



CM/GC GUIDANCE DOCUMENT

Montana Department of Transportation

Abstract

The purpose of the CM/GC Guidance Document is to outline MDT's general process for procuring and administering transportation projects through utilization of the Construction Manager / General Contractor project delivery method.

December 8, 2023, Version 3

Alternative Contracting Section
Engineering Construction Contracting Bureau

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ACRONYMS & ABBREVIATIONS

AA	Affirmative Action
ACEC	American Council of Engineering Companies
BVS	Best Value Selection
CM/GC	Construction Manager / General Contractor
CM	Construction Manager
CMP	Construction Management Plan
CPM	Critical Path Method
DB	Design-Build
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
EE	Engineer's Estimate
EEO	Equal Employment Opportunity
EOE	Equipment Operating Expense
FHWA	Federal Highway Administration
G&A	General and Administrative Costs
ICE	Independent Cost Estimator
MCA	Montana Contractor's Association
MDT	Montana Department of Transportation
NTP	Notice to Proceed
QA	Quality Assurance
QC	Quality Control
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
RMP	Risk Management Plan
SOQ	Statement of Qualifications
TP	Technical Proposal
TRC	Technical Review Committee
VA	Value Analysis
VE	Value Engineering

1. PURPOSE

The purpose of the Construction Manager/General Contractor (CM/GC) Procurement Guidance Document is to outline the Montana Department of Transportation's (MDT) general process for procuring and administering transportation projects through utilization of the CM/GC project delivery method. Even though CM/GC is used by many agencies, this document communicates the key aspects of MDT's version of CM/GC to the construction industry, the design community, and other stakeholders. The Guidance Document also provides a general CM/GC process outline for internal MDT staff.

Many of the procedures and concepts that MDT has chosen as part of this CM/GC process, have been developed utilizing MDT's Design-Build processes, as well as CM/GC concepts and options from the National Cooperative Highway Research Program (NCHRP) Synthesis #402 for Highway Programs, as well as through discussions with other state transportation agencies. Reference:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_402.pdf.

This CM/GC Guidance Document is intended for informational purposes only; it should not be considered a contractual document. MDT may elect to revise any processes or procedures described herein, with or without notice. This Guidance Document will be a living document and will continue to evolve as MDT's CM/GC program development progresses, and as MDT is able to identify agency-specific best practices. A list of definitions for selected terms used throughout this document is provided in Section 5.

The authority for MDT to use CM/GC as an alternative contract delivery method in Montana is pursuant to Montana Code Annotated 60-2-120 and Administrative Rules of Montana 18.4.201. Additionally, 23 CFR Part 635, applies to all Federal-aid projects within the right-of-way of a public [highway](#), those projects required by law to be treated as if located on a [Federal-aid highway](#), and other projects which are linked to such projects (*i.e.*, the project would not exist without another [Federal-aid highway](#) project) that are to be delivered using the [CM/GC](#) method. To the extent this Guidance Document conflicts with the formal procurement documents (RFQ and RFP described below), any state or federal laws, rules, and/or regulations, those documents and/or laws, rules, and/or regulations supersede the conflicting provisions within this Guidance Document.

CM/GC BACKGROUND AND SELECTION PROCESS - EXECUTIVE SUMMARY

BACKGROUND: The CM/GC project delivery method is an integrated team approach to the planning, design, and construction of a project. The delivery method incorporates procedures to better control the schedule, budget, and risk. The CM/GC method has been developed as a result of public owner demands to enhance innovation, lower overall project costs at completion, and better plan for and manage risks. The CM/GC method offers many potential benefits including: improved risk management, increased utilization of innovative design and construction techniques, advanced construction conflict identification and management, and enhanced overall quality.

CM/GC is fundamentally different from the traditional Design-Bid-Build and alternative Design-Build processes. In CM/GC project delivery, the successful Contractor will work closely with the MDT design team during the design (preconstruction) phase, but the Design Engineer (Consultant or MDT staff) will remain as the Engineer of Record. In addition, MDT will separately designate a Project Leader and an Independent Cost Estimator (ICE) to assist in this project delivery process.

MDT expects that the CM/GC contract will be made up of two parts: A Preconstruction Services Agreement that covers the scope of work to be provided in the Preconstruction Phase, and compensation for that work; and a Construction Contract that covers the construction work to be performed, with compensation for that work in accordance with the Bid Price or Early Work Package Bid Price. MDT will select a CM/GC Contractor (hereinafter referred to as “Contractor”) to provide both Preconstruction Phase and Construction Phase expertise. The selected Contractor must have the qualifications and skills required of a general contractor, to eventually construct the CM/GC project.

During the design phase, the Contractor will provide services, such as contract document reviews for constructability, pricing, scheduling, staging methods, material and subcontractor procurement strategies, risk identification/management, and other areas related to the construction of the project. MDT and the Contractor will monitor and negotiate the cost to complete construction throughout the design phase (using an estimate reconciliation process where the Contractor’s estimate is compared to estimates provided by the ICE and Design Engineer), and will ultimately come to a final agreement price, which is referred to as a Bid Price.

The Contractor will not proceed into construction unless MDT agrees that the Guaranteed Maximum Price provided, as part of an agreement to complete the project, or a portion of the project, has been independently evaluated as fair, reasonable, and defensible. If MDT and the Contractor’s Bid Price negotiations are not successful, MDT reserves its right to cancel the agreement with the Contractor, and the parties will follow the MDT standards for discontinuance of work, including the transfer of in-process fabricated materials. If MDT elects this measure, MDT will re-procure the work, and the Contractor will not be eligible to bid on that work through the revised project delivery process. If negotiations are successful and the construction Notice to Proceed (NTP) is issued, the Contractor will perform the traditional role of a general contractor.

SELECTION PROCESS: MDT will use a two-step process to select the Contractor, which is essentially a modified Qualifications-Based Selection with an added price component, also known as a Best Value Selection (BVS). A Technical Review Committee will be assembled and will follow established procedures in the evaluations and scoring. An independent Selection Committee will also be assembled to provide guidance for the Technical Review Committee and approve all scoring and selection efforts.

First, MDT will issue a Request for Qualifications (RFQ) to which the Proposers will respond by submitting their Statement of Qualifications (SOQ). The MDT Technical Review Committee, based on the review and scoring of the SOQs, will determine a short-list of CM/GC Contractors to advance in the selection process. Typically, between three and five Proposers will be short-listed to advance in the selection process; however, MDT reserves the right to short-list as many, or as few Proposers as deemed advantageous to the project or program. Details of the submittal requirements and the evaluation criteria will be included in the RFQ and RFP.

Second, MDT will issue a Request for Proposal (RFP), to which the short-listed Proposers will respond by submitting a Technical Proposal (TP) and a Price Proposal. The Technical Review Committee will review the Technical Proposals and will host an interview as an additional scoring component of the proposal process. Based on the evaluations of the Technical Proposals and the interview, coupled with a scoring of the Price Proposal, the Technical Review Committee will recommend to the Selection Committee the highest rated Proposer, based on the Best Value Score. Subsequently, the Selection Committee will approve the proposal scores, and negotiations for the Preconstruction Services Contract will commence.

The Transportation Commission will approve and award the construction contract after successful Bid Price negotiations.

1.1 MAJOR ELEMENTS OF CM/GC PROGRAM

This section highlights the major elements of MDT's CM/GC program. Further details of these elements are provided later in this document and/or will be included in the RFQ and RFP documents. For the purpose of this Guidance Document, when referring to the CM/GC entity that MDT is seeking to engage through this procurement process, the term "Proposer" is used; when referring to the CM/GC entity that MDT has selected, the term "Contractor" is used.

GENERAL MANDATORY ELEMENTS

- **MDT RIGHTS.** Throughout this process, both during and after procurement, MDT maintains its right to terminate the CM/GC process in part, or in its entirety. MDT also maintains its right to use other methods to deliver the subject project, in part or in whole.
- **SELF-PERFORMANCE.** The Contractor must perform the CM/GC services work valued at not less than 40 percent of the overall contract value with its own staff, excluding specialized services. The 40 percent threshold for self-performed work will also apply to Early Work Packages and will be considered when developing severable construction packages for early award.
- **PROGRAM ADVISORY SERVICES.** MDT has solicited review services and input from FHWA and private consultants during the development of MDT's CM/GC Program Guidance Document.
- **INDEPENDENT COST ESTIMATOR.** MDT intends to separately hire an Independent Cost Estimating firm (ICE) that will participate in scope and cost discussions through the Preconstruction Phase. The ICE will independently develop a production-based cost estimate. The ICE's estimate may be held in the "blind" or may be open book. The Project Leader, with input from other MDT staff, will determine if the ICE is in the blind or providing open book estimating. MDT has determined that the minimum threshold for agreement with the Contractor is that the negotiated Bid Price must be:
 - Less than 105 percent of the ICE estimate,
 - If the Bid Price is between 105 and 110 percent of the ICE estimate, award is discretionary,
 - If the Bid Price exceeds 110 percent of the ICE estimate, MDT will discontinue price negotiations and terminate the preconstruction contract.

SELECTION OF CM/GC CONTRACTOR

- **SELECTION PROCESS.** The Contractor will be selected using a Best Value Selection process, in which an MDT Technical Review Committee will evaluate the Proposers' Statement of Qualifications, written Technical Proposal, Interview, and Price Proposal.
- **SUBCONTRACTING PLAN.** As part of the selection and evaluation process, the Contractor may be required to identify in their proposal, subcontractors that qualify as key personnel (Key Subcontractors), as identified in the RFQ and RFP. Subcontractors are selected at the discretion of the CM/GC entity. The Contractor should make a good faith effort to select subcontractors that provide reasonable pricing and quality work. Every subcontractor will need to be approved by MDT, following typical procedures in accordance with MDT's Standard Specifications.

Subcontractor quotations will be used in milestone cost estimates throughout project development. Key Subcontractors working on CM/GC projects must also agree to use production-based pricing, similar to the estimating requirements imposed on the Contractor.

- **PRECONSTRUCTION PHASE SERVICES – FEE ESTIMATE.** The CM/GC’s Technical and Bid Price Proposals may be required to incorporate a Preconstruction Staffing Plan, including an hourly rate for direct salary only and estimated hours for key personnel identified in the RFQ/RFP. Hourly rates and estimated hours will not be scored as a part of the selection process. The Technical Review Committee will use the fee estimate information provided by the Proposer to evaluate if the Proposer understands the goals of the project. The fee estimate of the Preconstruction Phase services will help to demonstrate the Proposer’s capabilities to manage the Preconstruction Phase. The provided information is also intended to be used as the basis for MDT to start negotiations of the Preconstruction Services Contract (based on detailing the deliverables and the priorities of the Preconstruction Services, once the Contractor has received award). Additional detailed information on payment for Preconstruction Services will be provided in the RFQ/RFP. Should MDT elect to use a different compensation mechanism, that process will be described in detail in the RFQ/RFP.

IMPLEMENTATION OF CM/GC SERVICES

- **CONTRACT TYPES.** The Contractor will enter into a Preconstruction Services Contract, which will be a professional service-type contract. Upon negotiation of a Bid Price or Early Work Package Bid Price, MDT and the Contractor will enter into a Construction Contract, similar to a standard MDT construction contract, but with a negotiated Bid Price in lieu of a bid. The format of these contracts will be further defined in the RFP stage of this procurement process.
- **PRECONSTRUCTION PHASE SERVICES – SCOPE.** A general outline of the required Preconstruction Services activities will be provided in the RFP. Prior to entering into a Preconstruction Services Contract, MDT and the Contractor will collectively agree on the Preconstruction Phase scope of services with an estimate of the number of hours that will be needed by each member of the Contractor’s team to fulfill the agreed to scope/deliverables for Preconstruction Services.
- **PRECONSTRUCTION PHASE SERVICES – PAYMENT.** The Preconstruction Services scope is a relatively small (by cost) overall percentage of the total CM/GC scope, and because the scope of the Preconstruction Services is expected to be flexible as MDT requires, the CM/GC contracting method treats the structure of the Preconstruction Services phase in a similar fashion as the typical MDT Consultant Services Contract. Compensation to the Contractor will be negotiated upon Contractor selection. Specific details on compensation for Preconstruction Services will be described in the RFQ and RFP.
- **FINAL BID PRICE PROPOSAL.** At the completion of design, the Contractor will submit a Bid Price for construction of the final scope, based on the Cost Model developed throughout the Preconstruction Phase. This Bid Price will be negotiated and agreed upon with MDT before the Construction Contract is executed. The approved Bid Price amount will be treated as a unit price contract.

MDT may include multiple Construction Phases or early work construction packages that will result in the Contractor providing Early Work Package Bid Prices for each work component in the overall project, the summation of which equal the Bid Price for the whole project.

The Bid Price will:

- Include a contingency that will be established based on, among other things, a well-defined risk analysis. MDT and other governmental agencies will be entitled to monitor and audit all project costs should there be a dispute, change, or claim that warrants such action. The Bid Price should be based on fully-developed design documents. A Bid Price that exceeds 110 percent of the ICE's estimate will not be acceptable. Physical construction will be initiated once the Bid Price Proposal is finalized and a contract NTP is given by MDT. Compensation for construction services within a Bid Price Proposal will be as follows:
 - For Lump-Sum Items in the Bid Price Proposal: Paid as a percent of the total lump-sum based on monthly progress.
 - For Allowance and Contingency items in the Bid Price: Paid based on the actual expenditures or the field quantity at the agreed upon unit price.
 - For Unit Price items in the Bid Price Proposal: Paid based on the field quantity at the agreed upon unit price.
 - Each Bid Price Proposal will include a Schedule of Items (SOI) that may include one or several units of payment. The SOI will be paid based on the approved cost, in accordance with MDT scheduling specifications.
- **EARLY WORK PACKAGE BID PRICE PROPOSAL.** In lieu of one overall Bid Price Proposal, MDT may elect to proceed by breaking the project into more than one package. Similar to the Final Bid Price Proposal, the Contractor and MDT will formalize the Early Work Package Bid Price Proposal contracts through a negotiation process and will establish a unit price contract. Early Work Package Bid Price Proposals will follow the same guidelines listed above for the Final Bid Price Proposal. Pursuant to 23 CFR Part 635.506 (d), MDT must program funding for the estimated construction cost of the construction services before authorization of an Early Work Package. Construction services means the physical construction work undertaken by a CM/GC contractor to construct a project or a portion of the project (including early work packages). Construction services include all costs to perform, supervise, and administer physical construction work.

As a footnote to the above paragraph, the following are recommendations for MDT personnel entering an Early Work Package (EWP) into FMIS for authorization.

- The Early Work Package Bid Price Proposal will be entered into FMIS.
 - In addition, a comment will be added in FMIS which includes the estimated cost for the remainder of the project. The estimated cost for the remainder of the project will be obtained from the latest project estimate (30%, 60%, 90%). This information provides an indication of the relative size of the EWP versus the overall project, and the size of the funding obligation required for the remainder of the work.
- **UNSUCCESSFUL BID PRICE / EARLY WORK PACKAGE BID PRICE NEGOTIATIONS.** It is expected that the Final Bid Price / Early Work Package Bid Price negotiations will be an iterative process; however, MDT will not allow it to be an unlimited process. In the event MDT and the Contractor fail to agree upon final Bid Price or Early Work Package Bid Price, then MDT may proceed with the procurement of that scope by other means. If that occurs, MDT may terminate all or part of the

CM/GC process for a given project and procure the remaining elements of the project by any other lawful procurement method. The Contractor will not be allowed to re-bid the work under the new procurement method.

1.2 GENERAL OVERVIEW OF CM/GC RESPONSIBILITY AND PROJECT DELIVERY

MDT's CM/GC evaluation process is designed to ensure that the Department selects the Contractor that is best-suited for the project; with the necessary skills, personnel, resources, systems, and experience to provide valuable input to the design and to manage the work in a manner that minimizes the disruption to the travelling public and results in a high-quality project. During the Preconstruction Phase, the Contractor will engage in detailed discussions with MDT, the Design Engineer, and ICE over key constructability issues, contract packaging, phasing of the work, and traffic control - thereby reducing the risk that those issues would impact the project during construction. The Contractor will be contractually responsible for price, schedule and quality during construction. In addition, Proposers will be encouraged to indicate their abilities to utilize accelerated and innovative construction techniques.

