

PURPOSE

The 75% highway design review allows MassDOT's Highway Division to ensure that all comments from the 25% review have been addressed. It is also an opportunity to make certain that the plans and special provisions provide sufficient information to bid and construct the project.

GENERAL

This checklist represents the minimum amount of issues that should be considered when reviewing a 75% highway submittal. This checklist does not generally repeat items covered in the 25% Design Review Checklist. The submittal should include: responses to all comments from the 25% review, plans which are 90% complete, cross-sections, special provisions and estimate (including non-participating items).

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

RESPONSE TO COMMENTS

- Y N NA
1.01 ☒ ☐ ☐ Have all comments from the 25% review been addressed?

Comment: _____

PLANS

- Y N NA 2.00 Title Sheet
2.01 ☒ ☐ ☐ Is the Title Sheet prepared consistent with Exhibit 18-14?

Comment: _____

- 2.02 ☒ ☐ ☐ Does the index indicate that the plans have been organized in the same order as indicated in Section 18.2.2.6?

Comment: _____

- 2.03 ☒ ☐ ☐ Are all sheets sized in accordance with E-99-004?

Comment: _____

- 2.04 ☒ ☐ ☐ Are the stations and coordinates for the beginning and end of the Project Limits labeled on the project locus?

Comment: _____

- 2.05 ☒ ☐ ☐ Is the latest version of all appropriate documents listed on the right side of the Title Sheet (e.g. (Date) Standard Specifications, Supplemental Specifications (Date), etc.)?

Comment: _____

- Y N NA 3.00 Typical Sections
3.01 ☒ ☐ ☐ Do the typical sections provide sufficient representative sections so that adequate dimensioning and materials information is communicated to the contractor?

Comment: _____

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- Y N NA 3.00 Typical Sections (Cont.)
- 3.02 ☒ ☐ ☐ All proposed materials should be labeled on the Typical Sections. Are the material descriptions identical to the STANDARD NOMENCLATURE AND LIST OF STANDARD ITEMS or the material description in the STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES (Std. Specs.)?
- Comment: _____
- 3.03 ☒ ☐ ☐ Is the gravel borrow type specified?
- Comment: _____
- 3.04 ☒ ☐ ☐ Was the proposed pavement design developed consistent With Chapter 9 of the Project Development and Design Guidebook?
- Comment: _____
- 3.05 ☐ ☒ ☐ Are the pavement thicknesses and materials consistent with the approved pavement design?
- Comment: The pavement design for the 25% Submission was modified based on a telephone conversations and e-mails with the MassDOT Pavement Design Section

- Y N NA 4.00 Construction Drawings
- 4.01 ☒ ☐ ☐ Are the symbols and abbreviations used consistent with Exhibits 18-1 & 18-2?
- Comment: _____
- 4.02 ☒ ☐ ☐ Are the proposed horizontal geometry (PC, PT, R, T, DELTA, L) and lane and shoulder widths shown on every sheet?
- Comment: _____
- 4.03 ☒ ☐ ☐ Are limits of slope work clearly shown throughout the entire project?
- Comment: _____
- 4.04 ☒ ☐ ☐ Do the limits of work shown at the back of sidewalks, walls and bridges provide sufficient area for the proposed work to be constructed and to adequately transition to the existing topography?
- Comment: _____
- 4.05 ☒ ☐ ☐ Are the limits of proposed takings and easements shown?
- Comment: _____
- 4.06 ☐ ☐ ☒ Is sufficient right of way available to perform the work?
- Comment: A number of land takings are required.

- 4.07 ☒ ☐ ☐ Is the disposition of every existing item located between the slope limits labeled on the construction drawings (e.g. Rem., R&R, R&S, Ret., etc.)?
- Comment: _____
- 4.08 ☒ ☐ ☐ Is all work not to be performed by the Contractor labeled BY OTHERS?
- Comment: _____
- 4.09 ☒ ☐ ☐ Is all necessary information to construct the proposed drainage system shown on the drawings? (The words DRAINAGE DETAILS with location reference SEE BELOW or SEE PAGE NO:___ should appear at the top of each sheet. Depending on the amount of information depicted on the construction drawings a separate set of drawings may be required. Refer to DRAINAGE AND WATER SUPPLY DETAILS below for additional information)
- Comment: _____

- Y N NA 4.00 Construction Drawings (Cont.)
- 4.10 ☒ ☐ ☐ Do the plans adequately address water supply details? (The words WATER SUPPLY ALTERATIONS with location reference SEE BELOW or SEE PAGE NO:___ should appear at the top of each sheet. Refer to DRAINAGE AND WATER SUPPLY DETAILS below for additional information.)

