

PURPOSE The purpose of the 100% review is to ensure that all comments from the 75% review have been satisfactorily addressed. The review also provides an opportunity to ensure that a complete contract package will be available for bidding and construction purposes.

GENERAL The submittal shall include responses to 75% review comments; completed plans, special provisions, estimate and detail sheets, contract time determination schedules (if applicable), bottoms up estimates (if applicable), incentive/disincentive (I/D) checklists and provisions (if applicable), traditional/alternative schedule evaluations to support I/Ds (if applicable), road user calculations as applicable and an updated design schedule.

Any question listed below with a No (N) or Not Applicable (NA) answer requires a written comment.

SCORING Each comment/question below will be reviewed and scored by MassDOT during the review period. A maximum score of 2 can be given for each question/comment: 2 (meets), 1 (partially meets), or 0 (does not meet). The maximum score is 100 for the entire submission/review checklist.

1.0 SUBMISSION REQUIREMENTS

Y N NA

SCORE

1.1 Have all the design plan PDFs been *flattened* for the 100% Bluebeam Review Session?
Comment: _____

0

0

1.2 Have all 75% review comments or previous design submission comments been addressed (with a written response)?
Comment: _____

0

1.3 Did the Design Consultant provide a *Summary* of what has changed since the last submission (not as a result of any MassDOT comments)? This can be very helpful for the reviewers when items have been added or deleted from the project. Please keep track of any changes on a summary sheet.
Comment: Summaried in the cover letter

0

1.4 Was a *Comment Resolution Meeting* (CRM) held for the previous review comments?
Comment: _____

0

2.0 PLANS

Y N NA Title Sheet

SCORE

2.1 Are the latest documents referenced on the Title Sheet?
Comment: _____

0

0

Typical Sections

2.2 All proposed materials should be labeled on the Typical Sections. Are the material descriptions identical to the items provided in the CPE or the material description in the STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES?

Comment: _____

0

Plans/Drawings

2.3 Is the disposition of all *existing and proposed features* located within the limits of work clearly labeled? There should be no overlapping of text.

Comment: _____

0

2.4 Do all the *walks, sidewalks, crosswalks, and curbcut wheelchair ramps* meet the requirements listed in Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Public Rights of Way Accessibility Guidelines (PROWAG), which are discussed in the Engineering Directive E-12-005?

Comment: _____

0

2.5 If not, have all Architectural Access Board (AAB) *violations* been identified and clearly discussed for MassDOT's review, and an AAB variance to AAB Regulations submitted to the Project Manager?

Comment: _____ No AAB variance required for the project

0

2.6 Are there any conflicts between the Plans and the STANDARD SPECIFICATIONS? Always use the Standard Specifications when possible.

Comment: _____

0

2.7 Does every item of work shown on the Plans have an associated *pay item* ?

Comment: _____

0

2.8 Does the *plan sheet numbering* match the index, and is the *Project File No.* provided on each plan sheet?

Comment: _____

0

3.0 SPECIAL PROVISIONS

Special Provisions should only be written when absolutely necessary to address a project specific issue that is not satisfactorily addressed in the STANDARD SPECIFICATIONS and SUPPLEMENTAL SPECIFICATIONS, or if the item has an asterisk in the Construction Project Estimator(CPE). If a special provision is absolutely necessary, particular attention should be paid to the basis of payment and method of measurement.

SCORE

0

Y N NA

3.1 Is an adequate *Scope of Work* provided for the project?

Comment: _____

0

3.2 Has a Contract Time Determination (CTD) been developed?

Comment: _____ The district office is preparing.

0

- 3.3 Has the Project Utility Coordination (*PUC*) Form been utilized in the development of the CTD, including access restraints and contract milestones?
- Comment: _____ 0
- 3.4 Has an Incentive/Disincentive (*I/D*) checklist been used to determine values for any *I/Ds* if applicable? If *I/Ds* are required, has a special provision been provided and has a road user benefit calculation been performed? Was a traditional or alternative schedule evaluation performed to support the use of *I/Ds*? Enter the amount (3-5% budget) as a comment below so the PM can enter it into the CAPE.
- Comment: _____ Not in the scope 0
- 3.5 Has the project been checked for any *outdated specifications*, requiring an update or superseded by Supplemental Specifications or Interim Supplemental Specifications?
- Comment: _____ 0
- 3.6 Are all the *latest manuals*, *supplemental manuals* and *other documents* that are to be part of the contract by reference, listed on the special provisions front page?
- Comment: _____ 0
- 3.7 If the project requires specific information relative to *lane closures and traffic management*, is the information concisely conveyed as a supplement to subsection 7.09 Public Safety and Convenience?
- Comment: _____ 0
- 3.8 Is a complete list of *affected utility companies* included as a supplement to subsection 7.13 Protection and Restoration of Property?
- Comment: _____ 0
- 3.9 Is (are) the use of *non-standard workhours* required for this project? Has approval from the Chief Engineer been requested through the Project Manager?
- Comment: _____ 0
- 3.10 Is (are) the available *workshift* (s) described as a supplement to Subsection 8.02 Schedule of Operations?
- Comment: _____ 0
- 3.11 Was a special provision provided for every item in the estimate (*CPE*) that contained an asterisk * (the asterisk * identifies a *non-standard item* that requires a special provision)?
- Comment: _____ 0
- 3.12 Do all item descriptions and units contained in the special provisions *match exactly* to the item descriptions and units in the cost estimate (*CPE*)?
- Comment: _____ 0

