

# **Draft-Final Request for Proposals (RFP)**

## **Construction Manager (CM) Services for the Preconstruction Phase of the Project**

**I-270 Critical Bridge Replacements Project  
Mile Point (MP) 0.9 to MP 2.0**



**COLORADO**  
**Department of Transportation**

**PROJECT NUMBERS: FBR 2706-44/C R100-364**

**PROJECT LOCATION: I-270 from York St. to Vasquez Blvd.**

**PROJECT CODE: 24947/24527**

**November 18, 2022**

~~October 27, 2022~~

Colorado Department of Transportation  
4670 Holly Street  
Denver, CO 80216



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## **SECTION 1 – SCOPE OF WORK AND PROJECT INFORMATION**

### **1.1. CM SERVICES SCOPE OF WORK**

CDOT is soliciting Construction Manager services for the I-270 Critical Bridge Replacements Project (the “Project”). The Project includes the replacement of eight bridges (four pairs) on I-270 between the York Street Interchange and the Vasquez Boulevard Interchange. The Successful Proposer (also referred to as “Construction Manager (CM)”), will provide CM services for the pre-construction phase and will have the opportunity to negotiate a price to complete the construction of any package(s). If negotiation is successful, the CM will become the General Contractor (GC) with CDOT to fulfill the Project’s construction phase. The GC Construction Project Contract award to the CM is not guaranteed but is contingent on a successful negotiation of a Construction Agreed Price (CAP) .

The Project Scope Elements are described in **Section 1.3.B** of this Request for Proposal (RFP). The Project Scope Elements may be modified based on packaging, CM input, Stakeholder input, and final design refinements. This project is fully funded through State resources including Bridge and Tunnel Enterprise (BTE), Senate Bill 1, and Senate Bill 267 funds. CDOT is currently pursuing additional Federal discretionary funding that may become available through the FHWA Bridge Investment Program (BIP). Any BIP funding will be used to replace state funding already committed to the project, and will not result in an increase of scope.

The scope of work reflects an approach based on the Project Goals and known risks. A primary benefit of CM/GC is the ability to contractually allocate risks to the party best able to manage the risk. Risk assessment will be a continual process throughout the pre-construction and construction phase of the project. The process will incorporate risk sharing between public and private parties holding the both parties accountable for performance and expenditure of public resources.

The Successful Proposer shall analyze the Project Goals, evaluate work elements, identify risks, quantify risk, and mitigate risks. The Successful Proposer shall also articulate a clear, well thought out, plan for delivering the Project on time and on budget, with accountability of public resources throughout the process. The Successful Proposer shall consider new approaches, innovation, modifying the Project work elements, the Project sequencing, and/or the Project packaging to increase the efficiency of the Project delivery.

The CM shall partner with an integrated design team (Design Team) which will consist of CDOT, the Design Consultant, and the Independent Cost Estimator (ICE). The CM will provide input on schedule, phasing, constructability, quality assurance of the design, and project cost estimating throughout the preconstruction phase of the Project as well as general support services to ensure complete and efficient scoping of the different Project Elements. The CM will offer innovative ideas and risk mitigation measures throughout the design phase to proactively assist the Design Team. In addition to the base input expected of the CM, the CM shall also provide opportunities, means, and methods to protect the safety of the traveling public and reduce the construction duration to minimize impacts to traveling public and reduce costs.

If it is determined to be in the interest of the CDOT, CDOT may forgo negotiations of any portion of the project, and advertise/procure those portions of the Project separately. In the event that this happens, the CM's Firm will not be eligible to submit a bid, for any package, advertised or procured separately, in which the CM's Firm participated in the preconstruction activities.

The CM’s tasks during the preconstruction phase include, but are not limited to:



#### **A. Design Review:**

- Thorough review of all plans, specifications, reports, diagrams, shop drawings, as-built plans, site conditions, specifications, and all other necessary Project documentation to provide design validation from a construction expertise perspective.
- Conduct and analyze preliminary field work (coring, sampling, test holes, etc.) to assist with the design phase.
- Independently calculate quantities for verification purposes of construction packages, independent from both the Design Consultant and the Independent Contract Estimator.
- Provide constructability input on all facets of the Project including, but not limited to:
  - Bridge Construction Methods and Elements,
  - Structural Foundations and Walls,
  - Geotechnical,
  - Geohazards,
  - Resiliency,
  - Environmental Commitments including, but not limited to, reduction of air pollution throughout the lifecycle of the project,
  - Roadway and Safety Improvements,
  - Intelligent Transportation Systems,
  - Maintaining Traffic Operations and the Existing Capacity of I-270,
  - Minimizing impacts of Construction to the traveling public,
  - Material Availability,
  - Staging,
  - Stormwater Management Plan,
  - Roadway Drainage,
  - Shoring and Phasing Techniques,
  - Accelerated Construction Techniques and
  - Existing Subsurface Utilities.
  - Quality assurance of design deliverables specific to mitigation of error and omission prior to negotiation
- Provide written reviews or reports and details/redlines of the Project plans and specification packages at Project milestones. Comments should be related to constructability, construction phasing, clarifications, design errors or omission mitigation and tracking, impacts to schedule, impacts to cost, risk identification, and recommendations to increase efficiencies of the Project.
- Coordinate with the Design Team to make determinations whether multiple independent and severable CAP packages are:



- Efficient,
- Add value to the Project,
- Provide an overall benefit to the Project,
- Have the potential to accelerate the start of construction, and
- Bring the overall Project measurably under the Construction Budget.
- Coordinate with the Design Team to make determinations whether early procurement packages for materials (long lead-time procurement “LLTP”) are:
  - Viable and cost effective,
  - Have the potential to reduce the construction schedule, and
  - Provide an overall benefit to the Project.
  - Procurement of any LLTP materials may be done by the CM through a separate early GC Construction Project Contract with CDOT ahead of construction but not prior to completion of the National Environmental Policy Act (“NEPA”) process resulting in a signed decision document.
- Actively participate in discussions to study the feasibility of design options and provide input on constructability, pricing, innovation, value, risk mitigation, and quality.
- Provide additional milestone reviews depending on package complexity.
- Provide timely feedback from design reviews to assist in decision making.

## **B. Cost Estimating:**

### Ongoing Tasks

- The CM shall provide rough order of magnitude (“ROM”) cost estimating along with schedule impacts as design concepts/alternatives are being developed and evaluated throughout the preconstruction phase to help inform decisions. This may include:
  - Evaluating means and methods of various construction techniques that may influence design solutions with considerations of cost and schedule impacts.
  - Evaluating industry standard operating and maintenance costs to determine life-cycle costs.
  - Proposing design alternatives to reduce cost. All design alternatives must adhere to the ongoing I-270 Environmental Assessment and will be approved by CDOT and the Project stakeholders. Cost savings on any of the initial scope will be reinvested into other Project Scope Elements.

### CM Tasks at Milestones

- Providing initial ROM construction estimate and associated schedule for the full Project within one month of CDOT’s issuance of the pre-construction CM phase’s Notice to Proceed (NTP).
- Collaborating with CDOT to establish the expectations and the format of the Cost Model for construction packages through a series of Cost Model meetings. See **Section 1.21** of this RFP for additional information regarding the Cost Model.



- Providing construction cost estimates at milestones that shall include the following activities:
  - Item identification that is compatible with CDOT’s cost estimating, standards, and specifications.
  - Submission of Opinion of Probable Construction Costs (“OPCCs”) at 30%, 60% and 90% milestones for each construction package. Analysis should include availability of labor, equipment, and materials. Additional OPCCs may be required at the request of CDOT if: the package complexity indicates an added benefit, analysis of proposed alternatives is necessary, analysis of means and methods is necessary, or work is added to the Project.
  - Additional OPCCs may be required before determining the CAP proposal if CDOT agrees on their necessity. To facilitate comparisons with ICE estimates, both Contractor and subcontractor cost estimates will be included in an open book review.
  - The CM shall submit a CAP proposal when both the CM and CDOT agree the design has progressed to the appropriate level, typically at 90%.
    - Quantity and schedule reconciliation will be required between the CM, Design Consultant, the ICE, and CDOT. This may include verification of assumptions, and means of methods between CDOT, the Design Consultant and the ICE.
    - CDOT will request the CM submit a CAP proposal on early construction packages or for the procurement of long-lead items.
    - During CAP proposal reviews, the CM shall provide CDOT all production rates, material assumptions, indirect costs, and any other information as requested by CDOT to aid in reaching an agreement on a CAP proposal.
    - If a CAP proposal is successfully negotiated and accepted, the CM shall submit those CAP proposals as an Electronic Bid Submittal (“EBS”).

### C. Project Schedule:

- CDOT’s goal is to have construction for the full Project completed as soon as possible. It is anticipated that construction can be completed within 30 months of commencement.
- Impacts to the traveling public must be minimized and is a high priority consideration in the determination of daily working time schedules allowed. The CM and/or GC must work and communicate with Project stakeholders and citizens before and during construction. Seasonal, weekly, and daily traffic patterns must be considered when planning and scheduling work.
- Notable Project schedule constraints to be considered:
  - Environmental Requirements
    - All work is anticipated to conform to the EA and associated decision document that is expected to be completed in 2023.
    - Any early packages shall have the appropriate environmental clearances, approvals, and permits before CAP negotiation, and CAP package construction.
    - Required on-going environmental work during the design process will also be considered. Those tasks are listed in **Section 1.3.E** of this RFP.
  - Lane Closure Policy - See **Section 1.3.F** of this RFP for additional information.



- Utility Relocation - See **Section 1.3.G** of this RFP for additional information.
- Resources (including DBE) availability due to other major regional projects.
- See **Section 1.9** of this RFP for additional information regarding the Project Schedule.

#### **D. Risk:**

Risk is defined as an uncertain event or condition that, if it occurs, has a negative or positive impact on a project's goals and objectives. The CM/GC delivery method provides a forum to communicate and discuss risk in the design phase and to collaboratively address and reduce risk with the Owner, CM and the Design Consultant. A primary benefit of CM/GC is the ability to contractually allocate risks to the party best able to manage the risk. Risk assessment will be a continual process throughout the pre-construction and construction stage with risk sharing between public and private parties that holds both accountable for performance and expenditure of public resources.

Risk management will be a topic at both the 2-day Kickoff meeting and an initial Risk Management and Assessment Workshop which shall be scheduled by the CM early in the pre-construction phase. Regular risk meetings, facilitated by the CM, will be held to monitor progress. Risk responsibilities include:

- Facilitate quantitative and qualitative risk management discussions to identify risks, quantify probabilities, quantify impacts, develop mitigation strategies, and assign risk responsibility.
- Set risk meeting frequencies and prepare and update the Project Risk Matrix throughout the Project lifecycle.
- Collaborate with the Project Team to develop a Risk Management Plan, perform risk assessments, and prepare and update the Risk Matrix.

#### **E. Innovation:**

- The innovation process will be a topic of the Kick-Off Workshop, see **Section 1.1.F** of this RFP. The innovation process is intended to be an interactive and cooperative process to generate value for the Project. Following the Kick-Off Workshop,
- A combined Project Innovation and Value Engineering Workshop will be scheduled for early in the preconstruction phase.
- The innovation process during pre-construction will be an ongoing integrated process as the design progresses. The CM shall provide ongoing analysis specifically focused on seeking opportunity for innovation during all phases of the Project's development and construction. The CM will document this analysis through regularly submitted written reports and recommendations.
- Major cost elements of the Project will be discussed at the regular progress meeting and the topic will include innovations that may result in potential cost and schedule savings. CDOT expects cost savings greater than the fee paid for preconstruction services, which will result in better project value.



## F. Meetings:

- The Kick-Off Workshop will emphasize the importance of partnering within the CM/GC delivery method by focusing on team building and partnering over a 2-day period. This workshop is mandatory for all key team members including key subcontractors. This workshop will be facilitated by CDOT and will cover at a minimum the following items:
  - Introduction to the Project, CM/GC, partnering, Project stakeholder engagement, identification of roles and responsibilities. Subcontractors performing major and high-risk work items should be in attendance.
  - The Team will review Project status, vision, goals, objectives, funding, preliminary pre-construction schedule, what success would look like, current design, etc.
  - Initial discussion of preliminary innovations, phasing, and risk mitigations being proposed by the CM, Design Consultant, and ICE.
  - Discussion of the Cost Model review and coordination with the ICE during OPCCs.
  - Cost Model components.
  - Coordinate Project Schedule meetings in accordance with **Section 1.9** of this RFP.
  - Coordinate progress meeting frequencies and initiate working groups for various elements of the Project. Progress meetings may include project management meetings, design meetings, discipline/specialty meetings, stakeholder meetings, and public meetings.
  - Strategy, timing, and approach for the Project Innovation and Value Engineering Workshop.
- The Project Innovation and Value Engineering Workshop will be co-facilitated by CDOT, the CM, ICE, and the Design Consultant. Attendance and duration will be outlined at the Kick-Off Meeting. It is also anticipated that Project stakeholders' input will also be incorporated into this workshop. The approach, agenda, format, and duration for the workshop will be developed in collaboration with CDOT, the CM, ICE, and the Design Consultant. The CM shall provide input into how to achieve the desired results for the Project. This workshop could require several sessions, over an extended period. The purpose of this workshop is to evaluate the Preferred Alternative, consider any CM innovations or design refinements for the Project, incorporate value engineering principles to the Project, incorporate stakeholder input and get support for endorsement of any potential changes to the Preferred Alternative.
- The CM shall, unless otherwise directed, meet with CDOT at the CDOT Region 1 North Program Office at 4670 Holly Street, Denver, CO 80216. Meetings are to be attended in person unless otherwise negotiated. If meeting in person is prohibited, the meeting may be attended virtually.
- The following meetings are key to success on this project and attendance by the CM shall be anticipated. Other meetings may be deemed useful and necessary. Attendance to any additional meetings by the CM shall be coordinated with CDOT.:
  - Kick-Off Workshop
  - Regular Partnering meetings





- Design Discipline Task Force Meetings (as agreed upon by Design Team and CM)
- Project Innovation and Value Engineering Workshop
- Field Inspection Review (FIR) for each construction scope package – 30%
- Design Office Review (DOR) for each construction scope package – 60%
- Final Office Review (FOR) for each construction scope package – 90%
- Cost Model Review Meetings
- Quantity Reconciliation Meetings
- Risk Management Meetings
- Innovation Meetings
- OPCC Review Meetings
- CAP Review Meetings
- CAP Negotiations and Assumption Resolution Meetings (if applicable)
- Ongoing Lessons Learned
- Other Project Meetings:
  - Weekly Project updates with CDOT Project Management Team
  - Bi-Weekly Public Information Planning Meetings (twice a month)
  - Monthly Project Leadership Team (PLT) Meetings – 14 estimated
  - Monthly Technical Team (TT) Meetings – 14 estimated
  - Preconstruction Public Meetings – 2 estimated
- The CM shall be prepared to conduct Project Vision Meetings to analyze how Project progress is aligning and tracking with Project Goals. Items of focus include priorities, commitments, approach, scope, schedule, and cost reasonableness. The Project Vision Meetings are anticipated to be scheduled quarterly, at a minimum, to track and trend the pursuit of the Project Goals.

**G. Deliverables:**

- The CM shall develop and produce the following reports and deliverables:
  - Geotechnical Exploration Plan
  - Subcontractor Selection Plan
  - ~~Quality Management Plan for Design and Construction~~
  - Material Sourcing Plan
  - Worker and Public Safety Plan
  - Risk Management Plan
  - Comments, input, and support that will be incorporated into the Value Engineering Report (the CM will not be creating the actual document)



- Innovation Tracking and Performance Report
- Procurement Review Report for each LLTP CAP (GC Construction Project Contract) if required
- Submit monthly invoices and project reports to support payment of preconstruction CM services

#### **H. Other Tasks:**

- If CAP proposals are accepted by CDOT, then a separate GC Contract will be awarded to the CM, and they shall become the GC. The GC shall ensure all environmental, safety, and permit commitments that are specified in the plans, specifications, and contract documents are implemented during construction in accordance with applicable laws and regulations.
- The Design Consultant will develop the Stormwater Management Plan during pre-construction with input from the CM. CDOT will review the plan throughout the development process and apply for the permit. If a CAP proposal is successfully negotiated and agreed upon, the GC will be added to the permit after the award.
- The CM shall commit to integrating Disadvantaged Business Enterprises (“DBEs”) in the Project as required by the goals determined by the CDOT Region 1 Civil Rights Office. See **Section 1.19** of this RFP for additional DBE Program Requirements.
- Coordinating with CDOT’s Public Information Officer during pre-construction to ensure a smooth transition of communication into construction. Coordination will include involvement of the CM’s proposed Public Information Manager to help develop the Public Information Plan prior to construction, to aid in public/stakeholder outreach and public meetings during pre-construction.
- Assisting in the preparation and attendance of public meetings and/or open houses.

### **1.2. PROJECT GOALS**

The CDOT Project Goals reflect the values that this Project holds and expects. An exceptional proposal will demonstrate how each of the Project Goals will be pursued by the Proposer.