Comment: _____

- 4.11 ☐ ☐ ☒ Are the proposed guardrail locations consistent with Section 5.6 of THE PROJECT DEVELOPMENT AND DESIGN GUIDE, ENGINEERING DIRECTIVE E-95-008 and E-00-002, THE ROADSIDE DESIGN GUIDE, and THE CONSTRUCTION AND TRAFFIC STANDARD DETAILS? (The words HIGHWAY GUARD should appear at the top of each sheet. The type of guardrail, end treatments and stations should be noted for all proposed guardrail.)

Comment: No guardrail is required for this project.

- 4.12 ☐ ☐ ☒ If plan and profile are separate sheets is the sheet number for the profile noted in the lower right corner of the drawing?

Comment: No. We missed this and will make sure it is in place for the next submission.

- 4.13 ☒ ☐ ☐ Are all proposed materials adequately labeled? (e.g. type of curb, sidewalk treatment, driveway material, etc.)

Comment: _____

- 4.14 ☒ ☐ ☐ Is the proposed design consistent with ADA and AAB requirements? (A significant amount of information is necessary to present a design that adequately represents the proposed dimensions and elevations. In most instances, a separate large scale detail will be required)

Comment: _____

- Y N NA 5.00 Profiles
- 5.01 ☒ ☐ ☐ Are the proposed profiles prepared consistent with Exhibit 18-10?

Comment: _____

- 5.02 ☒ ☐ ☐ Are all aspects of the vertical geometry noted (Stopping Sight Distance, Passing Sight Distance, if applicable, G1, G2, L, K, station and elevation of the PVC, PVT and PVI)?

Comment: _____

- Y N NA 6.00 Curb Tie and Grading Plans
- 6.01 ☒ ☐ ☐ Does the curb tie information adequately provide station and offset information to PC's, PT's tapers, etc.?

Comment: _____

- 6.02 ☒ ☐ ☐ Are grades shown every 25 feet, or closer, to note intermediate high or low points?

Comment: _____

- 6.03 ☒ ☐ ☐ Does the curb tie and grading plan provide sufficient information to the contractor to adequately layout the proposed curb and construct a roadway that will not have ponding?