Other important responsibilities/requirements:

- The Contractor must perform the CM/GC services work valued at not less than 40 percent of the overall contract value with its own staff, excluding specialized services. The 40 percent threshold for self-performed work will also apply to Early Work Packages, and will be considered when developing severable construction packages for early award. During Preconstruction Services and development of a Bid Price or Early Work Package Bid Price, the CM/GC may be asked to identify work that could be classified as "specialty" for MDT's consideration. Specialty work will be defined on a project-specific basis.
- The successful Contractor and all subcontractors are required to follow MDT Specifications. The Contractor will not be performing engineering or environmental analysis, beyond what is normally performed by a general contractor, and MDT's Design Engineer will remain the Engineer-of-Record.
- The Contractor will be responsible for making a good faith effort to meet project-specific DBE goals that are listed in the RFQ/RFP.

Throughout the Preconstruction Services phase, the Contractor will be providing services such as plan reviews for constructability, pricing, scheduling, staging, methods, material procurement strategies, risk identification/management, and other areas related to the construction of the project. These discussions will include MDT, the Project Leader, the Contractor, the Design Engineer, the ICE and other stakeholders.

As MDT's Design Engineer advances the design, the Contractor will be required to provide production-based detailed pricing updates and options evaluations as part of their Preconstruction Phase services. When the design progresses to 30, 60, and 90 percent completion, or at any other significant milestones as determined by MDT, then the Department and the Contractor will begin to develop and reconcile the estimates that will become the basis of a Bid Price or Early Work Package Bid Price for construction of that scope of work. MDT also considers it a best practice to compare rough order of magnitude (ROM) cost estimates at the onset of the design phase (ideally occurring at around 10 percent design). The goal of the ROM estimating effort is to establish or verify the project budget and help align estimates early on in project development. The goal at the end of the program will be to have one Bid Price based upon fully-developed documents (and inclusive of all Early Work Package Bid Prices that preceded). Assuming the parties agree on the Bid Price, MDT will enter into a Construction Contract with the Contractor, and the Contractor will then function as the general contractor and will be responsible for completing the work on the schedule agreed upon during the Bid Price discussions. Numerous Early Work Packages may be used for the various phases of the work, but it is MDT's intent to limit the number.

ROLE OF THE PROJECT LEADER

The Project Leader will be an appointed individual (MDT staff or consultant), independent from the Design Engineer and Contractor. The Project Leader will be responsible for contract administration of the CM and ICE consultants; and general management and oversight of the design and construction of the CM/GC project, with support from other MDT design project managers and construction project managers. The Project Leader will monitor the overall project scope, schedule, and budget in collaboration with other MDT staff. The Project Leader is expected to develop and maintain the following documents with input from the Contractor, Engineer, ICE, and the design team: program schedule, program budget, and risk management plan. The Project Leader will also be responsible for developing a reporting plan and provide regular reports to MDT. The Design Engineer, Contractor, and ICE will be responsible to work cooperatively and collaboratively with the Project Leader.

ROLE OF THE PROJECT MANAGER

The MDT Project Manager (EPM) will be an integral part of the project team throughout the Preconstruction Phase and will be responsible for coordinating and overseeing the inspection and construction of the CM/GC project. The Project Manager responsibilities may include, but are not limited to:

- Participating in the TRC, including review of the SOQ to develop the short-list of Firms.
- Participating with the TRC in the evaluation of Technical Proposals.
- Working with the Engineering Construction Contracting Bureau responding to Firm inquiries.
- Participating in project meetings and workshops.
- Acting as MDT's liaison with the Contractor during construction of the project in general and as MDT's person in responsible charge of the Construction Phase.
- Conducting site reviews to ensure that construction activities are in compliance with the Construction Contract.
- Reviewing and approving periodic progress payments during construction.
- Monitoring DBE participation.
- Monitoring EEO Contract compliance.
- Monitoring Labor Compliance.
- Ensuring that proper Construction Engineering and Inspection (CEI) services are performed during construction.
- Ensuring that the Contractor's Quality Management Plan is followed.
- Ensuring that all environmental commitments/requirements are honored.
- Ensuring that appropriate documentation takes place at each step in the construction process.
- Conducting performance evaluations.

ROLE OF THE DESIGN ENGINEER

The Design Engineer will be contracted directly or employed by MDT, separate from the Contractor, to develop design documents. Throughout this process, the Design Engineer will retain the responsibility of Engineer-of-Record. Once the Contractor is selected, as part of the Preconstruction Phase services, the Design Engineer, the Project Leader, ICE, and the Contractor are to work cooperatively with MDT and other stakeholders to optimize the completion of agreed upon scopes of work. The Design Engineer will also be required to produce estimates for comparison in cost reconciliation meetings throughout project development. Depending on the project, MDT will specify the format of the Design Engineer's estimate as either production-based, or based on historical bid data. The Engineer's Estimate will be shared with

the project team (not held in the “blind”) and will be compared to both the ICE and Contractor’s estimates. Once construction commences, the Design Engineer performs the same functions as the traditional Design-Bid-Build approach: following MDT standard Construction Engineering services, reviewing shop drawings provided by the Contractor, answering Requests for Information (RFI), reviewing submittals, etc.

ROLE OF INDEPENDENT COST ESTIMATOR (ICE)

The ICE, who will be procured and contracted separately by MDT, provides an independent cost estimate at 30, 60, and 90 percent design or any other significant milestones (ROM estimate prior to 30 percent), and at the time of bid for the final Bid Price or each Early Work Package Bid Price. The ICE estimate will be compared with the Contractor’s cost proposal and Engineer’s Estimate to determine if the agreed upon Bid Price or Early Work Package Bid Price amounts are fair and reasonable. The ICE Consultant will participate in the design review, quantity and cost estimate reconciliation meetings and risk workshops. The ICE Consultant will be responsible for developing cost estimates based on independent quantity take offs, means and methods, and production rates; with the intent of representing the open market as the Contractor’s competition and establishing the fair market value for the project. The estimate provided by the ICE may be held in the blind or may be open book. The ICE will also review and provide comment on the Contractor’s construction schedule.

1.3 CONFIDENTIALITY

The SOQ, Proposal, and interview are integral parts of the best value CM/GC selection process. To the extent permitted by law, SOQs and Proposals will be treated as confidential until the time when the successful Proposer is selected for Preconstruction Services, or cessation of the procurement process. Proposers must designate what portions of their submittals are protected trade secrets before submission to MDT. MDT cannot guarantee that the courts or any other governmental agency with jurisdiction over such matters will treat such documents and content as confidential. Further information on confidentiality will be provided in the RFQ and RFP.

1.4 TIME OF PERFORMANCE REQUIREMENTS

The RFP will state the estimated time required for Preconstruction Services and the overall project durations. The Preconstruction Services agreement will formalize the time required for those services. During the Preconstruction Phase, the schedule will be prepared and maintained by the Project Leader with assistance from MDT staff, the Design Engineer, and Construction Manager; and will include all detailed coordination efforts to optimize the completion of the design, including all designer activities, remaining permitting/environmental activities, Contractor activities, third-party/stakeholder activities, MDT activities, and all cost estimate milestones. The obligation of MDT to complete specific submittal reviews, in accordance with the minimum requirements of MDT standards, will also be included in the project schedule.

Each Bid Price or Early Work Package Bid Price will state a time period in which the construction scope is to be delivered. Once the construction contract commences, the Contractor will be responsible to develop and maintain a project-specific Critical Path Method (CPM) schedule for the construction of the project using scheduling software identified in MDT Specifications. The CPM schedule is to be provided to MDT, the Project Leader, the ICE, and the Design Engineer for review and discussion. These baseline and updated schedules should be in accordance with MDT specifications.

1.5 TECHNICAL REVIEW COMMITTEE

The Technical Review Committee (TRC) is responsible for reviewing and evaluating Statements of Qualifications (SOQs) submitted by Proposers in response to the RFQ, and the Technical and Price Proposals submitted in response to the RFP, in order to select the Contractor. The Committee will be composed of key MDT staff and will be chaired by a representative of MDT. The responsibility of the Committee is to fairly and thoroughly assess the proposals submitted by Proposers in response to the Department's RFQ and RFP. Ultimately, the Committee will be responsible to first develop a short-list of Proposers based on the SOQ, then to select the preferred Proposer based on the Technical Proposal and the Interview, as well as the Price Proposal.

In addition, at MDT's discretion, the Committee may be supported with Technical Advisors, who are non-voting members from MDT, FHWA, MDT Consultants, or key stakeholders (Tribal Officials, City Officials, DEQ, FWP, etc.). The role of the Technical Advisors is to provide "subject matter" advice to the Committee that is considered non-routine. Technical Advisors may be assigned to assist, inform, advise, and make recommendations to the Committee's voting members, who will make their own judgment for the scoring of the proposal material. This team will also be provided the opportunity to comment on design drawings and cost models throughout project development.

In order to promote selection process transparency to MCA membership, MDT may include an unbiased representative from MCA executive board or membership in the proposal and interview review process. The MCA representative will not be a scoring member on the TRC and must not influence proposal scoring discussions.

1.6 **SELECTION COMMITTEE**

The MDT Selection Committee is responsible for providing guidance and oversight for the overall CM/GC process. The committee may be comprised of: the Highways and Engineering Administrator, the Preconstruction Engineer, the Construction Engineer, the Program Administrator, and the District Administrator. Each member of the Selection Committee may appoint a senior management level alternate, as appropriate. An FHWA representative may also be included as a non-voting member of the Selection Committee.

The Selection Committee oversees and provides approval for the Contractor selection process. The Selection Committee will approve the short-list that is produced by the TRC. After the TRC evaluates the Technical Proposals and submits its findings to the Selection Committee, the Selection Committee will approve the Technical Proposal scores. After the Price Proposal opening, the Selection Committee will approve the Best Value scores and final selection for initiation of the Preconstruction Contract.

During the Preconstruction Phase of a CM/GC project, the Selection Committee provides oversight and decision-making authority for program-level impacts.

2. DETAILED DESCRIPTION OF EVALUATION AND SELECTION OF THE SUCCESSFUL CM/GC

As generally described in Section 1, the MDT CM/GC procurement/evaluation process is a two-part procedure. Part One, the response to the RFQ, is the Statement of Qualifications (SOQ). Part Two, the response to the RFP, is the submission of a Technical Proposal and Price Proposal, and if applicable, an interview. The duration from Advertisement to Selection of a Contractor is anticipated to take approximately four (4) months. The Contractor is selected based on demonstrated qualifications, competency, and competitive pricing. Each of these submissions and steps are part of MDT’s “best-value” evaluation.

PROCUREMENT PROCESS

MDT = MT Department of Transportation
CM/GC = CM/GC Proposer

STEP ONE – RFQ
 (APPROX. 5 WEEKS)

- MDT** – Issue Request for Qualifications (RFQ)
- CM/GC** – Prepare and Submit Statement of Qualifications (SOQs)
- MDT** – SOQ Evaluation and Selection of Short-list

STEP TWO – RFP
 (APPROX. 11 WEEKS)

- MDT** – Issue Request for Proposals (RFP) to Short-listed Proposers
- ALL** – Preproposal Meeting
- CM/GC** – Submit Technical Proposal
- MDT** – Technical Proposal Initial Evaluations
- MDT & CM/GC** – Interviews and Final Evaluations
- CM/GC** – Submit Price Proposal
- MDT** – Opening of Price Proposal, Final Scoring, and Selection of the Apparent “Best Value” CM/GC Proposer
- MDT** – MDT Approval of CM/GC Contractor

2.1 SUMMARY - EVALUATION AND SELECTION OF THE CM/GC

A scoring matrix will be utilized by the Technical Review Committee to identify the major categories and the associated points for the scoring system. The scoring sheet will also have a location for a narrative comment summary of strengths and weaknesses as identified by the Technical Review Committee of each Proposer. The evaluation categories and scoring points (scoring matrix) will be included in the RFQ and RFP.

After selection of the short-listed Proposers based on their SOQ submittal, and receipt of Proposals based on the RFP, MDT will determine the best-value CM/GC Proposer, considering the Technical Proposal, Price Proposal, and Interview. It is important to note that the selection is not necessarily awarded to the Proposer with the lowest price component.

Regarding teaming with major subcontractors, all parties are required to comply with MDT Standard Specifications.

2.2 CM/GC ADVERTISEMENT

MDT will publicly advertise the RFQ on the [State Contracting and Bidding webpage](#). CM/GC projects will also be announced in advance on the [Alternative Contracting Upcoming Projects webpage](#).

2.3 REQUESTS FOR QUALIFICATIONS (RFQ)

MDT will issue the RFQ for soliciting qualification information from prospective CM/GC Proposers, and for the purpose of identifying a short-list of Proposers that will advance to the second step in the procurement process. The Proposer must submit all the information and documentation required by the RFQ in the format and order requested. The Proposers must give complete and accurate answers to all questions and provide all of the information requested. Selection of short-listed Proposers will be based on the submitted information and materials.

MDT is committed to a fair, thorough process. As such, unauthorized communications or contact between the Proposer, their employees, agents, or other related entities interested in submitting a Statement of Qualifications (SOQ) and MDT, MDT's Consultants, and any other person or entity participating on the Technical Review Committee or Selection Committee regarding this project, will be strictly prohibited.

The RFQ will identify the period of time the Proposers may submit questions and written requests for clarifications during the development of their proposals. All inquiries must be submitted through the Department's Question and Answer (Q&A) Forum (<http://www.mdt.mt.gov/business/contracting/gacurrent.shtml>). Answers to all substantive questions will be made available to all RFQ recipients via MDT's Q&A Forum; and when appropriate, revisions, substitutions, or clarifications will be posted to the Q&A Forum or issued as addenda to the RFQ.

The Proposer is responsible for assuring that the SOQ is delivered on time and to the correct location as identified by MDT. MDT will not accept late submittals and it is solely the Proposer's responsibility to ensure electronic delivery at the specified time.

MDT reserves the right to:

- At its sole discretion, reject non-responsive SOQs.
- At its sole discretion, waive discrepancies and informalities in the SOQs.
- At its sole discretion, terminate all or part of the CM/GC procurement process.

2.4 STATEMENT OF QUALIFICATION (SOQ) SUBMISSION REQUIREMENTS

All SOQs submitted must consist of the proper format and number of pages identified in the RFQ, including all required attachments, and be accompanied by a Transmittal Letter, one copy of which will be signed by an official authorized to legally bind the Proposer's project team. The Proposer must review the RFQ for specific submittal requirements. MDT will establish a page limit in the RFQ for the information submitted in the SOQ. The MDT Technical Review Committee reserves its right to rate any proposal as non-responsive that fails to include any information required in the RFQ. Proposers that submit non-responsive SOQs will not be eligible for the short-list and will not have the opportunity to continue on to the Technical Proposal phase.

The Proposer must demonstrate their ability to perform the scope of services required, to maintain the project budget and completion date, and to perform the work in a high-quality manner, consistent with MDT Specifications. The demonstration of prior successful completion of projects, in similar scope and magnitude, will be significant in MDT's evaluation.

The CM/GC RFQ will include the criteria for the selection process, Preconstruction Services scope of work, project constraints related to traffic, utilities, environmental concerns, permitting, right-of-way, and general construction requirements.

While the RFQ will include specific criteria for the selection, it is expected that MDT will be seeking SOQs from Proposers that highlight each team's experience working with Owners to resolve design conflicts during construction, as well as in general contracting and construction management. The Proposer does not need to demonstrate CM/GC experience. The SOQ should explain the Proposer's experience in similar types of construction, as expected on the subject project. The SOQ should also describe the Proposer's skills in construction management functions, such as scheduling and estimating.

The RFQ includes requirements to illustrate the team qualifications. Project management and critical staff experience and capabilities is an important factor in the selection of a CM/GC contractor. Credit is provided to Proposers who have not only those requirements stated above but also can demonstrate their understanding of local project conditions and MDT processes. To reduce effort by the Proposers, the Team Qualifications scores carry over into the RFP technical scores. The Proposers do not need to duplicate effort between the SOQ and Technical Proposal.

MDT also strongly believes that the successful execution of this project will require a high level of cooperation and collaboration and will be seeking that experience from the Proposers.