1. Traffic Control and phasing concepts shall seek to limit impacts to the traveling public.
2. Replace and decommission all deteriorating structures as efficiently as possible.
3. Anticipate and accommodate environmental requirements in both design and construction.

### **1.3. PROJECT DESCRIPTION/SCOPE OF WORK**

#### **A. Project Background**

The I-270 corridor provides a vital connection from I-70 to I-25. Over 100,000 vehicles per day utilize this corridor to bypass the friction of downtown Denver to move goods, services, information, and people between northern and eastern parts of the city.

Within the I-270 corridor there are eight (8) bridge structures within a one mile stretch between York Street and Vasquez Boulevard that are the source of many challenges to the mission of this corridor. These structures have been in service for over 50 years and are requiring frequent emergency repairs. Over 300 emergency repairs have been performed to the bridges along this



corridor since 2006. Each repair requires significant lane closures impacting travel time reliability in this corridor. This corridor lacks redundancy, and any detours during these emergency repairs require use of local roads or significant out-of-direction movements. Bridge inspections rated 6 of the 8 bridges in this one-mile segment as ‘poor’, which makes them eligible for Bridge & Tunnel Enterprise (BTE) funding for full replacement.

The Critical Bridge Replacements Project is expected to be cleared with the on-going Corridor Improvements Environmental Assessment (EA) and will replace 8 of the 12 existing bridges in the corridor. For more information and status on the Tier 2 NEPA Environmental Assessment (EA) study I-270 Corridor Improvements visit: <https://www.codot.gov/projects/i270>.

## **B. Project Information and Definition**

The goal of the Project is to construct the below Project scope elements in their entirety while minimizing impacts to the traveling public and other stakeholders. The Project Scope Elements may be modified based on packaging, CM input, Stakeholder input, and final design refinements.

~~If it is determined to be in the interest of the CDOT, or to meet funding constraints, CDOT may forgo negotiation and advertise/procure for construction services separately. In the event this happens, the CM's Firm will not be eligible to submit a bid, for any package, advertised or procured separately.~~

### **Project Scope Elements**

Project Scope Elements include but are not limited to:

- CDOT is currently conducting an assessment of the immediate bridge maintenance needs within the project limits. The intent of the assessment is to potentially provide a strategic investment for interim repair solutions for portions of the existing structures that will mitigate the need for emergency repairs that could require emergency lane closures prior to the beginning of permanent replacement efforts. CDOT may opt to negotiate this work as an early assessment package for the Project or advertise the work separately. If CDOT elects to negotiate a Construction Agreed upon Price (CAP) with the Successful Proposer, a subsequent General Contract will be executed to complete the work.
- Replacement of (8) existing I-270 mainline structures:
  - E-17-ID WB over South Platte River
  - E-17-IE EB over South Platte River
  - E-17-IF WB over Burlington Canal (FRICO)
  - E-17-IG EB over Burlington Canal (FRICO)
  - E-17-IH WB over Brighton Blvd, UPRR & BNSF
  - \*E-17-II EB over Brighton Blvd, UPRR & BNSF
  - E-17-IJ WB over E. 60th, BNSF Railroad
  - \*E-17-IK EB over E. 60th, BNSF Railroad
  - \* (NOT eligible for Bridge & Tunnel Enterprise (BTE) funds)



- Pavement reconstruction at bridge approaches to tie in new construction to existing profiles.
- Retaining walls as needed to reduce toe-of-slope, that impact Right of Way
- Advise CDOT on ROW/Easements needs for permanent features and temporary construction access
- Floodplain Management Coordination (MHFD/Adams County)

### **C. Project Features and Specialty Work**

Major work items may include but are not limited to: bridge replacement, approach reconstruction, earthwork, landfill mitigation, retaining wall construction, major and minor drainage features, ITS infrastructure, signing/stripping, and revegetation.

### **D. Major Project Risks**

Below is a general description (but not limited to) of the Major Project Risks:

- **Construction Phasing and Maintenance of Traffic:** High volume interstate traffic through a highly populated and congested area with minimal or no detour route. I-270 is identified as a Hazardous Materials Route which cannot be detoured to I-70 through the Denver Metro Area. Phasing for work will be required to minimize impacts to the traveling public, encourage driver expectancy, provide access to the local communities, and shall accommodate first responder needs throughout the project limits. See **Section 1.3.F** of this RFP for more information regarding Maintenance of Traffic.
- **Safety:** High speed differentials between fast-and-slow moving vehicles present a safety hazard in a construction zone to the workers and to the traveling public. This corridor sees higher than average truck traffic for an urban interstate within Colorado. Historical data reports up to 16% trucks utilizing the corridor and contributing to speed differentials.
- **Schedule:** With a large scope and the likelihood of multiple construction packages, there is a greater risk that there could be greater impacts to the traveling public if construction phasing and durations are not well thought out.
- **Environmental:** Timing of the Environmental Assessment Signature and Decision Document, which is anticipated in 2023.
- **Water Quality:** The Project rebuilds the structures over the South Platte River and the Burlington Canal, which are water sources for local and regional communities. The project will also be subject to Waterways of the US permitting.
- **Stakeholder Involvement:** Many stakeholders need to remain involved with the Project throughout design and into construction. A major component of the Project will be meeting the commitments of the EA/decision document and continuing to engage and involve major stakeholders as the design progresses.
- **Third Party Agreements:** These bridges span the South Platte River, the Burlington Canal (FRICO), the Union Pacific Railroad (UPRR) and the Burlington Northern Santa Fe Railroad (BNSF). Each third party has a unique set of guidelines and approval processes for activities within their respective Right-of-Ways.



- High Profile Project: Large project, on a highly congested corridor, in a very high-profile area. This Project will require well thought out communications plans and must be delivered with the highest quality and safety.
- Hazardous Materials: I-270 is the one of only two hazardous materials routes through the Denver Metropolitan Area. Closure of this route for any amount of time would require re-routing Hazardous Materials with a significant out of direction detour.
- Geology: A portion of I-270 alignment is built on an existing landfill, including the approaches to several of the Critical Bridges.

#### **E. Project Design and Development Status**

Below is a general description of work progressed to date through the I-270 Environmental Assessment and anticipated ongoing work, milestones, and potential early packages:

- Design: Preliminary activities have been conducted to advance critical Project elements and define potential environmental and Right-of-Way (“ROW”) impacts. Design in most areas will remain flexible to accommodate input from the CM in the pre-construction phase. Preliminary design has been advanced to an estimated 15% depending on the level of design needed to identify potential environmental and ROW impacts.
- Roadway/Alignment: A conceptual roadway design for the corridor has been developed to an estimated 15% level which generally represents feasible geometric and resiliency improvements acceptable to CDOT.
- Hydrology/Hydraulics: A conceptual hydrology study of the area and hydraulic analysis has been performed to determine the potential environmental and ROW impacts. A preliminary Hydrology and Hydraulics Report has been completed.
- Structural: An evaluation of the existing and proposed future bridge structures has been performed, however the structure type will be selected with contractor input considered.
- Geotechnical: A preliminary geotechnical investigation has been performed with an accompanying Preliminary Geotechnical Report.
- Environmental: CDOT is currently preparing an EA for the I-270 Corridor. Continued analysis of environmental impacts, mitigation measures, and public engagement are ongoing.
- Permitting and Certifications:
  - It is anticipated that CDOT will obtain a Section 404 Permit.
  - It is anticipated that the GC will need to obtain Construction Access Permits, ~~a Stormwater Construction Permit~~, a Dewatering Permit, as well as any other permits required for construction of the Project.
- ROW: The Project has performed a preliminary ROW analysis based on the Proposed Action and has determined that most of the Project is within existing ROW. The ROW acquisition process, if needed, will start as soon as NEPA is completed. It is anticipated that initial Project packages could proceed within existing ROW with appropriate environmental clearances prior to ROW acquisition being completed for the entire Project.

#### **F. Existing Operations and Traffic Restrictions**

Traffic operations on the corridor are a priority for CDOT. Unless permitted by the CDOT



Region 1 Lane Closure Strategy, the existing number of lanes shall be maintained, through all phases of the Project. The existing number of lanes is generally described as two general purpose lanes in each direction on mainline I-270.

The latest CDOT Region 1 Lane Closure Strategy outlines lane closure restrictions for I-270 through the Project area for each month of the year and is available at:

[https://www.codot.gov/safety/traffic-safety/assets/work-zones/lane-closure-strategies/R1\\_Lane\\_Closure\\_Report.pdf](https://www.codot.gov/safety/traffic-safety/assets/work-zones/lane-closure-strategies/R1_Lane_Closure_Report.pdf).

The CM may propose changes to the Lane Closure Strategy, should the changes be needed for constructability or provide a benefit to the Project/traveling public. The process to request a change to the current restrictions is outlined in the CDOT Region 1 Lane Closure Strategy and shall also include a traffic analysis and a public information plan, to support the request. The CM may seek approval for variances to the Lane Closure Strategy, however approval is at the sole discretion of CDOT.

General Construction Constraints and Limitations:

- All work and staging must be maintained within the existing or proposed CDOT ROW.
- Environmental clearances (NEPA) for identified elements within a package must be received and approved before a CAP proposal is negotiated and before CDOT issues an NTP.
- Changes to the Project concept and scope may trigger an environmental re-evaluation, or a modification of the transportation plan from DRCOG and transportation improvement program. CDOT must comply with the metropolitan and statewide transportation planning requirements in 23 CFR part 450 and the transportation conformity requirements (40 CFR parts 51 and 93) in air quality nonattainment and maintenance areas. CDOT must provide appropriate approval notification to the GC for such changes.

**G. Project Coordination Efforts**

Lead and Supporting Agencies: CDOT is the lead agency and Owner of the Project. Oversight is provided by FHWA.

Stakeholders: Primary Project stakeholders and their role or involvement in the Project are listed in the following table:



**Stakeholders**

Agency/Stakeholder	Role or Involvement
Federal Highway Administration (“FHWA”)	<ul style="list-style-type: none"> <li>● Project oversight</li> <li>● Member of the Project Leadership Team (PLT) and Technical Team (TT)</li> </ul>
Adams County	<ul style="list-style-type: none"> <li>● Member of the Project Leadership Team (PLT) and Technical Team (TT)</li> </ul>
City of Commerce City	<ul style="list-style-type: none"> <li>● All bridges fall within City limits</li> <li>● Member of the Project Leadership Team (PLT) and Technical Team (TT)</li> </ul>
Colorado Motor Carriers Association	<ul style="list-style-type: none"> <li>● Input on freight consideration, HazMat route maintenance and temporary detour decisions</li> <li>● Member of the Technical Team (TT)</li> </ul>
UPRR	<ul style="list-style-type: none"> <li>● Reviews and agreements required for proposed I-270 overpass reconstruction</li> </ul>
BNSF	<ul style="list-style-type: none"> <li>● Reviews and agreements required for proposed I-270 overpass reconstruction</li> </ul>
The Farmers Reservoir and Irrigation Company (FRICO)	<ul style="list-style-type: none"> <li>● Reviews and agreements for proposed E-17-IF/IG crossing over Burlington Canal</li> </ul>



**Additional Coordination Contacts**

Other Stakeholders	Role or Involvement
Private Property Owners	<ul style="list-style-type: none"> <li>● ROW/Easement impacts</li> <li>● Travel impacts/delays/detours coordination and notification</li> </ul>
RTD and Traveling public	<ul style="list-style-type: none"> <li>● Roadway safety/trip reliability input</li> <li>● Travel impacts/delays/detours coordination and notification</li> </ul>
Recreational users	<ul style="list-style-type: none"> <li>● Colorado Front Range Trail temporary detours</li> <li>● Sand Creek Greenway temporary detours</li> <li>● Travel impacts/delays/detours coordination and notification</li> </ul>
Emergency Responders/Incident Command	<ul style="list-style-type: none"> <li>● Emergency response/access input</li> <li>● Travel impacts/delays/detours coordination and notification</li> <li>● Local emergency responders are on the Members of the Project’s Technical Team</li> <li>● Incident Management and Planning for all potential impacts</li> <li>● CDOT Executive Leadership</li> <li>● CDOT Traffic Operations Center (CDOT TOC)</li> </ul>
Utilities	See table below.





**Anticipated Utility Coordination/Relocations**

Utility Identification	Facility type	Relocation Required?
Cable Television (Comcast)	Comcast provides cable television service to the corridor communities. There is one buried fiber conduit and several cables throughout the project area	TBD
Electric (Xcel Energy)	Xcel Energy has two main feeder lines and numerous smaller distribution lines in the western part of the study area	TBD
Telecommunications (CDOT and Zayo)	CDOT and Zayo have buried fiber optic and copper cable lines throughout the study area.	TBD
Gas (Xcel Energy)	Low- and High-Pressure lines are potentially within the project area	TBD
Sanitary Sewers (South Adams County Water & Sanitation District)	Location and potential conflicts to be further investigated	Not anticipated
Water	Location and potential conflicts to be further investigated	Not anticipated
Storm Sewer (CDOT)	CDOT has a storm sewer collection system within the corridor	Yes

**H. Adjacent Project Coordination and Communication**

During the preconstruction phase, the CM shall coordinate and consider adjacent projects when analyzing construction phasing and construction traffic control. Known projects within or adjacent to the described project limits are listed below. If other adjacent projects are identified, the CM must also closely coordinate with those projects.

- CDOT Central 70 Project
- CDOT I-76 York Street to Dahlia Street Bridge Replacement Project

**1.4. PROJECT FUNDING**

This project is fully funded through State resources including Bridge and Tunnel Enterprise (BTE), Senate Bill 1, and Senate Bill 267 funds. CDOT is currently pursuing additional Federal discretionary funding that may become available through the FHWA Bridge Investment Program (BIP). Any BIP funding will be used to replace state funding already committed to the project and will not result in an increase of scope.

**1.5. PROJECT DURATION**

It is estimated that the Project can be constructed in 30 months from commencement. ~~It is CDOT's anticipates that the goal to~~ start of construction on the Project ~~will begin no later than in 2024, as defined in the Project Goals.~~ The CM shall explore opportunities to measurably reduce this construction duration to minimize impacts to the traveling public and to reduce costs.



## **1.6. PROJECT ADMINISTRATION**

The CM shall utilize the following project administration contacts for the Project:

### **A. CDOT Project Director**

Katie Dawson, PE  
I-270 Corridor Reconstruction  
4670 Holly Street  
Denver, CO 80216  
W: 303.398.6766  
[katie.dawson@state.co.us](mailto:katie.dawson@state.co.us)

### **B. Contract Officer**

Janette Walker  
CDOT Alternative Delivery Program  
2829 W Howard Place  
Denver, CO 80204  
W: 303-757-9296  
Primary means of communication: [jan.walker@state.co.us](mailto:jan.walker@state.co.us)

## **1.7. PROJECT COORDINATION**

The CM shall utilize the following project coordination items for the Project:

### **A. Routine Working Contact**

The routine working contact will be between the Project Management Team (“PMT”), which will be comprised of the CDOT Program Engineer, CDOT Project Director, the CDOT Design PM, CDOT Construction Manager, CDOT Environmental Program Manager, the Design Consultant Project Manager (“DC PM”), the Independent Cost Estimator (“ICE”) Project Manager, and the Construction Manager Project Manager (“CM PM”).

### **B. Project Management Team Correspondence/Communication Requirements**

The PMT members are expected to communicate relevant contacts, coordination efforts, conversations, and emails where important Project Information is discussed.

### **C. Coordination**

In addition to the stakeholders listed in **Section 1.3.G**, the CM shall partner and coordinate with the groups below. The CDOT Project Management Team (defined below) shall be included in all coordination.

- Executive Oversight Committee
- CDOT Project Management Team
  - CDOT Project Director – Katie Dawson, PE
  - CDOT Regional Environmental Manager – Basil Ryer, MLA, MUD
  - CDOT Design Project Manager – TBD
  - CDOT Construction Project Manager – TBD
- CDOT Specialty Groups
  - Region 1 Materials



- Region 1 Traffic
  - Region 1 Hydrology and Hydraulics
  - Region 1 Survey
  - Region 1 Environmental
  - Region 1 Right-of-Way
  - Region 1 Utilities
  - CDOT Staff Bridge
  - CDOT Staff Geotech
  - CDOT Public Information Office
  - CDOT Operations Center
- Design Consultant and Subconsultants
  - Project Construction Manager (Owner's representative in construction) and any subcontractors
  - CDOT Engineering Estimates and Market Analysis (EEMA) Group
  - CDOT Maintenance Forces
  - Headquarters and Regional Civil Rights Manager
  - Colorado Transportation Investment Office (CTIO)
  - Bridge and Tunnel Enterprise (BTE)

#### **D. Project Co-Location**

A determination whether or not co-location is essential to the success of the project and will occur after selection. The location and timeframe for co-location is to be determined but is anticipated to be in the Denver Metro or within the Project vicinity. Co-location is at the discretion of CDOT.

