of all individual Subcontracts (and, for certainty, this requirement shall apply to all Subcontracts and not just DBE or ESB Subcontracts). The Department may verify this information by reviewing contracts and payment documents which shall be provided upon request.
- B. SDBPP. The Contractor shall submit a SDBPP prior to issuance of NTP1 and annually thereafter as described in Book 2, Section 2.5.2.2.
- C. Quarterly Civil Rights Progress Report. The Contractor shall submit a Quarterly Civil Rights Progress Report as further described in detail in Book

2, Section 2.125.3, that includes an assessment of the Contractor's achievement of the DBE and ESB Goals for the reporting quarter, Contract Year to Date and All Contract Years.

- D. DBE and ESB Goal Utilization Plans by Contract Year. The Contractor shall submit DBE and ESB Goal Utilization Plans by Contract Year as described in Book 2, Section 2.5.2.3.
- E. Department Annual DBE and ESB Assessment. Within 30 Calendar Days after CDOT Approval of each annual update to the SDBPP, CDOT shall provide a written determination on the Contractor's progress toward achieving the DBE and ESB Goals. Progress will be based on (1) the Contractor's demonstrated good faith efforts, (2) compliance with its SDBPP by achieving the schedules, annual targets, and outreach described in the plan, and (3) the Contractor's efforts put forth and as described in the Quarterly Civil Rights Progress Reports towards the DBE and ESB Goals throughout the Contract Year.
- F. Final SDBPP. The Contractor shall submit, for Approval by the Department, a final SDBPP on DBE and ESB Goal achievement during the Project no later than 30 Calendar Days prior to Substantial Completion. The final report shall include all of the information as required in Book 2, Section 2.5.2.2., as well as an additional Final Report section to include a final summary report of total DBE and ESB participation toward achieving each of the DBE and ESB Goals. The report shall include an updated Schedule with the most current participation achievement information available as of the date of submission and a detailed description of the Contractor's achievements and implementation of the strategies described in the SDBPP for the Contractor's achievement of the DBE and ESB Goals. In the event that Contractor failed to achieve any of the DBE and ESB Goals, as of the Substantial Completion Date, the Contractor shall submit, for Approval by the Department, an updated report, as needed, no later than 30 Calendar Days prior to Final Acceptance and to include final payments and release of retainage to all Subcontractors and Suppliers.
- G. Department Final DBE and ESB Assessment. Within 30 Calendar Days following Approval of the Contractor's Final SDBPP, the Department will evaluate the data to determine, and issue a written report setting out its determination of, whether the Contractor has (i) achieved each of the DBE and ESB Goals as of the Substantial Completion Date (or, as applicable, as of the Final Acceptance Date) and (ii) in relation to any such goal that has not been met, demonstrated that it has made good efforts to achieve such goal.

2.12.3 Quarterly Civil Rights Plan Progress Report

The Contractor shall submit to CDOT for Acceptance a quarterly progress report no later than 30 Calendar Days following the quarterly reporting period as defined by a Contract Year, addressing the following areas:

1. General

- A. List of Subcontractors and Suppliers (all tiers) that commenced Work during the reporting quarter, including: (1) tiering, (2) type of work to be performed, (3) total contracted amount, (4) DBE and/or ESB status, (5) status of CDOT Design Build Form 1415 submission, (6) Commitment Amount, and (7) Eligible Commitment Amount.
 - B. List of Subcontractors and Suppliers (all tiers) that have completed their portion of the Work during the reporting quarter, including total amount paid to the Subcontractor and whether the Subcontractor is still owed retainage.
2. Achievement of DBE and ESB Goals
- A. A schedule that demonstrates the Contractor's achievement of the Annual Participation Targets by Contract Year, as approved by CDOT in the Contractor's SDBPP, for the current Contract Year and reporting quarter towards each DBE and ESB Goal. The schedule should be organized based on the Contractor's planned Work Area per the SDBPP for all Contract Years and quarters (request example), and to include at a minimum:
 - i. DBE or ESB Planned Work Area per SDBPP.
 - ii. DBE or ESB Name, as included in the Contractor's Utilization Plan for the specified Goal and Contract Year, and for which a Commitment Confirmation (CDOT Design Build Form 1415) has been Accepted by CDOT. Anticipation DBE or ESB Participation applicable to future Contract Years that has not been reported in a Utilization Plan or Commitment Confirmation, may be referred to as such, but must be accounted for in the schedule to demonstrate how the relationship of the current reporting period in achievements with the projected annual participation targets of the Contractor's approved SDBPP.
 - iii. Scope of Work for each DBE or ESB listed.
 - iv. The total dollar value of each DBE or ESB Commitment distributed by Contract Year. For anticipated DBE or ESB participation applicable to future Contract Years that has not been reported in a Utilization Plan or Commitment Confirmation, the dollar value of such estimated Work by Contract Year, such that the total commitments submitted to CDOT to date and anticipated commitments total the annual participation target by Contract Year and All Contract Years as Approved by CDOT in the Contractors SDBPP.
 - v. Actual payments made to each DBE or ESB for the reporting quarter and total paid to date, including total paid to all DBEs or ESBs for the reporting quarter and percentage of the annual participation target achieved for that quarter and quarter to date. Actual DBE and ESB participation amounts should be based on data available at the time of report submission.
 - vi. Modifications to Annual Participation Targets, as Approved by CDOT, should be separately identified and reflected in the totals for accuracy

along with any updates to actual participation amounts that may not have been available at the time of report submission.

- B. A narrative discussing the Contractor's progress toward meeting each DBE and ESB Goal for the reporting quarter and current Contract Year, and any impacts the current quarter's achievements may have on future quarters and overall successful achievement of the annual Goal participation target for the Contract Year and any future Contract Years.
 - C. A progress update on the Contractor's efforts toward making new DBE or ESB commitments for future Contract Years.
 - D. A description of the anticipated Work to be done by DBEs and ESBs in the upcoming quarter and a list of corresponding DBEs and ESBs anticipated to complete that specific Work effort.
 - E. A description of any new DBE or ESB subcontracting opportunities expected during the upcoming quarter.
 - F. A description of compliance issues, such as payment disputes, non-performance of DBEs and ESBs, significant scope of work changes, and commercially useful function concerns in the reporting quarter.
 - G. Good faith efforts conducted by the Contractor in the reporting Quarter towards achieving the DBE or ESB Goals as per the SDBPP.
 - H. A description of any concerns the Contractor may have in meeting the current Contract Year goal for each DBE and ESB Goal or future Contract Years and the potential impact on the annual participation targets for those Contract Years as approved in the SDBPP.
 - I. A list and description of any CDOT Design Build Form 1420's submitted in the reporting quarter, or anticipated to be submitted, and the impacts on achievement of future Contract Year goals and anticipation of requesting a modification to the annual participation targets for any upcoming Contract Years.
 - J. A bidders list of all firms that submitted a quote to participate on the Project. The list shall include a description of the Work for which the bid was submitted, whether the firm is a DBE or ESB, and whether the firm was selected for the Work (including a reasoning non-selections).
3. OJT Goal
- A. An updated quarterly schedule indicating all anticipated Work to be performed in each quarter for the duration of the Project and the expected distribution of training hours separated by areas of Work for the duration of the Project.
 - B. A narrative discussing the Contractor's progress toward meeting the OJT goal, including a summary of OJT hours achieved to date.
 - C. If the Contractor has fallen behind its previously submitted quarterly schedule, the Contractor shall provide a description of the actions it is taking to facilitate increased OJT participation to make up for lost progress.

