State

Construction Design/Build & Accelerated Bridge Program Date of Award: September 2, 2010

Action Date: September 1, 2010, Item #23

Project No.

H604 007 C11

Town/City of

Wellesley

Contract No.

65281

NTP Date:

4,2010

FAP No.: NFA

Acct. No.: 6121-0800

Contractor J. F. White Contracting Company

Completion Date: Aunt 20, 2011

Bid Amount: \$3,450,000.00



CONTRACT FOR STATE HIGHWAY WORK

WELLESLEY Bridge Replacement Br. No. W-13-015 – Cedar Street over Route 9

OFFICE	OF	THE	COMP	TRO	LLER
CONTRA	CT	TRA	NSMIT	TAL	FORM

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BFY: 2011

Date: 10/7/2010

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		Bo	oston, MA 02108		E-m	ail: Ja	ames.Clark@c	lot.state.ma.u	S	10-11-11-11-11-11-11-11-11-11-11-11-11-1	
Please select one of the following categories (A-H) to complete the last column in the table below. The categories A, B, or C require only the submission of this form. No additional information is required. Submit the completed form via standard mail, inter-office mail or as an attachment in an e-mail to your Contract Liaison. Categories D, E, F, G, H and I must be submitted via standard mail or inter-office mail with the appropriate paperwork. In addition, the below categories may also be noted in the Comment Field in MMARS. For additional guidance, please review the applicable Policies, Job Aids, Etc. on the Comptroller's Web Portal. MMARS Administrative Adjustment Only - No change to total MMARS								nly the submission an e-mail to your K. In addition, the lob Aids, Etc. on the			
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в	Departmental Master Agreement - Open Order					ISA – Interdepartmental Service Agreement (BGCN/BGCS) Note: BGCN and BGCS transaction(s) are submitted separately, and not submitted with CTs or RPOs.					
с	C Rate Contract (Only MMARS Increase/Decrease of funds) NO change in rates, scope or duration. Must also include language in the Document Comment Field in MMARS that the contract is a rate agreement					G Open Order Non Master Agreement					
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DEVAL L. PATRICK, GOVERNOR TIMOTHY P. MURRAY, LT. GOVERNOR JEFFREY B. MULLAN, SECRETARY & CEO LUISA, PAIEWONSKY, Administrator

604007-10

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Highway

July 2, 2010

ADDENDUM NO. 3

To Prospective Bidders and Others on:

<u>WELLESLEY</u> Bridge Replacement Br. No. W-13-015 Cedar Street over Route 9 (DESIGN/BUILD) (ABP)

TECHNICAL/PRICE PROPOSALS DUE:

WEDNESDAY, JULY 21, 2010 @ 12:00 PM

Moving Massachusetts Forward.

Transmitting the following Documents:

Response To D/B Entity Questions:

RFP Section Revisions:

Revised page 3-13

1 page (attached)

Please take note of the above material, substitute the revised page for the original and attach only this cover letter of <u>Addendum No. 3</u> to your Technical/Price Proposal before submitting your proposal. Note addendum materials do not count toward any page limitations.

Very truly yours,

Frank Kulash

Frank Kucharski, P.E. Construction Contracts Engineer

LTP

c: Christine Mizioch, Manager, Design Build Program

Question Set #1

Question 1-1:

Reference Addendum No.1 page 7 of 17, 25% Highway Plans, under "General Comments", comment no. 1, and on the same page, under "Typical Section & Pavement Notes", comment no. 1 (attached).

Also reference the Lin Associates letter dated March 12, 2020 to Mr. Shoukry Elnahal, P.E. (attached). All four references pertain to design exceptions on the project. It appears from the documentation that has been made available that a definitive response to the Lin Associates letter of March 12, 2010 from MassDOT is missing, specifically, the status of MassDOT's approval for the design exceptions described in that letter. Please make MassDOT's response to this letter available.

Response 1-1:

The Design Exception memo was used to describe the exceptions from the design for the Cedar Street Bridge over Route 9. As a footprint bridge project, this bridge is exempt from the Design Exception process. Nonetheless MassDOT believed it necessary to evaluate the conditions that do not meet current design standards with respect to accident history. The memo was reviewed by the District 4 office and was found to be acceptable. No further documentation is planned.

3

③ ADDENDUM NO. 1 July 2, 2010

reviews are to determine that design criteria has been properly considered and factored into the design. Approval of an interim submittal shall not constitute or be construed as a final, overall approval.

MassDOT shall not be obligated to reimburse the DB Entity for delays in the proposed Notice to Proceed date or submittal reviews.

To the extent practicable, the DB Entity should allow for a 60 day plan preparation period and the required review process to be front loaded into the project schedule prior to beginning physical construction.

Appendix A: Project Manager and Key Personnel Resumes/Technical Supportive Information

Include resumes for the Project Manager and Key Personnel identified in the Project Management and Coordination section, and any supportive technical information. Please Note: the contents of this Appendix shall not count toward the Technical Proposal maximum page limit of 20 pages.

3.4 PRICE PROPOSAL

The Price Proposal shall be submitted in a separate sealed envelope. A CD with the Price Proposal shall also be included in the sealed envelope. The Price Proposal package shall clearly indicate that it is the price Proposal and shall be clearly labeled as detailed in Section 3.2 Proposal Submission, Deadline, and Location Requirements. It shall also include the bid form provided in Appendix D: Forms. The Non-Collusion Certificate and M/WBE Forms must accompany the Price Proposal.

Bid Bond

Every Proposal must be accompanied by a bid deposit in the form of a bid bond, or cash, certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company, payable to the awarding authority, MassDOT. The amount of such a bid deposit shall be 5 per cent of the value of the bid/price Proposal. The Bid Bond will be packaged separately from the Price Proposal and will be opened prior to the opening of the Price Proposals.

Prevailing Wage Rates

The Contractor must pay prevailing wage rates pursuant to M.G.L.c.149, § 27 for all work performed on this project and must comply with all reporting and administrative requirements of the same. A copy of the applicable prevailing rates is attached in Appendix C of this RFP. It is noted in the law prevailing rates must be updated one year after the award of the contract. The DB Entity is advised that no increase in contract price will be granted for updates of prevailing rates.

This Design Build project is a lump sum contract. Payments shall be made through a payout schedule based on major work items or tasks and in conjunction with Section 9.0 of the MassDOT's specifications.

The DB Entity's price Proposal shall include:

- One lump sum cost for all design, construction, and construction engineering and inspection (CEI), as required, and any warranties required.
- Allowance Items are identified in the Price Proposal. The Contractor shall estimate the quantity for Traffic Control and Construction Inspection. The Contractor will be invoiced for all police. The Contractor shall pay all police invoices within 30 days of receipt. MassDOT shall reimburse DB Entity for police invoices as appropriate. The use of Flaggers for Traffic Management shall be included in the BTC price and reimbursed at the prevailing wage rate.
- A milestone based payment schedule shall be tied to the milestones identified in Table 2 of this Section. The time schedule shall reflect the proposed project schedule provided in Section 4 of the DB Entity's Technical Proposal. The DB Entity proposed progress payment schedule shall identify payments for each Bid Item identified in Appendix D: Forms in accordance with the lump sum breakdown. The Payment schedule shall include the payment % identified in Table 2: Payment Schedule. Note that Mobilization costs can not be more than 3% of total project costs in accordance with Section 748 of the Standard Specifications
- M/WBE Schedule of Participation and Letter of Intent
- Non-collusion certificate
- Form B00420

Payment Item		Preliminary Design	2 Material Delivery	Phase 1 Construction	Final Construction	Acceptance Totals	
Pay	Payment	10	5	5	30	40	10
Item	Schedule (%)						
100.01	Schedule of						
	Operations						
101.01	Clearing and						х.
	Grubbing						and a second
115.1	Bridge Demolition						
120.2	Earthwork						· · · ·
149.2	Public Outreach						
184.1	Disposal of						
	Treated Wood						
	Products						
220.202	Drainage						
472.11	Roadway and						
	Pavement Work						
748.2	Mobilization						
756.01	Environmental Protection						. (

Table 2: Payment Schedule



DEVAL L. PATRICK, GOVERNOR TIMOTHY P. MURRAY, LT. GOVERNOR JEFFREY B. MULLAN, SECRETARY & CEO LUISA PAIEWONSKY, Administrator

604007-10

Moving Massachusetts Forward. DOT -----

June 15, 2010

ADDENDUM NO. 2

To Prospective Bidders and Others on:

<u>WELLESLEY</u> Bridge Replacement Br. No. W-13-015 Cedar Street over Route 9 (DESIGN/BUILD) (ABP)

TECHNICAL/PRICE PROPOSALS DUE:

WEDNESDAY, JULY 21, 2010 @ 12:00 PM

Transmitting the following Documents:

Response To D/B Entity Questions:

In accordance to the request to provide the 25% design CADD files for Wellesley - Cedar St. over Route 9 Design Build Project, please find attached a list of drawing files contained in each of the ZIP files summarized below to be electronically transmitted via email:

Jacobs 02-22-10(Traffic signal).zip Cedar st Bridge W-13-015 Sketch plan.zip Cedar st Highway Plan.zip

Please take note of the above material and attach only this cover letter of <u>Addendum No. 2</u> to your Technical/Price Proposal before submitting your proposal. Note addendum materials do not count toward any page limitations.