### **1.8. CONSTRUCTION BUDGET**

The Construction Budget is defined as the portion of the Project budget estimated for General Contracts for Construction. The estimated required Construction Budget for this Project is \$140 million. This amount does not include non-construction Project costs (which are in addition to this amount) and are still being evaluated by CDOT with the goal of optimizing efficiency.

It is estimated that each General Contract for Construction shall include:

- Agreed upon CAP amount;
- The Management Price Percentage (MPP) applied to each construction item, see **Section 2.8** of this RFP for additional information;
- GC indirect costs allowed as indicated in **Appendix C** of this RFP;
- Force accounts, and risk pools that are associated with the construction of all elements of the Work described in the General Contract for Construction;
- Performance and Payment Bonds; and



- Insurance Certificate(s) for Policy Requirements identified in CDOT's Standard Specifications.

Note: Additional Exhibits, Attachments, Terms and Conditions that are a part of CDOT's standard Construction Contract Document for a Work Package will be provided at the time of issuance of a Notice of Award for a Work Package.

## **1.9. PROJECT SCHEDULE**

Upon CM contract award, the CM shall establish a Pre-Construction Schedule according to the Project Scope Elements listed in **Section 1.3B** of this RFP in coordination with the Design Team. The CM shall incorporate the preconstruction roles and responsibilities as defined in **Appendix A** of this RFP. The Preconstruction Schedule will be used to establish the initial schedule for the Project and shall include/consider a proposed construction schedule as well.

After the scope, schedule, and budget is established for each package, an analysis shall be performed as to the status of the Project when compared to the Preconstruction Schedule. The CM shall provide continuous schedule validation for construction schedules and the overall schedule for the duration of the CM preconstruction phase.

The CM shall use either of the scheduling software programs listed in **Section 1.14** of this RFP and the CM shall maintain the schedule in the same format throughout the duration of the Project. The CM shall submit monthly schedule updates to the CDOT Project Director, or after any significant change to the Project, or as otherwise directed by CDOT.

It is anticipated that the CM will incorporate or perform the following items while developing the Preconstruction Schedule and maintaining it for the duration of the CM preconstruction phase:

- Incorporate all pre-construction activities for both the Design Team and the CM.
- Develop a preliminary construction schedule and construction packaging strategy within CDOT's Construction Budget. Collaborate with the Design Team to determine if early construction packages are viable, cost effective and provide an overall benefit to the Project.
- Assist in determining the scope for any potential early construction packages.
- Prepare construction schedules and phasing alternatives at each pre-construction milestone to support development of OPCCs, validate deadlines, and help develop Project delivery strategies.
- Develop a resource-loaded, critical path method, construction schedule at 30%, 60% and 90% OPCC milestones, as well as for all CAP proposals.
- Ensure each CAP package will be severable; will have specific beginning and end points; and will have independent overhead, mobilization, traffic control, and Project costs. Each CAP package will include provisions for liquidated damages, incentive/disincentive, and roadway user costs as determined by CDOT in its sole discretion. The CM and CDOT are responsible for ensuring the severability of each package.
- Compare and verify construction schedules and all assumptions with the ICE.

## **1.10. PRELIMINARY DOCUMENTS AND DRAWINGS**

The Project is currently in the NEPA phase; therefore, design work, preliminary drawings, and reports are limited and conceptual in nature. The environmental documents as well as other design related materials that CDOT has made public can be found on the Design Consultant Services procurement page, through the Reference Documents in Google Drive link:



<https://www.codot.gov/business/consultants/advertised-projects/2022/region-1-project-specific-i-270-critical-bridge-replacements-design-engineering-services>

The CM shall note the design related files are subject to the Electronic CAD Resources disclaimer found at the above link.

### **1.11. SPECIFICATIONS**

The most current version of CDOT's Standard Specifications for Road and Bridge Construction at the time of each successful CAP proposal negotiation shall control construction of that CAP package. The 2022 CDOT Standard Specification book is the most current version. The Project team will develop the project special provisions and standard special provisions that will take precedence over the Standard Specifications and plans during development of each scope package.

### **1.12. OWNERSHIP OF THE DOCUMENTS**

All tracings, bids, plans, manuscripts, specifications, data, maps, etc., prepared by or obtained by the CM because of working on this contract shall be delivered to and become the property of CDOT. All proposals submitted in response to this Request for Proposal, shall become the property of CDOT, including all unsuccessful proposals. All proposals will be confidential until award, and then will be subject to the provisions of the Colorado Open Records Act (C.R.S. 24-72-201, *et seq.*) and any other laws and regulations applicable to the disclosure of documents submitted under this RFP.

### **1.13. REQUIRED PERCENTAGE OF WORK SELF-PERFORMED BY CM**

The Proposer shall self-perform no less than 30% of the total work for CM services in the preconstruction phase by its own staff, not through subcontractors. For any awarded General construction contracts, the GC must self-perform work valued at not less than 30% of the total construction work by its own staff, not through subcontractors.

### **1.14. PROJECT COMPUTER SOFTWARE REQUIREMENTS**

The Contractor shall utilize the most recent CDOT adopted software. Latest version is defined as the version in use by CDOT at the release of this RFP. Upgrades to the version of any software on this list that occur for the duration of the Project, will be evaluated for efficacy on a case-by-case basis. The primary software used by CDOT is as follows:

#### **A. Estimating**

Microsoft Excel (latest version) or other software that is compatible with providing pricing in the CDOT Schedule of Bid Items standard format using the most current CDOT Item Code Book.

#### **B. Scheduling**

Microsoft Project (latest version) or Primavera (latest version)

#### **C. Specifications**

Microsoft Word (latest version)

#### **D. CADD**

Bentley OpenRoads Designer (latest version) & Bentley ProjectWise Cloud (latest version)



### **1.15. REQUIRED AVAILABILITY OF KEY PERSONNEL**

Key Personnel in the Project Management Team section of the Proposal, see **Section 3.1** of this RFP, constitutes an agreement by the Proposer to make the Key Personnel available to complete the services of the contract at the level the Project requires. CDOT requires that all Key Personnel be engaged to perform their specialty for all services required by this contract, and the Key Personnel shall be retained for the life of this contract to the extent practicable and to the extent that such services maximize the quality of work hereunder.

If the CM or a subcontractor decides to replace any of its Key Personnel, the CM shall notify the CDOT Project Director in writing of the desired change. No such changes shall be made until at least two qualified replacement candidates are recommended by the CM and a replacement is approved in writing by the Project Director or its designated representative. The approval shall not be unreasonably withheld. Failure of the CM to comply with the requirements of this provision may be the cause for CDOT's termination of the contract.

The Project Director or its designated representative will respond to the CM's written notice regarding replacement of Key Personnel within fifteen working days after receipt of the list of proposed changes. If the Project Director or its designated representative does not respond within that time, the listed changes shall be deemed to be approved.

If, during the term of the contract, the Project Director or its designated representative determines that the performance of approved Key Personnel is not acceptable, a notification shall be sent to the CM. The notification shall include a reasonable timeframe to cure the unacceptable performance. Thereafter the CM may be required to reassign or replace such Key Personnel. If the Project Director or its designated representative notifies the CM that certain Key Personnel of a subcontractor should be replaced, the CM shall use its best efforts to replace such Key Personnel within a reasonable time, but not to exceed fifteen working days from the date of the notice.

### **1.16. ORGANIZATIONAL CONFLICTS AND INELIGIBLE FIRMS**

The Proposer shall include a full disclosure of all potential organizational conflicts of interest in its Proposal. An organizational Conflict of Interest exists when a person or business entity has an unfair competitive advantage because of other activities or relationships with other persons. No Person or business entity prior to Proposal submission, that was engaged by the State of Colorado in the preparation of this Request for Proposal, that had access to procurement sensitive information related to this Request for Proposal including but not limited to Requirements, Statements of Work, or Evaluation Criteria will be eligible to directly submit or participate in the submittal of a proposal for this initiative.

By submitting its Proposal, each Proposer agrees that, if an organizational conflict of interest is thereafter discovered, the Proposer will make an immediate and full written disclosure to CDOT that includes a description of the action that the Proposer has taken or proposes to take to avoid or mitigate such conflicts. If an organizational conflict of interest is determined to exist without satisfactory mitigation, CDOT may, at its discretion, cancel the award or terminate the contract.

If the Proposer was aware of an organizational conflict of interest prior to the award of the contract and did not disclose the conflict to CDOT, CDOT may terminate the contract for Default. No firm that is ineligible for State contracts may be part of any Proposer Team. Each Proposer is responsible for determining the eligibility of its team members.



### **1.17. APPLICABLE FEDERAL REGULATIONS, STATE REGULATIONS AND INDUSTRY STANDARDS**

The Proposer shall conform to all applicable State and Federal laws and regulations and recognized industry, safety, environmental, and design standards.

### **1.18. NONDISCRIMINATION**

The CM shall comply with all applicable legal requirements that: enumerate unlawful employment practices including discrimination because of race, religion, color, gender, age, disability, or national origin, and define actions required for affirmative action and minority/disadvantaged business programs. The CM shall not discriminate against any employee or applicant for employment because of race, color, national origin, religion, gender, age, or physical handicap.

The CM shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, gender, age, disability, or national origin. Such action shall include the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CM agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

### **1.19. DBE PROGRAM REQUIREMENTS**

The contract goal for DBE participation during the preconstruction services is five percent (5%).

A DBE contract goal will be required for all GC Construction Project Contracts and will be set at the 90% design level based on its scope and size. The CM will be able to provide input as this deadline approaches. CDOT Civil Rights staff shall also be involved so they understand the goal in relation to the scope.

Sufficient good faith efforts to meet the DBE contract goal and any mitigation requirements of the on-going NEPA document shall be a condition of award for each General Contract for Construction. Sufficient good faith efforts to meet the On-the-Job Training Goals (“OJT”) shall also be a condition of award for each General Contract for Construction. DBE documentation and subcontractor selection must be provided before a General Contract for Construction is awarded.

The Proposer shall conform to all applicable State and Federal regulations regarding Civil Rights compliance.

### **1.20. MAXIMUM COMPENSATION FOR CM PRECONSTRUCTION SERVICES**

As stated in **Section 1.8** of this RFP, the Construction Budget is defined as the portion of the Project budget estimated for General Construction Contracts ~~for Construction~~. The estimated required Construction Budget for this Project is \$140 million. This amount does not include non-construction Project costs (which are in addition to this amount) ~~and are still being evaluated by CDOT with the goal of optimizing efficiency~~. The funding for the Project has been fully identified at the time of this RFP.

**The successful Proposer will be paid an ~~amount-total sum amount~~, not to exceed \$1.4 for the CM preconstruction services described in this RFP. Please see Form B-1 in Appendix B ~~of this RFP~~.**

The CM shall submit monthly invoices to the CDOT Project Director for payment as work progresses. The estimated percentage of CM preconstruction services completed will be discussed and agreed upon



with the CDOT Project Director prior to payment.

If it is in CDOT's interest any portion of the preconstruction scope described in this RFP, may be withheld, and the fee for preconstruction services will be adjusted, appropriate to the deducted scope.

### **1.21. EXPLANATION OF CAP**

A reviewed, negotiated, and agreed upon CAP proposal is the amount that may be incorporated into the standard General Contract for Construction.

The CAP is the sum of the direct Cost of Construction and the Management Price Percentage for a specific construction package. The Cost Model consists of bid items, quantities, risks, and assumptions for the construction package, etc. and will be refined and finalized through a series of Cost Model meetings.

The CM will propose a CAP to provide Construction services; CDOT and the CM will negotiate the direct Cost of Construction for that package with the goal of agreeing on a final CAP. CDOT makes no guarantees that it will accept or agree to a CAP proposal submitted by any party. If CDOT successfully negotiates, agrees, and accepts a CAP proposal, then payment for the construction of the Project will be based on the negotiated and accepted CAP which includes, but is not limited to, a Schedule of Bid items as per the Standard Specifications for Road and Bridge Construction.

CDOT anticipates requesting CAP proposals when both the CM and CDOT agree the design has progressed to the appropriate level, typically at 90%, for each individual construction package. If CDOT and the CM have negotiated, agreed on, and accepted a CAP proposal, the CM shall then submit the CAP proposal via the Electronic Bid Submittals ("EBS") system. The CM may develop multiple CAP proposal packages, and CDOT may negotiate and accept those CAP proposals during the design and construction phases of this Project. CDOT reserves the right not to award any part(s) or all the General Contracts for Construction Services, and bid/award some or all of the construction work separately. The CM shall deliver to CDOT a proposed GC CAP and GC CAP supporting documents for any appropriate milestones identified at the Project Scoping Workshop, and for any appropriate LLTP or construction phase.

Except for change orders due to unforeseen conditions or negotiated overrun items and agreed upon risk pool items approved by CDOT, a General Contract for Construction Services price will not be increased. The GC assumes all risk with performance of the bid items, including management of its subcontractors, suppliers, and any associated cost impacts over and above a General Contract for Construction Services price not negotiated as overrun items in the construction specifications or agreed to as risk pool items in the executed Risk Register.

A CAP proposal can be offered and negotiated three times. If the third attempt at a CAP negotiation fails, CDOT reserves the right to prepare the plans, specifications, and estimate package for public, low-bid, advertisement. The CM services contractor is not allowed to bid on this public advertisement.

CDOT will review and determine whether to accept the risk and shared risk contingency pools with the CM during the preconstruction phase, if accepted, the risk and shared risk contingency pools could potentially be incorporated into a negotiated CAP proposal. The purpose of the contingency risk-sharing pool is to develop a budget for items foreseen at the time of negotiating a CAP proposal but were not detailed enough for itemized pricing. All items fitting this category will be identified separately in a CAP proposal by CDOT and the CM and will be monitored for progress and cost by CDOT.

In developing this shared risk contingency pool, CDOT may agree to share any residual risk pool budget at the completion of construction (not attributed to any reduction in the scope of work or reduction in operating performance for the corridor).





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## **1.22. PUBLIC INFORMATION**

The section of I-270 through the Project area serves as one of only two Hazardous Materials Routes in the Denver Metro Area and serves as a link between the state's major north-south (I-25) and east-west (I-70) interstates. I-270 is part of the National Highway Freight Corridor and is a critical piece of infrastructure that plays a large role in economic vitality throughout the state of Colorado. The corridor sees a high volume of traffic, a high percentage of commercial vehicles (16%), and sees peak daily averages surpassing 100,000 vehicles per day. Congestion relief along I-270 is one of the state's highest transportation priorities, affecting millions of Colorado residents, tourists, and the movement of freight.

The CM Public Information Manager ("PIM") will be expected to execute and support CDOT's communication needs for this Project with a variety of audiences in the corridor including residents, business owners, the traveling public, tourists, recreation patrons, the freight industry, and others during the project development phase.

During the project development phase, CDOT will be the primary point of contact responsible for Public Information. If a General Contract for Construction Services is awarded, then CDOT will still be the primary point of contact, however, the GC will be required to provide timely updates and responses for Public Information requests for the duration of construction.

The cost for Public Information effort during construction shall be included in the individual construction packages. This work consists of providing regular and continuous communications services throughout the duration of construction including community and stakeholder outreach as well as media support.



## SECTION 2 – CM PROPOSAL REQUIREMENTS AND INSTRUCTIONS

### 2.1. PROPOSAL GENERAL INFORMATION

This RFP is a two-phase procurement process that includes a Proposal (Phase 1), followed by a short listing of Proposers by the Selection Panel (Phase 2) and followed by an interview of the shortlisted Proposers. CDOT intends to identify three shortlisted Proposers but reserves the right to identify as few as two and as many as four. The shortlisted Proposers will continue to Phase 2 of the procurement, which is the interview.

Proposal packages in response to the RFP shall be submitted in one package for pre-construction CM services. The Proposers Technical Score and their Interview Score will be summed and tabulated which will be referred to as their “Total Score”. The Proposers’ “Total Scores” will be ranked and the Proposer with the highest “Total Score” will be considered the apparent successful Proposer in accordance with the evaluation criteria set forth in **Section 3** of this RFP.

All Proposers to this RFP accept the conditions of this RFP, including, but not limited to, the following:

- A. Multiple proposals from a single Proposer will be considered non-responsive and will not be evaluated or scored.
- B. The costs associated with the preparation of the Proposal, required documentation, interviews, presentations, discussions, the selection process, the contract negotiation process, and/or any related activities are the sole responsibility of the Proposer, reimbursement will not be made by CDOT.
- C. The Proposer shall include a full disclosure of all potential organizational conflicts of interest as outlined in **Section 1.16** of this RFP.
- D. Any proposal received by CDOT after the time specified in **Section 2.3** of this RFP shall be deemed non-responsive and shall not be evaluated or scored.
- E. This RFP, including all material submitted by Proposers, at any stage, including but not limited to the Procurement phase, selection, and any resulting contracts, are subject to the provisions of the Colorado Open Records Act (C.R.S. 24-72-201, *et seq.*) and any other laws and regulations applicable to the disclosure of documents submitted under this RFP.