Comment: _____

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- Y N NA 7.00 Drainage and Water Supply Details
- 7.01 ☒ ☐ ☐ Are drainage structures located approximately 300 feet apart on tangents, or closer for intersections?
 Comment: _____
- 7.02 ☒ ☐ ☐ Are drainage structures located approximately 200 to 250 feet apart on the inside of superelevated curves?
 Comment: The spacing of the catch basins was set to insure that the gutter flows did not extend into the middle of the adjacent travel lane during the 10 year event.
- 7.03 ☐ ☐ ☒ Are drainage structures located approximately 250 feet apart on highway grades over 6%?
 Comment: The spacing of the catch basins was set to insure that the gutter flows did not extend into the middle of the adjacent travel lane during the 10 year event.
- 7.04 ☒ ☐ ☐ Are drainage structures located at the uphill side of bridges?
 Comment: _____
- 7.05 ☐ ☐ ☒ For major highways are six drainage structures used at low points (three each side)?
 Comment: Project not located on a major highway.
- 7.06 ☒ ☐ ☐ For all other roadways are four drainage structures used at low points?
 Comment: _____
- 7.07 ☒ ☐ ☐ Are drainage structures proposed prior to superelevation transitions?
 Comment: _____
- 7.08 ☒ ☐ ☐ Have catch basin to catch basin connections been avoided?
 Comment: _____
- 7.09 ☐ ☒ ☐ Is the drainage trunkline located in the most appropriate location for future maintenance?
 Comment: With all the underground utilities and the concrete encased rails in the roadway there was not much choice as to where to place the drainage trunkline.
- 7.10 ☒ ☐ ☐ Has every effort been made to limit the amount of structures located in the travel lane?
 Comment: See response to item 7.09.
- 7.11 ☒ ☐ ☐ Does the location and number of pipes entering manholes allow the walls of the manhole to maintain their structural integrity?
 Comment: _____
- 7.12 ☒ ☐ ☐ Is the length, size, direction of flow and type of material noted on each length of pipe?
 (Invert elevations should only be noted on cross culverts, not on the drainage trunkline)
 Comment: The invert elevations are shown on the trunk lines for review. They are on a separate layer and can be shut off when the final plans are produced.
- 7.13 ☒ ☐ ☐ Is the disposition of the existing drainage system adequately labeled? (RET, ADJ, R&R, ABON, REM, etc.)
 Comment: _____
- 7.14 ☒ ☐ ☐ Do the plans fully address all the impacts that the proposed roadway design may have on the existing water supply system? (Full depth reconstruction, profile changes, roadway widenings, etc. may all influence the water supply alterations required.)
 Comment: _____
- 7.15 ☒ ☐ ☐ Are the disposition of all curb stops and service boxes located within the proposed slope limits labeled?
 Comment: _____

- 7.16 ☒ ☐ ☐ Have drainage calculations and drainage sketches, with invert elevations, been submitted? (Please submit a hard copy of the drainage calculations and the electronic files. Do not show invert elevations on the Plans, only rim elevations)

Comment: _____

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Y N NA 8.00 Traffic Signal Plans

- 8.01 ☒ ☐ ☐ Do plans for signalized intersections include signal equipment locations, sequence and timing chart, phasing diagram, list of major items, pavement markings and signs?

Comment: _____

- 8.02 ☒ ☐ ☐ Are signal heads located in the vision cone specified by the MUTCD?

Comment: _____

Y N NA 9.00 Traffic Management Plans (may be 8-1/2 x 11 for simple projects)

- 9.01 ☒ ☐ ☐ Does the TMP provide sufficient information to determine that the proposed project can be constructed without undue inconvenience to the public?

Comment: _____

- 9.02 ☐ ☐ ☒ For projects with a detour, is the proposed detour reasonable considering available traffic data?

Comment: There are no detours proposed as part of this project.

- 9.03 ☒ ☐ ☐ Does the proposed TMP adequately address bicycle and pedestrian accommodation?

Comment: _____

- 9.04 ☐ ☐ ☒ Does the TMP anticipate the proposed changes in grade? Temporary barrier or sheeting may be required, or sufficient area must be available for slopes.

Comment: It is not anticipated that during construction significant changes in grade will occur.

- 9.05 ☐ ☐ ☒ For bridge projects, does the TMP provide sufficient space to allow for demolition, forming, dowel bar splicing, etc.?

Comment: This is not a bridge project.

Y N NA 10.00 Cross Sections

- 10.01 ☒ ☐ ☐ Are the cross-sections plotted consistent with Section 18.2.14?

Comment: _____

- 10.02 ☒ ☐ ☐ Is the proposed profile elevation shown on each cross section?

Comment: _____

- 10.03 ☒ ☐ ☐ Are the edge elevations noted on all sections that are superelevated or located on the transition to a superelevated section?

Comment: _____

- 10.04 ☐ ☐ ☒ Is the PC, R, PT and Rate of Bank noted on each sheet that contains a superelevated or transition cross section?

Comment: The superelevated section is in an area of milling and overlay.

- 10.05 ☒ ☐ ☐ Are the pay limits for the appropriate excavation types shown properly? (e.g. ITEM 140., ITEM 141., ITEM 123., ITEM 125. ITEM 121.)

Comment: _____

- 10.06 ☐ ☐ ☒ Does the proposed cross-section provide sufficient area to install guardrail where necessary?

Comment: There is no guardrail in the project.