Very truly yours,

Fronk Juckanski

Frank Kucharski, P.E. Construction Contracts Engineer

LTP c:

Christine Mizioch, Manager, Design Build Program

List of 25% design CADD files WELLESLEY Bridge Replacement Br. No. W-13-015 Cedar Street over Route 9 (DESIGN/BUILD) (ABP)

ADDENDUM NO. 2 June 15, 2010

Jacobs 02-22-10(Traffic signal).zip

Name

Name	Modified	<u>Size</u>
PVMT MARKING PLAN.dwg	2/22/2010 6:19 PM	1,074,976
SIGN SUMMARY.dwg	2/22/2010 5:02 PM	386,720
TRAFFIC SIGNAL DATA.dwg	2/22/2010 4:48 PM	844,160
TRAFFIC SIGNAL PLAN.dwg	2/22/2010 6:15 PM	921,888
CEDAR - ALIGN.dwg	2/22/2010 5:44 PM	2,234,496
CEDAR - EXISTING.dwg	2/22/2010 5:38 PM	2,422,496
CEDAR - PVMT MARKINGS.dwg	2/22/2010 5:58 PM	3,037,024
MHDSHT.dwg	2/22/2010 12:48 PM	129,216
8 file(s)		11,050,976

Cedar st Bridge W-13-015 Sketch plan.zip

<u>Name</u>	Modified	<u>Size</u>
Cedar St Skech 1.dwg	2/24/2010 4:30 PM	2,244,480
Cedar St Sketch 2.dwg	2/24/2010 4:31 PM	216,736
Cedar St Sketch 3.dwg	2/24/2010 4:31 PM	404,480
Cedar St Sketch 4.dwg	2/24/2010 4:32 PM	365,472
Cedar St Sketch 5.dwg	2/24/2010 4:32 PM	383,328
Cedar St Sketch 6.dwg	2/24/2010 4:33 PM	241,472
Cedar St Sketch 7.dwg	2/24/2010 4:34 PM	211,648
Cedar St Sketch 8.dwg	2/24/2010 4:35 PM	<u>719,520</u>
8 file(s)		4,787,136

Cedar st Highway Plan.zip

Name	Modified	<u>Size</u>
CEDAR - EXISTING.dwg	2/22/2010 2:40 PM	2,621,632
CEDAR - PROPOSED.dwg	2/22/2010 2:18 PM	596,576
Cedar sh 12-tmp rte 9 detour.dwg	2/23/2010 10:55 AM	1,186,720
CEDAR SH 13-TMP CEDAR DETOUR.dwg	2/23/2010 10:49 AM	1,807,936
CEDAR SH 14A-SIGN SUMMARY.dwg	2/24/2010 3:38 PM	1,165,952
Cedar sh 14-tmp.dwg	2/23/2010 11:01 AM	362,464
CEDAR SH 15-LANDSCAPE.dwg	2/22/2010 6:18 PM	677,440
Cedar sh 1-title.dwg	2/24/2010 4:36 PM	330,528
Cedar sh 2-typical 1.dwg	2/24/2010 4:36 PM	209,600
Cedar sh 3-typical 2.dwg	2/24/2010 4:36 PM	220,320
CEDAR SH 4-CONSTRUCTION 1.dwg	2/22/2010 3:31 PM	726,144
CEDAR SH 5-CONSTRUCTION 2.dwg	5/14/2010 8:44 AM	850,176
CEDAR SH 6-PROFILE 1.dwg	2/22/2010 6:11 PM	226,656
CEDAR SH 7-PROFILE 2.dwg	2/24/2010 4:56 PM	238,816
Cedar xsection.dwg	2/24/2010 5:26 PM	461,024
15 file(s)		11,681,984



DEVAL L. PATRICK, GOVERNOR TIMOTHY P. MURRAY, LT. GOVERNOR JEFFREY B. MULLAN, SECRETARY & CEO LUISA PAIEWONSKY, Administrator Moving Massachusetts Forward. DOT Highway

604007-10

June 3, 2010

ADDENDUM NO. 1

To Prospective Bidders and Others on:

<u>WELLESLEY</u> Bridge Replacement Br. No. W-13-015 Cedar Street over Route 9 (DESIGN/BUILD) (ABP)

TECHNICAL/PRICE PROPOSALS DUE:

WEDNESDAY, JULY 21, 2010 @ 12:00 PM

Revised pages 1-7, 6-21, 6-38 and 6-62

Transmitting the following Documents:

Response To D/B Entity Questions:

RFP Section Revisions:

Appendix B - Document 00718:

Appendix D - Form B00420:

25 % Design Submission Review Comments

Traffic Count Plan:

Concrete Core Testing Report:

Type Study Report:

13 pages (attached)

Revised pages 1 and 2

17 pages (attached)

1 Page (attached)

7 pages (attached)

Revised page 1

20 pages (attached)

Please take note of the above material, substitute the revised pages for the originals and attach only this cover letter of <u>Addendum No. 1</u> to your Technical/Price Proposal before submitting your proposal. Note addendum materials do not count toward any page limitations.

Very truly yours,

Hank Kuchanski

Frank Kucharski, P.E. Construction Contracts Engineer

LTP

c: Christine Mizioch, Manager, Design Build Program

Massachusetts Department of Transportation, Highway Division • www.mass.gov/massdot TEN PARK PLAZA • BOSTON, MA 02116-3969 • PHONE: 617.973.7000 • FAX: 617.973.8031 • TDD: 617.973.7306

Question Set #1

- Question 1-1: Can SIP decking be used to form the bottom of the cast in place bridge deck?
- Response: Yes
- Question 1-2: Detail A on Sheet 5 of 8, Sketch Plan of Proposed Bridge, indicate that the bridge railing on the bridge are cast-in-place concrete. Details 9 and 10 on Sheet 6 of 8 show the bridge railing to be pre-cast concrete connected to the existing wall. Can the DB Entity determine which type of barrier, cast-in-place or precast, be used at all locations, while maintaining the same aesthetics shown?

Response: Detail A refers to railing on the bridge and correctly requires cast in place railing.

Question 1-3: Section 6.6.12.3, Restoration Planting – It appears that the tree preservation zones are switched based on the surface areas listed and those shown on the Landscaping Plan. Please confirm that 50 trees are to be planted in the Western Zone and 25 trees in the Eastern Zone. Also, are all planting zones, except the tree preservation zone, to be cleared and grubbed?

Response: Tree planting quantities in Section 6.6.12.3.A.b. are correct. Clearing and Grubbing are required in all landscape zones except Tree Preservation Zone.

Question 1-4: On Sheet 3 of 8, Sketch Plan of Proposed Bridge, the bearing configuration shows fixed at both abutments and expansion at the center pier. Please confirm that the new bridge will consist of continuous beams fixed at each abutment.

Response: The proposed structure is a floating superstructure on elastomeric bearings. There is no fixity. The cheekwall, keeper block and backwall must support lateral and transverse loads.

ADDENDUM NO. 1 June 3, 2010

Question Set #1 (Continued)

Question 1-5:	Will the seismic design requirements of AASHTO Bridge Design Specifications, 17 th Edition be waived for this bridge reconstruction? Per the existing bridge plans, the existing bridge is plain concrete and may not be able to withstand seismic loads generated from an analysis. Also, the current LRFD code does not require a seismic design for structures in this Site Class.
Response:	Use Teflon bearings or equal on the center pier and design abutments for seismic loads.
Question 1-6:	Document 00718, Section I, indicates that the M/WBE participation goal is 12%, of which 6% is design services and 6% construction. However, the 5 th bullet item on page 3-5 of the RFP indicates that both goals for construction and design services is 12%. Please clarify which goal is correct.
Response:	The RFP language indicating 12 % design and 12% construction is correct. Document 00718 has been revised and is attached.
Question Set #2	
Question 2-1:	Worcester Street will be used for the detour during the bridge closure, however the portion of this street within the project area requires reclamation. The RFP provides specific guidance for lane closures on Cedar Street and Route 9, but no guidance is provided for lane closures on Worcester Street. What are the allowable lane closures for Worcester Street?
Response:	Closures will be the same as for Cedar Street.
Question 2-2:	Can the on and/or off ramps from Route 9 west bound be reduced to single lanes for time periods during the bridge closure (when these ramps are being used for the detour)?

Response: No.

ADDENDUM NO. 1 June 3, 2010

<u>Question Set #2</u> (Continued)

Question 2-3: Sketch Plan Sheet 5 of 24 shows a split guardrail along the east side of Cedar Street, north of the bridge. Beginning at the bridge the guardrail is on the east side of the sidewalk, and near STA 12+00 the guardrail moves to the west side of the sidewalk, and it does not appear that there is an end treatment at the south end of the guardrail along the west side of the sidewalk. The guardrail shown on sheet 8 of 24 is different from the information shown on sheet 5. Which sheet shows the desired guardrail plan? Also, if the guardrail plan on sheet 5 is to be constructed, should an end treatment be included as mentioned above?

Response: Plan view on Sheet 8 is incorrect. Follow MassDOT standards for guardrail end treatments.