Material subject to open records laws includes, but is not limited to, all records, documents, drawings, plans, specifications, and other materials relating to the Project, the solicitation, and the conduct of CDOT business. CDOT will also follow and adhere to CDOT Policy Directive 508.2 for this RFP and resulting contracts.

The Proposer shall specifically identify and mark any proprietary information, trade secrets, or confidential commercial and financial information that a Proposer believes should be exempted from disclosure.

During the Procurement phase, CDOT will accept materials clearly and prominently labeled “PROPRIETARY”, “TRADE SECRET”, or “CONFIDENTIAL” by the Proposer.

Blanket, all-inclusive identifications by designation of whole pages or sections as containing proprietary information, trade secrets, confidential commercial or financial information shall not be permitted and shall be deemed invalid except that blanket identifications can be made in the Strategic Project Approach, Approach to Risk, Schedule, and Pricing; and the Management Price Percentage breakdown (Appendix C) as defined in **Section 2.8** of this RFP.



CDOT will follow CDOT Policy Directive 508.2 in determining disclosure of documents requested. CDOT will advise the Proposer of any request pursuant to the Colorado Open Records Act and any other applicable laws for the disclosure of any materials. Under no circumstances, however, will CDOT be responsible or liable to the Proposer or any other party for the disclosure of any such labeled materials, whether the disclosure is deemed required by law, by an order of the court, or occurs through inadvertence, mistake, or negligence on the part of CDOT or its officers, employees, contractors, or consultants.

CDOT will not advise the Proposer as to the nature or content of documents entitled to protection from disclosure under the Colorado Open Records Act or other applicable laws, as to the interpretation of the Colorado Open Records Act, or as to the definition of trade secret. The Proposer shall be solely responsible for:

- All determinations made by it under applicable laws; and
- Clearly and prominently marking each and every page or sheet of materials with “PROPRIETARY”, “TRADE SECRET”, or “CONFIDENTIAL” as the proposer determines to be appropriate.

Each Proposer is advised to contact its own legal counsel concerning the Colorado Open Records Act, other applicable laws, and their application to the Proposer’s own circumstances.

In the event of litigation concerning the disclosure of any materials submitted by the Proposer, CDOT’s sole involvement will be as a stakeholder retaining the material until ordered by a Court, and the Proposer shall be responsible for otherwise prosecuting or defending any action concerning the materials at its sole expense and risk.

All submittals will become the property of CDOT, will not be returned, and will be disposed of according to Department policies. The concepts and ideas in the information contained in the Proposal, including any proprietary, trade secret, or confidential information (exclusive of any patented concepts or trademarks) submitted by all Proposers, shall also become the property of CDOT.

- F. CDOT reserves the right to reject any or all Proposals. Proposals that do not meet the Minimum Proposal Requirements listed in **Section 2.2** of this RFP will be deemed non-responsive and will not be evaluated, evaluation will be ceased upon discovery of non-responsive determination and will not be scored.
- G. Unsuccessful proposers may elect to participate in a debriefing by submitting the request via email to Contract Officer identified in **Section 1.6.B** within 5 working days after the Announcement of the Successful Proposer. All debriefs shall be conducted within 10 working days of the Announcement.
- H. The successful Proposer will be contracted for CM preconstruction services for this Project. CDOT may terminate the CM services contract at the completion of the preconstruction phase for convenience.
- I. If CDOT and the successful Proposer fail to successfully negotiate a Construction Agreed upon Price for any portion of the Project and CDOT chooses to publicly advertise a new solicitation of the GC portion of this Project for bids, the successful Proposer will not be permitted to submit a bid.



## **2.2. MINIMUM PROPOSAL REQUIREMENTS**

All Proposals will be required to meet minimum proposal requirements to be considered for this Project. To be considered qualified, Proposers shall have, as a minimum:

- A. Submit a Letter of Interest to the Project Director. At least one member of the proposed Project Team will have submitted a Letter of Interest prior to September 30, 2022. Any proposal received without a corresponding LOI will be determined by CDOT to be non-responsive. The corresponding non-responsive proposal will not be evaluated or scored and will not continue in the procurement process. CDOT will accept proposals from Joint Ventures where at least one of the major partners submitted a Letter of Interest.
- B. Demonstrated a bonding capability up to \$140M for an individual project in addition to its current and anticipated bond commitment workload. Provided a letter from a surety company indicating that the Proposer is capable of obtaining Payment and Performance Bonds covering Project No. FBR 2706-44/C R100-364, I-270 Critical Bridge Replacements Project for at least \$140M. Letters indicating “unlimited” bonding/security capability are not acceptable.

The surety submitting the letter must be a surety company or companies licensed by the State of Colorado and listed in the current United States Department of the Treasury Circular 570 as acceptable sureties for the bond amount on Federal Bonds. Performance and Payment Bonds will be required at the time the Construction Agreed upon Price negotiation begins, for any portion of the Project. The final value of the Bonds will equal the final construction contract amount.

- C. Provided CDOT with evidence of insurability that meets the requirements of Subsection 107.15 of the Standard Specifications for Road and Bridge Construction. The Proposer is not required to provide Professional Liability insurance certificates.

CDOT may, at its election, implement an Owner Controlled Insurance Program (“OCIP”) for the construction of this Project. Lines of insurance coverage may include any or all of the following: Workers Compensation, Commercial General and Excess/Umbrella Liability, Contractors Pollution Liability, and/or Builders Risk. CDOT reserves the right to determine who participates in the OCIP. The CM can assume that CDOT will make this determination at the 60% OPCC for each CAP package.

- D. Provided CDOT with evidence of having been pre-qualified with the CDOT Contracts and Market Analysis Branch at the greater than \$20,000,000 level and satisfy all requirements of pre-qualification per 2 CCR 601-10, Rules Governing Construction Bidding for CDOT Public Projects, within 14 calendar days of the Proposal submittal deadline as shown in **Section 2.3** of this RFP.

Federal and State regulations require certification by prospective participants (including contractors, subcontractors, and principals) as to current history regarding debarment, eligibility, indictments, convictions, or civil judgments.

- E. Meet all the Proposal Submittal requirements of **Section 2.8 (Management Price Percentage) and Section 2.9 (Proposal Submittal)** of this RFP.
- F. Provided CDOT with a signed Anti-Collusion Affidavit, CDOT form #606 with the initial proposal materials.



**2.3. KEY EVENTS SCHEDULE AND RFP DATES**

Proposers are required to meet the dates set for the Proposal submission, and the interviews. Proposers are also required to meet the information submittal dates outlined in the summary below. Failure to meet these dates will result in the Proposal being considered non-responsive. All times listed in the table below are Mountain Standard Time (MST). CDOT is fully committed to delivering the Project and meeting the milestones shown in the table below. CDOT does reserve the right to modify the timeframes if it is determined by CDOT to be in the best interest of the State, and the Project.

Key Event	Date	Time
Advertisement of Draft RFP for CM Services	10/27/2022	N/A
Optional One-On-One Briefings – Confidential (50-minutes)	11/09, 11/10, & 11/14/2022	as requested
Draft RFP Proposer Questions/Comments Due	11/16//2022	2:00 p.m.
Advertisement of Final RFP for CM Services	11/18/2022	N/A
Proposal Submission	12/09/2022	2:00 p.m.
Notification to Shortlisted Proposers	02/06/2023 <del>01/27/2023</del>	N/A
Interviews	<del>02/22/2023</del> <del>02/15/2023</del>	N/A
Chief Engineer Selection Approval	<del>03/03/2023</del> <del>02/24/2023</del>	N/A
CM Notification	<del>03/03/2023</del> <del>02/24/2023</del>	N/A
Announcement of Successful Proposer	<del>03/03/2023</del> <del>02/24/2023</del>	N/A
Anticipated Contract Execution/NTP	<del>04/28/2023</del> <del>04/21/2023</del>	N/A

**2.4. CONFIDENTIAL ONE-ON-ONE MEETINGS**

The Optional One-On-One Meetings - Confidential are provided to allow the Proposer an opportunity to ask questions regarding the Project, established goals, the draft RFP and the CMGC Procurement Process. Proposers that have submitted a Letter of Interest may sign up for an Optional One-On-One Meeting with CDOT staff by emailing [katie.dawson@state.co.us](mailto:katie.dawson@state.co.us), with three, 50-minute meeting requests starting on the hour. Requested meeting times are between 9am and 4pm, November 9th, 10th, and 14th.

**2.5. QUESTIONS AND CHANGES TO THE RFP**

CDOT reserves the right to make changes to the RFP. Changes to the RFP generally consist of clarifications, scope changes, or time and/or date changes. All changes to the RFP prior to the receipt of



proposals shall be made by an addendum to the RFP and shall be available publicly to all Proposers on the CDOT procurement webpage. Following receipt of proposals, changes to the RFP (If any) will be conveyed in writing directly to those Proposers determined to be responsive.

Proposers may submit questions, request clarification, or request a change to the Draft RFP by submitting a written request to the Contract Officer at the address set forth in **Section 1.6** of this RFP.

The request shall specify the provision and section of the Draft RFP in question, and, if a change is requested, contain an explanation for the requested change. CDOT will not respond to questions or change requests received after time specified in the above table within **Section 2.3** of this RFP.

CDOT will evaluate any questions and/or requests submitted to determine merit but reserves the right to determine whether to respond or accept the requested change at its sole discretion. All questions, requests for clarification, or RFP Addendums, and CDOT's response will be posted at the following link:

<https://www.codot.gov/business/alternativedelivery/opportunities/cm-gc-solicitations/i-270-critical-bridge-replacements>

Proposers shall not rely on oral or written instruction changes or clarifications regarding this RFP, unless issued in writing by the CDOT Contract Officer as an addendum to this RFP.

Proposers must acknowledge all issued addenda in their submittal and proposal.

## **2.6. CONTRACTOR PROTEST RULES**

Protests will be handled per 2-CCR 601-10 Rules Governing Construction Bidding for CDOT Public Projects, as follows:

Any actual or prospective contractor who is aggrieved in connection with a solicitation or award of a contract may protest to the Chief Engineer. The protest shall be submitted within seven working days after the aggrieved person knows or should have known of facts giving rise to the protest. A protest shall not stay the procurement.

The Chief Engineer or designee shall have the authority to settle and resolve a protest of a Contractor, actual or prospective, concerning the solicitation or award of a contract. A written decision regarding the protest shall be rendered within seven working days after the protest is filed.

The decision shall be based on and limited to a review of only those issues raised by the aggrieved Contractor, and will set forth each factor considered, in reaching the decision.

The decision will constitute the final agency action of the Colorado Department of Transportation regarding the protest.

Entitlement to costs: When a protest is sustained by the Chief Engineer or designee, or upon administrative or judicial review, and the Contractor should have been awarded the contract under the solicitation but was not, the protestor will be entitled to recover Proposal preparation costs. No other costs or fees will be permitted or awarded including, but not limited, to attorney's fees.

## **2.7. AWARD OF CONTRACT**

CDOT intends to evaluate, select, and award one CM contract to the top ranked Proposer based on the result of the Responsiveness Review and the Total Score of the Proposal (The Total Score is a summation of their Technical Score and their Interview Score) with Chief Engineer Concurrence of the Selection Panel's recommendation. The apparent successful Proposer receiving Chief Engineer concurrence will be awarded a contract for CM Preconstruction Services.



The Selection Panel shall complete an evaluation of submitted Proposals and score them. Those scores will then be averaged, and points will be awarded. CDOT intends to shortlist three Proposers but reserves the right to Shortlist the top two to the top four proposers if it is in the interest of the Project. Those Proposers that have made the Shortlist will then participate in a second evaluation consisting of a scored Interview based on criteria in **Section 3.2** of this RFP.

Selection evaluation criteria and scoring of the proposals is detailed in **Appendix B** of this RFP. Contract Award and contract execution will be contingent on availability of proposed Key Personnel and subcontractors, committed to by the CM in the proposal.

The successful Proposer has a potential, but no guarantee, to enter into a General Construction Contract with CDOT for GC construction services for this Project. Only if CDOT and the successful Proposer successfully negotiate, agree to and accept a CAP proposal, will all parties execute a CDOT drafted General Contract for Construction, of any portion or all the Project. The General Contract for Construction t (if any) will be separate from the CM contract.

All negotiations shall be open book. CDOT and their Independent Cost Estimating Consultant shall have access to all CAP proposal documents, quotations, takeoffs, and other construction cost estimates, including those for subcontractors, during negotiations.

Issuance of the General Contract for Construction will be subject to the CM's firm posting 100% performance and payment bonds and being compliant with CDOT procurement policies. The CM's firm will competitively procure and award qualified subcontractors in accordance with their proposed subcontracting plan, as described in **Section 2** and **Section 3** of this RFP.

## **2.8. MANAGEMENT PRICE PERCENTAGE**

The Management Price Percentage is a percentage which will be applied to all Construction Phase CAP Proposals. The Management Price Percentage shall include all applicable line items in **Appendix C** of this RFP, including profit and indirect costs as defined in **Appendix C** of this RFP.

CDOT has established the Management Price Percentage for the Project at 10.5%. Proposer acceptance of the Management Price Percentage will be submitted with the Proposal using **Form B-2** in **Appendix B** of this RFP and the information in **Appendix C** of this RFP, collectively called Management Price Percentage Certification (MPPC).

The MPPC shall consist of a maximum of 3-total pages: (1) completed Form B-2 and (2) 2-page maximum limit of detailed information showing the breakout of the Management Price Percentage, in **Appendix C** of this RFP. The 3-total pages maximum shall be submitted with the Proposal in accordance with deadlines in **Section 2.3** of this RFP. Other indirect and non-reimbursable costs outlined in **Appendix C** of this RFP must be considered when certifying agreement to the MPPC.

The MPPC will be evaluated for responsiveness. If the MPPC is determined by CDOT to be non-responsive, the corresponding Proposal will also be determined by CDOT to be non-responsive. The corresponding non-responsive Proposal will not be evaluated or scored and will not continue in the procurement process.



## **2.9. PROPOSAL SUBMITTAL – STEP 1**

Proposers must comply with the following items. CDOT retains the right to waive any minor irregularity or requirement, so long as CDOT determines that it is in its, and the Project’s best interest, as determined by CDOT, in its sole discretion.

### A. Please submit electronically through BidNet at:

<https://www.bidnetdirect.com/colorado/cdotconstructionengineeringservices>.

~~A. Please contact BidNet Direct support for help at (800) 835-4603 with any issues submitting electronically. Timely deliver **one (1)** electronic copy PDF file of the Proposal to the Contract Officer listed in **Section 1.6** of this RFP.~~

- ~~● The maximum file size, if only sent to one person, is 25 MB is 22-25MB. Emails containing Proposal that Carbon Copy (“cc”) other individuals further limit the attachment size. For example, the email attachment is limited to only 5MB if sent to 5 recipients.~~
- ~~● Proposers may send a practice .pdf file to the Contract Officer listed in **Section 1.6** of this RFP as a test, at least three working days ahead of the RFP deadline. This file will be deleted by CDOT.~~
- ~~● Alternatively, Proposers may break up their proposal into several PDF files and send them to CDOT in multiple separate emails. If the proposal is broken up into several PDF files, the same file size limitations described above apply to each email.~~
- CDOT will only evaluate the files that are received by the date and time deadline set forth in **Section 2.3** of this RFP.

### B. Proposal Format:

- Submittals shall be formatted with section headers/tabs in the exact form and alphanumeric sequence of **Section 3** of this RFP.
- All submittals shall use a minimum font size of 11 Times New Roman and a minimum font size of 10 Times New Roman exclusively for charts, graphs, and figures.
- Web links or QR codes to external documents, information, videos, etc. are not allowed.
- Introductory Letter
  - 1-page limit (8-1/2” x 11” electronic paper size). Proposers shall acknowledge all issued addenda within this letter.
- Proposal Section
  - 12-page limit (8-1/2” x 11” electronic paper size).
  - 3-page limit (11” x 17” electronic paper size) shall be reserved exclusively for charts, graphics, and plan sheets.
  - The total page limit for the Proposal Section is 15-pages (single sided).
  - Background information for Key Personnel or other Team members does not need to be duplicated in the Proposal Section. Proposers can refer to the Appendix Section for this information.





- Appendix Section

The Appendix Section shall only include:

- Potential conflicts of interest: No page limit (8-1/2" x 11" electronic paper size).
  - Signed Anti-Collusion Affidavit, CDOT form #606: No page limit (8-1/2" x 11" electronic paper size).
  - Evidence of Prequalification per **Section 2.2.D** of this RFP.
  - Surety Letters: No page limit (8-1/2" x 11" electronic paper size).
  - Evidence of insurability: No page limit (8-1/2" x 11" electronic paper size).
  - Resumes and references for team members: 20-page limit (8-1/2" x 11" electronic paper size). At a minimum, it is expected that resumes and references are included for all Key Personnel. The Proposer may include resumes and references for non-Key Personnel team members but shall adhere to the 20-page maximum page limit.
  - MPPC (Form B-2 and Appendix C): Maximum of 3-total page limit (8-1/2" x 11" electronic paper size).
  - Maximum Compensation for Construction Manager Preconstruction Services (Form B-1): 1-page limit.
- Supplemental Section
    - 5-page limit (8-1/2" x 11" or 11" x 17" electronic paper size).
    - The Supplemental Section shall be reserved exclusively for supplemental materials for risk assessments, Cost Model examples, process illustrations, the organizational chart, and additional photos, exhibits, or schedules.
  - Commendation Section
    - 5-page limit (8-1/2" x 11" electronic paper size).
    - The Commendation Section shall be reserved for awards or letters of recommendations.