2.5 MANDATORY DISCLOSURE FORMS

The Proposers may be directed to provide Mandatory Disclosure forms as part of the SOQ. If these forms are required, the Proposer will be advised that the submission of the Mandatory Disclosure forms identified in the RFQ are not optional. Failure to provide this information will result in the SOQ being deemed non-responsive. A list of standard MDT forms will be included in the RFQ.

2.6 EVALUATION CRITERIA FOR STATEMENTS OF QUALIFICATIONS (SOQ)

The Statement of Qualifications will be evaluated against the criteria set forth in the RFQ document. The Technical Review Committee may, as part of this selection process, review the references and other pertinent information and specifically reserves the right to perform due diligence and investigate the prospective Proposer and/or its team.

MDT anticipates selecting between three (3) and five (5) Proposers for inclusion on the short-list, or all Proposers if less than three (3) are received. However, MDT reserves the right to short-list as many, or as few Proposers as deemed advantageous to the project or program. Each of the Proposers selected for the short-list will be sent a Request for Proposal and will be invited for an interview as a part of the Proposal review process. The MDT Technical Review and Selection Committees reserve its right to rate any proposal as non-responsive that fails to include any information required in the RFQ.

2.7 REQUEST FOR PROPOSALS (RFP)

The RFP is the second step of the evaluation process and is to be implemented for entities selected as short-listed Proposers. Two major submittals will be provided by the Proposers during this portion of the CM/GC evaluation – Technical Proposal and Price Proposal. In addition, this phase of the proposal will include an interview with the Proposers. The criteria for the submission and scoring of the Technical Proposal and Price Proposal, will be included in the RFP document. The Request for Proposal, Technical Proposal, and Price Proposal will be considered contract documents for the subject project.

The RFP will include, in addition to the evaluation criteria for the selection process, the following information: anticipated preconstruction scope of work; specific constraints related to working in and around the project site, environmental considerations, traffic, utilities, and right-of-way; pricing details; and construction requirements. The CM/GC RFP will be typically organized as follows:

- A description of the CM/GC delivery method and selection process, including the selection process calendar.
- RFP formatting instructions and documentation requirements with associated scoring criteria.
- The Draft Preconstruction Services Contract, including the agreement, terms and conditions, and scope of work.
- A draft of the Construction Contract agreement, terms and conditions.
- A general description of the Design Engineer’s scope of work.
- A general description of the proposed Project Leader’s responsibilities.
- Compensation procedures.
- Oral interview requirements.

The RFP will require two submittal packages, one for the Technical Proposal submission and one for the Price Proposal submission. The submittal method and date for the Technical and Price Proposals will be identified in the RFP.

The MDT Technical Review Committee will first determine whether the proposals are responsive to the requirements of the RFP. Technical Review Committee members will evaluate the appropriate components of the Proposals against the criteria contained in the RFP. As required by MDT, the Technical Review Committee may be assisted by technical advisors. The Technical Review Committee members will also evaluate the Proposers based on the interviews, in addition to the Technical Proposal and Price Proposal.

The RFP will identify the period of time the Proposers may submit questions and written requests for clarifications during the development of their proposals. All inquiries must be submitted through the Department’s Question and Answer (Q&A) Forum (<http://www.mdt.mt.gov/business/contracting/gacurrent.shtml>). Answers to all substantive questions will be made available to all RFP recipients via MDT’s Q&A Forum; and when appropriate, revisions, substitutions, or clarifications will be posted to the Q&A Forum or issued as addenda to the RFP.

MDT will schedule a confidential interview with each Proposer. This interview will provide an opportunity for the Proposers to fortify their Technical Proposal with presented information, as well as allow the Technical Review Committee to ask clarifying questions. Oral interviews are further discussed in Section 2.12 herein.

The commercial terms and conditions of the contracts between MDT and the Contractor are generally considered standard and are not negotiable. MDT intends to issue a “draft” of the Preconstruction Services Contract, and the Construction Contract, which will show the contract terms in their substantive form, for review and acceptance by the Contractor along with the RFP. Additionally, at MDT’s sole discretion, some of the construction terms may be negotiated during the development of a Bid Price or Early Work Package Bid Prices based on the overall benefit to MDT and the Project.

2.8 PREPROPOSAL CONFERENCE FOR THE REQUEST FOR PROPOSAL

Prior to the RFP due date, a preproposal meeting will be held with the Short-Listed Proposers, to discuss the project in detail and to clarify any concerns that the Proposers may have. At the discretion of MDT, other project stakeholders may attend this meeting. The meeting is intended to provide a forum for the Proposers to ask questions and to discuss aspects of the RFP and related Technical and Price Proposals. The Department will obtain feedback and, at MDT's sole discretion, may amend the RFP requirements. Attendance at the Preproposal Meeting is a mandatory element of the selection process, and Proposers who fail to have a representative present will be considered non-responsive.

2.9 TECHNICAL PROPOSAL

The Technical Proposal is intended to demonstrate the Proposer's abilities to meet MDT's goals to successfully execute the project. The Technical Proposal will provide the MDT Technical Review Committee with an understanding of which Proposer is best prepared and equipped to complete the specific CM/GC project.

While the detailed selection and scoring criteria will be included in the RFP document, it is expected that the Proposer will provide information regarding their management approach to this project (including quality control and project controls); their subcontracting plan (including DBE and AA/EEO requirements); their approach to the Preconstruction Phase (including their plan to work cooperatively with MDT, the Design Engineer, and the ICE); their estimating methodology (ability to provide labor, material, equipment hours, and subcontractor cost estimates by bid item, and understanding of open-book estimating concept); and their approach to the Construction Phase (including innovative project solutions and methods for minimizing impacts).

MDT will be seeking a Contractor who will provide services in both the Preconstruction Phase and the Construction Phase. For anticipated Preconstruction Phase services, please refer to Section 3 of this document. For anticipated Construction Phase services, please refer to Section 4 of this document.

2.10 TECHNICAL PROPOSAL EVALUATION PROCESS AND CRITERIA

The Technical Review Committee will first determine whether the proposals are responsive to the requirements of the RFP. Proposals that fail to include any information required in the RFP will be considered non-responsive. Committee members will evaluate the appropriate components of the proposals against the criteria contained in the RFP. Following the review of any technical advisors and the qualitative ratings, the Technical Review Committee will determine if clarification of minor inconsistencies will be required. The Project Leader will notify in writing each Proposer for which clarifications of their proposal are required in accordance with the schedule contained in the RFP. The Technical Review Committee may request each Proposer to provide clarifying information only to assist the committee with fully understanding the proposal.

The Proposer's response to the Request for Proposal (both the Technical Proposal and the Price Proposal) will be evaluated against the criteria established in the RFP. The evaluation criteria and the selection method are designed to ensure fair competition among the prospective Proposers and to assist the Technical Review Committee in making its best value selection.

The Technical Review Committee will provide credit to Proposers who demonstrate their successful approach and execution on past similar projects and who performed innovative construction methods that saved time and money. These Proposers will also have provided in-depth, thoughtful approaches and solutions to the technical challenges associated with the project.

2.11 PRICE PROPOSAL EVALUATION PROCESS

MDT has chosen to use a “best value” selection process that includes scoring on both the Technical Proposal and the Price Proposal. However, it should be noted that MDT is interested in selecting a Contractor that provides a highly scored technical approach, as well as a competitive price for the selected price component. This is not a low bid process, and the highest combination of Technical and Price Proposal scores will be designated as the best value and winning proposal.

The Price Proposal is the final step to determine the “best value” score of each of the Proposers. The required Price Proposal will be provided after the TRC has completed technical proposal evaluations. The pricing component is designed to provide competitive pricing for selecting the CM/GC entity. The specific pricing requirement will be included in the RFP.

As part of the overall “best value” scoring criteria, the pricing component will be used as a percentage of the total score of the Proposal. The Technical Proposal and the Price Proposal, as well as the Interview, will be used, in varying weights, to provide the best value score. The specific weighting will be included in the RFP.

2.12 CM/GC INTERVIEWS

The MDT Technical Review Committee will conduct oral interviews with the top Proposers as part of the selection process. The confidential interviews will be held separately with each Proposer. At a minimum, the format will include a question-and-answer session. Besides the Technical Review Committee members, MDT may include other staff, technical advisors, and project stakeholders to observe the interview.

The interview will not be used to fill in missing or incomplete information that was required in the written proposal. The interview will not be used as an opportunity by the Proposers to revise or supplement their proposals. This step in the selection process will be defined in the RFP.

MDT considers the interview to be a key indicator of the ability of the Proposer’s team. As such, the Technical Review Committee will include scoring points for the interview in their overall evaluation. That scoring criteria will be outlined in the RFP.

2.13 RECOMMENDATION OF CONTRACTOR

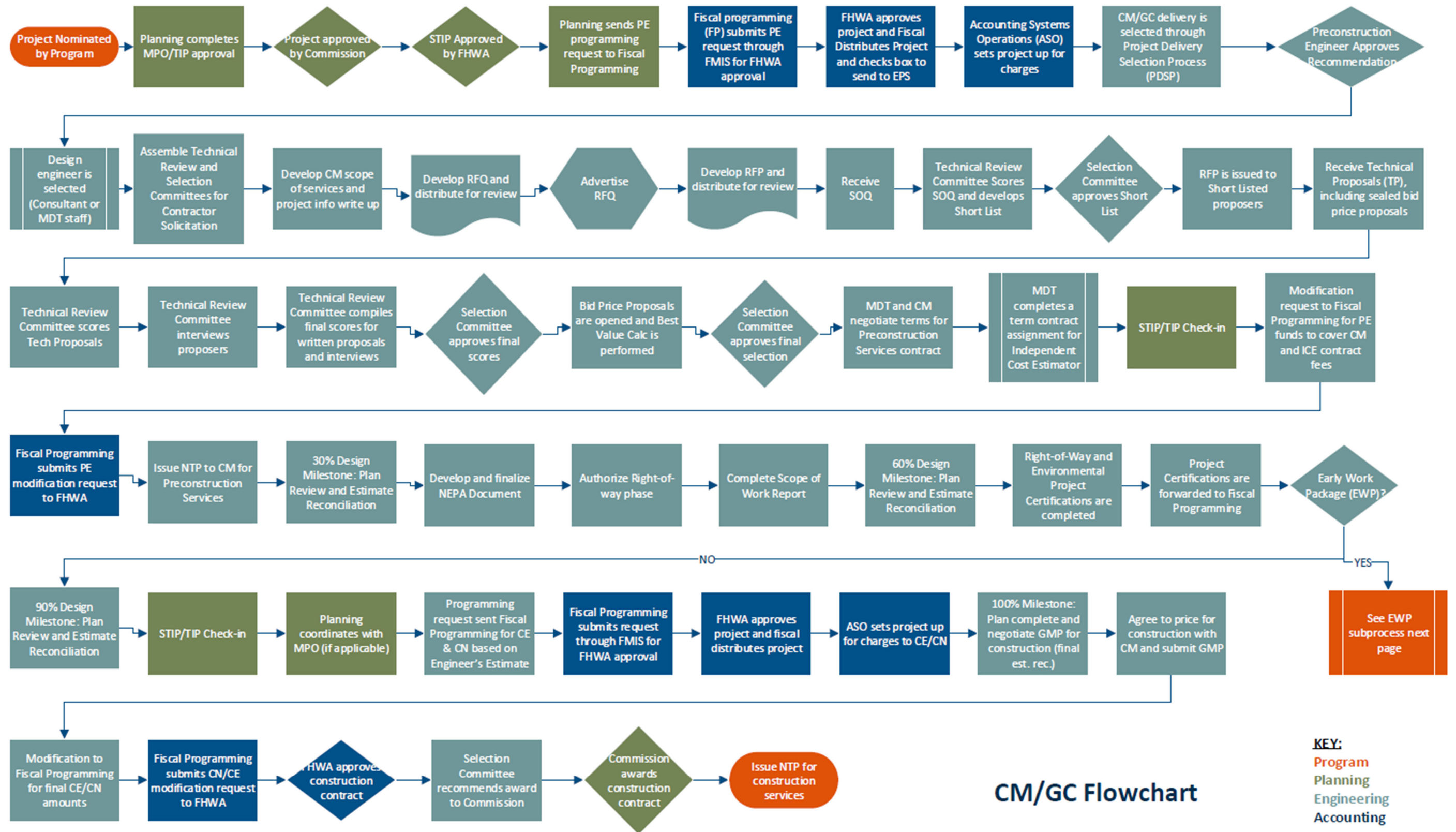
The overall technical score includes both the written Technical Proposal and the Oral Interview scores. MDT considers the oral interview a critical factor in the selection of the best suited Contractor. Per Administrative Rules of Montana, the department must weight the in-person interview of each shortlisted proposer as at least half of the technical score. The technical proposal will account for the balance of the technical score.

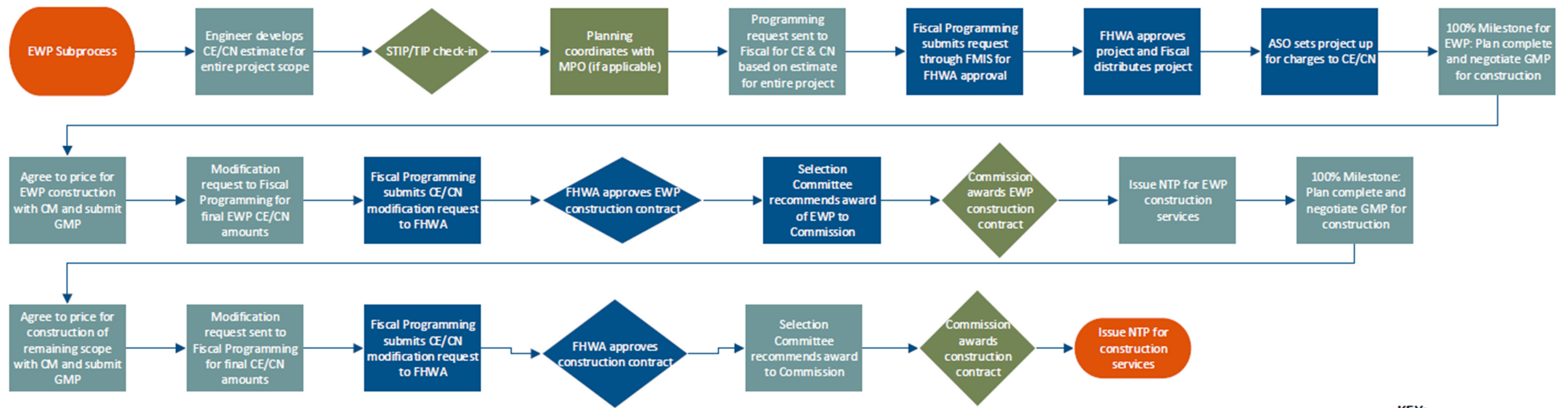
If a minimum of two proposals are accepted and scored, the MDT Technical Review Committee will recommend the approval of the Best Value Proposer. This recommendation will then be approved by the Selection Committee. Selection Committee approval is the start of Preconstruction Contract negotiations with the Best Value Proposer. After the successful Bid Price or Early Work Package Bid Price negotiation, the Construction Contract will be presented to the Transportation Commission for approval and award of the contract.

As noted previously in this document, MDT reserves the right to reject all proposals that are deemed non-responsive, as well as to waive minor proposal irregularities. As also noted previously, the “contract” for CM/GC services will be in two parts: The Preconstruction Services Agreement, and the Construction Contract(s).

2.14 *SUMMARY OF MDT FUNDING AND APPROVAL PROCESS*

The following figures depict MDT’s funding and approval process for CM/GC projects.





CM/GC EWP Sub-Flowchart

KEY:
 Program
 Planning
 Engineering
 Accounting

3. ANTICIPATED PRECONSTRUCTION SERVICES (DURING DESIGN)

3.1 OVERVIEW OF PRECONSTRUCTION SERVICES

The purpose of Section 3 is to highlight the types of services that MDT may be seeking from the Contractor during the Preconstruction Phase. It is included here to give the Contractors that are considering putting a team together, an idea of the types of services that might be required for a CM/GC project. The specific requirements and scope elements will be included in the RFQ and RFP.

CM/GC project delivery offers MDT significant benefits by having the Contractor on board during early phases of project development to provide constructability input. Early Contractor involvement may improve the project's cost and schedule, and provide the opportunity to mitigate the impact of identified risks. During this process, the Design Engineer can modify plans, specifications, and project requirements with Contractor recommendations that have been vetted by the owner through the CM/GC process. The design may be adjusted to incorporate means and methods specific to the selected Contractor to better-accommodate physical construction and improve efficiency, cost, and schedule.