Question Set #3

Question 3-1:

Does MassDOT have lease agreements with Private Utilities that require the Private Utilities to relocate as required by MassDOT Construction Projects at the Private Utilities expense? If so will these be in effect and enforceable for this project?

- Response: There are not currently any force account agreements in place for the utility relocations. DB Entities are required to coordinate all utility related issues.
- Question 3-2: Is the D/B team responsible to make a new 25% submission? Under 6.6.5.5 the document states that a 25% submittal is required, However MassDOT has already reviewed and approved the February 22, 2010 25% submittal made by the consultant (Lin Associates) and has certified the preliminary ROW, and approved the Design Exception Report, etc?

Response: The DB Entity is required to make a 25 % submittal.

Question 3-3: Please clarify if these other components were submitted, or if the D/B team is responsible to submit them prior to 75%

- i Early Environmental Checklist
- ii. Utility plan submittal
- iii. Design waiver for bridge clearance
- iv. 25% public hearing

Question Set #3 (Co	ontinued)						
Response:	i. DB Entity submits						
	11. DB Entity submits						
	111. Not required						
	iv. DB Entity required to prepare for, present at, and attend in conjunction with MassDOT.						
Question 3-4:	It appears that the temporary construction easements do not account for the protection of trees within 15 feet of the limits of work as required under Section 6.6.12.3. Will MassDOT revise the temporary easements to accommodate this requirement or grant a waiver?						
Response:	Delete Section 6.6.12.3.F.b. entirely and replace with: "b. Any impacts to adjacent landscaping on private property shall be the responsibility of the Design Build Entity.						
	Delete Section 6.6.12.3.F.c. entirely.						
Question 3-5:	Could you expand upon what is intended under required "coordination with the Town of Wellesley/stake holders and abutters" Are additional public meetings and hearings required to be held by the DB entity? Or is it intended that the DB just provide assistance and support to MassDOT as explained in 6.4.1?						
Response:	A 25% public hearing is required to be prepared and presented by the DB Entity in conjunction with MassDOT. All coordination for this and any other public meetings deemed necessary during the contract duration will be done with MassDOT. The DB Entity shall not schedule or conduct any public meeting or hearing without MassDOT approval. All public meetings and hearings shall be conducted in accordance with MassDOT procedures and policies.						
Question 3-6:	Under section 1.10.2 it states that the "bridge plans being provided for this project reference the use of Load Factor Design and the previous MassDOT Bridge Manual information as the basis for design. The DB Entity will follow the AASHTO Bridge Design Specifications 17 th Edition", we are unable to locate this reference on the Sketch Plans. In either event could you clarify whether the final bridge design is to use allowable stress design (ASD) or load factor design (LFD)?						
Response:	The Design Build Entity has the option to use Allowable Stress Design (ASD) or Load Factor Design (LFD).						

ADDENDUM NO. 1 June 3, 2010

Question Set #3 (Continued)

- Question 3-7: Has MassDOT performed a detailed inspection of the elements of the bridge, abutment and piers below the proposed cap, that are to be incorporated into the final bridge per the Bridge Sketch Plans? Additional deterioration discovered during the 72 hour window would be catastrophic to the schedule and completion of the project.
 Response: All available inspection reports have been provided.
- Question 3-8: Under 6.10.17 it says that "MassDOT reserves the right to require the rating report to be submitted as a requirement of any bridge opening". Is it possible that MassDOT would even consider this requirement for this project? It is likely impossible to submit a bridge rating report, consistent with the Bridge Manual requirements within the time frames established for this project.
- Response: This is standard language for all RFP's. MassDOT will require various forms of documentation for the bridge construction and installation prior to its opening.

Question Set 4

Question 4-1: Section 6.6.6.4 Traffic Signals, states that MassDOT's comments on the previously submitted plans were provided with the plan set. No comments were included with the RFP package.

Response: MassDOT Traffic comments are attached.

Question 4-2: Section 6.6.5.5 Highway Design Documents, requests a 25% Highway Design Submittal. Will the previously submitted 25% plans need to be resubmitted?

Response: A 25% submission is required.

Question 4-3: What will be the coverage of the traffic counts scheduled for July 3 through July 5, 2010 as stated under Section 6.6.5.4 Pavement Design?

Response: Automated traffic counts will be conducted as shown in the figure attached to this addendum. Turning movement data will not be collected.

ADDENDUM NO. 1 June 3, 2010

Question Set 4 (Continued) Question 4-4: The construction operations identified in the Functional Design Report are not consistent with the 25% Highway Plans that were provided. Will additional capacity analysis of the proposed detour conditions shown on the plans be required? Response: No. Section 5.5 Minority and Women Business Enterprises (M/WBE) Ouestion 4-5: Participation is in conflict with Appendix A Document 00718. Please confirm that Design Services is 6% and Construction is 6%. Response: See response to question 1-6. Question 4-6: The Environmental Services Historical Resources letter of January 10, 2010 and the Geotechnical Report dated May 2006 both indicate the solid unreinforced center pier is to be replaced with a new open column pier. Please clarify that the existing pier is to remain and be rehabilitated as per the Sketch Plans. Response: The existing pier is to remain. Teflon bearings or approved equal are to be used to transfer the seismic loading to the abutments. Question 4-7: Relative to Question 6 above is the Type Study available? The RFP indicates a Type Study was developed. Was a Structures Report separate or part of the Type Study and is it available? Was ASR, chloride testing and compressive strength cores taken and are the results/reports available? Response: The Type Study and Concrete Core Testing Report are attached. Question 4-8: Section 6.6.5.5 Highway Design Documents, requests a 25% Highway Design Submittal. What does MassDOT envision this submittal to be in addition to what Lin Associates has already prepared and submitted?

Question Set 4 (Continued)

Juesi	Response:	The 25% plan submission will be required. In addition to modifications necessary to accommodate the shift to rapid bridge construction techniques, some of the review comments need to be addressed, many of which normally appear on subsequent submissions. Specifically, the following sections of the attached plan review document need further attention: 2/17/2010 State Traffic Engineer comments: Bullet #4 2/12/2010 District 4 Traffic and Construction: Title Sheet, Comment 1 Typical Sections and Pavement Notes, Comment 3 Construction Plans, Comments 1, 2, 4, 7, 8-10, 12 Profile, Comments 1-3 Signing and Pavement Marking Plan, Comment 3 Traffic Signal Plan, Comment 1
		 <u>2/12/2010 District Traffic Engineer:</u> TMP, General, Bullet #1 TMP, Cedar St. Detour, Bullets #1, 3 Typical TMP, Bullet #1 <u>2/12/2010 District Utility and Constructability Engineer:</u> Construction Plans: Comments 1-15 Bridge Plans: Address all comments on First Structural Plan submission.
	Question 4-9:	Sections 6.6.5 and 6.6.6 indicates that 25% Highway Plans have been submitted and reviewed by MassDOT. If comments were prepared, are they available for the DB Entity's review.
	Response:	Review comments are attached.
	Question 4-10:	Please clarify the last sentence in Section 1.10.2 Project Summary/Elements. Something appears missing from this sentence. It appears to say that there is No Environmental Permitting required for the Final Design.
	Response:	Sentence should read: "There are no wetland impacts associated with the design as shown on the reference plans. Any permitting for the final design, especially with respect to the final drainage design, is the responsibility of the DB Entity.

(1)

1.10.2 Project Summary/Elements

The bridge plans being provided for this project reference the use of Load Factor Design and the previous MassDOT Bridge Manual information as the basis for design. The DB Entity will follow the AASHTO Bridge Design Specifications 17th Edition. The DB Entity must provide its own final, complete design package, sealed and certified by its engineer of record, for review and approval by MassDOT. Plans being provided with this RFP will be reference documents only.

The Traffic Management Plans (TMPs) for this project call for a closure of Route 9 and Cedar Street. Coordination with the Town of Wellesley by the DB Entity will be required for these closures.

An existing cantilever guide sign in the project area is expected to be removed during construction and reset prior to the reopening of Route 9 in it's current location.

Existing traffic signal system within the project limits shall be upgraded in accordance with MassDOT Standards.

Drainage work associated with this project is expected to be limited to any minor adjusting or remodeling of catch basins required by the raising of the Cedar Street profile.

There are no wetland impacts associated with the design as shown on the reference plans. Any permitting for the final design, especially with respect to the final drainage design, is the responsibility of the DB Entity.

1.10.3 Infrastructure Project Elements

The scope of work is based on the Type Study, and Sketch Plans, 25% Highway Design as approved by MassDOT. The DB Entity will be responsible for a new Geotechnical Report including any temporary locations and final location of the bridge structure.

The scope of work contains but is not limited to the design and replacement/reconstruction of the bridge of raising the profile of Cedar Street to provide 15 feet 0 inches of vertical clearance. Work will also include modifications to the existing abutments, pier and wingwalls, requirements for traffic management for detours and appropriate roadway transitions to the structure. The project will be required to utilize a rapid build construction technique, which may include the use of Self-Propelled Modular Transporters (SPMT's) to replace the existing bridge superstructure. The Design Build Entity shall be permitted to close Route 9 and Cedar Street for a period of 72 hours starting from 10:00 PM on Friday, July 1, 2011 to perform demolition, abutment and wingwall extensions, superstructure installation and roadway grade work to the reclaimed material level. Other miscellaneous bridge and roadway work for Cedar Street including the final roadway paving will be allowed between June 20, 2011 and July 20, 2011, between the hours of 10:00 PM and 6:00 AM. Lane restrictions for Route 9 will only be permitted with written consent of MassDOT.