C. CDOT shall evaluate Proposals in accordance with criteria as indicated in **Section 3.1** of this RFP and subsequently score the submitted responsive Proposals in accordance with criteria in **Appendix B** of this RFP.

D. Responses to all items shall be complete; Proposers are encouraged to cross-reference to other sections of their proposal where applicable.

E. All references shall be current and relevant.

F. Tabs, covers, and tables of content pages do not count toward the page count. All proposals must be submitted in .pdf format and transmitted electronically to CDOT.

G. Short List

From the Proposals received, the Selection Panel intends to Shortlist the top three Proposers but reserves the right to shortlist two or four Proposers if it is in CDOT's and the Project's interest to do so. The Proposals will be evaluated and scored using the scoring indicated in **Section 3** and **Appendix B** of this RFP.



## **2.10. INTERVIEWS - STEP 2**

Mandatory interviews will be conducted for the shortlisted teams only. Interview times will be arranged by CDOT per **Section 2.3** of this RFP and are subject to change; all shortlisted firms will be notified in advance. Interviews will be evaluated and scored using the scoring indicated in **Section 3 and Appendix B** of this RFP.



## **SECTION 3 – PROPOSAL CONTENT AND EVALUATION CRITERIA**

### **3.1. EVALUATION CRITERIA FOR PROPOSALS (75 Points Possible)**

#### **A. CM Project Management Team (15 Points Possible)**

##### Composition and Commitment of the CM Project Management Team

- Provide a description of the composition of the team’s Project Key Personnel. If the Proposer team is a Joint Venture or association, indicate specific responsibilities of each party to the Joint Venture.
- Provide, identify, and discuss the qualifications of the Key Personnel and include the following:
  - Provide job descriptions, responsibilities, and authority;
  - Provide a list of the concurrent projects, responsibilities, and commitments that each may have for the duration of the Project;
  - Current home office location;
  - Qualifications and past construction experience relevant to this Project, in addition to length of time performing those job duties;
  - Unique skills or knowledge each may possess related to the Project;
  - Length of time of overall experience pertinent to the scope of this project and length of time with the current firm for each;
  - Experience on similar projects as a team; and
  - Provide resumes and two current references for the Key Personnel in an appendix to the Proposal. References will be considered current if the party’s name, current position/title, and position/title held at the time for which the recommendation is being sought are provided; telephone numbers must be current as of the proposal due date.

##### Tier Breakdown

- TIER I: One team member should comprise the role as the Key Personnel for the Project, and should have the following Tier I skills, experience, and knowledge:
  - Project Manager (PM)
    - This team member shall serve as the overall PM for the CM services and, if awarded the CM/GC Construction Project Contract, GC construction services. The PM shall be the main point of communication for the Project team;
    - This team member shall remain in this role for the duration of the Project and is not permitted to fulfill any Tier II or Tier III responsibilities;
    - This team member shall have 15 years of industry experience and shall have demonstrated experience and expertise on a similar role in the delivery of projects of a similar scope, value, nature, and complexity to the Project; and
    - Anticipated time commitment: 100% throughout the duration of the Project.



- TIER II: The following staff members shall comprise Key Personnel for the Project, and should have the following Tier II skills, experience, and knowledge:
  - Construction Manager
    - This team member shall be responsible for providing construction and constructability expertise, construction phasing, and seeking innovative solutions during preconstruction services;
    - This team member shall have a minimum of 15 years of experience in construction and management of construction on highway projects similar in scope, value, nature, and complexity of the Project; and
    - Anticipated time commitment: 50-75% during preconstruction, 100% during construction (if applicable).
  - Scheduling Expert/Project Controls
    - This team member shall be responsible for managing the Project schedule and Project risk;
    - This team member shall have a minimum of 7 years of industry experience specific to this expertise and be able to confidently use the scheduling software of choice as shown in **Section 1.14** of this RFP; and
    - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 30-50% during preconstruction, 50-75% during construction (if applicable).
  - Quality Manager
    - This team member shall be responsible for quality assurance during the preconstruction phase and if a CAP is successfully negotiated this position may transition into managing Contractor Project quality control throughout for both design and construction;
    - This team member shall have a minimum of 7 years of industry experience specific to this expertise; and
    - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 30-50% during preconstruction, 75-100% during construction (if applicable).
  - Cost Estimator
    - This team member shall be responsible for providing ROM cost estimates and OPCCs during preconstruction services;
    - This team member shall have a minimum of 7 years of industry experience specific to this expertise; and
    - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 30-60% during preconstruction, and 10% during construction (if applicable).
  - Structures Expert



- This team member shall be responsible for providing input, constructability expertise, and providing innovative solutions for all the structural features of the Project including but not limited to the bridge, and wall construction;
- This team member shall have a minimum of 15 years of industry experience specific to this expertise; and
- Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 60-75% during preconstruction and construction (as needed).
- Geotechnical
  - This team member is responsible for providing input and constructability expertise for all the geotechnical aspects of the Project including but not limited to analysis, bridge/wall foundations, excavation stability, and landfill mitigation measures;
  - This team member shall have a minimum of 15 years of industry experience specific to this expertise; and
  - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, this person may be committed 30-50% during preconstruction and construction (as needed).
- Environmental Specialist
  - This team member shall be responsible for providing input on all environmental issues, for example the incorporation and construction of erosion control measures into the Stormwater Management Plan (SWMP) and permanent water quality;
  - This team member shall have a minimum of 7 years of environmental experience, including design and construction experience; and
  - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 20-40% during preconstruction, and 50-75% during construction (as needed).
- Public Information Officer/Stakeholder Engagement
  - This team member shall have a minimum of 7 years as an experienced manager in public information, public relations, and strategy in communication with stakeholders;
  - This team member shall have demonstrated experience and expertise filling a similar role in the delivery of projects equivalent in scope, value, nature, and complexity to the Project; and
  - Anticipated time commitment: Depending on the number, size, and complexity of construction packages, may be committed 20-40% during preconstruction, and 100% during construction (if applicable).
- TIER III: Technical Experts will make-up Tier III of the organization structure but are not considered Key Personnel. Technical Experts are expected to attend relevant Project meetings. Tier III staff should provide the following skillsets, knowledge, and experience:
  - Safety,
  - Materials,



- Utilities,
- Roadway,
- Drainage,
- Landscaping/Aesthetics, and
- Civil Rights (Equal Employment Opportunity).
- Multiple Tier III skill sets may be fulfilled by one individual if adequate justification is made in the proposal to define who is fulfilling what role and their qualifications. Proposers shall identify a lead person for each skillset.
- The Proposer may identify and include additional Key Personnel within the Proposal that are necessary for the success of the Project. The Proposer shall include an explanation for the additional Key Personnel, and the added value they bring to the Project. The Key Personnel requirement within **Section 1.15** of this RFP will apply to any additional Key Personnel identified by the Proposer.
- All Key Personnel are expected to attend relevant Project meetings.
- Key Personnel are expected to have been delegated a reasonable level of decision-making authority on behalf of the CM.

#### Organizational Chart and Succession Planning

- Provide a graphic showing the CM's organizational chart, complete with working titles for the team for the preconstruction phase. Provide an explanation of any variation to the anticipated Key Personnel time commitments stated above.
- Provide a narrative describing succession planning for team stability and planning for any member of the project team that may leave.
- See **Section 1.15** of this RFP for additional information related to Key Personnel.

#### Safety Record and Performance

- Provide a narrative of the Proposer's largest foreseen safety risks for the Project and describe the safety programs, processes, and initiatives that the Proposer currently has in place to help manage/mitigate/or eliminate the safety risks.
- Provide the following information for each entity involved, covering the last 4 years (2018-2021).
  - Experience Modification Rates (EMR)
  - OSHA Reportable Incident Statistics

### **B. Contractor Capability (20 Points Possible)<sup>1</sup>**

#### Prior Project Experience/Performance/References

<sup>1</sup> Pursuant to Section 24-93-110, (1), C.R.S. The Department of Transportation shall not exclude a participating entity from a short list, prepared and announced by the Department as required by Section 24-93-105 (2), of responding participating entities that have been determined to be most qualified to receive a request for proposals for an IPD contract for a public project based solely on the participating entity's lack of experience in delivering a public project in the State by the IPD method to be used for the public Project.



- Provide a summary of the Proposer’s previous project experience relevant to the general scope and construction value of work for this Project.
- Provide three or more relevant projects/programs that demonstrate the Proposer’s ability to be successful on this Project. For each listed project or experience, include the name of the owner, any architect/engineer references, and the contract information CDOT may at its discretion, contact references on the listed projects.

Provide at a minimum:

- The project/contract name,
- Project delivery method,
- Description of services provided,
- Overall construction cost of the project, as applicable, including the initial contract/construction value and value at final acceptance. Please provide reasoning for any differential,
- Description of project schedule performance, including initial schedule, and reasons for schedule change,
- Coordination with stakeholders, if any,
- Key personnel assigned or in-house staff and their level of involvement,
- Senior Leadership assigned and their commitment in time to the overall success of the project, as well as their commitment to the success of the Owner’s Program,
- Major subcontractors and primary subcontracts used in the performance of the contract, and
- Project Reference(s). All references submitted shall be current for relevant projects. References will be considered current if the party’s name, current position/title, and position/title held at the time for which the recommendation is being sought are provided; telephone numbers must be current as of proposal due date.

**C. Strategic Project Approach (25 Points Possible)**

Preconstruction Services

Provide a narrative that describes the Proposer’s project specific plan and approach to meeting the Project Goals. Identify how the Proposer will manage schedule, budget, and incorporation of innovation.

CDOT determined that CM/GC is the most appropriate delivery method for the Project because of the ability for risk sharing, early construction manager input into the design, and to develop early cost certainty for the Project. Describe the Proposer’s role and responsibility in refinement of the design, quality of the design, accuracy of the scope, and ensuring efficiency of the execution of delivery for the Project.

Describe the Proposer’s strategy for project management for the Project that would encourage building a culture of success and collaboration. Highlight how the Proposer will manage preconstruction milestones, quality control during preconstruction, project resources, and environmental resources.



Describe how the Proposer will partner with CDOT, and the designer, to ensure that every dollar invested into the preconstruction phase of the Project adds value to the Project.

#### Construction Services

Describe the Proposer's project specific plan and approach to construction project management for the Project. Describe how the Proposer is uniquely skilled to manage the challenges of the Project. Highlight the strategy to meeting construction milestones, project sequencing, early action opportunities, critical scope elements, stakeholder coordination, and market conditions.

Describe the Proposer's project specific plan and approach to scope management, self-performance, subcontractor management, and management of Civil Rights compliance.

Describe the Proposer's plan and approach to environmental management for the Project. Please include an emphasis on air quality and emission reduction, including greenhouse gasses, NOx, fine particulate matter, and other co-pollutants, for construction activities and materials.

Describe the Proposer's plan and approach for CDOT I-270 Corridor incident response. Include how the Proposer your team will remain agile to coordinate, adapt, complement, and contribute to the Incident Command's direction.

#### Project Innovations

Describe the Proposer's practical innovative ideas specific to the Project in detail. All innovative ideas presented by the Proposer will be considered proprietary in accordance with Section 2.1.E of this RFP.

### **D. Approach to Risk, Schedule, and Pricing (15 Points Possible)**

#### Risk Approach

Define the key steps to risk management that the Proposer will employ. Describe how those steps will be applied to both the preconstruction and construction process.

Describe the techniques and tools that the Proposer will use to quantify the risk, establish a risk pool, and participate in management of the risk pools and contingencies.

Identify and describe the top five risks the Proposer has identified on the Project and what are the preliminary plans to manage those risks. Be specific on how the Proposer will prioritize those risks and manage them.

#### Schedule Approach

Time is of the essence for the Project. Describe the Proposer's plan and approach to managing the construction schedule in such a way as to minimize impacts to the traveling public, encourage efficient execution, inform the preconstruction process, manage the critical path, incorporate innovation, and provide reasonable float.

#### Cost Model Approach

Describe the Proposer's approach to Transparency and Accountability in the Cost Model. Describe how the Proposer will contribute to the pursuit of the project goals and provide





easy to interpret deliverables using standard agreed upon terms and inputs.

Describe how the Proposer's cost model will incorporate the variables that affect project costs, innovation, essential inputs needed, coordination with the Owner and their Independent Cost Estimator, and be reliable over multiple construction seasons.

### **3.2 EVALUATION CRITERIA FOR INTERVIEWS (25 Points Possible)**

An interview will be a mandatory part of the selection process for those Proposers on the Short List. The structure of the interview will be as follows:

#### **A. Short Presentation (10 Points)**

Summarize the Proposal and describe the Proposer's innovative ideas and unique resources (20 Minutes). The Proposer needs to communicate to the Selection Panel why the Selection Panel should determine the Proposer as the apparent successful Proposer. What strategies and abilities does the Proposer bring to this Project to distinguish them from the other shortlisted Proposers? Limit the presentation to the most critical points of the Proposal and focus on what your team can bring to the project and why.

#### **B. Team Challenge (5 Points)**

The Proposer will be given a written challenge to review and propose a course of action to address the elements in the problem. The Proposer will be given 15 minutes to prepare a response or solution and 10 minutes to present the formal response or solution to the Selection Panel. The Selection Panel will observe, evaluate and score both the deliberations of the Proposer during the 15-minute preparation and the 10 minute presentation. This challenge evaluation and scoring will be determined by the following criteria:

- Team's understanding of the Team Challenge;
- Team's recognition of key points and ideas;
- Team's collaboration;
- Team's communication skills;
- Team's understanding of CM/GC Delivery Method and environmental commitments; and
- Team's understanding of Project Goals

#### **C. Question and Answer Session with the Selection Panel (10 Points)**

The questions asked by the Selection Panel in this session will be the same for each Proposer. The Proposer will be allocated 25 total minutes for this session. The Evaluation Facilitator will read each question and allow the Proposer to respond to the question for evaluation and scoring by the Selection Panel. The interview typically includes multiple questions, all questions and follow up questions must be responded to in the allotted 25-minute time limit. The Proposer shall monitor the 25 total minutes. If time remains after all questions are asked and answered, and the Proposer does not have any questions, the Selection Panel may ask follow-up questions regarding the Proposers proposal, short presentation, team challenge or questions and answers.



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The interview presentation and question/answer scoring will be based on the following criteria:

- Project Understanding,
- Project Approach,
- Project Innovation,
- Communication Skills, and
- Understanding of CM/GC Project Delivery Model.



## **APPENDIX A: PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX**

The table below includes activities of communication, consensus building, project team reviews, conceptual design, data gathering, documentation, and formal public notice and should be planned by the appropriate responsible party and coordinated with all team members.

The time of their implementation will overlap, and parallel paths of activity should be planned to finish in the development phase in accordance with the shortest possible schedule. The type and number of meetings, documents, etc., will depend on the category and characteristics of the project work.

The CM shall work with the Design Team to finalize Appendix A for approval by the Project Director.