The Contractor will be a part of the overall project team consisting of MDT staff, an Independent Cost Estimator, an MDT Project Leader, and the Engineer-of-Record. The Contractor will provide services such as plan reviews for constructability, pricing, scheduling, staging methods, material procurement strategies, risk identification/management, and other areas related to the project.

ANTICIPATED GENERAL PRECONSTRUCTION PHASE SERVICES

It is expected that the Contractor tasks during the Preconstruction Services phase may include, but are not limited to:

- Collaboration and coordination with MDT, the Project Leader, ICE, Design Engineer, and other stakeholders.
- Advising MDT on ways to gain efficiencies in project delivery, including recommendation of contract packaging options.
- Project planning and construction scheduling.
- Identifying potential risks to schedule, cost, and quality; and develop strategies for managing those risks. (See Section 3.11 for information on the Risk Management Process.)
- Providing guidance and suggestions to mitigate impact on users.
- Suggesting modifications to the design that may improve cost, schedule or quality.
- Constructability studies and identification of construction access and staging areas.
- Value Engineering (VE) support services.
- Alternative approach, design, or systems evaluation.
- Options analysis (cost and schedule assessments).
- Early investigative work to analyze the existing conditions to be by work-order request.
- Construction phasing, scheduling, and maintenance of traffic to minimize interruption to the transportation system users.
- Developing the limitations of operations.
- Developing detailed equipment and material delivery plans.
- Detailed cost estimates and knowledge of marketplace conditions.
- Providing cost estimates and participating in estimate reconciliations at various stages of project development. MDT may also require a rough order of magnitude estimate based on limited plan information at the onset of the design phase.
- Reconciliation of the Bid Price or Early Work Package Bid Price with MDT and the ICE.

- Finalization of the Bid Price or Early Work Package Bid Price, with all schedule and cost estimating basis.
- Attending and facilitating meetings as requested by MDT.
- Supporting the public involvement plan as directed by MDT.
- Participating in professionally facilitated partnering sessions throughout the life of the project. In some cases, MDT may require that the CM contract with the partnering subconsultant.
- Encouraging DBE and Equal Opportunity participation.
- Development of a quality control plan for independently reviewing all contract documents, and development of a quality assurance program to confirm that QC procedures are followed.

3.2 AWARD OF PRECONSTRUCTION SERVICES AND BID PRICE

The selected Contractor will enter into two distinct contracts with MDT – each to be initiated with an individual Notice to Proceed (NTP), following successful negotiations. The first NTP will be issued to engage the Contractor in performing Preconstruction Services. The form and draft terms of the Preconstruction Services Agreement will be included in the RFP. Proposers are required to name their proposed Key Subcontractors for the Preconstruction Services, if any, in their proposal. A second NTP (or series of NTPs) will be issued after the parties agree to a Bid Price for the selected scope of work. If Early Work Package Bid Prices are included in the project, each Early Work Package Bid Price will also have its own NTP.

As the Preconstruction Phase evolves, the successful Contractor will be required to provide detailed construction pricing updates and options evaluations, in addition to other required scope elements. During this process, MDT and the Contractor (together with the ICE, Design Engineer, and Project Leader) will meet in Estimate Calibration Meetings to advance the pricing. When the design of a scope of work is completed and a final estimate is submitted, MDT and the Contractor will develop and agree upon a Bid Price or Early Work Package Bid Price through the estimate reconciliation process, for construction of that scope.

Once design has reached completion, assuming the parties agree on the Bid Price for that scope, it is anticipated that some of the Contractor’s personnel will shift to full-time construction services while others continue to work on Preconstruction Services (and some may split their time). At that point, the Preconstruction Phase services will be reviewed, and reallocation of the Contractor team will occur, in order to identify the personnel continuing Preconstruction Services and the personnel dedicated to the delivery of that component or scope of work. For the work included in the Bid Price that receives a construction NTP, the Contractor will then function like a general contractor and will be responsible for completing the work on schedule and according to the Guaranteed Maximum Price for that scope.

3.3 PRECONSTRUCTION FEE

MDT and the Contractor will negotiate a cost reimbursable contract for Preconstruction Services. The scope of work shall include all anticipated assignments for constructability reviews, value engineering, cost estimating and development of Bid Prices, risk management, options analysis, and all other Preconstruction Phase services. Adjustments to the Preconstruction Services scope and final fees will be negotiated upon Contractor selection. As a baseline for negotiations, Proposers may be asked to provide in their Technical Proposal, an hourly rate (for direct salary only) for key personnel identified in the RFP. Additional detailed information on payment for Preconstruction Services will be provided in the RFQ/RFP. Should MDT elect to use a different compensation mechanism, that process will be described in detail in the RFQ/RFP.

The Contractor's Preconstruction Services will be reimbursed for direct labor, based upon the actual hours worked and the employee's hourly rate (for direct salary only), with a Preconstruction Multiplier of 1.8 applied to the direct labor costs. This multiplier is to compensate the contractor for all overhead and profit type costs, exclusive of specifically identified direct costs that will be further defined in the RFP document. This multiplier will be applied to all the Contractor's management and staff labor. No home office overhead costs, or corporate principal salary costs, or profit will be allowed for the Preconstruction Phase. Those costs are considered to be included in the Preconstruction Multiplier, whether the multiplier is high enough to cover the costs or not. The only exception to this multiplier will be that certain direct costs – specifically for travel, lodging, and meal costs associated with CM/GC employees, approved in advance by MDT, will be reimbursed at actual costs as direct expenses. Such travel expenses will be limited, similar to the standard provisions on MDT professional services contracts.

MDT anticipates many of the Contractor staff providing Preconstruction Services will transition some, or all their time, to the management of the construction work. MDT will continue to compensate the Contractor for the individual's preconstruction service efforts. However, compensation for the individual's efforts on the construction contract(s) will be considered in the Bid Price. MDT and the Contractor will establish a strategy for allocating the labor charges to the appropriate contract when the individual's efforts are in transition.

MDT and the Contractor will agree to terms of the Preconstruction Services contract and fee. Any required increases to the Contractor preconstruction scope of work, costs, and time of performance (i.e., duration) will be contracted with supplemental agreements.

MDT CM/GC projects may have more than one Early Work Package. In this case, MDT and the Contractor will determine a payment structure that allows for some selected staff to continue with the Preconstruction Services after the first Bid Price is agreed upon. The basis of the initial Preconstruction Phase will serve as the basis for this continuation of Preconstruction Services.

The Contractor will not be entitled to recover any lost costs for the actual expenditures or any lost profits for the costs of the future Construction Phase services contract, should a Bid Price or Early Work Package Bid Prices not be successfully agreed upon with MDT for any reason.

The costs for developing and delivering responses to project solicitations (RFQ and RFP) are entirely the responsibility of the Proposer. The State is not liable for any expense incurred by the Proposer in the preparation and presentation of SOQ and Technical Proposal submittals.

3.4 PRELIMINARY EVALUATION (DESIGN PHASE COOPERATION, COORDINATION, AND COMMUNICATION)

Once a NTP has been issued for the Preconstruction Services contract, the Contractor will provide a preliminary evaluation of MDT's most current project requirements, including a review of all updated drawings, background data, commitments, criteria, priorities, time constraints, and physical and financial limitations. It is expected that this report will be updated on a regular basis as the design evolves.

The Contractor will be responsible for becoming thoroughly familiar with the work sites, and conditions surrounding the sites.

The Contractor will review other site data such as access, inspection reports, location of utility services, surveys, soils information, and other relevant information.

The Contractor will participate in a kick-off meeting(s) with the Project Team to develop a common understanding of the scope and goals of the project and to outline the estimating organization, method of measurement, basis of payment, working limitations, innovative practices, and possible means and methods, and a collective risk mitigation strategy.

A full preliminary evaluation report will be due from the Contractor to MDT soon after the NTP, to be updated regularly thereafter, for the entire Preconstruction Phase. This report is to contain a preliminary discussion on project risks and possible mitigation strategies, review of the program schedule developed by the Project Leader, constructability aspects including site access requirements, a narrative on the means and methods of the critical components of the project, options analysis, and a log of all suggested changes to the design documents, as well as the Contractor's cost estimates for construction, when available. MDT will, at its discretion, pursue implementation of the Contractor's recommendations.

3.5 CONTRACTOR'S PERFORMANCE AND LIMITATIONS

The Contractor, to further the interests of MDT, will perform the services required by and in accordance with the contract, to the satisfaction of MDT, exercising the skill and judgment required for the project. The Contractor will perform the required services consistent with sound and generally accepted construction management and construction contracting practices.

The Contractor's services are those necessary and appropriate to successfully complete the project in a timely and cost-effective manner and will include, but are not limited to, those described or specified herein. The Contractor will provide all requested services according to the capabilities reflected in its SOQ, inclusive of those described in the RFP, the construction documents, the contract, and all amendments to the contract. Unless otherwise provided in the contract, or as agreed in writing between MDT and the Contractor, the form and content of all systems, submittals, reports, and/or studies will be subject to MDT's prior approval, and the Contractor will submit such materials to MDT for acceptance prior to implementation. MDT's acceptance thereof will not limit MDT's right to thereafter require reasonable changes or additions.

The Contractor's Preconstruction Services are not intended to include the performance of design work. MDT's Design Engineer will remain responsible for the engineering of all aspects related to completion of the design documents and will remain the Engineer-of-Record throughout construction of the project. The Contractor's responsibilities for design during the Construction Phase will be those typical for MDT general contractor (D-B-B) services (such as shop drawings, formwork design, temporary works design, and other items of work that specifically include design or performance requirements).

MDT will perform audits in accordance with their standard procedure and Specifications for traditional Design-Bid-Build projects, including review of claims. All contract documents, created and maintained by the Contractor, are subject to audit by MDT or an appointed designee.

3.6 ADDITIONAL SUPPORT SERVICES

The Contractor will consult with, advise, assist, and provide recommendations to MDT, the Project Leader, the ICE, and the Design Engineer on all aspects of the planning, efficiency, innovation, sequencing, pricing, and schedule-related concepts of the scope of the work. The Contractor will also provide recommendations on construction feasibility; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; and

factors related to construction cost, including estimates of alternative designs or materials, preliminary budgets and possible economies.

3.7 CONTRACTOR COLLABORATION

MDT, the Project Leader, the Contractor, the Design Engineer, and the ICE have the common goals of producing a quality project within the budget, maximizing the value of the work to MDT, achieving completion without undue inconvenience to the public, and producing the work at a reasonable cost to MDT. In promoting these goals, the Contractor will consult with and maintain a spirit of cooperation, collaboration, and open communication with MDT, the Project Leader, the ICE, and the Design Engineer in performing their Preconstruction Services. The Contractor will actively provide input for alternatives, improved methods, and other ways to maximize the quality of the project. The Contractor will maintain regular communication with the Project Leader, the Design Engineer, the ICE, and MDT.

The intent of this collaboration is to obtain information and common construction practices from the Contractor to look at possible solutions for challenges in the project. Such information could include: construction methods and production rates with associated costs, modern equipment availability and costs, and availability of materials and other resources. The idea behind this collaboration is to develop and implement an innovative and effective design while still maintaining constructability, to ensure the goals and objectives are understood and potential problems are resolved promptly. The CM/GC concept also allows input from the Contractor to use the latest advancements in technology in the construction industry.

The Contractor is expected to provide construction expertise and technical experience to assist in project design development, ensure the technical challenges are addressed, and provide input on items affecting construction costs, schedule, constructability, quality, safety, and market conditions.

3.8 SUBCONTRACTING – INCLUDING AA/EEO AND DBE

The Contractor will submit a subcontracting plan to be followed during the implementation of the CM/GC project. In addition, the Contractor will be required to submit, monitor, and update its AA/EEO plan, as well as its DBE program plan. These plans will be managed throughout both the Preconstruction and Construction Phases of the project. The Contractor will provide the appropriate MDT staff with copies of all DBE subcontractor contracts. The specific DBE criteria, including required percentage and penalties for non-conformance, will be included in the RFQ and RFP documents.

Subcontractors are selected at the discretion of the CM/GC entity. The Contractor must make a good faith effort to select subcontractors that provide reasonable pricing and quality work. Every subcontractor will need to be approved in accordance with Subsection 108.01 of the Standard Specifications. Subcontractor quotations will be used in milestone cost estimates throughout project development. Key Subcontractors identified in the Proposal as a part of the CM/GC team, must also agree to use production-based pricing, similar to the estimating requirements imposed on the Contractor. The Contractor will identify their selections during the design process, prior to the Bid Price finalization, as the team creates a solution that meets schedule, quality, and budget goals. The Contractor is to update the description of the roles/scopes of each subcontractor as changes occur. Changes to Key Subcontractors must receive prior approval by MDT. Specific requirements related to Key Subcontractor and Subcontractor involvement will be described in the RFP.

3.9 CHANGES TO THE CM/GC TEAM

The Contractor's work will be performed and directed by key project personnel identified in the Statement of Qualifications and Technical Proposal. Any changes in the indicated personnel will be subject to prior review and approval by MDT. The Contractor will have available professional and construction staff with the training and experience required to perform the work. Engineers and Surveyors in responsible charge of various elements of the project must be licensed and comply with all pertinent Montana Statutes and applicable rules of the Montana Board of Professional Engineers and Professional Land Surveyors.

3.10 VALUE ENGINEERING (VE) AND VALUE ANALYSIS (VA)

During the Preconstruction Phase, the Contractor will participate in and provide Value Analysis support. On a project-specific basis, MDT may choose to incorporate a formal Value Analysis workshop, in which case, MDT will lead and facilitate the VA study. The Contractor will participate in the study and provide recommendations and information to support the generation of a report by the VA Team that will be presented to MDT. Results of the study will be documented in a VA Report that will include an explanation provided for all recommendations from the VA team following MDT's standard VA process. Innovative cost saving concepts accepted during the Preconstruction Phase will be incorporated into the design and the respective Bid Price contract documents.

Regarding the Contractor's innovation during the Construction Phase, the Contractor may submit a Value Engineering Contractor Proposal (VECP). As noted in MDT Standard Specifications Subsection 104.08, the Contractor's innovative cost savings during the Construction Phase are shared with the Contractor as fifty percent of the net savings of each proposal. MDT will limit the sharing of the savings to VECPs that reasonably could not have been contemplated or anticipated during the Preconstruction Phase. A benefit of CM/GC contracting is Contractor collaboration during the Preconstruction Phase. Withholding innovative ideas until the Construction Phase is not viewed favorably and those savings will not be shared.

3.11 RISK ANALYSIS

MDT intends to implement a robust risk analysis and mitigation program on CM/GC projects. MDT considers a project risk to be an uncertain event or condition that, if it occurs, has a negative or positive effect on a project's objectives, cost, schedule, or quality. The Project Leader will have primary responsibility to develop the Risk Management Plan, and the Contractor will work proactively and cooperatively with the Project Leader and the Design Engineer to document and implement the plan.

Project risk management will be a collaborative process that will involve all project participants and will include the identification, analysis, planning for, mitigation of, allocation, and control of project risks. In addition, once identified the risk will be monitored and documented. The Contractor will be primarily responsible for identifying construction risks and will participate in the establishment of the project's Risk Management Plan, which is a tool used to document the risk management process.

The purpose of the Risk Management Plan is to define the risks, document the risks, identify cost and schedule impacts associated with the risks, and produce detailed mitigation plans for the risks. Each Risk Management Plan includes the agreement of how MDT and the Contractor define the risks, who is responsible for the risks, and how the risks are to be paid for during construction. An important consideration of the risk analysis by the Contractor is to establish a thorough dialogue and agreement on assigning and allocating risk through various payment terms. The ICE (verifying costs associated with risks), Design Engineer (refining the design to minimize or eliminate the risks), the Project Leader (overall manager of risk program), and MDT will all play important roles in this process.

The risk analysis process will also be used during the development of the Bid Price or Early Work Package Bid Price. The Contractor should not include risk in the general Bid Price that is not previously discussed or separately identified and included in the Risk Management Plan. In general, MDT expects risk to be accounted for in three ways:

- 1) Risk that is allocated to the Contractor is included within the Contractor's bid items;
- 2) Risk that is allocated to MDT is programmed to the project budget or identified in the Bid Price contingency as a provisional item;
- 3) Risk that is to be shared is also identified in the Bid Price contingency.