At the bridge approaches the roadway pavement will be reclaimed and adjusted to final grade. Hot mix asphalt material, (surface, binder and base course) shall be placed on the reclaimed material. Suggested Traffic Management Plans have been submitted and reviewed by MassDOT. The

plan set is on the CD that MassDOT provided to each DB Entity. The DB Entities will have to develop new TMPs and all TMPs will need to adhere to the criteria set forth in section 6.6.6.1 and approval by MassDOT.

Within this procurement, the DB Entity will be required to continue the design work for the Cedar Street Bridge Over Route 9 in collaboration with MassDOT, and develop and complete the following documents and work efforts. Note that this list is not to be considered all inclusive.

- Final design for the bridge
- Any and all environmental permits to support final design and/or to allow any construction work to begin
- Coordination with abutters, landowners, environmental agencies, utilities, local boards and officials and any other party with an interest in or impact from the project. Coordination will be done in conjunction with MassDOT.
- Complete design and construction Quality Assurance and Quality Control programs

1.10.4 Adjacent Projects

At all times, the DB Entity will be responsible for coordination with any adjacent projects on Cedar Street, Worcester Street or Route 9.

① ADDENDUM NO. 1 June 3, 2010

① 6.3.4 Incentive / Disincentive Requirements

For the purposes of this contract, MassDOT is instituting and Incentive/Disincentive specification. This specification is to encourage the DB Entity to use innovative methodologies and techniques to achieve early project completion and to achieve certain milestones. Conversely, if the DB Entity fails to achieve certain milestones, MassDOT shall assess Disincentive Deductions.

For purposes of determining whether the Contractor shall receive an Incentive Payment, the number of calendar days set forth in Milestones No. 1 will not be adjusted under any circumstance for any reason, cause, or circumstance whatsoever, regardless of fault, save and except in the instance of a catastrophic event and/or declared state of emergency. However, Milestone Nos. 2, 3, and 4, at the discretion of MassDOT due to severe weather expected with the input of the DB Entity and Town may be adjusted by 7 day increments. This decision involving severe weather will be discussed at the completion of Milestone No. 1.

Payment: The Incentive Payments for achieving Milestone No. 1, 2, 3, or 4 or the Disincentive Deductions shall be a payout schedule under this Contract. Any partial day will be rounded down to the nearest whole day. For hourly incentive payment, the time will be rounded down to the nearest whole hour.

Liquidated Damages: Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the MassHighway Standard Specifications for Highways and Bridges – Failure to Complete Work on Time.

6.3.4.1 Incentive Milestone Payments

Incentive Milestones shall be defined as stated in Section 6.3.1 General Prosecution of Work (Milestones)

- Incentive Milestone #1 Payment: If the DB Entity achieves Milestone #1 as defined previously by June 20, 2011 at 11:59 PM, MassDOT shall pay an Incentive Payment of a maximum of \$50,000.
- Incentive Milestone #2 Payment: If the DB Entity starts Milestone #2 as defined previously on July 1, 2011 at 10:00PM and completes Milestone #2 in less than 72 continuous hours later, MassDOT shall pay an Incentive Payment of \$2,500 per hour for each less. This incentive is limited to a maximum of \$150,000.
- Incentive Milestone #3 Payment: If the DB Entity achieves Milestone #3 as defined previously by July 20, 2011 at 11:59 PM, MassDOT shall pay an Incentive Payment of a maximum of \$50,000.
- Incentive Milestone #4 Payment: If the DB Entity achieves Milestone #4 as defined previously by August 20, 2011 at 11:59 PM, MassDOT shall pay an Incentive Payment of a maximum of \$50,000.

6.3.4.2 Disincentive Milestone Payments

- Disincentive Milestone #1 Deduction: For each day the DB Entity exceeds Milestone #1 as defined previously by June 20, 2011 at 11:59 PM, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day. The maximum Disincentive Deduction shall not exceed \$50,000.
- Disincentive Milestone #2 Deduction: If the DB Entity exceeds the continuous 72 hour timeframe as defined previously, MassDOT shall assess the DB Entity a Disincentive Deduction of \$2,500 per hour. The maximum Disincentive Deduction shall not exceed \$150,000.
- Disincentive Milestone #3 Deduction: For each day the DB Entity exceeds Milestone #3 as defined previously by July 20, 2011 at 11:59 PM, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day. The maximum Disincentive Deduction shall not exceed \$50,000.
- Disincentive Milestone #4 Deduction: For each day the DB Entity exceeds Milestone #4 as defined previously by August 20, 2011 at 11:59 PM, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day. The maximum Disincentive Deduction shall not exceed \$50,000.

6.2 ADMINISTRATION AND COORDINATION

6.2.1 Briefings for Community Groups, MassDOT, and Others

Public involvement is an important aspect of the project development. The DB Entity shall be required to support MassDOT with preparation of materials and presentations required for communicating to all interested persons, groups and government organizations information regarding the development of the project. The DB Entity shall not be compensated by MassDOT for the preparation of these materials.

6.2.2 Meeting Minutes

The DB Entity shall attend all meetings involving the DB Entity, MassDOT or its authorized representatives, and third parties including, but not limited to, Utility companies, railroads, municipalities and regulatory agencies as appropriate. For all meetings at which the DB Entity is in attendance, the DB Entity shall submit to MassDOT objective draft meeting minutes within five (5) Business Days after the meeting. Final meeting minutes incorporating any MassDOT comments shall be submitted to MassDOT within five (5) Business Days after receipt of MassDOT's approval or comments on such draft meeting minutes, as applicable. Draft meeting minutes may be submitted to MassDOT electronically; however, final MassDOT-approved meeting minutes shall be submitted as hard copies. The DB Entity shall be responsible for the distribution of final MassDOT-approved meeting minutes to all meeting attendees. Excluded from this requirement are internal meetings between the DB Entity's team members.

Wellesley – Cedar Street over Route 9 RFP Section Revisions

Redtwig dogwood (Cornus sericea): 2-3 ft. ht. Northern bayberry (Myrica pensylvanica): 2-2.5 ft. Arrowwood viburnum (Viburnum dentatum): 2-2.5 ft. ht. Highbush cranberry (Viburnum trilobum): 3-4 ft. ht.

c. Prior to replanting, disturbed area shall be cleared and grubbed to remove old root systems. However, in order to minimize exposure of weed seeds in the soil (seed bank), DO NOT till soil prior to planting. Invasive non-native plant species such as Oriental bittersweet (Celastrus orbiculatus) shall be removed from the site and treated with herbicide to control re-growth.

C. Ornamental Planting Zone:

a. The goal is to provide an attractive area as the entry way for pedestrian access up the stairway and over the bridge. This area shall be designed to minimize maintenance and discourage establishment of invasive plant species. A recommended strategy is to achieve coverage of the soil surface as quickly as possible in order to shade out seedlings.

b. Plant species and sizes for Ornamental Planting Zone may be referenced from any of the other lists provided here.

c. Minimum planting density shall be calculated by area with a typical spacing of 6 ft. on center for shrubs and 12 ft. on center for ornamental trees. Larger trees may be used as specimen trees.

North Ornamental Planting Zone (550 SF) = 30 shrubs (min.) South Ornamental Planting Zone (1600 SF) = 50 shrubs (min.)

d. Native species ornamental grasses such as switchgrass (Panicum virgatum) may be planted as a spacing of 3 ft. on center.

D. Southern Slopes:

a. The goal is to minimize loss of existing trees during construction. Disturbed areas shall be cleared and grubbed then covered with a 2 inch minimum of compost and seeded to an erosion control seed mix.

b. Trees larger than 4 inch caliper that are removed shall be replaced one-for-one as individual trees planted in tree saucers formed into the slope as per the standard MassDOT planting detail. Tree species shall be the following.

Red maple (Acer rubrum): 2-2.5 in. cal. Scarlet oak (Quercus coccinea): 2-2.5 in. cal. Pin Oak (Quercus palustris): 2-2.5 in. cal.

E. SEEDING

a. The goal is to minimize maintenance of woody vegetation along the roadside by providing a "mow zone". Currently, the areas are flail mowed and unsightly. The grassed mow zone shall be cleared and grubbed to remove all woody roots. The areas shall be seeded to a native grass erosion control mix with a dominance of switchgrass (Panicum virgatum).

b.

b. Areas disturbed by construction or tree removals and not identified for a specific treatment shall be fine graded, patched with 2" compost and seeded to lawn grass.

F. MISCELLANEOUS SITE PROTECTION AND RESTORATION

a. The trail marker sign post at the foot of the existing stairway shall be removed and replaced by the contractor.

Any impacts to adjacent landscaping on private property shall be the responsibility of

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the Design Build Entity. c. DELETE

All landscaping shall be completed as per the MassHighway Standard Specifications as referenced in Section 6.6.2.