**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b>INITIAL PROJECT SCOPING MEETING (WORKSHOP)</b>			
A. CM/GC AND PARTNERING INTRO SESSION	2	2	1
B. PROJECT SITE VISIT AND INSPECTION	1	2	2
C. PROJECT STATUS, GOALS, ELEMENTS, OBJECTIVES, DESIGN SCHEDULE REVIEW	C	C	C
D. IDENTIFY PROJECT RISKS AND DEVELOP INITIAL RISK MANAGEMENT PLAN AND RISK REGISTER	1	2	2
E. REVIEW APPLICABLE ENVIRONMENTAL DOCUMENTS (ROD, FONSI, ETC.)	1	1	2
F. INDEPENDENT DESIGN AND AS-BUILT REVIEW	1		
G. DEVELOP PROJECT SCHEDULE AND TASKS	1	2	1
H. SCHEDULE BI-WEEKLY PROGRESS, FIR, FOR, AND MILESTONES MEETINGS		2	1
I. IDENTIFY DESIGN CRITERIA		1	2
J. DISCUSSION OF POSSIBLE EARLY DELIVERY AND LONG LEAD TIME ITEMS	1		2
K. ANALYSIS OF PROJECT PHASING AND MULTIPLE PS&E PACKAGES	1	2	2
L. DEVELOP DOCUMENT REVIEW AND NAMING CONVENTION STANDARDS	2	1	2
<b>PROGRESS MEETINGS</b>			
A. CDOT/PM, C/PM, CMGC/PM	C	C	C
B. PROJECT MEETING MINUTES		1	2
<p>The managers and team members will meet periodically as required (typically at two-week intervals). These progress meetings will be used to coordinate and track the work effort and resolve problems. The meetings will review the following:</p> <ul style="list-style-type: none"> <li>● Activities required to be complete since last meeting (Action Items)</li> <li>● Problems and challenges encountered/anticipated and potential solutions</li> <li>● Project Schedule Updates (Design and Construction)</li> <li>● Action Items</li> <li>● Coordination and communication required with: <ul style="list-style-type: none"> <li>▪ Team Members</li> <li>▪ CDOT Specialty Units</li> <li>▪ Other</li> </ul> </li> </ul> <p>The CDOT/PM will provide meeting minutes that include details discussed, notes, and all action items relating to the meeting within one week of the meeting.</p>			

LEGEND: C = COLLABORATIVE RESPONSIBILITY, 1 = PRIMARY RESPONSIBILITY, 2 = SECONDARY RESPONSIBILITY



**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b>1. PROJECT DEVELOPMENT PROCESS</b>			
<b>Project Management</b>	2	2	1
The CDOT/PM will coordinate all the work tasks being accomplished by all parties to ensure Project work completion stages are on schedule. The C/PM and CMGC/PM shall coordinate all the work tasks being accomplished by their respective teams to make sure Project work completion stages are on schedule			
<b>Communication and Consensus Building</b>	2	2	1
The CDOT/PM is responsible for the consensus building and facilitating the communication between all members of the Project team. This does not dismiss the responsibility of all team members to communicate with the CDOT/PM and the CDOT Project Management Team when required.			
<b>Weekly Update Newsletter</b>	NA	NA	NA
The CDOT/PM will publish a weekly update newsletter to document the weekly or bi-weekly progress of the schedule, estimate, team meetings, action items, and pertinent information for the FHWA, CDOT management, and Project team members.			
<b>Maintain Updated Contact List</b>	2	1	2
Establish and maintain a computerized list of all appropriate interested parties for the communication process. The list will be used for notices regarding public meetings, mailings, newsletters, or other communication as appropriate.			
<b>2. MEETINGS</b>			
<ul style="list-style-type: none"> <li><b>Graphics support and presentations</b></li> </ul>	C	C	C
Each Project team member is responsible for the graphics, documents, reports, plans, specifications, and written reviews from each specific scope of work item. Presentation of these documents and their reviews will be available on the shared Project server after the meeting has been adjourned.			
<ul style="list-style-type: none"> <li><b>Provide Local Office</b></li> </ul>			1
The CDOT/PM will obtain and maintain an office within the Project area to conduct small group meetings and provide displays/information to the public. This office may have work spaces for Project team members, meeting rooms with graphics support and capacity for the entire team to attend. Additional offices or meeting spaces may be considered at the Project Workshop.			
<ul style="list-style-type: none"> <li><b>PM Updates on Progress</b></li> </ul>	C	C	C
The CDOT/PM, CMGC/PM, and the C/PM will all update the team members at the scheduled meetings as to their progress on deliverables, challenges, and the feedback/comments they need.			
<ul style="list-style-type: none"> <li><b>Project Discussion</b></li> </ul>	C	C	C
The team members need to come prepared to discuss any and all reservations, ideas, and challenges to the Project. Open and honest dialogue is the key to the success of Project delivery.			

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**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b><u>2. PRELIMINARY DESIGN</u></b>			
Preliminary Roadway, Geometric, Structural, Environmental, SWMP, etc. Design		1	1
CDOT/PM will coordinate all design activities with required CDOT specialty units, the Contractor, the Design Consultant, and other outside entities. Design Consultant is responsible for the civil and structural design, plans, specifications, and estimate packages at each formal review.			
• Environmental - gathering data and analysis		2	1
• Environmental - mitigation development	2	2	1
• Environmental clearances			1
• ROW, specialty, and local clearances		2	1
• Hazardous material investigation		1	2
• CDOT processes (forms, clearances)			1
• Utility coordination	2	2	1
• Conduct field survey of Project area.		1	
• Field and Project research	C	C	C
• Construction requirements	2	1	1
• Innovation development, proposal, and tracking	1	2	2
• Check and field verify all applicable as-built plans	C	C	C
• Provide construction plans, specifications, and estimates		1	2
Plot/develop all required information on the plans in accordance with all applicable CDOT policies and procedures and all industry standards for civil, electrical, ITS, and structural design.			
• Develop construction cost model for Engineer Estimator and ICE	1		2
• Develop and calculate quantities	2	1	2
• Risk Register development	1	2	2
• Initiate and Track DBE/ESB and Subcontractor Plan	1		
• Constructability reviews and reports	1	2	2

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**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<ul style="list-style-type: none"> <li>Construction Phasing Plan</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Value Engineering input and participation</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Cost savings reviews</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Preliminary construction schedule</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time CAP submissions and proposals</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time negotiations</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time item procurement</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Opinion of probable construction cost Estimate #1</li> </ul>	1		
<b>30% milestone FIR (Field Inspection Review) Preparation</b>			
Coordinate, complete, and compile the plans with inputs from other branches: materials, hydraulics, environmental, traffic, right of way, maintenance, safety, and Staff Bridge, if applicable.		1	2
The 30% milestone plans and specifications shall comply with CDOT requirements and shall include: title sheet, typical sections, general notes, plan/profile sheets, and preliminary		1	2
The plans shall be submitted to the CDOT/PM and the CMGC/PM for preliminary review at least one week prior to the FIR (30% milestone)		1	
The plans will be reproduced electronically by CDOT.		2	1
Prepare the Engineer's Estimate for work described in the 30% milestone plans based on estimate quantities.			1
Prepare the 30% preconstruction milestone		1	2
CDOT Form 1048 – Project Scoping Procedures Completion		2	1
<b>Field Inspection Review Meeting</b>			
Review 30% milestone PS&E package and provide written reviews, comments, and redlines.	1		1
Attend the FIR.	C	C	C
Provide post-FIR revisions and memo.		1	
Provide list of all deviations from the standard design criteria and written justification for each.		1	2
Update DBE/ESB and Subcontractor Plan.	1		2
Update Risk Register and Cost Model.	1		2

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**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b>Final Roadway, Geometric, Structural, Environmental, SWMP, etc. Design</b>		1	
CDOT/PM will coordinate all design activities with required CDOT specialty units, the Contractor, the Design Consultant, and other outside entities. Design Consultant is responsible for the civil and structural design, plans, specifications, and estimate packages at each formal review.			
<ul style="list-style-type: none"> <li>Environmental - gathering data, analysis, and mitigation development</li> </ul>		2	1
<ul style="list-style-type: none"> <li>Final environmental clearances</li> </ul>			1
<ul style="list-style-type: none"> <li>Final environmental permits</li> </ul>	2	2	1
<ul style="list-style-type: none"> <li>ROW, specialty, and local clearances</li> </ul>		2	1
<ul style="list-style-type: none"> <li>FIPI justification for sole sourcing</li> </ul>		2	1
<ul style="list-style-type: none"> <li>Final utility coordination</li> </ul>		2	1
<ul style="list-style-type: none"> <li>Develop and calculate final quantities</li> </ul>	2	1	2
<ul style="list-style-type: none"> <li>CDOT processes (forms, clearances)</li> </ul>		2	1
<ul style="list-style-type: none"> <li>Update Risk Register, formal risk assessment meeting</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Constructability reviews and reports</li> </ul>	1	2	
<ul style="list-style-type: none"> <li>Construction Phasing Plan</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Value Engineering input and participation</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Final construction requirements</li> </ul>		1	2
<ul style="list-style-type: none"> <li>Innovation development, proposal, and tracking</li> </ul>	1	2	2
<ul style="list-style-type: none"> <li>Cost Savings reviews</li> </ul>	1	2	
<ul style="list-style-type: none"> <li>90% preconstruction milestone/Final Office Review (FOR) Construction Schedule</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time CAP submissions and proposals</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time negotiations</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Long lead time item procurement</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Opinion of Probable Construction Cost Estimate #2</li> </ul>	1		2
<ul style="list-style-type: none"> <li>Provide 90% preconstruction milestone construction plans, specifications, and estimates</li> </ul>		1	2
<ul style="list-style-type: none"> <li>Develop and calculate final quantities</li> </ul>	2	1	2

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**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACT OR	REQUIRED OF DESIGN CONSULTA NT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b>90% Milestone/FOR (Final Office Review) Preparation</b>			
Coordinate, complete, and compile the 90% milestone plans with inputs from other branches: materials, hydraulics, environmental, traffic, right of way, maintenance, safety, and Staff Bridge if applicable.		1	2
The 90% milestone plans and specifications shall comply with CDOT requirements and shall include: title sheet, typical sections, general notes, plan/profile sheets, and preliminary layouts.		1	2
The plans shall be submitted to the CDOT/PM and the CMGC/PM for preliminary review at least one week prior to the 90% milestone.		1	
The 90% milestone plans will be reproduced electronically by CDOT			1
Prepare the Engineer’s Estimate for work described in the FOR plans based on estimate quantities.			1
Prepare the 90% preconstruction milestone	C	C	C
<b>90% milestone/FOR (Final Office Review) Meeting</b>			
Review 90% milestone PS&E package and provide written reviews, comments, and redlines.	1		1
Attend the 90% milestone meeting.	C	C	C
Post-90% milestone revisions and memo		1	
Provide list of all deviations from the standard design criteria and written justification for each.		1	2
Provide a 90% milestone Construction Plan.	1	2	2
Obtain final environmental and access permits.		2	1
Finalize construction Cost Model for Engineer Estimator and ICE.	1	2	2
Update DBE/ESB and Subcontractor Plan.	1		2
Update Risk Register.	1		2

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**PRECONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX - CONTINUED**

CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF CONTRACTOR	REQUIRED OF DESIGN CONSULTANT	REQUIRED OF CDOT/ OTHERS
<b>PHASE: PRECONSTRUCTION</b>			
<b>CAP Proposal and Negotiations</b>			
Notify CDOT/PM at a point where CAP proposals can be sufficiently prepared.	1		2
Supply cost model and assumptions to ICE and Engineer Estimate.	1		2
Supply EBS and Construction Contract Checklist to CM/GC Contractor.			1
Prepare and submit construction CAP proposals.	1		2
Procure independent cost estimate.			1
Submit an electronic EBS to the CDOT/PM for each phase.	1		
Review the construction CAP proposals and compare to Engineer's Estimate and ICE.			1
Negotiate final CAPs for each phase.	C		C
CM/GC and CDOT have three attempts to negotiate assumptions and prepare CAP estimates. After the third opening, CDOT reserves the right to prepare the bid package for advertisement.			

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## APPENDIX B: EVALUATION NOTES AND FORMS

### Proposal Evaluation and Interview Evaluation Scoring Notes:

1. CDOT has developed an Evaluation Manual to promote objectivity and transparency. Selection Panel Members are required to read, attend training, and follow all scoring guidelines.
2. All Selection Panel Members have signed Non-Disclosure Agreements and Conflict of Interest Disclaimers as part of this procurement and cannot directly be contacted by or contact anyone outside of the Evaluation Facilitator about this project until the CM Services contract has been executed.
3. Points have been assigned prior to evaluation and are to be consistent on all evaluation forms. Comments by Selection Panel members are required on all scoring forms so that all Proposers may receive constructive feedback on their proposals and performance.
4. Selection Panel scoring values will be only numbers in whole, half, or quarter-number increments (i.e. 2.25, 3.50, 4.00.). Scoring of the Proposal and Interview will be based on the Evaluation Assessment Guidelines as set forth in the table below.
5. Strengths and Weaknesses for the Evaluation Assessment Guidelines as set forth in the table below are defined as follows:
  - A. *Strengths* – That part of the Proposal that ultimately represents a benefit to the Project and is expected to increase the Proposer’s ability to meet or exceed the Project Goals. A Minor Strength has a **slight positive influence** on the Proposer’s ability to meet or exceed the Project Goals while a Significant Strength has a **considerable positive** influence on the Proposer’s ability to meet or exceed the Project Goals.
  - B. *Weaknesses* – That part of a Proposal which detracts from the Proposer’s ability to meet the Project Goals or may result in inefficient or ineffective performance. A Minor Weakness has a slight negative influence on the Proposer’s ability to meet the Project Goals while a Significant Weakness has a considerable negative influence on the Proposer’s ability to meet the Project Goals.



<b>Evaluation Assessment Guidelines</b>	
Selection Panel members will individually evaluate and score their assigned proposal category in accordance with the evaluation criteria set forth in this RFP and assign a numerical score according to the scoring methodology listed below.	
Score	Description
5	<p>The Proposer demonstrates <b>several Significant Strengths</b> and/or <b>several Minor Strengths</b>, has <b>no Significant Weaknesses</b> or <b>no Minor Weaknesses</b> regarding the following bullets:</p> <ul style="list-style-type: none"> <li>● The Proposer’s understanding of and approach to meeting the Project Goals.</li> <li>● The Proposer’s understanding of and approach to meeting the stated requirements and objectives of this scoring category.</li> <li>● The Proposer communicates a commitment to quality for all phases of the Project.</li> <li>● The Proposer's qualifications.</li> </ul> <p>The response supports an extremely strong expectation of successful Project performance if ultimately selected as the CM.</p>
4	<p>The Proposer demonstrates <b>several Minor Strengths</b> and/or <b>few Significant Strengths</b>, has <b>few Minor Weaknesses</b> and <b>no Significant Weaknesses</b> regarding the following bullets:</p> <ul style="list-style-type: none"> <li>● The Proposer’s understanding of and approach to meeting the Project Goals.</li> <li>● The Proposer’s understanding of and approach to meeting the stated requirements and objectives of this scoring category.</li> <li>● The Proposer communicates a commitment to quality for all phases of the Project.</li> <li>● The Proposer's qualifications.</li> </ul> <p>The possibility exists that if selected, the Proposer may offset the Weakness of the response with their strengths. However, their minor weakness could slightly affect the success of the Project.</p>
3	<p>The Proposer demonstrates <b>several Minor Strengths</b> and <b>no Significant Strengths</b>, has <b>several Minor Weaknesses</b> and <b>few Significant Weaknesses</b> regarding the following bullets:</p> <ul style="list-style-type: none"> <li>● The Proposer’s understanding of and approach to meeting the Project Goals.</li> <li>● The Proposer’s understanding of and approach to meeting the stated requirements and objectives of this scoring category.</li> <li>● The Proposer communicates a commitment to quality for all phases of the Project.</li> <li>● The Proposer's qualifications.</li> </ul> <p>The possibility exists that if selected, the Proposer’s Weaknesses could have an adverse effect on the success of the Project.</p>
2	<p>The Proposer demonstrates <b>few Minor Strengths</b> and <b>no Significant Strengths</b>, has <b>several Minor Weaknesses</b> and/or <b>several Significant Weaknesses</b> that demonstrate deficiency regarding the following bullets:</p> <ul style="list-style-type: none"> <li>● The Proposer’s understanding of and approach to meeting the Project Goals.</li> <li>● The Proposer’s understanding of and approach to meeting the stated requirements and objectives of this scoring category.</li> <li>● The Proposer communicates a commitment to quality for all phases of the Project.</li> <li>● The Proposer's qualifications.</li> </ul> <p>It is probable that if selected, the Proposer’s Weaknesses will have an adverse effect on the success of the Project.</p>
1	<p>The Proposer demonstrates <b>no Minor Strengths</b> and <b>no Significant Strengths</b>, has <b>several Minor Weaknesses</b> and/or <b>several Significant Weaknesses</b> regarding the following bullets:</p> <ul style="list-style-type: none"> <li>● The Proposer’s understanding of and approach to meeting the Project Goals.</li> <li>● The Proposer’s understanding of and approach to meeting the stated requirements and objectives of this scoring category.</li> <li>● The Proposer communicates a commitment to quality for all phases of the Project.</li> <li>● The Proposer's qualifications.</li> </ul> <p>The response supports a strong expectation that if selected, the Proposer’s Weakness will negatively impact the pursuit of the Project Goals.</p>



**COLORADO DEPARTMENT OF TRANSPORTATION  
FORM B-1: MAXIMUM COMPENSATION FOR CONSTRUCTION MANAGER  
PRECONSTRUCTION SERVICES CERTIFICATION**

Name of Proposer: \_\_\_\_\_

Name of Project: I-270 Critical Bridge Replacements Project

Date: \_\_\_\_\_

The undersigned certifies its acceptance or rejection of the CDOT determined Maximum Compensation for Construction Manager Preconstruction Services of \$1.4 million (RFP Section 1.20), established for the above project by selecting either “Accept” or “Reject,” initialing next to the proposer’s section, and signing this certification:

\_\_\_\_\_ Accept the Maximum Compensation for Construction Manager Preconstruction Services - \_\_\_\_\_ Initials

OR

\_\_\_\_\_ Reject the Maximum Compensation for Construction Manager Preconstruction Services - \_\_\_\_\_ Initials

By: \_\_\_\_\_ Print Name: \_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Signed and initialed certification of the project’s determined Maximum Compensation for Construction Manager Preconstruction Services must be clearly established and included with the response to this Project’s Request for Proposal.