The Project Leader will be responsible for the development and maintenance of the Risk Management Plan during the Preconstruction Phase. Upon successful negotiation of a Bid Price and after the issuance of a construction NTP, the Contractor will take over responsibility for the tracking and monitoring of the Risk Management Plan items associated with that scope of work.

3.12 INDEPENDENT COST ESTIMATE

MDT will procure and contract with an Independent Cost Estimator (ICE) that has a demonstrated ability to develop production-based cost estimates. These estimates will show all quantities (including temporary materials), anticipated production rates, labor prices, material prices, and equipment prices, and should demonstrate the direct costs of the project. Production-based cost estimates are to be generated by the ICE, Contractor, and in certain cases, the Engineer at 30, 60, and 90 percent design and at completion of design for a scope of work, or other major milestones, as deemed necessary by MDT. MDT may also require the development of a rough order of magnitude (ROM) estimate prior to 30 percent plan development, aimed at refining the project budget and proactively defining procedures for the estimating process. Additionally, these estimates will include a cost for all indirect expenditures such as project management, supervision, field office support, mobilization costs, construction utility costs, insurances, profits, etc. The ICE will be required to develop their detailed cost estimates independent of MDT, the CM, and the Design Engineer; however, their estimate will be set up in a similar manner as the other production-based estimates. The estimate prepared by the ICE will be used to set up, compare, and evaluate the Bid Price or Early Work Package Bid Price amount.

The ICE estimate may be held "in the blind" during the Bid Price cost estimate reconciliation process. In other words, the ICE estimate may not be shared with the Contractor or Engineer but will be used to compare the various iterations of the cost estimate. In the case of the ICE being in the blind, ICE cost estimate will be disclosed after the successful negotiation of the Bid Price or Early Work Package Bid Price.

MDT may elect to have the ICE provide open book estimating if it is deemed to be a benefit to the project and MDT. The ICE would not be in the blind when the ICE is providing open book estimating. MDT may also elect to blind most of the ICE's estimate but only reveal bid item costs that are significantly different between the ICE and Contractor.

3.13 ENGINEER'S ESTIMATE

The MDT Bid Price process involves three detailed construction cost estimates. MDT will obtain an Engineer's Estimate from the Design Engineer, which may be either a production-based or historical bid price-based, construction cost estimate prior to the estimate calibration meetings (see below), and prior to any Bid Price reconciliation. This cost estimate will be compared to the ICE and Contractor's estimate as part of the estimate calibration meetings. The ICE will also prepare an independent detailed, production-based construction cost estimate and will participate in the estimate calibration meetings. All estimates will be strictly confidential outside of the project team and will be reconciled together, at each

estimate milestone and prior to the final steps of the Bid Price or Early Work Package Bid Price acceptance. In some cases, MDT will be required to assist with the reconciliation process by providing a review of the major variance of each of these estimates.

3.14 ESTIMATE CALIBRATION MEETINGS

As part of Preconstruction Phase services, the Contractor, the Project Leader, the Design Engineer, MDT personnel, and the Independent Cost Estimator will hold regular meetings to determine the cost estimate organization and break-down. An early activity in the Bid Price estimate development for a scope of work is establishing quantities. Subcontractor and material price quotes can also be reconciled between the teams during this time frame. Estimate Calibration Meetings may also be referred to as an “Approach to Price” discussion and may be documented in an “Estimate Coordination Memo” generated by the Contractor.

Topics of discussions during a series of cost estimate calibration meetings include the cost estimate narrative, the limitations of operations, the quantities, the planned method of measurement and basis of payment, and a description of the planned means and methods. The actual comparison of the Engineer’s, ICE’s, and Contractor’s Estimate occurs at each milestone submittal in the development of any Bid Price.

At each estimate phase, Key Subcontractors and material vendors will be required to supply production-based estimates for their respective work for the Contractor. Subcontractors and vendors are selected at the discretion of the Contractor; however, the Contractor must provide justification for their selections, which will be discussed with the ICE and Design Engineer at estimate calibration meetings.

3.15 COORDINATION WITH THE DESIGN ENGINEER AND THE PROJECT LEADER

MDT will appoint a Project Leader and a Design Engineer to provide management and engineering services for the entire project. All communications and submittals by the Contractor to MDT will be issued to, or made through the Project Leader, unless otherwise directed by MDT. MDT will establish procedures, consistent with the contract, to be followed by the Project Leader, the Designer, and the Contractor, and to call periodic conferences, to be attended by the Contractor, and the Contractor’s Key Subcontractors, throughout the term of the contract.

3.16 CONTRACTOR REVIEWS

DESIGN DOCUMENTS: The Contractor will meet with the Project Team as required to review the design as it develops. The Contractor will thoroughly familiarize itself with the evolving documents through the various design phases. The Contractor will routinely conduct constructability and bid-ability reviews of the drawings and specifications, as necessary to satisfy the needs of the project. The reviews will attempt to identify all discrepancies and inconsistencies in the construction documents, especially those related to clarity, consistency, and coordination of subcontractor work and suppliers.

Upon request by MDT, the Contractor will assist in preparing comparative life-cycle studies of ownership, and operation and maintenance costs for each schematic design alternative considering costs relating to efficiency, usable life, maintenance, energy, and operation.

The Contractor will monitor and document changes in the design that would impact cost or schedule and bring those issues to the attention of the project team. The Contractor will also monitor the impacts of these changes on the project schedule and recommend adjustments in the design documents or construction bid packaging to ensure completion of the Project in the most expeditious manner possible. The Contractor will advise and assist the Project Leader, and represent MDT, if requested, in dealing

appropriately with all applicable laws and with local utilities, communications, and other related infrastructure issues, as necessary.

As part of this Design Review Team, the Contractor will provide constructability comments, feasibility and practicality of any proposed means and methods; selected materials, equipment, and labor; material availability; site improvements; earthwork, and foundation considerations; coordination of the drawings and specifications; verification of quantities, etc. The Contractor should also provide cost effective alternatives. In addition, the Contractor will maintain a high focus on risk issues.

CONSTRUCTABILITY REVIEWS: The Contractor will evaluate whether:

- There are any conflicts in the way any materials are designed to be installed (including equipment and site access limitations), and the drawings and specifications are free of conflicts, and are configured to enable efficient construction.
- The design has taken into consideration all efficiency issues concerning interfaces, sequencing and phasing, access and entrance to the site, work restriction, weather restrictions, environmental commitments, laydown and storage of materials, staging of site facilities, construction equipment mobilization, and all other construction efficiency issues.
- Design elements are standardized, and materials chosen are suitable and efficient for the intended use.
- Module/preassembly has been considered and optimized to best facilitate fabrication, transportation, and installation.
- There has been adequate sub-surface investigation to the extent possible to avoid differing site conditions once under construction.

BID-ABILITY REVIEWS: The Contractor will check cross-references on drawings and in the specifications, and, in general, evaluate whether:

- The drawings and specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies.
- Named materials and equipment are commercially available and are performing well or otherwise, in similar installations.
- The design adequately represents existing conditions.
- Specifications include alternatives in the event a requirement cannot be met in the field.

The results of the bid-ability reviews and the constructability reviews will be provided to MDT by the Contractor in formal, written reports clearly identifying all discovered discrepancies and inconsistencies in the drawings and specifications with notations and recommendations made. The Contractor will regularly meet with the design team to discuss, update, and review these reports.

The CM/GC's reviews will be from the Contractor's perspective and are intended to reduce the number of changes during the Construction Phase. However, the responsibility for the Drawings and Specifications will remain with the Design Engineer, not the Contractor.

3.17 NOTIFICATION OF VARIANCE OR DEFICIENCY

The Contractor will assist the Design Engineer in ascertaining if the construction documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations. If the Contractor recognizes that portions of the construction documents are conflicting or are at variance with

those items, it will promptly notify the Design Engineer and MDT in writing, describing the apparent conflict, variance, or deficiency.

3.18 ALTERNATIVE EVALUATIONS / OPTIONS ANALYSIS – PRIOR TO BID PRICE

The work noted here is in addition to the formal Value Analysis workshops noted elsewhere. During the finalization of design (i.e., from 30 percent to 100 percent development), the Contractor will routinely identify and evaluate options, using value engineering principles and comprehensive analysis. The Contractor may be required to perform a cost benefit analysis of the viable alternatives/options and submit a report to MDT. If required, this activity will be described in the RFP. MDT, the Project Leader, Design Engineer, and the Contractor will collectively decide which alternatives/options will be incorporated into the Project. The Design Engineer will have full responsibility for the incorporation of the alternatives/options into the drawings and specifications. The Contractor will also include the cost of the chosen alternatives/options into the cost estimate, construction schedule, and any Bid Price proposals. This process is one of the most significant expectations of the Contractor. The Contractor will be responsible for developing and maintaining an innovation register, with input from the Project Leader and Design Engineer. MDT will use this document to monitor the effectiveness of the CM/GC delivery method.

Additional design costs related to the proposed changes will be considered in any cost benefit analysis submitted for acceptance.

3.19 PROJECT MEETINGS

The Contractor, the Project Leader, MDT, the Design Engineer, and other project team members will meet regularly as the progress of the project require, to review and agree upon detailed construction schedules, critical items, cost and budget related issues, the work performed to date, and to establish the controlling items of work for the upcoming month. The Contractor will attend Project Team meetings which may include, but are not limited to, weekly project management meetings, regular design meetings, project workshops, special project meetings, contract document rolling reviews and partnering sessions. Specific Preconstruction activities will be described in the RFP and further negotiated after selection of the Contractor. The Contractor will participate in each meeting, report on the state of the costs estimates, project construction schedule, constructability reviews, and provide pertinent input when required. The project design meetings will present general project progress, address design options that arise during the design process, and will help to incorporate input and direction from MDT. Project meetings will be conducted throughout the design portion of the project, to complement the project schedule and design review meetings.

The Contractor will also be required to participate in Estimate Reconciliation Meetings. Estimate Reconciliation Meetings will be held at each major design milestone (ROM, 30 percent, 60 percent, 90 percent, and final design). The Contractor will be required to provide a production-based cost estimate for comparison with the ICE and Design Engineer estimates at these workshops. Any major discrepancies between estimates will be discussed in detail, including discussion on the supporting production-based cost estimating documentation that is required to be provided with each estimate. The CM/GC process may require additional estimate coordination meetings, which will be described in the RFP.

In addition, the Contractor, when requested by MDT, will attend, make presentations and participate as may be appropriate, in public agency and community meetings relating to the project. The Contractor will assist the Design Engineer in the preparation of drawings, schedule diagrams, budget charts, and other materials describing the project, when needed for any such meetings. Specific public involvement requirements will be described in the RFP.

3.20 DESIGN REVIEWS

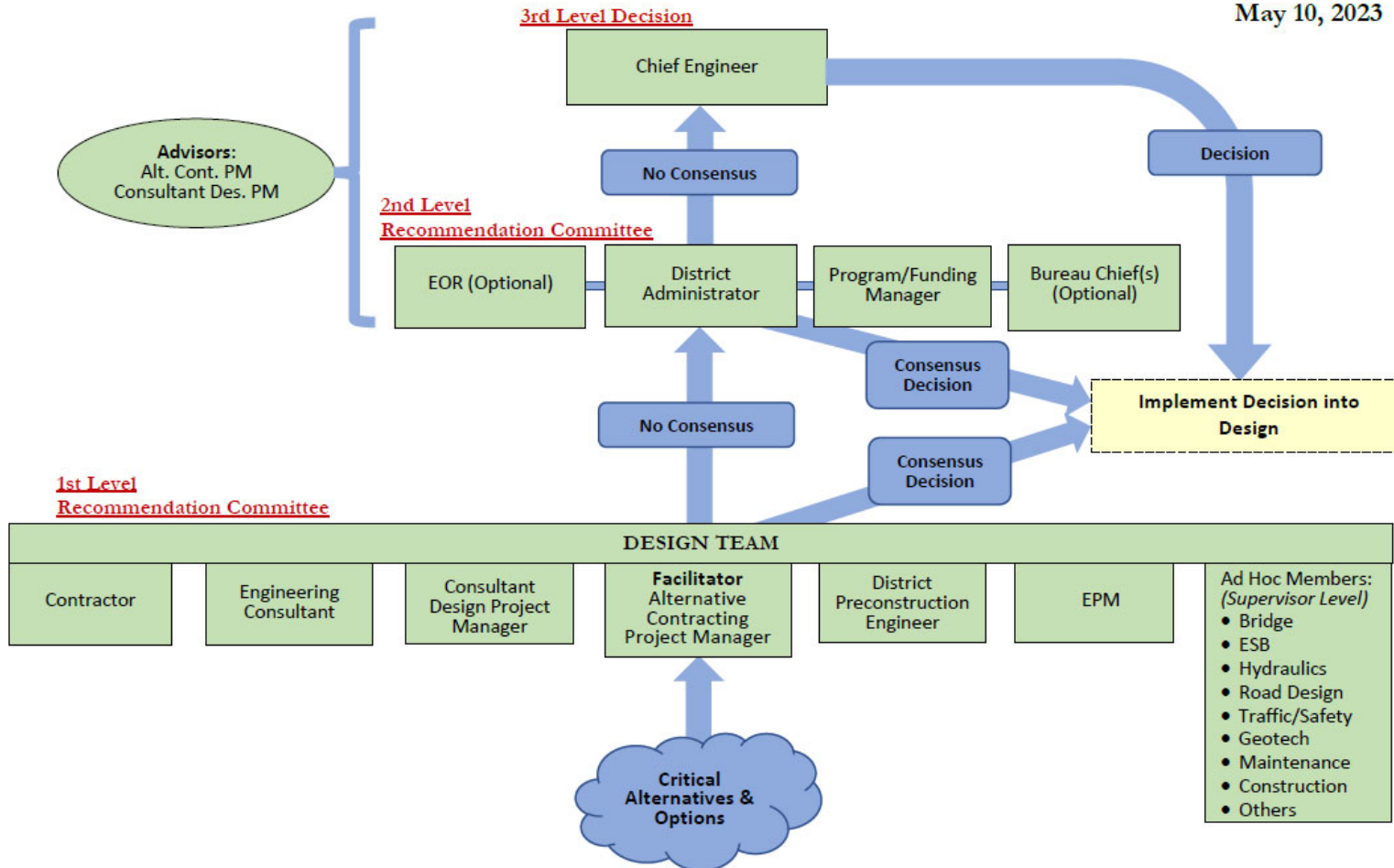
CM/GC projects will include both formal and informal design review processes. Informal evaluations will consist of Over-the-Shoulder Reviews, which are reviews of design packages that are intended to provide feedback on the design, prior to a milestone submittal. The Design Engineer is responsible for recording the review comments, but formal responses and disposition of comments will not be required. A formal design review process will be used on the milestone submittals, which will require responses and disposition of comments.

During the design process, the Contractor will assist the Project Leader and the Designer in Over-the-Shoulder reviews. The Contractor will suggest possible alternatives which could reduce costs and/or shorten the schedule. The Contractor will advise on constructability.

In the event that a project team cannot come to consensus on the preferred alternative/option, or a project development decision has a significant impact to the project, MDT's CM/GC Decision-Making Process Flowchart (shown in the following figure) may be implemented to determine the best value solution. The Flowchart shown is generic and each project team should adapt this process to fit their specific needs. As noted in the figure, design exceptions on CM/GC projects will follow MDT's standard approval process. For consultant designed projects, the Consultant Design Engineer is the design exception signatory. Also, note that FHWA provides advisory support to the Decision-Making process and is not a voting member.

ALTERNATIVE CONTRACTING - DECISION MAKING PROCESS FLOWCHART
APPLIES TO DESIGN-BUILD PHASE 1 ANALYSIS, PROGRESSIVE DESIGN-BUILD AND CONSTRUCTION
MANAGER/GENERAL CONTRACTOR PROJECT DELIVERY

May 10, 2023



Engineering Construction Contracting Bureau
 Alternative Contracting Section

3.21 LONG LEAD ITEMS / SYSTEM PROCUREMENTS

The Contractor will recommend to MDT a schedule for procurement of long-lead time items which will constitute part of the Work as required to meet the project schedule. These items will be procured by the Contractor upon execution of a Bid Price or Early Work Package Bid Price.