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- Y N NA 10.00 Cross Sections (Cont.)
- 10.07 ☒ ☐ ☐ Do the proposed cross sections relate well to the adjacent properties? (e.g. slope, material treatment, existing trees, walls, etc.)
- Comment: _____
- 10.08 ☐ ☐ ☒ Are cross sections provided at all intersecting driveways?
- Comment: Since this is primarily a milling and overlay project cross sections were only prepared in areas of full depth reconstruction or significant widening. Where cross sections were taken sections were taken at all driveways
- 10.09 ☐ ☐ ☒ Does the gravel box adjust to cut and fill ("daylight") cross sections consistent with Chapter 5 and the Typical Sections?
- Comment: The project is not in a fill section where this would be possible.

11.00 SPECIAL PROVISIONS

Special provisions should only be written when absolutely necessary to address a project specific issue that is not satisfactorily addressed in the STD. SPECS. and SUPPLEMENTAL SPECS., or if the item has an asterisk in the STANDARD NOMENCLATURE. If a special provision is absolutely necessary, particular attention should be paid to the basis of payment and method of measurement.

- Y N NA
- 11.01 ☒ ☐ ☐ Is an adequate Scope of Work provided?
- Comment: _____
- 11.02 ☒ ☐ ☐ Are all the latest manuals, supplemental manuals and documents listed in the contract?
- Comment: _____
- 11.03 ☒ ☐ ☐ 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: Conditions are described in subsection 7.17 (Maintenance and Protection of Traffic)
- 11.04 ☐ ☐ ☒ If workhours, other than the standard eight hour shift, are proposed, is (are) the available workshift(s) described as a supplement to Subsection 7.09 Schedule of Operations?
- Comment: Proposed work hours are standard eight-hour shift.
- 11.05 ☒ ☐ ☐ Is a complete list of affected utility companies included as a supplement to Subsection 7.13 Protection and Restoration of Property?
- Comment: _____
- 11.06 ☒ ☐ ☐ Do all items contained in the estimate with an asterisk in the STANDARD NOMENCLATURE have a special provision?
- Comment: _____
- 11.07 ☒ ☐ ☐ Are all item descriptions and units contained in the special provisions consistent with the estimate (and STANDARD NOMENCLATURE, if applicable)?
- Comment: _____
- 11.08 ☒ ☐ ☐ If the plans contain work that requires specific construction techniques not defined in the STD. SPECS., has a special provision been included?
- Comment: _____

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Y N NA 11.00 SPECIAL PROVISIONS (Cont.)
11.09 ☒ ☐ ☐ Do all special provisions include a very specific, unambiguous, method of measurement and basis of payment that will eliminate the potential for disputes during construction?

Comment: _____
11.10 ☒ ☐ ☐ For Items labeled R&S, is the location where they are to be stacked clearly identified?

Comment: _____
11.11 ☐ ☒ ☐ Have the special provisions been reviewed to ensure that there are no proprietary items specified? If proprietary items are specified, please justify.

Comment: _____
Imprint Crosswalks are called for at specific locations at the request of the Town of Belmont, and they are a proprietary item.

Y N NA 12.00 ESTIMATE
12.01 ☒ ☐ ☐ Is the methodology used to estimate the project consistent with the STD. SPECS. and the latest SUPPLEMENTAL SPECIFICATIONS?

Comment: _____
12.02 ☒ ☐ ☐ Does every item of work shown on the plans have an associated pay item?

Comment: _____
12.03 ☐ ☐ ☒ Is there a clear delineation between highway items and bridge items such that all work is included in the estimate and no work is included twice?

Comment: There are no bridge items.
12.04 ☒ ☐ ☐ Does the estimate include a payment method for all work associated with the environmental permits?

Comment: _____

The following issues should be considered when reviewing contract estimates. The issues listed below are based on analysis of common extra work orders:

Y N NA 13.00 Section 100
13.01 ☐ ☐ ☒ Is the estimated quantity for ITEM 101. of significant size to prevent unusually high bid prices? (If not consider eliminating item. Section 101.81 indicates that if item is not in contract work is included in Earth Excavation or Borrow).

Comment: Item not included.