Certifying “Reject” of the Maximum Compensation for Construction Manager Preconstruction Services will cause the corresponding Proposal to be considered non-responsive to the solicitation and the corresponding Proposal will not be scored or further considered in this Project’s procurement.

Failure to certify acceptance or rejection of the Maximum Compensation for Construction Manager Preconstruction Services may cause the corresponding proposal to be considered non-responsive to the solicitation.



**COLORADO DEPARTMENT OF TRANSPORTATION  
FORM B-2: MANAGEMENT PRICE PERCENTAGE CERTIFICATION  
CONSTRUCTION MANAGER/GENERAL CONTRACTOR SERVICES**

Name of Proposer: \_\_\_\_\_

Name of Project: I-270 Critical Bridge Replacements Project

Date: \_\_\_\_\_

The undersigned certifies its acceptance or rejection of the CDOT determined Management Price Percentage (MPP) of 10.5 percent, established for the above project by selecting either “Accept” or “Reject,” initialing next to the proposer’s section, and signing this certification:

\_\_\_\_\_ Accept the MPP - \_\_\_\_\_ Initials

OR

\_\_\_\_\_ Reject the MPP - \_\_\_\_\_ Initials

By: \_\_\_\_\_ Print Name: \_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Signed and initialed certification of the project’s determined MPP must be clearly established and included with the response to this project’s Request for Proposal.

Certifying “Reject” of the MPP will cause the corresponding Proposal to be considered non-responsive to the solicitation and the corresponding Proposal will not be scored or further considered in this project’s procurement.

**In addition to submitting this certification, Proposers are also required to submit the information in Appendix C (two-page maximum for Appendix C).**

Failure to certify acceptance or rejection of the MPP may cause the corresponding proposal to be considered non-responsive to the solicitation.



### APPENDIX C: CONSTRUCTION GENERAL CONDITIONS

	Costs NOT TO BE included in CM/GC Management Price Percentage	Costs TO BE included in CM/GC Management Price Percentage
Item	Costs for the categories below will be negotiated and included in the direct “Cost of the Work”	Other indirect and non-reimbursable costs to be included in the CM/GC price percentage are listed below
E.1	Mobilization	Project Principal – all costs
E.2	Project Manager	Project Manager relocation, housing, and subsistence costs.
E.3	Construction Manager/Superintendent	Construction Manager/Superintendent relocation, housing, and subsistence costs.
E.4	All other on-site, construction management staff as approved by the Agency	Additional CM/GC staff relocation, housing, and subsistence cost.
E.5	On-site administrative staff, including clerical and secretarial staff	Home, branch and regional office administrative support staff and all related costs
E.6	All project direct costs related to Safety	Home, branch and regional office safety support staff and all related costs
E.7	All project direct costs related to Quality Control	Home, branch and regional office quality control support staff and all related costs
E.8	Project office costs for cleaning, set-up/demo, maintenance, security, utilities, rent/lease, equipment, and furniture	Profit
E.9	Materials and equipment handling, including shipping/transport to site and storage costs	
E.10	Costs to co-locate with Agency staff	
E.11	Job site temporary toilet facilities and maintenance	
E.12	Partnering workshops	
E.13	Construction rental equipment	
E.14	Actual cost of permits	
E.15	All project direct costs related to implementation of Agency-approved sustainable practices	
E.16	All project direct costs related to implementation of Agency-approved DBE/ESB program	
E.17	Construction equipment and vehicles at Proposer’s internal cost rate, including costs of maintenance and fuel	
E.18	All costs related to cell phones, radios, fax machines, pagers, computers and software.	
E.19	All costs of capital and interest; licenses and taxes required by law.	



E.20	Miscellaneous project office costs, including but not limited to, drinking water, printing, reproduction, postage, delivery, and supplies	
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## APPENDIX D: FINAL PROJECT DELIVERY SELECTION MATRIX<sup>2</sup>

Workshop Summary	
<b>Project Name:</b>	24947/24527 I-270 Critical Bridges Replacement Project
<b>Workshop Dates:</b>	February 9, 11, and 15, 2022
<b>Workshop Location:</b>	Virtual via Google Meet
<b>Facilitator:</b>	Matthew Pacheco
<b>Delivery Method Selected:</b>	CM/GC

Workshop Participants	
Name	Email
Adam Parks, R1 North Resident Engineer	adam.parks@state.co.us
Andy Stratton, R1 North Program Engineer	andrew.stratton@state.co.us
Basil Ryer, R1 Environmental Manager	basil.ryer@state.co.us
Chris Horn, FHWA Senior Area Engineer	chris.horn@dot.gov
Greg Marcuson, R1 Staff Bridge	greg.marcuson@state.co.us
Matthew Pacheco, Alternative Delivery Program Manager	matthew.pacheco@state.co.us
Patrick Holinda, Bridge Enterprise Program Manager	patrick.holinda@state.co.us
Sina Khavaray, Alternative Delivery	sina.khavary@state.co.us
Tristan Siegel, R1 Staff Bridge PE II	tristan.siegel@state.co.us
Tony Meneghetti, R1 North Resident Engineer	anthony.meneghetti@state.co.us

<sup>2</sup> Pursuant to Section 24-93-110, (2)(b)(II), C.R.S. During the procurement process, include the justification for selecting the IPD method in any Request for Qualifications and in the Request for Proposals.



Project Attributes
<p><b>Project Name:</b> I-270 Critical Bridges Replacement Project</p>
<p><b>Location:</b> I-270 in Adams County (Commerce City)</p>
<p><b>Estimate:</b> Scoping level estimate: \$175M (includes Preconstruction costs, Construction Engineering (CE) costs, CDOT Indirect costs and projected inflation)</p>
<p><b>Estimated Project Delivery Period:</b> Design starting in Fall 2022, Construction starting in Summer 2023, completion in early 2026</p>
<p><b>Required Delivery Date (if applicable):</b> The deteriorating bridges were built over 50 years ago and have reached the end of their service life. The need to eliminate safety concerns related to frequent emergency bridge repairs which impact the traveling public, railroad operations, and maintenance staff makes this project an urgent priority.</p>
<p><b>Source(s) of Project Funding:</b> Colorado Bridge &amp; Tunnel Enterprise funds for 6 eligible structures, SB267 funds for remainder of scope</p>
<p><b>Project Corridor:</b> I-270</p>
<p><b>Major Features of Work:</b>  <ul style="list-style-type: none"> <li>-Remove and replace eight (8) aging, deteriorated bridges and roadway approaches as required.</li> <li>-ROW: partial acquisitions and/or temporary/permanent easements will most likely be required in locations TBD (no relocations anticipated). Roadside retaining walls may be used to reduce ROW impacts.</li> <li>-Standard shoulder widths and acceleration/deceleration lanes to/from the adjacent interchange ramps at York Street and Vasquez Blvd.</li> <li>-No additional through-lane capacity</li> </ul> </p>
<p><b>Major Schedule Milestones:</b> Public/industry alternative delivery meeting, Transportation Commission delivery method recommendation meeting, RFP for design services, NEPA clearance</p>
<p><b>Major Project Stakeholders:</b> FHWA, Adams County, Commerce City, BNSF Railroad, UPRR, RTD, Farmers Reservoir and Irrigation Co.</p>
<p><b>Major General Obstacles:</b> Class 1 railroads (BNSF and UPRR) require lengthy approval process for highway overpass bridge designs (initial design concept review has been initiated with the railroads)</p>
<p><b>Major Obstacles with Right of Way, Utilities, and/or Environmental Approvals:</b>  <ul style="list-style-type: none"> <li>-ROW acquisition and or easements may be required to facilitate access and start of certain construction activities.</li> <li>-Utility Engineering (SUE) is complete and shows various perpendicular underground utilities in the vicinity of the bridges.</li> </ul> </p>
<p><b>Major Obstacles during Construction Phase:</b></p>



Four (4) bridges over active railroads will require flagging for construction activities. Known landfill material at roadway approaches will require ground stabilization methods.

**Safety Issues:**

Bridge construction involves numerous safety critical work items. Bridge construction over railroads involves additional safety critical work submittals and construction techniques approved by a stakeholder/third party.

**Sustainable Design and Construction Requirements:**

Environmental Management documentation and potential low-emission equipment requirements for contractor

**Project-Specific Goals**

**Goal #1:**

Remove and replace eight (8) aging, deteriorated bridges as soon as reasonably possible to eliminate frequent emergency repairs which cause lengthy and costly travel delays and detours for the traveling public and freight industry.

**Goal #2:**

Anticipate and meet environmental requirements before, during and after construction.

**Goal #3:**

Limit impacts to the traveling public during construction and minimize the number of required full-freeway closures

**Goal #4:**

Portion of the project may utilize SB-267 funds which have a drawdown goal of 80% by June 30, 2025

**Constraints**

Class 1 Railroads (BNSF Railway, Union Pacific Railroad) require lengthy approval processes for highway overpass bridge designs before construction can begin

Farmers Reservoir and Irrigation Company approval prior to construction

**Project Financing**

Does your project have any funding gaps that would require Financing\*? **NO**



**Identified Project Risks**

3<sup>rd</sup> party (Railroad, Ditch Company) reviews and approvals.

Utilities present in the area may require Utility Relocation Agreements (Adams County Fiber/Storm, AT&T, CenturyLink, CCD, Comcast, Denver Water, Magellan, Metro Wastewater Reclamation District, Sprint, Suncor, Verizon, Xcel, Zayo)

Underground geotechnical conditions, especially at the existing landfill (cir.1960) near Suncor, were investigated for the I-270 NEPA Environmental (EA). Further geotechnical investigation may be warranted to reduce risk of unforeseen conditions.

Inflation of preconstruction and construction costs due to labor and material market conditions.



Rating Key			
<b>++</b>	Most appropriate delivery method		
<b>+</b>	Appropriate delivery method		
<b>-</b>	Least appropriate delivery method		
<b>X</b>	Fatal Flaw (discontinue evaluation of this method)		
<b>NA</b>	Factor not applicable or not relevant to the selection		
I-270 CRITICAL BRIDGES REPLACEMENT PROJECT DELIVERY METHOD OPPORTUNITY/OBSTACLE SUMMARY			
	DBB	CM/GC	DB
<b>Primary Selection Factors</b>			
1. Project Complexity & Innovation	+	++	+
2. Project Delivery Schedule	+	++	+
3. Project Cost Considerations	-	+	+
4. Level of Design	+	++	-
5. Risk Assessment	-	+	+
<b>Secondary Selection Factors</b>			
6. Staff Experience/Availability (Agency)	n/a	<b>Pass</b>	n/a
7. Level of Oversight and Control	n/a	<b>Pass</b>	n/a
8. Competition and Contractor Experience	n/a	<b>Pass</b>	n/a



### Project Delivery Selection Summary Conclusions and Comments

#### **BACKGROUND:**

The I-270 corridor provides a vital connection from I-70 to I-25. Approximately 100,000 vehicles per day utilize this corridor to bypass the friction of downtown Denver to move goods, services, information, and people from the eastern edge of the city to north of the city. Within the I-270 corridor there are eight (8) structures within a one mile stretch between York St. and Vasquez Blvd. that have been the source of many challenges to the mission of this corridor. These structures have been in service for over 50 years and have been requiring frequent emergency repairs. Over 300 emergency repairs have been performed to the bridges along this corridor since 2006. These deck repairs always require significant lane closures affecting travel times in this corridor. This corridor lacks redundancy, and any detours during these emergency repairs require use of local roads or significant out-of-direction movements.

Bridge inspections rated 6 of the 8 bridges in this one-mile segment as 'poor', which made them eligible for Bridge & Tunnel Enterprise (BTE) funding for full replacement. CDOT Region 1 North Engineering and BTE recognize that any further investment into keeping these 8 bridges in service will have diminishing return, therefore the next step should be full replacement. CDOT Region 1 North Engineering has begun to advance the design phase to pursue replacement of these bridges as soon as possible. Full funding for the Critical Bridge Replacements project is available from sources including BTE and SB-267. A subsequent future project will complete the I-270 EA proposed action (to be determined) throughout the I-270 corridor.

CDOT Region 1 North Engineering convened a team of agency subject matter experts, and project team members for an interactive workshop to discuss and evaluate various delivery methods for the "I-270 Critical Bridges Replacement Project" using CDOT's Project Delivery Selection Matrix (PDSM). The workshop was held over the course of three days (February 9, 11, and 15, 2022), and approximately 9 hours total was spent in discussing the opportunities and obstacles each delivery method brought to the table, and how those characteristics can be leveraged to pursue the goals of the I-270 Critical Bridges Scope.

#### **ANALYSIS:**

The Project Team first discussed the project attributes, goals, constraints, and risks. Design-Bid-Build (DBB), Design-Build (DB), and Construction Manager/General Contractor (CM/GC) methods were then discussed. Each participant provided input as the opportunities and obstacles of each delivery method were discussed. It should be noted that the Progressive Design Build (PDB) delivery method was not evaluated in the workshop but was discussed separately by members of the Project Team. This delivery method would be a new type of contracting at CDOT requiring coordination and approval from the office of the Attorney General and the State Controller. The resulting schedule uncertainty and risk would not meet project delivery goals. After all comments were recorded, the Project Team collectively assigned a rating to each



method for the primary factors listed in the Project Delivery Selection Matrix. The summary table was then populated with the ratings for the sake of comparison and selection of the most appropriate delivery method for this project. Please refer to the I-270 Project Delivery Selection Matrix (PDSM) for the summary table and detailed matrix evaluations.

The project faces scope and schedule risks due to the features underneath bridges requiring “third-party” agreements. Four of the eight bridges to be replaced span over Class 1 Railroads (BNSF Railway and Union Pacific Railroad) which will require complicated, lengthy design approval processes and negotiated clearances. Two bridges spanning over the historic Farmers Reservoir and Irrigation Company (FRICO) Burlington Ditch will also require similar design approvals and clearance. Two bridges span over the S. Platte River and adjacent Greenway Trail which must remain open to users throughout construction using its existing alignment, a temporary detour, or the future trail alignment. Maintenance of traffic must be optimized during all phases of bridge replacement with a goal of reducing the number of full freeway closures required.

The Project Team recognized several advantages offered by alternative delivery methods when compared to traditional Design-Bid-Build (DBB). An alternative delivery method with an accelerated design schedule can accommodate an earlier construction start date reducing the number of emergency repairs required over the remaining service life of the existing bridges. Alternative contracting also results in contractor input and consultation during the design phase reducing the risk of post-design scope changes and schedule delays stemming from contractor site access, phasing considerations and general constructability issues.

Key advantages typically offered by the Design-Build (D-B) delivery method were diminished by the prevalence of 3rd party agreement requirements controlling most of the project scope (Railroads and the FRICO Ditch Company). The project schedule critical path includes railroad and ditch review and approval at 30% design, final design, and construction. If final bridge designs for approvals are advanced in parallel to a lengthy Design-Build procurement process, the innovation advantages typically offered by D-B competition would be eliminated for all but a small remaining portion of the project scope. If overpass design changes are then proposed by the selected Design-Build team after procurement, the lengthy overpass design and approval processes may need to restart with significant delays to the schedule.

The CM/GC delivery method provides CDOT the earliest opportunity to secure a qualified Designer and a Contractor with the needed expertise for the Project and provides early and continuous collaboration between the Owner, Designer, General Contractor, and stakeholders throughout all Project phases. In addition, the Construction Manager’s early and continuous input into design may identify additional or previously unknown risks while providing further consideration of opportunities for innovation, feasible mitigation strategies and collaborative scope development.



**RECOMMENDATION:**

The Project Team recommends a CM/GC Project Delivery Method. The expected opportunities offered by the CM/GC method can be leveraged to meet the unique challenges of this project. CM/GC allows CDOT to manage and mitigate risk using shared risk pools and the influence of an integrated project team that includes participation from CDOT, the Designer and the Contractor. CDOT can negotiate and coordinate risk elements by assigning risk to the party best suited to manage the risk during design and construction.

Justification includes:

- Advantage of early contractor input on complex project challenges:
  - Railroads and Ditch Company approvals for overpass designs and construction
  - Constructability and site access planning
  - Maintenance of Traffic planning for each bridge construction phase
  - Accelerated Bridge Construction (ABC) opportunities
- Acceleration of pre-construction schedule
- Project Team collaboration can result in early cost certainty
- Collaborative design process, guided by CDOT, can pursue a quality and practical project
- Through strong CDOT management and project team collaboration, risks can be identified, quantified, and mitigated





### Project Delivery Selection Matrix Primary Factors

**1) Project Complexity and Innovation**

Project complexity and innovation is the potential applicability of new designs or processes to resolve complex technical issues.

**DESIGN-BID-BUILD** - Allows Agency to fully resolve complex design issues and qualitatively evaluate designs before procurement of the general contractor. Innovation is provided by Agency/Consultant expertise and through traditional agency directed processes such as VE studies and contractor bid alternatives.