3.22 CONSTRUCTION MANAGEMENT PLAN

The Contractor will prepare and submit a Construction Management Plan (CMP) to MDT. In addition, the CMP will be required to be updated monthly, or at different intervals as specified by MDT, until MDT approval. The CMP may include elements such as:

1. The organizational chart of the Contractor's team.
2. A matrix summarizing each Project Team member's role and responsibilities.
3. Communications protocol.
4. Project milestone dates and the Project Schedule related to construction activities.
5. A plan for cost control and monitoring.
6. Change management protocol – during preconstruction and construction.
7. A listing of important investigations to be undertaken/supplemented.
8. Construction staging and access plans.
9. Alternate strategies for fast-tracking or phasing the construction.
10. A list of possible work segments to be constructed under multiple Bid Prices and justification for Early Work Package Bid Prices.
11. Anticipated sub-agreements to be awarded to subcontractors and suppliers for the project construction.
12. Permitting finalization and compliance strategy.
13. Safety and training programs.
14. Construction quality control and quality assurance.
15. Listing of deliverables that the Contractor and the Project Leader have included in the Preconstruction Phase services.
16. Risk assessment and monitoring plan for selected elements.
17. Innovation register.
18. Listing of all critical submittals and shop drawings.
19. Traffic management plans.
20. Schedule management plan.
21. Basis methodology for monthly cash flow projections.
22. Cost accounting and records retention procedures.
23. Public outreach initiatives, as described in RFP.
24. Start up and testing plans.
25. Other items that the Contractor recommends for the project.

The Contractor will update and add detail to its previous version of the CMP to keep it current throughout the Preconstruction Phase, so that the CMP is ready for implementation at the start of the Construction Phase. The update/revisions will consider:

1. Revisions in drawings and specifications.
2. The Contractor's examination of the results of any additional investigatory reports of subsurface conditions and drawings of existing physical conditions (including surface and subsurface facilities and documents depicting underground utilities placement and physical condition, whether obtained by MDT, the Design Engineer, or the Contractor).
3. Unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right-of-way.

4. The status of the procurement of long-lead time equipment and materials.
5. Funding issues identified by MDT.
6. Input from the public involvement process.

3.23 PROJECT SCHEDULE

During the Preconstruction Phase, the Contractor will review the program schedule developed by the Project Leader. The Contractor will provide feedback on contingency plan scenarios, and the Project Leader will use that expertise to help optimize the program schedule. As the design evolves, the Contractor will continuously monitor and update the anticipated construction schedule. The Contractor will also be responsible for maintaining the project schedule throughout the Construction Phase.

3.24 TEAM PARTNERING

Collaboration is a key component of the CM/GC process, and MDT intends to promote partnering throughout project development and delivery. At the start of the CM/GC contract, all members of the project team will attend an initial team coordination meeting involving the Project Leader, the Design Engineer and Key Subconsultants, the Contractor and Key Subcontractors, the ICE, MDT, and other agencies required by the project. The meeting is expected to take place shortly after the Contractor's Notice to Proceed for Preconstruction Services.

The partnering meeting will include:

- Development of common goals for the project.
- Procedures designed to maximize communication, cooperation and collaboration between the Project Leader, the Design Engineer, the Contractor, and MDT.
- Communication between the Design Engineer and the Contractor regarding constructability, value analysis, and other collaborative efforts.
- Schedules for submittals such as staging plans, specifications, cost estimates, and analysis of alternatives.
- A partnering Issue Escalation and Resolution ladder process.
- Public involvement.
- Such other matters as may be appropriate.
- Agreement on a plan to continue the partnering process throughout the project, including regularly scheduled follow-up meetings.

Partnering Meetings are planned for intervals of at least two (2) times per year. The direct expenses associated with partnering (i.e., facility and facilitator) will be borne by MDT.

3.25 PREPARATION OF BID PRICE PROPOSALS

As part of Preconstruction Phase services, when the construction documents for a scope of work are sufficiently complete to establish a price for the project (or portion of the project) and the estimate reconciliation process is complete, the Contractor will establish and submit a formal Bid Price or Early Work Package Bid Price.

It is repeated here that MDT maintains its right to break out any portion of the work and procure it using other methods, should it be in MDT's interest to do so.

As part of the process to achieve acceptance of a Bid Price, MDT anticipates that more than one submittal from the Contractor may be required to allow for development, exchanges, work-sessions, estimate

calibration meetings, and review time. The Contractor's submittals will be in a fully detailed, production-based format. All information regarding the Contractor's estimate shall be made available to MDT. As noted above, the Bid Price proposals will be the sum of the anticipated direct cost attributed to the work, plus field indirect costs, along with the Contractor's Construction Phase Multiplier. The direct costs should not include any contingencies, any spread of field indirect costs, or any profit and home office overhead.

Each Bid Price or Early Work Package Bid Price is expected to include certain allowances and a Bid Price Contingency for changes in the agreed upon scope. If the allowances or Bid Price Contingency are not fully utilized, the unspent amounts are not earned by the Contractor, and may be later used at MDT's discretion. The Contractor agrees to complete the scope of work for that Bid Price amount (i.e., the contract amount for the Construction Phase contract), provided that no extra work orders were previously approved by MDT.

If design changes are required during the review and reconciliation of Bid Price or Early Work Package Bid Price proposals, MDT will authorize and request the Design Engineer to revise the construction documents to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved Bid Price or Early Work Package Bid Price proposal. The Contractor will promptly notify the Design Engineer and MDT if any such revised Bid Price or Early Work Package Bid Price construction documents are inconsistent with the agreed-upon assumptions and clarifications. Upon signing of the Bid Price or Early Work Package Bid Price contract, the Contractor will take full responsibility for the estimate basis and assumptions that were provided.

At the sole discretion of MDT, some construction contract terms may be negotiated for a specific Bid Price based on the overall benefit to MDT and the Project.

It is not intended that project risk (MDT and shared risk) will be included in the pricing for the Bid Price or Early Work Package Bid Price; rather MDT desires that any risk be discussed openly and included in the contingency negotiations (see Section 3.11 Risk Analysis).

Compensation for construction services within a Bid Price or Early Work Package Bid Price will be as follows:

- For Lump-Sum Items in the Bid Price: Paid as a percent of the total lump-sum based on monthly progress.
- For Allowance and Contingency items in the Bid Price: Paid based on the actual expenditures.
- For Unit Price items in the Bid Price: Paid based on the field quantity at the agreed upon unit price.

Each Bid Price or Early Work Package Bid Price will include a Schedule of Items (SOI) that may include one or several units of payment. The SOI will be paid based on the approved cost and resource loaded CPM schedule, in accordance with MDT Specification.

3.26 EARLY WORK PACKAGE BID PRICES

One of the main goals of the CM/GC delivery method is to arrive at cost certainty prior to starting construction of a scope of work. MDT may seek to start portions of early/critical work by executing a separate contract with the Contractor detailing the scopes of work selected to commence before execution of the final guaranteed price amendment. The separate contract, if elected to be utilized by MDT, will state the sum for that specific scope of work, which will include the cost of the work, the general conditions, and any fee that has been established as part of the bid or negotiation process.

MDT will consider Early Work Package Bid Price proposals that meet all the following criteria:

- The implementation of multiple Early Work Package Bid Prices must be clearly understood by MDT to be in the best interest of the project and MDT.
- The segment of work proposed for construction under a separate Early Work Package Bid Price will be performed in accordance with all applicable permits and statutes. Additionally, work constructed under an Early Work Package Bid Price must not affect/impact adjacent areas that do not have all required clearances.
- Use of Early Work Package Bid Price's on the project must be demonstrated to save time, reduce inconvenience to the travelling public, and/or reduce construction costs.
- The Early Work Package Bid Prices are within the project budget.
- Early Work Packages must be severable from the remainder of the project scope. Execution of an early work package does not guarantee award of the final Bid Price package to the CM/GC Contractor. Each construction package is subject to the estimate reconciliation and Bid Price negotiation process.

3.27 EXTRA WORK ORDERS / AMENDMENTS TO THE BID PRICE

One of the main benefits of the CM/GC concept is to improve the “completeness” and the accuracy of the final design, as well as to improve the Contractor’s understanding of the work. The most significant benefit of this collaborative team effort is intended to be the reduction of change orders during construction. However, it is understood that like any construction project, a CM/GC project may require some change orders, albeit minimal, to complete the scope of work. Under the CM/GC process, the Construction Contract will include change order provisions. It is anticipated that the change order process will closely follow standard MDT procedures.

It will be at MDT’s discretion whether a change order is funded through the Bid Price contingency, the MDT contingency, or some other means.

3.28 UNSUCCESSFUL BID PRICE NEGOTIATION

At the completion of the cost estimate calibration meetings, the Contractor, Design Engineer, and ICE will provide their estimates to MDT for evaluation and comparison. The Contractor’s price will be compared to the Independent Cost Estimator’s (ICE) Estimate and the Engineer’s Estimate. The Bid Price negotiation will be considered unsuccessful if the Contractor’s estimate exceeds 110 percent of the ICE estimate. However, the Department may elect to implement a recovery method in attempt to come to agreement.

RECOVERY METHODS:

1. **Recovery Method 1 - Contractor pricing resubmission** - MDT may allow the Contractor to resubmit their pricing and Bid Price or Early Work Package Bid Price documentation, with the specific goal of reducing the proposal price to an acceptable threshold.
2. **Recovery Method 2 – Bid Price Reconciliation Workshop** – MDT may facilitate a reconciliation workshop to evaluate the major variances between the Bid Price or Early Work Package Bid Price estimates generated by the Contractor, ICE, and Engineer. All aspects of the Bid Price documentation and estimate, including basis, production rates, quantities, risk, crews, and methods, are to be open for discussion.

UNSUCCESSFUL NEGOTIATIONS AFTER RECOVERY:

If MDT and the Contractor fail to successfully negotiate a Bid Price or Early Work Package Bid Price, then:

1. The Contractor will lose the right to construct the work related to the failed Bid Price and will be ineligible to rebid the work through a different delivery method. The Contractor's Key Subcontractors will also lose the right to construct the work related to the failed Bid Price but will be eligible to participate in a re-procurement of the work, whether by design-bid-build or by some other project delivery method as determined by MDT.
2. MDT may re-procure the work related to the unsuccessful Bid Price or Early Work Package Bid Price by any other lawful procurement method.
3. MDT may terminate, in part or in full, the CM/GC process and procure the remaining elements of the project by any other lawful procurement method.

MDT will provide written documentation of the reasoning behind the termination of the Bid Price or Early Work Package Bid Price discussions and will take possession and ownership of all documents produced by the Contractor for that work. Any information provided during this phase may be used to develop the plans and specifications for the project advertisement. Additional information provided during the development phase may be provided to bidders if a price cannot be reached. In this event, the Contractor will not perform, nor be compensated for any Preconstruction Services beyond the date of the termination of the Bid Price or Early Work Package Bid Price discussions.

3.29 CONTINGENCY

Bid Price Contingency:

The Bid Price Contingency is an allowance that will be tailored to the scope of work for a Bid Price or Early Work Package Bid Price that is based on several factors. The allowance may be set up to cover the possibility of an issue occurring that was identified in the risk analysis. The contingency may also be used, at MDT's discretion, to cover change order items.

The Bid Price Contingency will be approved and used at the sole discretion of MDT. The amount of Bid Price Contingency will be approved by MDT prior to the execution of the Bid Price or Early Work Package Bid Price. The utilization of any portion of the Bid Price Contingency will be processed similar to the MDT procedures used for change orders and/or miscellaneous work, but must first be clearly justified by the Contractor in writing and must be authorized by MDT. If the Bid Price Contingency is not fully utilized, the unspent amounts are not earned by the Contractor, but remain with MDT. The Bid Price Contingency may appear in the construction contract as a specific pay item and will be treated like Miscellaneous Work (see Standard Specifications article 104.04 for more information).

The Bid Price Contingency is intended for the following:

- a) Net quantity overruns for unit priced items, after adjustment for underruns.
- b) Minor design changes.
- c) Other identified risks.
- d) Shared risk items.

MDT Contingency:

The MDT Contingency (a.k.a. Owner controlled) will be an amount determined by MDT and is included in the overall program budget. The purpose is to properly account for potential increased cost due to changes in the work, made at the discretion of MDT, or that were not anticipated by MDT, and are beyond the control of MDT and the Contractor at the start of the program. The MDT Contingency is an overall program budgeting reserve that MDT establishes and maintains exclusive from the Contractor. The MDT Contingency may be programmed to the project, but is not assigned to any pay items in the construction contract.

Contractor Contingency:

The Contractor Contingency is intended to cover the cost of risks that are allocated to the Contractor and will be accounted for in the Contractor's bid items. MDT recognizes that not all construction risks will be mitigated through the preconstruction risk management process, and therefore allows the Contractor to carry a justifiable cost for risks assigned to the Contractor at the time of Bid Price submittal. The Contractor's Contingency must be clearly defined and described in production-based estimates for each milestone. MDT, working in collaboration with the Independent Cost Estimator, will validate that the costs included in the contingency are reasonable and accurate. The Contractor Contingency will be priced separately as a part of the production-based estimating process during preconstruction. However, at the time of construction, this cost will be balanced across appropriate pay items and disbursed to the contractor as a part of the unit price cost of each work item.

3.30 NOTICE PROVISIONS

When the Contractor has reason to believe that impacts have, or will, cause a change to the Preconstruction Phase services agreement that is not accounted for in that scope, it will be the Contractor's responsibility to provide MDT with sufficient advance written notification as defined in the contract, to allow MDT to have reasonable opportunity to avoid such costs or amend the scope of services appropriately.

3.31 PRELIMINARY BID PRICE SCHEDULE

At the time of submission of the Bid Price or Early Work Package Bid Price proposal, the Contractor will submit a cost and resource loaded schedule, in accordance with MDT specifications, to meet MDT's goals for the substantial completion date of the scope of work under that Bid Price or Early Work Package Bid Price. The Contractor will plan, schedule and execute all aspects of the work and will be responsible for coordinating its activities with all parties who are directly impacted by the work. The Contractor will document and report all work in accordance with the requirements of the Contract Documents.

3.32 COST ESTIMATES AND ESTIMATE CALIBRATION MEETINGS

Early in the Preconstruction Services, the Project Leader will develop an overall program budget, including a program Work Breakdown Structure. The Contractor will review and use that information to develop an overall program Cost Model for MDT to review. The Contractor will review and use all available information regarding the design and scope of the project to develop the model. The cost model will be prepared in a format agreed upon by MDT, the Project Leader, and the Contractor. The purpose of the model is to aid the team in the later development and negotiation of the Bid Price. The Contractor will be required to generate early construction cost estimates as design progresses and will be required to routinely be an active participant in a series of estimate calibration meetings.

Once the format, Work Breakdown Structure, and overall Cost Model template are approved by MDT, the Cost Model will be populated by the Contractor, and kept current as the design progresses throughout the Preconstruction Phase, and as Bid Prices are developed. The Cost Model will eventually be used to model the complete project costs. The Contractor will communicate to the Project Team any assumptions made in preparing the Cost Model through submission of an estimate narrative.

Between milestone estimates, the Contractor will provide and update a construction cost report that identifies the upward or downward movements of costs due to value engineering or scope changes. It will be the responsibility of the Contractor to keep MDT, the Project Leader, the ICE, and the Design Engineer

informed as costs change relative to previous estimate versions and MDT's overall budget. As a part of this documentation process, the Contractor will also be responsible for maintaining an innovation register and noting how these project concepts affect overall costs.

As the design progresses, the Contractor will be required to provide a detailed production-based construction cost estimate and a written narrative basis for the scope associated with each Bid Price. The timeframe for the estimate will be established by MDT based on the size of the scope of the work. The Contractor cost estimates will be submitted to the Project Leader but will not be provided to the ICE and Engineer until MDT determines it is appropriate to do so. However, MDT, the Project Leader, and Contractor will work collectively to develop a cost estimate narrative, the limitations of operations, the quantities, the detailed description of the planned method of measurement and basis of payment, and the planned production rates. This information and other such as labor rates, equipment rates, material quotes, etc. will be provided to the Independent Cost Estimator and Engineer for discussion at what is expected to be a series of Estimate Calibration meetings.