6.7 ENVIRONMENTAL APPROVALS/CLEARANCES, COMPLIANCE, MITIGATION

6.7.1 General Statements

The DB Entity shall be responsible for any and all costs, including any liability, penalties, expenses, damages or delays resulting from any suspension, termination, interruption for failure to obtain any Environmental Approval(s)/Clearance(s) not already provided or obtained by MassDOT.

In accordance with the Chapter 291, Section 96 of the Acts of 2004, also known as the 2004 Transportation Bond Bill, and because there will be no increase in capacity or change in alignment to the roadway, these bridges are exempt from review under the Massachusetts Environmental Policy Act Regulations (301 CMR 11.00), the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00), and the Chapter 91 Waterways Regulations (310 CMR 9.00).

The proposed bridge structure is not mapped within the Natural Heritage and Endangered Species Program's Estimated or Priority Habitat.

The DB Entity is responsible at all times for complying with: (a) all conditions and schedules in any Environmental Approvals/Clearances, whether obtained by the MassDOT or the DB Entity, and (b) all applicable Environmental Laws. Failure to comply with conditions or schedules in Environmental Approvals/Clearances will be grounds for termination hereof. The DB Entity shall be responsible for any and all costs, liability, penalties, expenses, damages, including economic, property, natural resource and personal injury, or delays resulting from any non-compliance with Environmental Approvals/Clearances.

6.7.2 DB Entity Responsibility for Obtaining Environmental Approvals/Clearances

It is the responsibility of the DB Entity, in coordination with MassDOT, to obtain all Environmental Approvals/Clearances other than those provided by MassDOT under Section 6.7.3.

- The DB Entity has ensured that the Facility may be operated without damage to the Facility or any other property and without injury to any person.
- The DB Entity has ensured that the Facility is ready to be opened to the public.
- All testing requirements have been satisfactorily completed and documented.

As promptly as is practicable after receipt of notice pursuant to this Section, and in no event later than 30 Days thereafter, MassDOT shall advise the DB Entity in writing of any of the following of which MassDOT then has knowledge: (a) defects in the DB Work; and/or (b) deficiencies in the Project; and/or (c) deviations of any installed equipment, materials and workmanship from the requirements of the RFP and Contract Documents. The DB Entity shall, at its own cost and expense, promptly correct such defects, deficiencies and deviations.

Substantial Completion of the Project shall be deemed to have occurred when all of the following have occurred:

- The DB Entity has corrected all defects, deficiencies and deviations with respect to the Project and MassDOT has notified the DB Entity in writing of its acceptance (or waiver pending Final Acceptance) of such corrections; provided that final clean-up shall not be required to be performed as a condition to Substantial Completion.
- The DB Entity has received all applicable Governmental Approvals required to be obtained by the DB Entity pursuant to this RFP and Contract Documents.
- The entire Project Site is ready to be fully opened for public travel.
- A Punch List has been developed and mutually agreed to by the DB Entity and MassDOT

6.12.2 Liquidated Damages

Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the MassHighway Supplemental Specifications to the 1988 Standard Specifications.

6.12.3 Final Acceptance

Promptly after Substantial Completion, the DB Entity shall perform all DB Work, if any, which was waived for purposes of Substantial Completion, and shall satisfy all of its other obligations under the RFP and Contract Documents, including ensuring that the Project has been completed and all components have been properly adjusted and tested. Final Acceptance of the Project shall be deemed to have occurred when all of the following have occurred:

- All requirements for Substantial Completion of the Project shall have been fully satisfied.
- MassDOT shall have received all Design Documents, As-Built Documents, Right of Way record maps, surveys, test data and other deliverables required under the RFP and Contract.

- All special tools purchased by the DB Entity as provided in the RFP and Contracts shall have been delivered to MassDOT and all replacement spare parts shall have been purchased and delivered to MassDOT free and clear of Liens.
- All of the DB Entity's and Subcontractors' personnel, supplies, equipment, waste materials, rubbish and temporary facilities shall have been removed from the Right of Way.
- The DB Entity shall have delivered to MassDOT a certification representing that there are no outstanding claims of the DB Entity or claims, Liens or stop notices of any Subcontractor or laborer with respect to the DB Work, other than any previously submitted unresolved claims of the DB Entity and any claims, Liens or stop notices of a Subcontractor or laborer being contested by the DB Entity (in which event the certification shall include a list of all such matters with such detail as is requested by MassDOT and, with respect to all Subcontractor and laborer claims, Liens and stop notices, shall include a representation by the DB Entity that it is diligently and in good faith contesting such matters by appropriate legal proceedings which shall operate to prevent the enforcement or collection of the same). For purposes of such certificate, the term "claim" shall include all matters or facts which may give rise to a claim.
- The Punch List items shall have been completed to the reasonable satisfaction of MassDOT, all of the DB Entity's other obligations under the RFP and Contract shall have been satisfied in full or waived, and MassDOT shall have delivered to the DB Entity a Notice of Final Acceptance to the effect of the foregoing.

The occurrence of Final Acceptance shall not relieve the DB Entity from any of its continuing obligations, including any required warranty obligations as per the MassHighway Standard Specifications and industry standards.

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6.13 CONSTRUCTION DIGITAL RECORDING

The DB Entity shall engage a qualified commercial photographer to take photographs / video during construction to document the projects progress and activities. The photographer shall be an individual of established reputation that has been regularly engaged as a professional photographer for not less than 5 years. The DB Entity shall submit to MassDOT for approval the name and credentials of the photographer whom will be responsible for taking the photographs during construction.

6.13.1 **Progress Photographs**

The DB Entity shall take digital photographs on or about the last day of the month and also during and after completion of important stages of work as determined by MassDOT, the DB Entity shall take a minimum of twelve (each month), but not more than twenty four images(each month) as directed, showing progress of construction.

The DB Entity shall provide the following deliverables for each submission:

Massachusetts Department Of Transportation



Highway Division

Project No. 604007

① ADDENDUM NO. 1 JUNE 3, 2010

DOCUMENT 00718 – DESIGN BUILD

SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN'S BUSINESS ENTERPRISES (Implementing Chapter 233, Section 11 of the Acts of 2008)

Revised: December 3, 2008

I. M/WBE PARTICIPATION GOAL

On this best value design build contract, the Massachusetts Department of Transportation has established a goal of 12% for participation by Minority or Women Business Enterprise – certified firms. This goal is applicable to both design and construction services performed under the contract. A minimum of one half of the goal for construction, 6%, shall be met in the form of construction activity. The M/WBE participation goal shall remain in effect throughout the life of the contract.

(1) (1) <u>Design Services</u>: Minority or Women Business Enterprises **12%** <u>Construction</u>: Minority or Women Business Enterprises **12%**

II. POLICY

It is the policy of the Massachusetts Department of Transportation that Minority and Women Business Enterprises (M/WBEs) have an equal opportunity to receive and fully participate in the performance of its state funded contracts.

III. M/WBE OBLIGATION

The design build entity/contractor agrees to take all necessary and reasonable steps to ensure that MBE and WBEs have an equal opportunity to compete for, and to perform, MassHighway contracts.

IV. FAILURE TO COMPLY WITH M/WBE REQUIREMENTS

All design build entities, contractors and subcontractors are hereby advised that failure to carry out the requirements of these provisions constitutes a breach of contract which may result in termination of the contract, a determination that the design build entity, contractor or subcontractor be barred from bidding or proposing on MassDOT contracts for up to three (3) years, or any other remedy as MassDOT may impose under section XI of these special provisions.

V. REQUIRED SUBCONTRACT PROVISIONS

The Design Build Entity/Contractor shall include the provisions of sections II, III, and IV above in every subcontract making those provisions binding on each subcontractor, supplier, manufacturer, consultant or service provider.

VI. DEFINITIONS

For the purpose of these special provisions, the terms listed below are defined as follows:

"Minority Business Enterprise or MBE means any individual, business organization, or non-profit corporation certified as an MBE or as a Portuguese owned firm by the State Office of Minority and Women Business Assistance (SOMWBA), or by MassDOT for the purposes of a particular bid or proposal to be submitted to MassDOT.

Women Business Enterprise or WBE means any individual, business certified as a WBE by SOMWBA, or by MassDOT for the purposes of a particular bid or proposal to be submitted to MassDOT.

"Contractor activity" means any work, including but not limited to, design services, construction, demolition, renovation, survey, test boring services, or maintenance work performed under the contract.

Project No. 604007

"Approved Joint Venture" means a joint venture between a M/WBE(s) and a non-M/WBE(s), which has been established for the purpose of participation on a particular contract, where:

1. The M/WBE partner(s) shares in the ownership, control, management responsibilities, risks and profits of the joint venture; and

2. The joint venture has been approved by MassDOT for M/WBE participation on the particular contract.

"Equipment Rental Firm" means a firm that owns equipment and assumes actual and contractual responsibility to rent said equipment to perform a useful function of the work of the contract consistent with normal industry practice.

"Material Supplier" means a vendor engaged in sales to the highway construction industry from an established place of business or source of supply, which:

1. Manufactures goods from raw materials or substantially alters them before resale, or

2. Provides and maintains a storage facility for materials used in the work, consistent with normal industry practice.

"SOMWBA" means the Massachusetts State Office of Minority and Women Business Assistance.