2.12.4 Submission of Certified Payroll

1. To comply with the DBRA requirements contained in Book 1, Section 7.4, weekly certified payrolls shall be submitted electronically utilizing LCPtracker at the following link: <https://prod.lcptracker.net/WebForms/login.aspx>
2. Each construction subcontractor shall submit their payrolls directly into LCPtracker for approval by the Contractor.
3. The Contractor shall submit and approve their own payrolls in LCPtracker.
4. For all Work covered by DBRA, the Contractor and all Subcontractors shall pay workers unconditionally and not less often than once per week. Workers shall be paid within 7 Days of the applicable contractor's regular weekly pay period end date.
5. The Contractor and all Subcontractors shall submit certified payrolls within seven (7) Days of the applicable contractor's regular weekly payment date. Certified payrolls not submitted within the required seven (7) Day timeframe are considered to be late and in noncompliance. The Contractor shall serve in the "primer approver" role within the LCPtracker system. The Contractor shall have seven (7) Days to either "approve" or "reject" a submitted payroll. If a payroll is rejected for noncompliance, the applicable contractor shall be given seven (7) Days to correct and resubmit the previously rejected certified payroll. The Contractor shall then review the resubmitted certified payroll within seven (7) Days, and either "approve" or "reject" the resubmitted certified payroll. If the payroll is found to be in noncompliance upon resubmission or no response to the noncompliance notice is received from the applicable contractor, an NCR shall be issued by the Contractor.
6. The Contractor shall utilize Administrative Notices within LCPTracker as the communication method to reject certified payrolls and communicate the reasoning for such rejection. The Administrative Notice shall include: (1) subject week ending date, (2) initials or name of the person issuing the Administrative Notice, (3) a description of the noncompliance issue, (4) actions to be taken to correct the payroll, and (5) a deadline for response of seven (7) days from issuance of the notice.
7. For late certified payrolls, the Contractor shall notify the applicable contractor in writing within seven (7) Days of the missed deadline that it is in noncompliance and the applicable contractor shall be given seven (7) Days from the date of the notice to submit the requested certified payroll. Late payroll notices issued by the Contractor shall be uploaded into LCPtracker eDocuments (with the subject week ending field appropriately selected) and include: (1) the subject payroll week ending date, (2) a description of the non-compliance issue (i.e., late payroll), (3) actions to be taken (i.e., submit payroll) to correct the issue, and (4) a deadline for response of seven (7) days from issuance. If the applicable contractor fails to submit the certified payroll

within seven (7) Days of the Contractor's written notification as requested, the Contractor shall issue an NCR for noncompliance.

8. Required supporting documentation: The following supporting documentation is required for a certified payroll submission be considered complete.
 - A. CDOT's Contractor Fringe Benefit and Deduction Statement (CFBDS): Each contractor shall submit a CFBDS in the LCPtracker system prior to or concurrently with its first certified payroll submission. On the CFBDS, each contractor shall list company-wide fringe benefits and allowable deductions offered to its general employee population. If a contractor's fringe benefits or deductions are altered during the life of the Project, a revised CFBDS shall be submitted.
 - B. Individual Deductions: Deductions listed on a certified payroll that are unique to a specific individual shall be accompanied by supporting documentation submitted into LCPtracker eDocuments as detailed in CDOT Certified Payroll Memo (issued June 12, 2018) available online at <https://www.codot.gov/business/civilrights/compliance/labor/payroll> Examples of such required supporting documentation includes, but is not limited to: wage garnishment orders, child support court orders, loan documentation, USDOL approval letters, Owner Affidavits.
 - C. The Contractor shall ensure compliance with the Copeland Act that requires employee payroll deductions to be within those allowed by the U.S. Department of Labor (USDOL), or otherwise contractors have obtained USDOL approval as documented in a USDOL Approval Letter.
 - D. All deductions shall be detailed by type and dollar amount on each certified payroll.

2.12.5 Payment Reporting

All Subcontractors must be registered with B2GNow and be listed for this Project in CDOT's B2GNow database.

1. By the 15th of each month, the Contractor shall record all payments to Subcontractors by completing an audit in B2GNow.
2. Each Subcontractor acting as a payor shall report its payments in B2GNow by the 15th of each month.
3. Once a payment is reported in B2GNow, the payee Subcontractor or supplier will receive a notice to confirm payment. The Subcontractor or supplier shall have 15 Days from the notice to confirm payment or report an issue.