The Contractor and the Project Leader will reconcile any disagreements based on the estimate as part of the reconciliation process. If no consensus is reached; MDT will make the final determination on what will be done as a course of action.

Each cost estimate submitted by the Contractor will be a production-based estimate and will be accompanied by backup documentation, which will include the following:

- Detailed prices and quantity take-offs, including all calculations to arrive at quantities.
- Material costs, equipment ownership and operating costs, labor costs, fully-loaded hourly labor rates (including employee benefits, payroll taxes and other payroll burdens).
- The detailed total cost for any portion of the work to be performed by subcontractors. The pricing for Key Subcontractor work should be production-based and include subcontractor labor, materials, equipment, and general conditions (including subcontractor bonds and insurance).
- Copies of quotations from subcontractors and suppliers.
- Crew composition (labor and equipment) and production rates for all operations.
- Transportation and other facilities and services necessary for the proper execution of the work, whether temporary or permanent, and whether incorporated, or to be incorporated into the work.
- All fixed equipment, site improvements, and utility and equipment installations.
- Construction Phase Multiplier.
- Project overhead, general condition costs, indirect costs.
- Bid Price Contingencies, as directed by MDT.
- Allocated general and administrative expenses not accounted for in the Construction Phase Multiplier, such as bonds, non-exempt taxes, and insurances.
- Memoranda, narratives, consultant's reports, and all other information included by the Contractor to arrive at the price shown in the Cost Model or Bid Price. Include a list of all assumptions and a description of the breakdown of all allowances.

3.33 CONFIDENTIALITY OF COST MODEL AND BID PRICE DOCUMENTATION

The Contractor may designate certain documents as trade secrets and such documents may be protected as confidential information to the extent that Montana laws allow. Typical construction cost estimates, including those that clearly identify anticipated production rates, are not deemed to be proprietary.

4. ANTICIPATED CONSTRUCTION ADMINISTRATION SERVICES

4.1 CONSTRUCTION PHASE

The purpose of Section 4 is to highlight the types of services that MDT may be seeking from the Contractor during the Construction Phase. In general, during the Construction Phase, the Contractor has the responsibility of a general contractor, including the project's construction. This section highlights some Construction Phase services that are incumbent upon the CM/GC Contractor; it is not intended to be an all-inclusive scope list of construction activities. It is included here to give the Contractors that are considering proposing, an idea of the types of services that might be required on a CM/GC project. The specific requirements and scope elements will be included in the RFQ and RFP.

During the Construction Phase of the project, the goal of MDT, the Project Leader, the Design Consultant, and the Contractor is to construct the project in accordance with the contract documents, to complete the project within the defined timeframe, to minimize impacts to stakeholders, and if possible, complete the project under budget. The Construction Phase will begin when all the following have occurred:

- The Contractor and MDT agree on a Bid Price for the entire project, or the Early Work Package Bid Price for a portion of the construction work.
- The Contractor and MDT execute a construction contract with all current Bid Price documentation – including estimates, drawing, specifications, requirements, attachments, and addenda.
- MDT issues a written NTP letter for the Construction Phase of the contract.

The Construction Phase may begin before all activities of the Preconstruction Services phase are complete. Whether or not the Construction Phase begins prior to design completion, the Contractor will remain obligated to complete the previously agreed to scope elements of the Preconstruction Services contract, unless otherwise approved by MDT.

Construction Phase service activities are not to be billed under Preconstruction Phase services. After successful negotiation of a Bid Price, the Preconstruction Services for that Early Work Package Bid Price is considered to have been completed. Compensation for the Contractor's management and administration of the Bid Price or Early Work Package Bid Price from this time forward will be included in the Bid Price. No further compensation will be allowed in the Preconstruction Services contract for the work associated with that Bid Price. The Contractor will continue to be compensated for preconstruction service on other Early Work Package Bid Price or Final Bid Price assignments, as applicable.

ANTICIPATED GENERAL CONSTRUCTION PHASE SERVICES: It is expected that the Contractor tasks during the Construction Phase will include the following (also refer to [MDT's Standard and Supplemental Specifications for Road and Bridge Construction](#) for additional requirements):

- Safety oversight for all Contractor entity and subcontractor staff, as well as for onsite MDT and other stakeholder staff.
- Overall construction phasing to limit impacts.
- Continuing to provide project controls services (project scheduling and estimating) as required during construction.
- Working diligently to mitigate any encountered issues not previously identified.
- Processing RFI's in conjunction with the MDT design team.
- Providing Quality Control according to the proposed plan.
- Providing all documentation to support MDT's processes.

Construction will be in accordance with all federal, state and local requirements.

4.2 SUBCONTRACTORS

The Contractor will be responsible to select and contract with subcontractors. The Contractor must implement the DBE and AA/EEO Workforce plan in accordance with the plans developed and must maintain the established goals through the life of the project. Project-specific goals are provided in the RFQ/RFP.

4.3 SELF-PERFORMANCE BY THE CONTRACTOR

The Contractor must perform the CM/GC services work valued at not less than 40 percent of the overall contract value with its own staff, excluding specialized services.

4.4 COMPENSATION

MDT intends to follow the standard MDT payment specifications and procedures, on which compensation for construction work is based.

4.5 MEASUREMENT AND PAYMENT

The method of measurement and the basis of payment, for all bid items installed, will be in accordance with Section 109 of the Standard Specifications. During development and finalization of the Bid Price or Early Work Package Bid Price, MDT and the Contractor will define the method of measure and basis of payment, in accordance with the Schedule of Items to be developed for the work.

4.6 CHANGE ORDERS AND TIME EXTENSIONS

MDT will process change orders in accordance with Subsection 104.02.3 of the Standard Specifications, with consideration being given to modify the payment process approvals to accommodate the CM/GC delivery method.

In considering any request for additional compensation and/or an extension of time because of a contract modification, MDT will consider the fact that the project has been developed using the CM/GC project delivery process. As part of this process, the Contractor has had the responsibility to review the contract documents throughout the Preconstruction Phase and to verify the accuracy and completeness of the plans, specifications, and quantities included in the Bid Price Record Documentation. If the causes for the requested modification to the contract could have reasonably been foreseen, given the Contractor's participation in the Preconstruction Phase, the Contractor will not be entitled to any compensation and/or extension of time. A determination will be made whether the change of scope will be funded from the Bid Price Contingency or paid as a change order funded from the MDT Contingency. The use of all contingency must be approved in writing by MDT.

4.7 CONTRACTOR AND SUBCONTRACTOR RECORDS

The Contractor, subcontractors, and all suppliers will keep and maintain all books, papers, records, files, accounts, reports, and a copy of the Bid Price Record Documents with backup data, including electronic data, and all other material relating to the contract and project for five (5) years following completion and acceptance of the work. All the above material will be made available to MDT and other authorized governmental agencies including, but not limited to, the Legislative Auditor for auditing, inspection, and copying, and will be produced upon any dispute or claim that appears to be irreconcilable. The Contractor will insert the above requirement in each subcontract, purchase order, and lease agreement, and will also include in all subcontracts a clause requiring subcontractors to include the above requirement in any lower-tier subcontract, purchase order, or lease agreement.

The Contractor is required to provide the basis of Bid Price or Early Work Package Bid Price as an escrow document, which may be used to settle disputes and claims. The escrow document requirements will be incorporated into the Bid Price or Early Work Package Bid Price contract.

4.8 CONTRACT TERMINATION OR SUSPENSION

The contracts developed for the execution of the work will include provisions for terminations or suspensions, which will include the following situations:

1. Prior to the execution of a Bid Price, MDT reserves the right to terminate the CM/GC Preconstruction Services Contract at any time without cause.
2. After execution of a Bid Price, MDT reserves the right to terminate or suspend Preconstruction or Construction work for cause or convenience.
3. If the contract is terminated after the award of the Construction Phase to the Contractor, the termination procedures in MDT's Specifications for construction will be followed.

4.9 DISPUTE RESOLUTION

MDT has established the issue escalation process for design and construction questions and conflict resolution for the Contractor and Engineer-of-Record to follow. All issues are to be directed to the Project Leader or Project Manager. If the issue cannot be resolved at this level, the Project Leader or Project Manager will forward the issue to the next level in the process.

As a part of the CM/GC process, frequent management-level discussions between project entities are encouraged. For issue resolution during the preconstruction phase of a project, MDT will rely on guidance from the following internal escalation procedure:

- Design Related Issues: Consultant Design Project Engineer → District Preconstruction Engineer → Preconstruction Engineer → Chief Engineer
- CM Contract Administration Issues: Project Leader → District Preconstruction Engineer and District Construction Engineer → Senior Leadership Committee (District Administrator, Construction Engineer, Chief Engineer, and Chief Operations Officer)

Specific details related to the formal escalation ladder are further described under section 3.20 in the MDT CM/GC Decision-Making Tree.

5. DEFINITIONS OF SELECT TERMS

The following definitions apply to this CM/GC Guidance Document.

Award: MDT's acceptance in writing of a Bid Price for construction services, subject to the execution and approval by MDT and the Transportation Commission of a Construction Contract thereof and the provision by the Proposer of performance and payment bonds acceptable to the Department to secure the performance thereof, and to such other conditions as may be specified by the Department and required by law.

Best Value (for CM/GC selection): The highest overall evaluation scoring/value to MDT, considering qualifications, experience, technical approach, and a price component.

Blind Estimating Process: Bidding process set up to verify a comparison between all estimates completed by the Engineer, the Independent Cost Estimator (ICE), and the Contractor. The ICE estimate may be kept hidden, or "blind," from the Contractor and Design Engineer. The Project Leader will be responsible for maintaining the confidentiality of the ICE estimate and will also be tasked with generating a comparison spreadsheet that qualitatively shows the differences between the estimates. As previously stated, MDT may elect to unblind the ICE and have the ICE provide open book estimating. MDT may also only unblind bid item costs where there are large discrepancies between the Contractor and ICE.

Construction Manager/General Contractor (CM/GC) Contractor: A contractor, or joint venture, under contract with MDT, to perform Preconstruction Phase and Construction Phase services. The term CM/GC is also used to describe the project delivery method. The CM/GC Contractor is part of the overall project team consisting of MDT staff, the Design Engineer, and an Independent Cost Estimator (ICE) firm. The Contractor will initially provide services such as plan reviews for constructability, pricing, scheduling, staging, methods, material procurement strategies, risk identification / management, and other areas related to the construction of the project. During the Construction Phase, the Contractor performs the same functions as MDT General Contractors under traditional project delivery methods and is responsible for construction of the project. The Contractor is not the Engineer-of-Record at any time during the life of the project (except for Contractor-designed temporary works); the Contractor and the Engineer-of-Record are selected separately by MDT. See Sections 3 and 4 for additional information on tasks and responsibilities of the Contractor.

Construction Manager/General Contractor (CM/GC) Procurement Process: A procurement process in which MDT selects a Contractor to provide Preconstruction and Construction Phases services.

Constructability Review: A process that integrates the Contractor's build/assembly skill sets into the design phase to determine the feasibility of the design to be constructed. By active/early involvement, the Contractor provides their expertise and experience, as the design is being finalized, to identify potential problems, provide details and clarity, optimize methods, and to evaluate phasing complexity. These evaluations are beneficial in reducing proposed construction costs, critical schedule delays, requests for information (RFIs), change orders, and construction claims.

Construction Contract: A written agreement between MDT and the Contractor setting forth the obligation of the parties, including the furnishing of labor, equipment, materials, and defining the basis of payment. The construction contract will be in accordance with the standard MDT construction contract, and will include the information provided as part of the Price Proposal, the Bid Price or Early Work Package Bid

Price, Bid Price record documentation, any addenda, contract agreement, contract bonds, certificates of insurance, standard specifications, special provisions, project plans, standard drawings, design performance criteria documents, reference documents, engineering directives, and any supplemental agreements that are required to complete the construction of the work in an acceptable manner, all of which constitute one instrument. The Construction Contract, along with the Preconstruction Services Contract, together make up the “Contract” for CM/GC services.

Construction Phase: The time period when the Contractor performs the Construction. The start of the Construction Phase is documented when the Preconstruction Phase is complete, after the Bid Price or Early Work Package Bid Price is authorized for the specific start of construction work (Notice to Proceed).

Construction Phase Multiplier: A Multiplier for the work expressed as a percentage of the total construction cost. The Construction Phase Multiplier will include the Contractor’s profit and the home office overhead (G&A: General and Administrative Costs) allocated to the project. The Construction Phase Multiplier will be used in the Contractor’s estimates and their Bid Price proposals. Home office overhead is defined as all auditable costs that are allocated to all the Contractor’s ongoing projects, including insurance that is maintained by the Contractor as a general cost of doing business. The Construction Phase Multiplier should not include any field indirect costs or direct costs of the project, risks, or contingencies.

Contingencies:

Bid Price Contingency:

The Bid Price Contingency is an allowance that will be tailored to the scope of work for a Bid Price or Early Work Package Bid Price that is based on several factors. The allowance may be set up to cover the possibility of an issue occurring that was identified in the risk analysis. The contingency may also be used, at MDT’s discretion, to cover change order items.

The Bid Price Contingency will be approved and used at the sole discretion of MDT. The amount of Bid Price Contingency will be approved by MDT prior to the execution of the Bid Price or Early Work Package Bid Price. The utilization of any portion of the Bid Price Contingency will be processed similar to the MDT procedures used for change orders and/or miscellaneous work, but must first be clearly justified by the Contractor in writing and must be authorized by MDT. If the Bid Price Contingency is not fully utilized, the unspent amounts are not earned by the Contractor, but remain with MDT. The Bid Price Contingency may appear in the construction contract as a specific pay item and will be treated like Miscellaneous Work (see Standard Specifications section 104.04 for more information).

The Bid Price Contingency is intended for the following:

- a) Net quantity overruns for unit priced items, after adjustment for underruns.
- b) Minor design changes.
- c) Other identified risks.
- d) Shared risk Items.

MDT Contingency:

The MDT Contingency (a.k.a. Owner controlled) will be an amount determined by MDT and is included in the overall program budget. The purpose is to properly account for potential increased cost due to changes in the work, made at the discretion of MDT, or that were not anticipated by MDT, and are beyond the control of MDT and the Contractor at the start of the program. The MDT Contingency is an overall program budgeting reserve that MDT establishes and maintains exclusive from the Contractor. The MDT

Contingency may be programmed to the project, but is not assigned to any pay items in the construction contract.

Contractor Contingency:

The Contractor Contingency is intended to cover the cost of risks that are allocated to the Contractor and will be accounted for in the Contractor's bid items. MDT recognizes that not all construction risks will be mitigated through the preconstruction risk management process, and therefore allows the Contractor to carry a justifiable cost for risks assigned to the Contractor at the time of Bid Price submittal. The Contractor's Contingency must be clearly defined and described in production-based estimates for each milestone. MDT, working in collaboration with the Independent Cost Estimator, will validate that the costs included in the contingency are reasonable and accurate. The Contractor Contingency will be priced separately as a part of the production-based estimating process during preconstruction. However, at the time of construction, this cost will be balanced across the appropriate pay items and disbursed to the contractor as a part of the unit price cost of each work item.

Contractor or CM: The contractor selected by MDT to provide CM/GC services.

Contractor Approach to Price Meetings: As part of Preconstruction Phase services, the Contractor, MDT, the Design Engineer, and the Independent Cost Estimator (ICE) will hold regular meetings to plan relevant aspects of the cost estimate organization and break-down for a specific scope of work. This will include a cost estimate narrative, a detailed assessment of the project's limitations of operations, reconciliation of the quantities, crew sizes, production rates, subcontractor costs, and material costs, the planned "method of measurement" and "basis of payment", and a description of the Contractor's planned "means and methods" for constructing the project scope, and other items that become necessary or as required by MDT. The intent of these meetings is to provide common ground for later negotiations between MDT and the Contractor.

Cost Model: A cost accounting tabulation for the construction of the project that is developed by the Contractor prior to development of the Bid Price or Early Work Package Bid Prices for the project and/or a scope within the project. The Cost Model will be based on the work breakdown structure established by the Project Leader. The Cost Model will be generated to properly plan how the production-based construction cost estimates will be developed to best facilitate estimate comparison.