13.02 ☐ ☐ ☒ If ITEM 101. is included in the estimate then ITEM 103. and 104. should not be used. The only exception would be in instances where the tree removal is outside the limits of the clearing and grubbing. In this case, the Detail Sheets should describe the station and offset for the trees to be paid for under ITEMS 103. or 104.

Comment: Item 101. is not included in the contract.
13.03 ☒ ☐ ☐ All earthwork volumes shall be calculated using the shrinkage and swell criteria from Exhibit 18-30. The contract quantity will then be calculated using the SUMMARY EARTHWORKS QUANTITY SHEET on page 18-73.

Comment: _____

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	Y	N	NA	
13.00 Section 100 (Cont.)				
13.04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If ITEM 112. is included in the contract, consider the use of ITEM 119.
	Comment: Item 112. is not included.			
13.05	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ITEM 120. includes the excavation of a huge variety of materials and should be used whenever possible.
	Comment:			
13.06	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If ITEM 120.1 is included in the contract do not include ITEM 121 and ITEM 120.
	Comment:			
13.07	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Considering the boring information, ITEM 121. (unless ITEM 120.1 is used) and 144. may be required.
	Comment:			
13.08	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ITEM 141.1 should be included in nearly every project that will require excavation.
	Comment:			
13.08	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ITEM 142. will most likely be required if ITEM 202.2 or ITEM 202.3 is proposed.
	Comment:			
13.09	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is ITEM 150.1 appropriate based on the type of construction involved and the boring information?
	Comment:			
13.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Consider ITEM 156. for contracts that include drainage or water supply work.
14.00 Section 200				
14.01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In areas with a significant amount of existing utilities, consideration should be given to include ITEMS 204. and 238.XX.
	Comment:			
14.02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Trunklines 36" (900 mm) or greater require ITEM 203.
	Comment: The project does not include proposed trunklines 36" or greater.			
14.03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Grade changes of more than 6" (150 mm) require ITEM 220.5.
	Comment:			
14.04	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The condition of the existing drainage system should be evaluated to determine if ITEMS 221. and 222. should be specified rather than 220. Also 220.2 should be considered.
	Comment: Item 222.3 is included			
15.00 Section 300				
15.01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contracts that include alterations to a water system will generally require ITEMS 156., 309. and 903.
	Comment:			
15.02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Consider ITEMS 357. and 381. to allow for existing boxes that are not adjustable.
	Comment:			
15.03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Consider contingency items for service lines.
	Comment:			

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- Y N NA 15.00 Section 300 (Cont.)
- 15.04 ☒ ☐ ☐ Projects involving roadway widening may require ITEM 376.2.
 Comment: _____
- 15.05 ☐ ☒ ☐ Will temporary or transitional water service use be required? Will weekend or evening work be required to implement?
 Comment: The need for temporary water service is not anticipated. _____
- 16.00 Section 400
- 16.01 ☒ ☐ ☐ ITEM 440. and ITEM 443. should be included in all projects with full depth reconstruction.
 Comment: _____
- 16.02 ☐ ☒ ☐ Consider ITEM 463. for projects that include full depth reconstruction.
 Comment: We are using ITEM 452. Asphalt Emulsion for Tack Coat for this project. _____
- 16.03 ☐ ☒ ☐ ITEM 464. should be estimated at a rate of 1/20 gal/sy (0.20 l/sm).
 Comment: We are using ITEM 452. Asphalt Emulsion for Tack Coat for this project. _____
- 16.04 ☐ ☒ ☐ ITEM 464.5 should be included in all projects that include paving.
 Comment: We are using ITEM 453. HMA Joint Sealant for this project. _____
- 16.05 ☒ ☐ ☐ ITEM 472. should be included in nearly every project requiring paving.
 Comment: _____
- 17.00 Section 500
- 17.01 ☒ ☐ ☐ Curbing to be set on radius of 100 ft (30 m) or less shall paid for using the appropriate "curved" curb item.
 Comment: _____
- 17.02 ☐ ☐ ☒ Edging to be set on radius of 10 ft (3 m) or less shall paid for using the appropriate "curved" edging item.
 Comment: No edging is proposed on this project. _____
- 18.00 Section 600
- 18.01 ☐ ☐ ☒ Wood blocks must be used on all guardrail installations, see E-00-002.
 Comment: No guardrail is required on this project. _____
- 18.02 ☐ ☐ ☒ Refer to E-95-008 and E-02-001 for the design of impact attenuators.
 Comment: No guardrail is required on this project. _____
- 18.03 ☐ ☐ ☒ Buried ends are measured as units of 37.5 ft (11.46 m)
 Comment: No guardrail is required on this project. _____
- 18.04 ☐ ☐ ☒ Leading and trailing ends at bridges are measured as units of 25 ft (7.64 m).
 Comment: No guardrail is required on this project. _____
- 18.05 ☐ ☐ ☒ Leading and trailing ends at bridges are thrie beam, therefore if Type SS highway guard is proposed, ITEM 627.6 will be required.
 Comment: No guardrail is required on this project. _____
- 18.06 ☐ ☐ ☒ Guardrail constructed to a radius of less than 150 ft (45 m) will paid for under the appropriate curved guardrail item.
 Comment: No guardrail is required on this project. _____