3.13 Do all special provisions include a very specific, unambiguous *method of measurement and basis of payment* that will minimize the potential for disputes during construction?
Comment: _____ 0

3.14 Is the location for items to be *removed and stacked* clearly identified? This is usually a Municipal or State Facility that is referenced.
Comment: _____ 0

3.15 Have the special provisions been reviewed to ensure there are no proprietary items specified? A minimum of three (3) different suppliers/manufacturers shall be provided (Recommend to provide a *word search* for: "or approved equal", "or equal" to help find these items). If *proprietary items* are specified on a municipal project, please justify and supply a letter from the Municipality to the Chief Engineer requesting approval.
Comment: Request for use of propriety items has been submitted for FHWA approval. 0

3.16 Have *Early Utility Relocations* been identified as a critical need to support the CTD dates? If so, notify the PM, DUCE and Utility Engineer to start early coordination.
Comment: _____ 0

3.17 If required, has the Section 8.14 (Utility Coordination) documentation been included?
Comment: _____ 0

4.0 COST ESTIMATE

Y N NA

SCORE

4.1 Was a completely new estimate entered into the Construction Project Estimator (CPE) with the correct programmed Federal Aid, Non-Federal Aid, and Municipal Funding Categories, and an Excel file provided? The estimate is certified by the consultant's Log-In record using CPE.
Comment: 75% CPE estimate was updated for 100% since funding sources were assign at the last submission 0

4.2 Is the methodology used to estimate the project consistent with the STANDARD SPECIFICATIONS, the latest SUPPLEMENTAL SPECIFICATIONS, and using the latest 12 months of the Weighted Average Bid Application (W.A.B.A.), reflecting the latest pricing trends? (some projects may require an exception to using the WABA).
Comment: _____ 0

4.3 Does every item of work shown on the plans have an associated pay item? (Yes, this is a repeat question that requires much attention!)
Comment: _____ 0

4.4 Does the quantity of each item in the estimate (CPE) match the quantity in the Calculation Book? Please perform a quantity review.
Comment: _____ 0

4.5 Do the unit prices in the CPE reflect the magnitude of the quantity of work vs. mobilization/set up costs? (e.g. 100 Tons of ITEM 460. on a bridge replacement project will cost significantly more than 100,000 Tons on an Interstate resurfacing project)

Comment: _____ 0

4.6 Has the cost estimate (CPE) been *cross referenced* with the Special Provisions? Items identified on the estimate often do not agree with items provided in the special provisions.

Comment: _____ 0

4.7 Was a *bottoms up estimate (BUE)* developed for all lump sum pay items? The BUE should consider the anticipated construction phasing and duration.

Comment: _____ 0

4.8 Are there any *outdated construction items* still being used for this project that have been superseded?

Comment: _____ 0

4.9 Are there any *Non-Participating (100% City/Town) Items* being used for this project? And have you received the Municipality's written approval?

Comment: Town is aware of the non-participating items and working on securing fund for the project. _____ 0

4.10 Have *standard construction items* been considered first before using non-standard items (non-standard items typically generate more extra work orders)?

Comment: _____ 0

Detail Sheets

4.11 Do the Earthwork quantities on the PRELIMINARY ESTIMATE OF QUANTITIES - DETAIL SHEET correspond with those noted on the Summary Quantity Sheet?

Comment: _____ 0

4.12 Does the pavement structure on the PRELIMINARY ESTIMATE OF QUANTITIES - DETAIL SHEETS correspond with the Typical Sections?

Comment: _____ 0

4.13 Are all items on the detail sheets, not completely described and located on the plans, adequately described by station and offset?

Comment: _____ 0

Calculation Book

4.14 Have drainage sketches and *invert elevations* been included in the Calculation Book?

Comment: The drainage plans shows the invert elevation tables. _____ 0

4.15 Has an *index with page numbers* been prepared for the Calculation Book?

Comment: _____ 0

5.0 CONCLUSIONS

SCORE

Y N NA

0

5.1 Did your DESIGN FIRM conduct a *QC/QA review* for this 100% submission?

Comment: _____

0

5.2 Is the estimated Total Federal Participating Construction Cost (*TFPCC*) consistent with the amount programmed on the State Transportation Improvement Program (*STIP*)?

Comment: _____ It has some increase due to quantities increase due to 75% Comments.

0

5.3 Has an independent *constructability review* been performed for this project?

Comment: _____

0

5.4 Does the *Participating Cost* include all the Utility Estimates, any 999. Items such as Railroad, and adequate Traffic Police costs?

Comment: _____ MassDOT PM needs to update per latest estimate.

0

5.5 Do the plans represent a project that is reasonable from a *constructability* standpoint with respect to construction access and techniques, and the available right of way? Will the contractor be able to build the project within the ROW, as defined on the plans?

Comment: _____

0

5.6 Have all *Environmental Permits* been secured? If not, what permits still remain?

Comment: _____ ENF & NOI will be filling after the 100% submission

0

6.0 DESIGN SCHEDULE - BONUS (0-5)

Y N NA

6.0 Was the Design Submission on time in line with the latest *approved Design Schedule*?

Comment: _____

0

DESIGNER CERTIFICATION

Y

The Designer certifies that the 100% Design Plans have been reviewed in accordance with this checklist and that all responses are correct and accurately reflect the information presented on the submitted Design Plans.



Consultant Firm Principal Signature

August 2, 2021

Date

Note: Please make sure this checklist is attached to your Firm's submission/transmittal PDF letter.

TOTAL REVIEW SCORE (including Schedule BONUS):

0