Critical Path Method Schedule (CPM): The optimal time and cost saving technique for planning, organizing, and scheduling construction activities, materials, and work force operations. A comprehensive network approach to manage projects, which is to be communicated, updated, and monitored by all project team members. Additionally, this method can be valuable for evaluation of changes, implementation of efficient delay/recovery efforts, and is the most accepted method when assessing the causes of delays. MDT currently requires the use of Critical Path Method (CPM) scheduling software; project-specific requirements will be included in the RFQ, RFP, and MDT Specifications.

Design-Bid-Build (D-B-B): The typical project delivery method used by MDT. This is a low-bid selection method in which a design engineer (MDT or consultant) designs the project. MDT then solicits bids and awards a contract to the lowest responsive and responsible bidder to construct the project.

Design Engineer: The Design Engineer (MDT or consultant) that develops the final plans, specifications and estimate of quantities for the project. The Design Engineer will also be responsible for developing the

Engineer's Estimate, which will be used as a reference in determining and verifying project costs. The Design Engineer is the Engineer-of-Record.

Design Review Team: Representatives from the Contractor, the Designer, the ICE, and MDT responsible for reviewing project submittals. The Design Review Team may be augmented with supplemental assistance for technical aspects that may be non-routine and necessary to evaluate the design packages.

Direct Costs: The total of all direct cost for field construction to complete the project, which includes loaded labor rates, permanent materials, construction materials, equipment, and subcontracted work. Direct costs do not include any contingencies, any allocation of field indirect costs, or the Contractor's Construction Phase Multiplier.

Early Work Package Bid Price: MDT may elect to have the Contractor provide several Early Work Package Bid Prices for phases or components of the overall project. At the completion of the project, the summation of the Early Work Package Bid Prices equals the final Bid Price. For the purpose of this document, the terms "Early Work Package Bid Price", "Final Bid Price", and "Bid Price" are used interchangeably. *See also "Bid Price."* It should be noted that execution of an Early Work Package Bid Price does not guarantee that the Contractor will have to opportunity to complete the entirety of construction. Early work packages will be developed so that they are severable.

Equipment Rate: Includes hourly rental rate, either equipment depreciation for contractor owned equipment or outside rental. Also includes Equipment Operating Expense (EOE) consisting of fuel cost, running repairs, repair labor, and consumable items such as tires, ground wear parts, and cables. Also included is the cost of labor and equipment required for running repairs such as fueling and daily and periodic maintenance. Equipment rates will be in accordance with Subsection 210.04 of the Standard Specifications.

Bid Price: The total itemized dollar amount agreed upon between the Contractor and MDT for constructing a specific portion of the project scope – excluding the fee for the Preconstruction Phase services. It includes, but is not limited to, all direct and indirect contractor costs associated with the construction, contracting, self-performance, and management of the project; including the preparation of the construction schedules, shop drawing preparation, construction labor, material costs, equipment costs, all traffic control, quality testing, survey, replacement of rejected work or materials (in some cases), all punch-list work, all overhead costs, general condition costs, and fees. The Contractor is required to provide estimate details to MDT as part of the Bid Price submittal process.

MDT may include multiple Construction Phases or early work construction packages that will result in the Contractor providing Early Work Package Bid Price's for each package in the overall project, the summation of which equal the Bid Price for the whole project.

The Bid Price cost excludes the fees that are paid for services under the Preconstruction Services phase, as they will be covered in a separate Preconstruction Services Agreement. Bid Prices are typically not subject to price escalation or de-escalation because of inflation (time value of money) costs unless specifically negotiated to include that. However, MDT acknowledges the price escalation risk will be included in the Bid Price if no clauses are included in the Construction Contract to allow for it. This issue will be considered on a case-by-case basis as part of contingency discussions within each Construction Contract. In such instances, an escalation study that is specific to the elements of work may be used as a basis of comparison and setting of the contingency costs for escalation and de-escalation.

The Bid Price will include the CM/GC Construction Phase Multiplier, which is a fixed-rate percentage for home office overhead and profit that will be applied to the total of all direct costs and indirect costs.

Once a Bid Price or Early Work Package Bid Price is finalized by MDT and the Contractor, MDT will issue a contract Notice to Proceed. Should MDT and the Contractor be unsuccessful in agreeing to a Bid Price, the Contractor will lose the rights to perform the work associated with that Bid Price, which will be re-procured using Design-Bid-Build or any other lawful procurement method selected by MDT. The Contractor will not be allowed to participate on the re-procured work.

Bid Price Record Documentation: Bid Price Record Documentation consists of the approved Bid Price, all versions of the Bid Price updates, and all documents used to generate the Bid price including all pricing provided in the Request For Proposal, design documents, directives that were incorporated by reference, narratives, basis statements, addenda, contracts, bonds, certificates of insurance, standard specifications, special provisions, project plans, standard drawings, design performance criteria documents, reference documents, engineering directives, and any supplemental agreements (executed after the approved Bid Price) that are required to complete the construction of the work in an acceptable manner, all of which constitute one instrument.

Independent Cost Estimator (ICE): An independent consultant hired to provide a series of detailed cost estimates throughout development of MDT's CM/GC projects. Estimates developed by the ICE will be used to establish, compare, and approve the Construction Manager / General Contractor's pricing for a given project. The ICE will develop cost estimates and cost models to compare with the CM's pricing information, ensuring the construction costs are reasonable and fair. The ICE's estimates are expected to demonstrate both the direct and indirect costs of a project, and should include: all quantities (including temporary materials), anticipated production rates, labor prices, material prices, equipment prices, project management costs, field office support fees, insurances, profits, etc. The ICE will be required to critically analyze and critique the CM's CPM schedules and subcontractor/vendor quotes. The ICE will work closely with, and become a part of, the overall project team.

Indirect Costs: The total of all cost for the contractor's onsite overhead to support the field construction. These include labor costs for project management, supervision, engineering, quality control, survey, safety, indirect equipment maintenance, temporary utilities for the contractor's use, project-specific insurance, testing other than third-party laboratory testing, and field office administration. The material and miscellaneous costs include set-up of project office, small tools, consumables, and supplies, mobilization of personnel and equipment, insurance, and project administration, along with any other labor and equipment costs necessary to maintain temporary facilities and utilities.

Labor Rate: The hourly prevailing wage rate at the time of the Bid Price or Early Work Package Bid Price negotiations. The Contractor will be required to provide a detailed breakdown of all cost components forming the total wage rate.

Markup (on subcontracted work): An allowable additional charge calculated as a percentage that covers a Contractor's general condition costs for managing subcontracted work.

Notice to Proceed: A written communication issued by MDT, to the Contractor, authorizing the Contractor to proceed with the work and establishing the date of the commencement of the work.

Planning Committee: Independent advisory committee of MDT staff and members external to MDT. This team consists of professional representatives nominated by their affiliated associations, including: Montana Contractor’s Association (MCA), American Council of Engineering Companies of Montana (ACEC), and Federal Highway Administration (FHWA). This committee of industry contacts was consulted in the development of MDT’s CM/GC Guidance Document.

Preconstruction Phase Multiplier: During the Preconstruction Phase, a multiplier of fifty percent will be added to the Contractor’s direct labor costs, based on the actual hours worked and the employees’ hourly rate (for direct salary only) to compensate the Contractor for all overhead and profit. No home office overhead costs, or corporate principal or partner salary costs, will be allowed for the Preconstruction Phase; such costs are considered to be included in the Preconstruction Multiplier, whether the multiplier is high enough to cover the costs or not.

Preconstruction Services: The activities conducted by the Contractor during the advancement of preliminary design and final design phases. These include, but are not limited to, services such as plan reviews for constructability, pricing, scheduling, staging, methods, material procurement strategies, risk identification/management, and other areas related to the construction of the project. The Contractor and MDT will document these in a Preconstruction Services Agreement which will include the terms, scope, schedule, and compensation provisions for the Preconstruction Services. MDT will issue a Notice to Proceed (NTP) to the Contractor for this work; no work will proceed without the NTP. The Preconstruction Services Agreement and the Construction Contract together make up the “Contract” for CM/GC services.

Preconstruction Services Fee: Payment for services provided during the Preconstruction Phase will be negotiated upon selection of the of the successful proposer. Specific details on compensation for Preconstruction Services will be described in the RFQ and RFP.

Production-Based Cost Estimate: Otherwise known as a “cost-based” estimate, the Contractor will be required to provide detailed construction cost estimates as the design progresses at each design milestone (ROM, 30, 60, and 90 percent); and final design. Contractor estimates should be fully-detailed and will be utilized in an open process. These estimates will only be submitted to authorized members of MDT and will be held strictly confidential.

Production-based cost estimates are to be provided with details that clearly display all anticipated direct, indirect and fee costs in bid item summary and detail format, as directed by the Project Leader and the contract documents. Estimates should be capable of showing unit prices and total cost for each bid item and activity. The bid item unit price and total cost will be a rollup of the individual activities identified to be required and estimated to complete the work identified by the bid item. Each activity will show the quantity and cost of the work the activity represents, and the productivity based on the assigned crew composition. Each activity will show type, quantity and unit price for labor, equipment and permanent and construction materials or subcontracted works. The estimating platform should be capable of summary and detail reports by bid item and activity, which represents costs by category (labor, equipment, permanent and construction materials, and subcontract cost) and man and equipment hours. The Contractor’s Estimate and the ICE Estimate must all reflect this level of detail. Depending on the project, MDT will specify the format of the Design Engineer’s Estimate as either production-based, or based on historical bid data.

Program Advisory Consultant: A separate entity hired by MDT to provide specialized consultant services, tasked with assisting MDT in the development of the Department’s CM/GC Guidance Document.

Project Leader: MDT will designate a staff member or engineering consultant to act as the Project Leader on projects selected for CM/GC delivery. This individual is tasked with overall project management, coordination, oversight, and administration of the MDT Contract with the Construction Manager and ICE. The MDT Project Manager (EPM) will be tasked with administration of the MDT Contract with the General Contractor. The Project Leader is expected to be the lead in developing the overall program budget and schedule, with input from the Designer and the Contractor and other MDT staff. In addition, the Project Leader is expected to take the lead in developing the Risk Management Plan and managing the risk mitigation process during the Preconstruction Phase, with input from other team members.

Project Manager (EPM): MDT’s designee responsible for the management and administration of the construction contract for a CM/GC project.

Proposal: In response to the MDT-issued RFP, the Proposer will submit a Proposal that is made up of two, separately packaged, sections. One section will be the “Technical Proposal”, in which the Proposer addresses the requirements for their technical approach to the work. In addition, the technical portion of the evaluation will include the Proposer Interview. The second section will be the “Price Proposal”, in which the Proposer submits their competitively priced information in accordance with the RFP. Both portions of the proposal will be used in the evaluation and selection process.

Proposer: A team made up of a construction contractor, alone or in Joint Venture, together with subcontractors identified as key personnel that submit a Statement of Qualifications to MDT in response to the RFQ. In addition, if included in the short-list, the Proposer may respond to the RFP with a submitted proposal. Proposers are not required to form a Joint Venture; however, entities desiring to qualify and propose as a joint venture must declare their intention in a letter of commitment, included in the SOQ. Short-listed Proposers must include an executed "Declaration of Joint Venture and Power of Attorney" affidavit with their Proposal.

Public Advertisement: MDT will publicly advertise the CM/GC services to promote a competitive process, following standard project advertisement procedures.

Request for Proposals (RFP): Following the identification of the short-listed CM/GC proposers, a Request for Proposal for the project will be issued. The response to the RFP will serve as the basis of MDT’s “best-value” evaluation. The response to the RFP will include a Technical Proposal, Price Proposal, and will include an interview. The pricing component will carry-over into the Bid Price or Early Work Package Bid Pricing (for the applicable components of the project). The technical portion of this RFP is a detailed description of the Proposer’s project management and approach. This includes many aspects that demonstrate the Proposer’s competencies for the specific project. The Request for Proposal will be considered a contract document for the subject project. See Section 2.7 for more details.

Request for Qualifications (RFQ): The RFQ is the first formal step in the CM/GC procurement process and is a document that will be issued and responded to by Proposers. The RFQ will detail the submittal requirements by which the MDT Technical Review Committee will evaluate the qualifications of the Proposers, and that evaluation will result in a short-list for advancement in this procurement process. See Section 2.3 for more details.

Risk Management Plan (RMP): MDT's tool that aids the project team in accomplishing the four main elements of risk management: risk identification, risk analysis (qualitative and quantitative), risk response strategy, and risk monitoring and control.

Selection Committee: The committee responsible for reviewing final scoring results of the short-listed Proposers and approves the Proposer to be awarded the contract. After the TRC evaluates the Technical Proposals and submits its findings to the Selection Committee, the Selection Committee reviews the TRC findings and the Price Proposals to make a final selection based on established best value procedures. The Selection Committee is also responsible for recommending award of the construction contract to the Transportation Commission. The Selection Committee will also provide project oversight through the Preconstruction and Construction Phases.

As a minimum, the Selection Committee is comprised of the Construction Engineer (who serves as Chairperson), the appropriate District Administrator, the appropriate Program Manager, the Preconstruction Engineer and the Highways and Engineering Administrator. An FHWA representative may be a non-voting member of the Selection Committee. Each member of the Selection Committee may appoint a senior management level alternate, as appropriate.

Short-list: The list of Proposers that have been determined by the Technical Review and Selection Committees to advance to the RFP stage of the procurement process, based on the evaluation of the SOQs. MDT anticipates selecting between three (3) and five (5) Proposers for inclusion on the short-list, or all Proposers if less than three (3) are received; however, MDT reserves the right to short-list as many, or as few Proposers as deemed advantageous to the project or program.

Statement of Qualifications (SOQ): The document submitted by the Proposers in response to MDT's Request for Qualifications. Contractors desiring to submit proposals on CM/GC projects must submit a SOQ setting forth the qualifications of members of the Proposer's team, and providing any other information required by the announcement for the project (Request for Qualifications). The submitted SOQ will be evaluated by the Technical Review Committee in determining the short-list for advancement in the selection process.

Steering Committee: A high-level group of MDT staff assembled to advise the Alternative Contracting Section in the development of the Department's CM/GC program. This group provides guidance on program policy and procedures and is also tasked with general program oversight.

Subcontracts: As defined by MDT Standard Specifications Subsection 101.03.

Surety (Contract) Bond: The security furnished with each Bid Price or Early Work Package Bid Price to guarantee that the Contractor will enter into the contract amendment if its Bid Price or Early Work Package Bid Price is accepted. This will consist of both performance and payment bonds equal to the full value of the construction of that scope of work.

Surety (Proposal) Bond: Proposers must attach a notarized statement from an admitted surety insurer authorized to issue bonds in the State of Montana that states:

- Proposer's current bonding capacity is sufficient for the project and referenced payment and performance bonds; and
- Proposer's current available bonding capacity.

Technical Review Committee (TRC): A group of individuals assembled to evaluate and score the SOQ, establish the ranked short-list of Proposers, and evaluate and score Technical Proposals and Interviews of the short-listed Proposers. For the success of the project, it is essential that members of the TRC be involved in development of the RFQ and RFP. This group will include corresponding subject matter experts and will also be provided the opportunity to comment on design drawings and estimate comparisons throughout project development.

An FHWA representative will be included on this committee for FHWA Projects of Division Interest (PODI) (according to the current MDT/FHWA Partnership Agreement). The TRC may also be supported by non-voting advisors, such as other MDT staff and/or consultants. Non-voting members provide subject matter advice to the Technical Review Committee. All committee members and non-voting members will be required to maintain the confidentiality of proposals during the selection phase. MDT will provide scoring reference materials and training to all team members, prior to evaluation of the proposals. There will be a minimum of five members.

Value Analysis (VA): See Section 3.10. Value Analysis is the systematic application of recognized techniques by a multi-disciplined team, which identifies the function of a product or service; establishes a worth for that function; generates alternatives using creative thinking, optimizes the design; and provides the needed functions reliably, at the best value. Value Analysis consists of those tasks performed by a Value Analysis Team in accordance with MDT's Value Analysis Program Manual. The Design Engineer and the CM/GC may be required to participate on a Value Analysis Team.

Value Engineering Contractor Proposals (VECP): See section 3.10. A cost savings generated on the contract from cost reduction proposals offered by the Contractor and approved by the Department.

Unit Price: A summarized price for a component of the work. A unit price does not reveal the cost breakdown of labor, materials, equipment, and/or any other indirect/mark-up costs that are anticipated to complete the work.