2.13 Durability Plan

Sixty (60) Days after NTP1, the Contractor shall submit for the Department's Acceptance a Durability Plan addressing the Contractor's approach to incorporating durability into the design and construction of the Work. The Durability Plan shall indicate the durability design basis and the measures in place to ensure the durability requirements are reflected

in the final plan sets. All Work Elements shall have a minimum design life of twenty (20) years, unless otherwise stated elsewhere in the Contract Documents.

The Durability Plan shall include the following, at a minimum:

1. Identification of each relevant Work Element with the corresponding environmental exposure conditions for each Element (e.g., buried, submerged, exposed to atmosphere, exposed to corrosive chemicals). Some Elements may be exposed to more than 1 environmental condition (e.g., foundations in water table, foundations in areas with petroleum contamination), which might require different corrosion considerations for each exposure;
2. Identification of relevant degradation and protective mechanisms for each Element, quantifying the degradation processes and resistances to these processes with respect to time. The time-related changes in performance for each relevant Work Element at intervals not exceeding 10 years up to the end of the design life of the Element. The design life shall be predicted using deterministic models, published industry guidance and test data, allowing for the environmental conditions, and any proposed protective measures. The models and all assumptions shall be clearly indicated in the plan;
3. Description of measures taken during construction to ensure the assumed quality of construction is achieved (e.g., uniform compaction of embankment, adequate concrete cover, proper curing, proper application of protective coatings, etc.);
4. Summary of the above information, for each Element, in a tabular format;
5. List of manufacturers of all proposed durability enhancement measures, including coatings, inhibitors, sealers, and membranes;
6. Schedule for corrosion inspection of Elements indicating the parameters to be measured in order to confirm the underlying performance relative to that predicted in the design, gathered at intervals of not more than 10 years from Project Completion; and
7. Proposed maintenance Schedule for items/materials that could be affected by corrosion.

Cathodic protection shall not be used to mitigate expected corrosion effects, unless otherwise Approved by CDOT.

2.14 Deliverables

At a minimum, the Contractor shall submit the following to CDOT for Review, Approval, or Acceptance:

Table 2-2: Deliverables by the Contractor

Deliverable	Review, Acceptance, or Approval	Schedule
Project Management Plan	Acceptance	At least 10 Days prior to NTP1
WBS	Acceptance	At least 10 Days prior to NTP1
Preliminary Baseline Schedule	Acceptance	At least 10 Days prior to NTP1
Original Baseline Schedule	Approval	15 Days prior to issuance of NTP2
Methods Statement Schedule Narrative Reports	Review Acceptance	With Original Baseline Schedule, Current Baseline Schedule, Revised Baseline Schedule, and Recovery Schedule Prior to NTP2
Current Baseline Schedule	Acceptance	Concurrent with Monthly Invoice
Recovery Schedule	Approval	According to Section 2.5.2.6
As-Constructed Schedule	Acceptance	Before the release of final Retainage
List of Contractual Schedule Constraints	Review	With Original Baseline Schedule, Current Baseline Schedule, Revised Baseline Schedule , and Recovery Schedule
Narrative of changes to previous actual dates or dates required in the Contract	Approval	With any Schedule when dates have been revised
Draft Monthly Invoices	Acceptance	Within 10 Days following prior month's end concurrent with the progress status meeting
Final Monthly Invoices	Approval	Monthly
Invoice Supporting Documents	Approval	Prior to NTP1
Monthly Invoice format changes	Approval	At least 15 Days prior to first invoice and before NTP2
Monthly Progress Report format	Acceptance	Within 10 Days of NTP1
Monthly Progress Report	Acceptance	Concurrent with each Monthly Invoice
Monthly Progress Schedule	Acceptance	Concurrent with Monthly Invoice
Certifications by Contractor's Design Build Quality Manager	Review	Concurrent with Monthly Invoice
Monthly Maintenance Progress Report	Acceptance	Concurrent with Monthly Invoice