VII. ELIGIBILITY of M/WBEs

Only firms, other than the Design Build Entity / Contractor, which have been certified by SOMWBA and/or MassDOT as eligible to participate on state funded contracts as MBEs, Portuguese owned businesses or WBEs may be used on this contract for credit toward the M/WBE participation goal.

1. SOMWBA Directory of Certified M/WBEs: The State Office of Minority and Women Business Assistance publishes a Directory of certified MBE and WBEs. This Directory can be obtained from SOMWBA. It lists those firms which have been certified as minority or Portuguese owned (MBEs) or women owned (WBEs) in accordance with the criteria of 425 CMR 2.00 et seq to participate as M/WBEs on state funded contracts. It also lists the kinds of work in which each firm engages but does not constitute an endorsement of the quality or performance of any business and does not represent MassDOT subcontractor approval. Website: http://www.somwba.state.ma.us/

2. Application for Certification by MassDOT for a Particular Project: A firm which has (1) submitted a fully completed M/WBE application to SOMWBA at least 30 days previously, (2) has provided in a timely manner, any additional information which may have been requested by SOMWBA, and (3) can provide evidence, satisfactory to MassDOT, of a bidder's conditional commitment to subcontract with the firm, if certified, may apply directly to the MassDOT Office of Civil Rights to be certified for participation on the particular contract.

3. Joint Venture Approval: To obtain recognition as an approved joint venture between a M/WBE(s) and a non-/M/WBE(s), the joint venture must provide to the MassDOT Office of Civil Rights, at least 14 business days before the bid opening date, an application for joint venture participation approval, and a copy of the joint venture agreement, which shall include a detailed breakdown of the following:

- (a) Capital participation by the M/WBE,
- (b) Specific equipment to be provided to the joint venture by the M/WBE,
- (c) Specific responsibilities of the M/WBE in the management of the joint venture,
- (d) Workforce and specific skills to be provided to the joint venture by the M/WBE, and
- (e) Percentage distribution to the M/WBE of the projected profit or loss incurred by the joint venture.
- (f) The joint venture shall provide all such additional information as may be requested by MassDOT for the purpose of determining joint venture eligibility.

Massachusetts Department Of Transportation



Highway Division

ADDENDUM NO. 1 June 3, 2010

Project Location: WELLESLEY

This Price Proposal includes the following RFQ Addenda, numbered:,,,,,	_,
·,,,	_,
and the following RFP Addenda, numbered:,,,,,,,,,,,,	,

The foregoing prices shall include the furnishing of all design services and all materials (except as otherwise herein specified), the performing of all the labor requisite or proper, the providing of all necessary machinery, tools, apparatus and other means of construction, the doing of all the abovementioned work in the manner set forth, described and shown in the specifications and on the drawings for the work, in the form of contract, and in the Proposer's's technical proposal, and the completion thereof by **August 20, 2011**.

If the Proposer's price and technical proposals are calculated to be the best-value, and the undersigned shall fail to contract as aforesaid and to give a performance and payment bond in the sum to be determined as aforesaid with surety satisfactory to MassDOT within fourteen (14) calendar days from the date of the mailing of notice from MassDOT to him/her, according to the address herewith given, that the contract is ready for signature, MassDOT may, at its option, determine that the Proposer has abandoned the contract, and thereupon the Proposer's price and technical proposals, and the acceptance thereof shall be null and void, and the proposal guaranty submitted covering this proposal shall become the property of MassDOT otherwise the said proposal guaranty shall be returned to the undersigned.

Full name and address of individual, firm, partnership or corporation submitting this Price Proposal:

Address for payments, if different:

Signed by:

Title: _____

Vendor code : VC

NOTICE: The Price Proposal shall be signed in black ink by person having proper legal authority, and the person's title should be given, such as "owner" in the case of an individual, "partner" in the case of a general partnership, "president", "treasurer" or "secretary" in the case of a corporation.

Owner or Partner

Address

Massachusetts Department Of Transportation

massDOT

Highway Division

Project No. 604007

ADDENDUM NO. 1 June 3, 2010

If the Proposer is a corporation, give the State in which incorporated and the names and business addresses of the following officers:

President Treasurer			Addres	s						
			Address							
Secreta	ry	A			Addres	s		•		
State	here	if	the	Price	Proposal	is	submitted	by	joint	ventures:
is a corp The pro	poration, a posed sure	copy of ty on th	the vote bond to	of the corp	oration authori s:	zing the	joint venture s	_ and if and if and if and if and if and if and	ny of the jo attached he	int venturers ereto.
Name										
Home (Office Addı	ess		****	•					
Massacl (if diffe	husetts Ado rent)	dress								

NOTE: Zip Code shall be included with all addresses.

END OF DOCUMENT



INTEROFFICE MEMORANDUM

TO:	Stanley Wood, P.E David Phaneuf –	 Highway Design Engineer AAB/ADA Coordinator
ATTENTION:	Matt Hopkinson –	Project Manager
FROM:	German Nieto P.E. –	Highway Design Section
DATE:	February 4, 2010	v
SUBJECT:	Wellesley –	Cedar Street over Route 9 Bridge # W-13-015 (2MH) Pars # H604007 P11 Project File # 604007 AAB/ADA Accessibility Review

The following review is based on the 25% submission plans of January 2010. These plans have been marked and contain comments which have been highlighted on the title sheet.

PROJECT COMMENTS:

- The plans must indicate the construction tolerance ($\pm 0.5\%$) for the cross slope of the proposed sidewalks (Sheets 2 and 3).
- The typical sections for Cedar Street (Sheet 2) show sidewalk widths of less than 5'- 6" including the curb.

Where an accessible route (which includes walks and sidewalks) is less than 5'- 6" including the curb, passing spaces of 60"x 60" excluding curb stones are required at intervals not exceeding 200 feet, under Section 20.5 of 521 CMR.

This requirement to detail passing areas can be eliminated by widening the sidewalk to 5'- 6" including the curb.

- The typical section for Worcester Street East (Sheet 3) shows a variable sidewalk width. If this width varies, the minimum dimensions shall be included.
- A minimum gap (level area) of 6 feet is required between the proposed wheelchairs ramps located at the NE quadrant of the Worcester Street/Cedar Street intersection (see marked-up Sheet 4). Abrupt changes of ramp transition slopes (ridges) on the pedestrian (wheelchair) path of travel are unacceptable.

Page 1 of 2 Pages

OVERALL COMMENTS:

Consultant and Contractor are ultimately responsible for full compliance with the Architectural Access Board (AAB) and the American with Disabilities Act (ADA) regulations. Because of the accelerated nature of design/build, and limited reviews, the consultant/contractor team has an additional obligation to meet the AAB/ADA requirements for this Design/Build project.

The plans should include schedules for both driveways and wheelchair ramps which are crossreferenced with the construction plans. The schedules should include the referenced roadway baseline, station and offset to the center of the opening at the gutter line, gutter profile slope, opening width at the gutter, left transition length, right transition length, depth from the gutter to the back of the sidewalk, and depth of level landing or width of path of travel across driveways.

We are attaching a copy of a more complete detail table for driveways and wheelchair ramps from an in-house project. The table can be modified slightly but should form the basis of tabular information used to layout and construct driveways and wheel chair ramps.

The wheelchair ramp schedule plan should include a notation, on the sketches, that detectable warning panels are required on all the proposed wheelchair ramps and are to be installed in accordance with Construction Standard M/E 107.6.5R (December 2004).

We are enclosing a drawing showing typical sidewalk clearance details to be used as a designer's guide in preparing the subject project. It is the designer's responsibility to verify, in advance, that there is sufficient width, to locate or relocate all sidewalk obstructions. The designer is responsible to ensure obstructions (utility poles, hydrants, signs, signals, trees, bushes, etc.) can be relocated in a manner which will provide the minimum 36" excluding curb AAB required path of travel. Utility removal, or Right of Way takings or sidewalk easements may be required to ensure this required path of travel.

GON/ Attachments.

Page 2 of 2 Pages

Moving Mass	25% DESIGN REVIEW COMMENTS ADDENDUM NO. 1 June 3, 2010 Highway 2/22/10 0 M	Methodoconservices and a service and a servi
ТО:	Neil E. Boudreau, State Traffic Engineer	Ŋ
FROM:	Andrew K. Paul, ABP Traffic Review Coordinator	
DATE:	February 17, 2010	
SUBJECT:	Wellesley – Cedar Street over Route 9 Bridge Replacement Bridge No. W-13-015	
	25% Submission Review Comments – ABP Traffic ReviewDesign Consultant – Lin AssociatesProject Manager – Matt HopkinsonProject Reviewer – Haralampos StathopoulosProject #604007	

The Boston Traffic Section has reviewed the subject project based on the project materials dated February 1, 2010, including the Estimate of Quantities/Cost, Design Plans and Specifications. Our review focused on conformance of the proposed project's Signs and Pavement marking plans and Temporary Traffic Control Plans with the *Standard Details and Drawings for Development of Temporary Traffic Control Plans (TTCP)*, 2006 MassHighway Design Guide, 2009 Manual on Uniform Traffic Control Devices, and potential traffic and safety implications of this project.

The length of the project is 0.079 miles on a bridge that spans Route 9, with an Average Daily Traffic (ADT) of 17,940 vehicles per day. The Cedar Street bridge was constructed in 1932.