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- Y N NA 18.00 Section 600 (Cont.)
 18.07 ☒ ☐ ☐ The Method of Measurement and Basis of Payment for stone masonry walls has been revised in the Supplemental Specifications. ITEM 685. now includes the cement concrete footing and the coping material. Excavation is still paid for under ITEM 141.

Comment: _____

- 19.00 Section 700
 19.01 ☒ ☐ ☐ All projects shall include ITEM 748. This item should be estimated at 3% of construction costs.

Comment: _____

- 20.00 Section 800
 20.01 ☒ ☐ ☐ Refer to E-02-003 for estimating procedures for ITEM 851.

Comment: Estimated quantity conforms to sub-section 850.80, as per supplemental specs.

- 20.02 ☐ ☐ ☒ All guardrail installations require delineators. Refer to Subsection 828.60 for estimating.

Comment: No guardrail is required on this project.

- 20.03 ☒ ☐ ☐ ITEM 854.034 and/or 854.036 should be included for temporary pavement markings on proposed top course.

Comment: _____

- 20.04 ☒ ☐ ☐ If the TMP requires the removal of pavement markings, include ITEM 854.1 and/or 854.2.

Comment: Item 854.1 is included.

- 20.05 ☒ ☐ ☐ If ITEM 853.2 is specified, will ITEM 853.21 be required?

Comment: _____

- 20.06 ☒ ☐ ☐ Will ITEM 856.12 be required?

Comment: _____

- 21.00 Section 900
 21.01 ☐ ☐ ☒ If ITEM 987., 987.1, 987.12 or 987.2 is proposed, refer to E-99-001 for applicability.

Comment: These items are not proposed.

CONCLUSIONS

- Y N NA
 22.01 ☒ ☐ ☐ Have all the comments from the 25% review been satisfactorily addressed?

Comment: _____

- 22.02 ☐ ☐ ☒ Is the estimated total construction cost consistent with the TIP?

Comment: According to the current Boston MPO Transportation Improvements Program for FYY 2011-2014, the total project cost in Appendix A is r \$11,587,000. The 75% estimated construction cost is \$14,100,000 excluding contingencies, inflation, construction engineering and utility costs.

- 22.03 ☒ ☐ ☐ Has an independent constructability review been performed?

Comment: _____

CONCLUSIONS (Cont.)

- 22.04 ☒ ☐ ☐ Do the plans represent a project that is reasonable from a constructability standpoint with respect to construction techniques and available right of way?

Comment: _____

- 22.05 ☒ ☐ ☐ Does the estimate include all the items of work necessary to complete the project?

Comment: _____

- 22.06 ☒ ☐ ☐ Does the estimate appropriately distinguish participating from non-participating items?

Comment: There are no non participating items.

- 22.07 ☒ ☐ ☐ Has the Design Submission Distribution Chart been reviewed and has the Project Manager been contacted to ensure that each submission includes the required documentation?

Comment: _____


Designer Certification

Y
☒

The Designer certifies that the 75% 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



Date