Deliverable	Review, Acceptance, or Approval	Schedule
Draw d Down Plan <u>Schedule</u> /Revised Draw d Down Plan <u>Schedule</u>	Review	With Original Baseline Schedule, Current Baseline Schedule, Monthly Progress Schedule, and Recovery Schedule
Pre-construction photographs and video	Acceptance	Prior to NTP2
Progress photographs	Review	Progress photos monthly. Photos of buried structures just prior to burial.
Office facilities	Approval	Prior to CDOT occupying any Contractor-provided facilities not later than 30 Days after NTP1
Project Directory	Review	Prior to NTP2, updated quarterly
Project Safety Management Plan	Acceptance	Prior to NTP2 or any work element requiring implementation of the Project Safety Management Plan.
Contractor DCS correspondence categorization and serialization method	Acceptance	Prior to issuance of NTP1
<u>Draft Civil Rights Plan</u>	<u>Acceptance</u>	<u>Within 15 Days after NTP1</u>
Civil Rights Plan	Approval	No later than 3 weeks <u>15 Days</u> prior to NTP2
<u>Civil Rights Plan updates</u>	<u>Approval</u>	<u>Annually or as requested by CDOT</u>
Small and Disadvantaged Business Performance Plan (SDBPP)	Approval	No later than 30 Calendar Days prior to issuance of NTP1; thereafter, updated annually and submitted no later than 30 Calendar Days prior to the start of the Contract Year (July 1)
DBE Design Utilization Plan by Contract Year	Acceptance	For Contract Year 1, no later than 30 Calendar Days prior to the issuance of NTP1; for each Contract Year thereafter, no later than 30 Calendar Days prior to the start of each Contract Year (July 1).

Deliverable	Review, Acceptance, or Approval	Schedule
DBE Construction Utilization Plan by Contract Year	Acceptance	For Contract Year 1, no later than 30 Calendar Days prior to the issuance of NTP2; for each Contract Year thereafter, no later than 30 Calendar Days prior to the start of each Contract Year (July 1).
ESB Utilization Plan by Contract Year	Acceptance	For Contract Year 1, no later than 30 Calendar Days prior to the issuance of NTP1; for each Contract Year thereafter, no later than 30 Calendar Days prior to the start of each Contract Year (July 1).
CDOT Design Build Form 1415	Acceptance	Concurrently with each submission of the DBE and ESB Goal Utilization Plans by Contract Year for each DBE; updated when commitments change
CDOT Design Build Form 1416	Approval	When Contractor determines it cannot meet one of the DBE goals (if applicable)
CDOT Design Build Form 1420	Acceptance	To modify a Utilization Plan by Contract Year and an Annual Participation Target for a Contract Year in the SDBPP; submitted concurrently with the SDBPP and no later than 30 Calendar Days prior to the affected Contract Year
CDOT Form 893	Acceptance	Submitted to CDOT no less than 10 Calendar Days before the DBE commences Work
Joint Check Letter	Acceptance Approval	Prior to use of a joint check
CDOT Design Build Form 1432 for every DBE counting toward goal	Acceptance	To be completed by the Contractor and DBE for each DBE Firm as per Book 1, Section 2.5.2.6.H. and submitted to CDOT within 14 Calendar Days after completion of CDOT Design Build Form 1432 by both the Contractor and DBE.
Quarterly Civil Rights Plan Progress Report	Acceptance	No later than 30 Calendar Days following the quarterly reporting period end (based on Contract Year)
Certified Payroll in LCPtracker System	Review	Weekly

Deliverable	Review, Acceptance, or Approval	Schedule
Payments to all Subcontractors in B2Gnow System	Review	Monthly
Small and Disadvantaged Business Participation Final Report	Approval	No later than 30 Calendar Days prior to Substantial Completion Date, with an updated report, as needed, no later than 30 Calendar Days prior to Final Acceptance and to include final payments and release of retainage to all Subcontractors and Suppliers.
Durability Plan	Acceptance	No later than 60 Calendar Days after NTP1

All deliverables shall also conform to the requirements of Book 2, Section 3.

2.15 Exhibits

Exhibit 2-A Work Breakdown Structure