Provided the Designer properly addresses these comments with a written, response, the project can proceed to the 75% design stage. We offer the following comments:

Title Sheet

- 1. Change all the *Traffic Management Plans* titles to *Temporary Traffic Control Plans* (TTCP). See notes on the plans.
- 2. The font of the *Index* text and the text above the *Design Designation* list is very large compared to the rest. Use the same font as the text in the *Design Designation* list.

Sign and Pavement Markings Plan

3. If there are trucks on Worcester Street Eastbound taking a left turn, the 10-foot turning lane provided on this street is not wide enough for trucks.

Sign Summary

4. Provide the total area of all signs used in the project under the sign summary table. See notes on the plans.

Traffic Signal Plan and Data

- 5. Change the text Traffic Management Plans in note #1 on sheet ten to TTCP.
- 6. The *I Way 3 Section Signal Housings* proposed for this project are only seven. Therefore erase the letter *J* from under the graphic of the 1-Way housing shown on sheet eleven.
- 7. Add a note that clarifies what times are the *(All Other Times)* for *Maximum I* in the Timing and Sequence table on sheet eleven.

Temporary Traffic Control Plans

- 8. Provide on a separate sheet a table summarizing all signs used during construction, similar to the Sign Summary table on sheet nine.
- 9. Provide an R2-10a sign, *Work Zone Speeding Fines Doubled*, on Route 128/I-95 Southbound between the W20-1a and W20-5L signs.
- 10. Provide a better quality map than the one on sheet thirteen. Some of the minor roadways cannot be seen and it looks like some signs are placed in the middle of nowhere.
- 11. There is a sign and pole graphic with no sign code near the G20-2 sign, *End Road Work*, on Cedar Street. Provide both sign code and sign graphic to show to the reviewer what sign is proposed to be placed there.
- 12. Change all *Traffic Management Plans* titles in sheets twelve through fourteen to TTCP. See notes on the plans.
- 13. Stay consistent with units in the plans. On sheet fourteen the 2-Way Partial Lane Closure Traffic Control Detail you use both meters (<u>12 m</u> TYP for Spacing between drums and cones) and feet (all other instances).

- 14. The 2-Way Partial Lane Closure Traffic Control Detail should show a police detail or flagger (P/F), as in Figure TLR-2 of the Standard Details and Drawings for Development of Temporary Traffic Control Plans.
- 15. The Lane Closure Traffic Control Closure should be similar to Figure TLR-5 of the Standard Details and Drawings for Development of Temporary Traffic Control Plans. Revise and rename this detail in your plans.

<u>Cost Estimate</u>

- 16. There is an item number missing in your cost estimate but the item name is in the estimate; item number 628.2, which corresponds to *Bridge Rail to Highway Guard Transition*. Correct the estimate to show this number with the right item.
- 17. The unit price of the following items should be closer in range with those listed on the online construction project estimator (initials in parenthesis denotes units of measurement):
 - a. Item 635.1, Highway Guard Removed and Discarded: \$2.50 (FT)
 - b. Item 851., Safety Controls for Construction Operations: \$250 (UD)
 - c. Item 852., Safety Signing for Construction Operations: \$17.50 (SF)

Should the Designer wish to discuss our comments or have any questions regarding our comments, they may contact Andrew Paul at 617-973-7967 or by email at Andrew.Paul@state.ma.us, or Bob Stathopoulos, Project Reviewer, at 617-973-7486 or by email at Haralampos.Stathopoulos@state.ma.us.

HNS

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THE COMMONWEALTH OF MASSACHUSETTS MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION District Four INTEROFFICE CORRESPONDENCE

TO: A. Shoukry M. Elnahal, P.E., Director of Accelerated Bridge Program Pices Leavourt FROM: Patricia Leavenworth, P.E. District High DATE: February 12, 2010 SUBJECT: Cedar Street Over Route 9- Bridge Replacement **Accelerated Bridge Program** Wellesley, MA 25% Design Review Comments (DB Project) Project File No. 604007 Accelerated Bridge Design Engineer - Lin Associates, Inc. Program Attn: Mathew Hopkinson, P.E. **District Four** Project Manager

The District Projects, Traffic and Constructability sections have reviewed the 25% design plans and the RFP Part 2 of the above referenced project. Attached, please find our written comments and also minor comments marked on the plan sheets and the RFP.

Please include a written response to all review comments. Should you require any additional information relative to these comments, please contact Narayana Murthy Kolla, P.E., Project Reviewer at (781) 641-8339.

2

Cedar St. Over Route 9- Bridge Replacement 25% Design Submission Review Comments

25% Highway Plans

General Comments

- 1. The functional classification of Cedar Street and Worcester Street is Urban Minor Arterial and the Typical Sections & Pavement Notes indicate shoulder widths less than the minimum width of usable shoulders for this road (Minimum width is four feet for the right shoulder). Recommend a Design Exception Report (DER) or other documentation for review to address the geometric deficiencies for not meeting the standard values for the design controlling elements.
- 2. Provide revised 25% Design review checklist for the project.
- 3. Provide revised Functional Design Report for the project.

Title Sheet

- 1. Update the traffic data listed in the Design Designation since the project estimated construction and the design year have changed. The estimated construction and design year should be 2010 and 2030 respectively.
- 2. Add Worcester Street and pertaining data to the Design Designation Table.
- 3. Add Functional classification of Cedar Street and Worcester Street in the Design Designation Table
- 4. This is a Non Federal Aid (NFA) Project, indicate NFA for FAP No. above the locus map and in the upper right corner box of the sheets
- 5. Under the Locus Map also include the length of the project in miles to the nearest three decimals.

Typical Section & Pavement Notes

1. The shoulder width doesn't conform to standard design values for the classification of the Road for Cedar and Worcester Streets. Provide documentation for review to address the geometric deficiencies for not meeting the standard values for the design controlling elements.

File: Cc 604007

3

Cedar St. Over Route 9- Bridge Replacement 25% Design Submission Review Comments

- 2. A section for full depth reconstruction for Route 9 is included, provide location of the reconstruction with stationing and also indicate on the construction plan sheet.
- 3. Indicate construction tolerance of +/_ 0.5 % for sidewalk cross slopes on the typical sections.
- 4. Include temporary pavement section if necessary when the traffic is detoured.
- 5. Provide justification for the proposed pavement composition. Coordinate with Pavement section for their review and approval.

Construction Plans

- 1. The plans show existing Highway Guard being removed/disposed and new rail installed, indicate the type and station of rail under Highway Guard Details.
- 2. The project involves upgrading the existing traffic signal system. Show Traffic Signal Conduit on the sheet.
- 3. This project is a Non Federal Aid Project; delete any reference to Federal Aid (Begin/ End Federal Aid) on the plans.
- 4. The impacts of construction and disturbance as shown on the TMP plans, and the proposed accelerated bridge work may require changing the project limits. Establish the limits of work to bring back pre-construction conditions and show on the plans.
- 5. The Overhead Cantilever Guide Sign structure on Route 9 EB east of the Bridge is not shown on Plans. For construction of the Bridge this sign may require removal /reset.
- 6. Show temporary construction easement line on the plans.
- 7. If the existing median guard rail on Route 9 require removal and reset for moving the heavy lift, show removal/reset on plans. Also include details of median with guard rail replacement.
- 8. There are several CB's within the project that require modified/adjust are not called out on the plans. All the frames and grates shall be hook and lock for the CB's that are adjusted/ modified in the project unless directed by the municipality, refer to directive E-09-003.

File: Cc 604007
4

Cedar St. Over Route 9- Bridge Replacement

25% Design Submission Review Comments

- 9. Provide construction details and schedules for wheelchair ramps and driveways, and cross referencing the construction plans.
- 10. Separate the construction baseline curve data and the curved curb data in the data table for clarity.
- 11. Worcester Street1932 Construction Baseline is shown on Traffic Signal Plan, and Signing and Pavement Marking plans, shown on construction plans
- 12. Recommend moving the General Notes, Legend and abbreviations into a separate sheet.
- 13. Existing pavement and curbing on Route 9 under the bridge and along the on/off ramps is deteriorated, recommend cold planning and replacement of curbing within the project area.

Profile

- 1. It appears the angle points created (from the proposed and existing grades) at the limit of work for Cedar Street and Worcester Street have grade differential over 0.5%. Please review the grades to lower/eliminate the grade breaks where it meets existing.
- 2. If possible avoid vertical curve on the bridge.
- 3. What is the design speed for Worcester Street? Are the K values of the proposed vertical curves consistent with the design speeds?
- 4. The proposed minimum vertical curve length should be three times the design speed of the road, please verify for Worcester Street.

Signing and Pavement Marking Plan

- 1. Show on plans the Overhead cantilever guide sign structure that require removal and reset.
- 2. The text for sign # 5 is missing on the plans.
- 3. Is the storage length shown on the plan for the signalized intersection is inconsistent with the section 6.7.3 of the Project Development Design guide Book.

File: Cc 604007

5

Traffic Signal Plan

1. Traffic signal system upgrades are proposed for the intersection of Cedar/Worcester Street; provide a copy of the revised FDR to review the intersection analysis including capacity analysis, basic signal system, phasing and queue length analysis, etc.