Opportunities	Obstacles	Rating
Railroad agreements must be obtained prior to overpass reconstruction	Project construction advertisement could be delayed by lack of Railroad Agreements	+
Owner has most control over design prior to advertisement	CDOT responsible for all change management cost impacts (e.g. errors & omissions)	
Value Engineering (VE) process as required by FHWA for large projects (\$50M+)	Constructability reviews by independent parties rather than active contractor (lower incentive to provide innovation)	
Owner designed traffic control (MOT) plans	MOT redesigns may be required via change order due to contractor input during construction	
Owner controlled defined scope of existing landfill under highway and proposed mitigation plan	Low bid selection does not consider necessary and beneficial experience for high-risk projects	
CDOT inspection and Quality Assurance (QA) during construction	Contractor input limited to post construction advertisement	

**CMGC** - Allows independent selection of designer and contractor based on qualifications and other factors to jointly address complex innovative designs through three party collaboration of Agency, designer and Contractor. Allows for a qualitative (non-price oriented) design but requires agreement on CAP.

Opportunities	Obstacles	Rating
Early and continuous input of contractor expertise throughout design process. Specific project scope includes landfill material west of Brighton Blvd, Accelerated Bridge Construction input.	Potential for scope creep due to contractor and designer influence. Requires owner input and focus on key project goals.	++
With Railroad approval being a critical path item for the project schedule, early Contractor input on overpass phasing constructability and design helps streamline the Railroad approval process.		
Shared risk pool reduces the burden of risk traditionally held by the owner (CDOT)		
Early identification of errors & omissions is motivated by the shared risk pool		
Qualification-based selection for contractors that demonstrate understanding of project context	Contractor innovation may be limited by lack of competition when compared to Design-Build	
Early construction packages can be issued prior to entire project being 100% designed.	Construction Package scopes will need to remain independent and severable, but proximity of several bridges close together may pose a risk	
Collaboration between Owner/Designer/Contractor encourages "Project First" culture	Developing Skills to effectively negotiate the CAP.	
Less project management process adjustment when compared with Design-Build		



Moderate project management process adjustment from traditional DBB, including the CAP negotiation process		
<b>DESIGN-BUILD</b> - Incorporates design-builder input into design process through best value selection and contractor proposed Alternate Technical Concepts (ATCs) – which are a cost-oriented approach to providing complex and innovative designs. Requires that desired solutions to complex projects be well defined through contract requirements.		
Opportunities	Obstacles	Rating
Qualifications based contractor short list based on innovation and experience	Less Owner control over Design.	+
Design is pushed towards Lean solutions for cost savings (added value)	Poorly defined technical requirements can be exploited	
Lowered risk for Owner (e.g. errors & omissions)	Least control over design process and construction product but this can be mitigated by quality Technical Requirements	
CDOT goals and values are met with competitive/innovative proposals	Owner shift from inspection focus to oversight and audit focus with reliance on Contractor IQC program	
More collaborative construction team structure than traditional DBB (Requires a more intensive level of Project Partnering and change in perspective)	Non-traditional CDOT project management process with less staff experience (100% project-focused staff required across several disciplines)	
ATCs (Alternative Technical Concepts) encourages competitive innovation and a menu of improvement options	Intense pace of project requires a large dedicated full-time project staff on Owner side.	
AREs (Additional Requested Elements), when appropriate, can provide opportunity to maximize investment in the corridor	Third Party review times can be challenging to coordinate and manage according to contract requirements.	
Procurement process provides best value as defined by the Owner.		
Constructability and Value Engineering are inherent to the DB process. Separate VE study not required.		



**2) Delivery Schedule**

Delivery schedule is the overall project schedule from scoping through design, construction and opening to the public. Assess time considerations for starting the project or receiving dedicated funding and assess project completion importance.

<b>DESIGN-BID-BUILD</b> - Requires time to perform sequential design and procurement, but if design time is available has the shortest procurement time after the design is complete.		
Opportunities	Obstacles	Rating
Procurement method (Advertisement for competitive bids) is reliable and usually efficient	Design phase has a lower sense of urgency without proper Project Management	+
Agreements and clearances before construction advertisement can reduce risk of delays after award	Sequential design followed by construction advertisement	
Familiar standard process with more predictable schedule for project team	Construction duration difficult to accelerate	
	Unable to validate low-bid contractor schedule and approach during construction advertisement period	
	Least flexible for management of change conditions in construction as the contractor is not motivated to minimize change condition impact	
	Least opportunity to compress schedule as the design and construction phases do not overlap	
	Design and construction schedules can be unrealistic due to lack construction industry input	
	Unable to procure long-lead-time items before start of construction phase.	
<b>CMGC</b> - Quickly gets contractor under contract and under construction to meet funding obligations before completing design. Parallel process of development of contract requirements, design, procurements, and construction can accelerate project schedule. However, schedule can be slowed down by coordinating design-related issues between the CM and designer and by the process of reaching a reasonable CAP.		
Opportunities	Obstacles	Rating
Relatively moderate procurement period (10-16 weeks)		++
Quickest from NEPA to construction. CM input can begin in NEPA phase	Less control over completion date when compared with a typical Design-Build.	
Procurement of long-lead-time items before construction phase		
Design and construction packages can occur in parallel for schedule compression	Fixed or promised 'road opening' dates can create conflicts within the CM/GC negotiation process and should be set with caution.	
Some construction activities can commence prior to execution of Railroad Agreements	A contractor change in a later phase of work would result in re-design and coordination challenges	
Contractor input/innovations for schedule efficiencies		
Lower learning curve (than Design-Build) for Owner Project Managers	Owner Project Manager must plan and manage multiple parallel packages for overall schedule savings to be realized	



<p>Schedule development is collaborative between Owner, Designer and Contractor, resulting in a more reliable schedule, based on actual contractor production rates rather than a forecast of historical data.</p> <p>Qualification-based selection can evaluate based on scheduling plan and approach</p>	<p>Failed Construction Agreed Price (CAP) negotiations can add significant time (3-6 mo.)</p>	
<p><b>DESIGN-BUILD</b> - Ability to get project under construction before completing design. Parallel process of design and construction can accelerate project delivery schedule; however, procurement time can be lengthy due to the time necessary to develop an adequate RFP, evaluate proposals and provide for a fair, transparent selection process.</p>		
Opportunities	Obstacles	Rating
Completion Date contract can specify construction end date, resulting in high motivation for rapid completion	The fast-paced nature of the contract encourages minimal schedule contingencies and higher potential for conflicts over schedule	+
Schedule certainty comes earlier in the project development process	Completion date contract schedules are not immune to risk, as Owner input or Third-Party agreements can impact critical path	
Schedule risk is owned by the contractor	Additional approximate 5 months for procurement phase vs. CM/GC	
Owner-assigned value on schedule creates competition amongst proposers and results in aggressive schedules	Need for advanced design for Railroad overpass approvals minimizes innovation opportunity	
Fastest average delivery method from planning to completion of construction.	Highest level of project workload intensity, can overwhelm an Owner	
Construction RFC packages can be flexible to improve overall schedule		
Quicker from NEPA to construction than DBB. Procurement process can occur prior to NEPA. Design Notice-to-Proceed (NTP 1) can be issued upon completion of NEPA.		



**3) Project Cost Considerations**

Project cost is the financial process related to meeting budget restrictions, early and precise cost estimation, and control of project costs.

<b>DESIGN-BID-BUILD</b> - Competitive bidding provides a low cost construction for a fully defined scope of work. Costs accuracy limited until design is completed. More likelihood of cost change orders due to contractor having no design responsibility.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
Lowest initial cost and market pricing (low-bid) on scope per the Advertisement Package.	CDOT at risk for all errors & omissions change management cost impacts.	-
Value Engineering mandatory for large projects – gain value prior to Advertisement.	Limited Contractor input results in less opportunities for cost reduction through innovation.	
	Cost Estimate is based on Historical Data, not current market pricing.	
	Cost certainty is not achieved until construction is completed.	
	Value Engineering Change Proposals savings – only 50% to the owner	
<b>CMGC</b> - Agency/designer/contractor collaboration to reduce risk pricing can provide a low cost project however, non-competitive negotiated CAP introduces price risk. Good flexibility to design to a budget.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
Collaboration helps manage project risk resulting in more accurate project scope and project cost.	Negotiated bid rather than market low bid. May not lead to lowest possible project cost.	+
Owner achieves 100% of Value Engineering (VE). VE is inherent to the process and contributes to a more reliable project cost.	Construction Manager (CM) cost for the pre-construction phase is an additional project cost	
Contractor input results in more opportunities than DBB for cost reduction through innovation.	Negotiation experience of the Owner can be different than the Contractor and could potentially put the owner at a disadvantage in Construction Agreed Price (CAP) negotiations	
Quantified risk contingency is carried in a risk pool. This incentivizes mitigation of risk.	Cost certainty not known until the last package.	
Achieve cost certainty sooner than DBB.	Cost of Independent Cost Estimating consultant adds to project cost.	
<b>DESIGN-BUILD</b> - Designer-builder collaboration and ATCs can provide a cost-efficient response to project goals. Costs are determined with design-build proposal, early in design process. Allows a variable scope bid to match a fixed budget. Poor risk allocation can result in high contingencies.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
Guaranteed Maximum Price (GMP) puts the risk of cost escalation with the contractor over the life of the project	Reliance on performance specs and technical requirements can introduce cost risk.	+
Provides earliest cost certainty of all methods	Proposers will include larger contingencies to compensate for market volatility, eroding potential savings (less value for the investment).	
Alternative Technical Concept (ATC) among proposers promotes cost efficiency and maximized scope under the GMP	Cost of preparing the RFP is time and resource intensive.	
Contractor is the most capable party to mitigate volatility of cost due to market conditions.	Contractor or designer capabilities or limitations may affect cost	
DB team must warrant against error and omissions – shifts risk from the Owner to the DB team.	Owner will pay a stipend for ATCs of unsuccessful proposers	



**4) Level of Design**

Level of design is the percentage of design completion at the time of the project delivery procurement.

DESIGN-BID-BUILD - 100% design by Agency or contracted design team, with Agency having complete control over the design.		
Opportunities	Obstacles	Rating
Agency has control over the entire design phase	Misinterpretation of the Work, as well as errors and omissions in the plans and specifications, can result in disputes and claims.	+
Completion of the design phase includes management of RR coordination and approvals before advertisement	Changes to the design due to contractor inputs on constructability and access after award can restart the design and RR approval processes.	
CMGC - Can utilize a lower level of design prior to procurement of the CMGC and then joint collaboration of Agency, designer, and CMGC in the further development of the design. Iterative nature of design process risks extending the project schedule.		
Opportunities	Obstacles	Rating
Procurement of contractor for input and expertise can occur at the current level of design (conceptual) vs. a higher level of design required before DB procurement can occur.		++
Contractor provides constructability means and methods input starting at the current level of design, reducing risk of future design changes		
Packaging can allow for construction start for certain project elements during final design of other project scope items		
DESIGN-BUILD - Design advanced by Agency to the level necessary to precisely define contract requirements and properly allocate risk (typically 30% or less).		
Opportunities	Obstacles	Rating
	If final designs for railroad and ditch overpass approvals proceed in parallel to the lengthy DB procurement process, the innovation advantages typically offered by DESIGN-BUILD competition would be eliminated for all but a small portion of the remaining project scope.	-
	If design changes are proposed after procurement, the lengthy railroad overpass design and approval process may need to restart.	



**5) Risk Assessment of Delivery Methods**

Risk is an uncertain event or condition that, if it occurs, has an effect on a project’s objectives. Risk allocation is the assignment of unknown events or conditions to the party that can best manage them. An initial assessment of project risks is important to ensure the selection of the delivery method that can properly address them. An approach that focuses on a fair allocation of risk will be most successful.

<b>DESIGN-BID-BUILD</b> - Risk allocation for design-bid-build best is understood by the industry, but requires that most design-related risks and third party risks be resolved prior to procurement to avoid costly contractor contingency pricing, change orders, and potential claims.		
Opportunities	Obstacles	Rating
Risk allocation is well understood by industry	Owner holds greatest share of the risk	-
Most-defined scope going into construction	Design changes from errors/omissions	
Utility agreements and relocations pre-construction	Design changes from differing site conditions	
Railroad agreements/approvals before construction	Ad date is subject to RR agreements	
Owner control over design phase protects owner intent	Low-bid winner may not be the best-suited to perform the specific work based on the project risk profile	
	Low-bid winner may misinterpret the “WORK”	
	Least opportunity for contractor input before award	
	Change order risks (schedule, cost)	
	Public input responsiveness depends upon specs and change orders rather than proposals	
<b>CMGC</b> - Provides opportunity for Agency, designer, and contractor to collectively identify and minimize project risks, and allocate risk to appropriate party. Has potential to minimize contractor contingency pricing of risk, but can lose the element of competition in pricing.		
Opportunities	Obstacles	Rating
Early input from a well-qualified contractor during design phase can reduce risk of future design changes and revisions to 3 <sup>rd</sup> party agreements	Non-essential scope can be introduced in the absence of thorough oversight from the Owner project management team	+
Early identification of construction risks, e.g. retaining walls, ground stabilization, etc.	Construction finish date is less certain vs. DB	
Shared risk pool reduces the burden of risk traditionally held by the owner (CDOT)	CAP negotiation introduces cost and schedule risk	
<b>DESIGN-BUILD</b> - Provides opportunity to properly allocate risks to the party best able to manage them, but requires risks allocated to design-builder to be well defined to minimize contractor contingency pricing of risks.		
Opportunities	Obstacles	Rating
Performance-based specifications transfer risk to D-B team	3rd party agreements are high-pressure and have the potential to delay the project if they are on the critical path	
Provides the owner with the opportunity to allocate risks to the party best-suited to manage the risk	Designer is not selected or managed individually by the Owner	



Qualifications-based selection to find the best suited team to mitigate the project risk profile	QA team is not selected by owner	+
Lowest risk of cost escalation	Poorly defined risks add cost	
Early risk identification by proposers promotes effective mitigation		





**Project Delivery Selection Matrix Secondary Factors**

**6) Staff Experience and Availability**

Agency staff experience and availability as it relates to the project delivery methods in question.

<b>DESIGN-BID-BUILD</b> - Technical and management resources necessary to perform the design and plan development. Resource needs can be more spread out.		
Opportunities	Obstacles	Rating
		n/a
<b>CMGC</b> - Strong, committed Agency project management resources are important for success of the CMGC process. Resource needs are similar to DBB except Agency must coordinate CM's input with the project designer and be prepared for CAP negotiations.		
Opportunities	Obstacles	Rating
The CDOT North Program has administered several CM/GC contracts over the past several years.	Additional training will be required, and new positions filled with experienced and dedicated staff	PASS
CDOT is one of States in the US with the most fully developed program and experience with CM/GC.		
CDOT Region 1 North Program has created project-specific positions to manage this project through its lifecycle		
<b>DESIGN-BUILD</b> - Technical and management resources and expertise necessary to develop the RFQ and RFP and administrate the procurement. Concurrent need for both design and construction resources to oversee the implementation.		
Opportunities	Obstacles	Rating
		n/a



**7) Level of Oversight and Control**

Level of oversight involves the amount of agency staff required to monitor the design or construction, and amount of agency control over the delivery process

<b>DESIGN-BID-BUILD</b> - Full control over a linear design and construction process.		
Opportunities	Obstacles	Rating
		n/a
<b>CMGC</b> - Most control by Agency over both the design, and construction, and control over a collaborative agency/designer/contractor project team		
Opportunities	Obstacles	Rating
Owner control over design and construction packaging continues after procurement	Higher level of cost oversight required (ICE, scope creep)	PASS
Owner control to assist with negotiating 3 <sup>rd</sup> party agreements, phasing, constructability, and stakeholder concerns.		
Owner maintains opportunity to influence design and construction throughout project development		
<b>DESIGN-BUILD</b> - Less control over the design (design desires must be written into the RFP contract requirements). Generally less control over the construction process (design-builder often has QA responsibilities).		
Opportunities	Obstacles	Rating
		n/a



**8) Competition and Contractor Experience**

Competition and availability refers to the level of competition, experience and availability in the market place and its capacity for the project.

<b>DESIGN-BID-BUILD</b> - High level of competition, but GC selection is based solely on low price. High level of marketplace experience.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
		n/a
<b>CMGC</b> - Allows for the selection of the single most qualified contractor, but CAP can limit price competition. Low level of marketplace experience.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
The size and scope of this bridge replacement project offers a competitive entry point for contractors to gain experience with this delivery method.	low bid has largest pool of candidates.	PASS
Industry has responded with strong interest surrounding the release of this project, generating competition.		
<b>DESIGN-BUILD</b> - Allows for a balance of price and non-price factors in the selection process. Medium level of marketplace experience.		
<b>Opportunities</b>	<b>Obstacles</b>	<b>Rating</b>
		n/a



**COLORADO**  
Department of Transportation

**Appendix E**  
~~FINAL DRAFT~~ Request for Proposals –  
~~11/18/2022~~~~10/20/2022~~  
Project No. FBR 2706-44/C R100-364  
I-270 Critical Bridge Replacements Project

## **APPENDIX E: SAMPLE CONSTRUCTION MANAGER CONTRACT**