Traffic Management Plan

- 1. Include details of temporary pavement for the suggested detour route as required.
- 2. Earlier submissions included proposed/suggested Cedar Street bridge work in stages, now the work will be done using rapid construction techniques with road closure/detour. Were the suggested Cedar Street Detour route and the suggested TMP plans were submitted to the Local Town and stake holders for review and approval?
- 3. During the Bridge closure, will there be provisions to maintain pedestrian traffic along Cedar Street and Route 9 WB.

Cross Sections

1. See marked sheets for comments.

Preliminary Estimate

1. Revised estimate was not included with this submission.

File: Cc 604007

THE COMMONWEALTH OF MASSACHUSETTS

INTEROFFICE MEMORANDUM

MHD DISTRICT FOUR

TO: Brian Fallon, DPE

THROUGH: Mike Karas, DTOE

FROM: Emil Vezarov, EIT E.v.

DATE: Fub 12, 2010 December 12, 2008

SUBJECT: Wellesley – Cedar Street over Route 9 - 25% Review (EWO# H604 007 P11, File No: 604007)

District Traffic Engineering Section has reviewed the 25% plans and RFP for the subject project and offers the following:

- List of review comments
- Consultant evaluations
- Project documents with comments marked in red

Should you have any question, please contact Emil Vezarov at ext. 8318.

EGV/ev c-file encl. SUBJECT:

Wellesley - Cedar Street over Route 9 - 25% Review (EWO# 0604 007 P11, File No: 604007) Date: December 9, 2008

General Comments

• The Consultant should provide revised FDR as required in a 25% submission. The FDR is also necessary for the consecutive design stages.

<u>RFP</u>

• Although, there is no new highway lighting proposed in the project, there is existing lighting that need to be maintained during construction - 6.5.11.

Pavement Markings and Traffic Signing Plan

• Our records indicate that there is no Speed Limit Regulation issued for Cedar Street and the ramps from and to Route 9 in Wellesley. Remove all proposed speed limit signs.

Sign Summary

- Revise the layout of the R10-11b sign to be according to the 2003 MUTCD.
- Specify that the D3 signs should be painted on both sides (P.B.S.).
- Revise the proposed D6 signs to be according to the latest Mass DOT standards. No distance should be posted on the signs.

Signal Plan

- The pedestrian phase should be set on locking memory.
- Revise typos as marked.

<u>TMP</u>

General

• The first 3 drums for any TMP setup should be equipped with Type "A" flashers. Provide notes on the plans.

Route 9 Detour

• The proposed detour route for Route 9 WB goes through an U.P. location that would need to be relocated. Please revise the detour route.

Cedar Street Detour

• All detour signs should be combined with a SP-1 sign "Cedar Street".

SUBJECT:

Wellesley - Cedar Street over Route 9 - 25% Review (EWO# 0604 007 P11, File No: 604007) Date: December-9;=2008 F-40; [3, 2010

- Replace the G20-2 signs with M4-8a "End Detour" signs.
- Provide a SP-1/M4-8/M6-2R sign on Route 9 EB at the exit to Cedar Street.
- Provide additional trailblazing signs along the detour route.

Typical TMP

• Provide "Flagger" signage as an option along with the "Police Officer Ahead" signs where applicable.

All comments are marked on the drawings. Revise the drawing to reflect these comments as necessary.

THE COMMONWEALTH OF MASSACHUSETTS

Massachusetts Department of Transportation Highway Division

DISTRICT FOUR

INTEROFFICE MEMORANDUM

TO: Brian Fallon, P.E., District Projects Engineer

THROUGH: Jack Wood, District Utility & Constructability Engineer

FROM: Thomas Weil, P.E.

DATE: February 12, 2010

SUBJECT: Wellesley – Bridge Replacement W-13-015, Cedar St. over Rte. 9 Project File #604007, 25% Review Comments

The District Utility Constructability Engineering Section has reviewed the 25% Plans, Specifications, and Estimate and offers the following:

• List of review comments

Should you require any additional information relative to these comments, please contact Tom Weil at (781) 641-8434.

JRW/TGW cc: File #604007

Wellesley – Bridge Replacement W-13-015, Cedar St. over Rte. 9 Project File #604007, 25% Review Comments

2/12/2010

General Comments

 If rebuilding the stairs at Sta. 11+50 Rt. is part of this project, a Note should be included in the Plans, Sheet 5, and construction details be added. It is recommended that the stair design follow MassDOT Drawings 304.1.0 and 304.2.0. Consider using a MassDOT M4.06.1 High Performance Cement Concrete due to the severe corrosion of the stair reinforcing steel due to heavy deicing salt use.

Plans:

Typical Sections

- 1. Pavement Notes -
 - a. Prop. Full Depth Pavement Surface Change Surface Course Material to Modified Top Course Material. MassDOT standards do not include a Surface Course Material.
 - b. Prop. Full Depth Pavement Add to the description "Reclamation."
 - c. Sidewalk Change one layer to "2 ½" HMA placed on two layers, 1 ¼" Top Course Material over 1 ¼" Binder Course Material." Please follow MassDOT Std. Spec. subsection 701.62 Bituminous Concrete Sidewalk.
 - d. Driveway Surface Change "1 ½" Surface Course Type B over 2" Intermediate Course Type A" to "1 ½" Top Course Material over 2" Binder Course Material".
 e. Wheelchair Ramp Surface What does the asterisk refer to?
- 2. Sheets 2 & 3: All Typical Sections need to change HMA <u>Surface</u> Course to HMA <u>Modified Top</u> Course (see above comment).
- 3. Cedar St. Section A What does the double asterisk (next to the 2-1/2" Hot Mix Asphalt note) refer to?

Construction Plans

- General Comment Any UP R&R will add time to the Project schedule. Every effort should be made to rebuild this bridge with minimal utility relocations, if any. Therefore there may be two options to rebuilding this bridge: (1) Take 1+ years to reset UP and re-splice OHW (see comment below), then rebuild the bridge, or (2) demolish the bridge from the west side on Rte. 9 with minimum impact to all UP and OHW.
- 2. Utility Pole I.D. #'s should be added to the Plans.
- 3. The Pavement Notes include a design for Prop. Rte 9 full depth pavement. There is none shown on the Construction Plans. What is the anticipated scope of full depth reconstruction along Rte. 9?
- 4. <u>Sheets 4 & 5</u>: All utility structures at the pavement surface (such as MH, CB, hand gates, etc) must be marked as ADJ, REMOD, etc.
- 5. <u>Sheet 4 & 5</u>: The Plans call for all UP to be "R&R by Others" along the east side of Cedar St. from Sta. 10+10 Rt. to Sta. 13+50 Rt. During the Utility coordination meeting on Feb. 24, 2009 with District 4 DUCE Section, the three main companies

Wellesley - Bridge Replacement W-13-015, Cedar St. over Rte. 9

Project File #604007, 25% Review Comments

2/12/2010

Wellesley Electric, Verizon and Comcast insist that they can not work at the same time moving poles and splicing lines. Thus a sequential construction schedule would need to be worked out. Verizon alone estimates one year to splice and redirect lines. Can a plan be developed that would minimize the number of UP to be moved?

6. <u>Sheets 4 & 5</u>: If cranes are positioned on Cedar St. to demolish the bridge, then the OHW crossing one side of the bridge or the other would also have to be temporarily relocated. Consideration should be given to demolishing the bridge from below using the Rte. 9 layout as the staging area.

Sheet 4:

- 7. Increasing the elevation of Cedar St. on the south side of the bridge, from Sta. 8+75 to the Worcester St. intersection now affects the UP at Cedar St. Sta. 9+25, Rt. and Worcester St. Sta. 29+30, Lt., and the attached OHW. Is this elevation increase necessary due to the change in bridge deck elevation?
- 8. There is a new foundation for an Overhead Sign Post that has been recently installed at Worcester St. sta. 29+30 lt. that is not shown on the plans. This should be added to the plans.
- 9. There is an "R&R" for what appears to be the existing traffic control signal at Worcester St. Sta. 29+60, Lt. Traffic Signal Plan sheet 10 shows that this traffic signal will not be reused but will be replaced with a mast arm. Please clarify.
- 10. Wellesley Municipal Light has an underground electric duct bank along the northerly sidewalk at Rte. 9 WB, possibly next to the abutment foundation. It appears to continue along Cedar St. SB off ramp. This could be damaged from the weight of the SPMT and bridge. Care must be taken to protect these ducts and will require further coordination with Wellesley Electric.
- 11. Wellesley Municipal Light should be contacted to see if they have plans to upgrade any of their underground electric ducts along Rte. 9.
- 12. Add UP at approximately 65' west of the bridge on the north side of the Rte. 9 WB roadway. It is not shown on the plans.
- 13. It should be determined if the OHW that runs along the northerly side of Rte. 9 (UP at 65' and 165' west of the bridge) are high enough to allow the SPMT with the new bridge superstructure to pass underneath. If not, a plan will be needed to either raise these wires (Use a taller UP at the traffic island and beyond may be easiest solution.) or temporary relocation of these wires. Also determine if the SPMT can fit between these two UP.
- 14. The UP at Sta. 14+65, Rt. will have to be relocated if the Traffic Management Plan on Sheet 12 is utilized. Consider aligning the detour road for Rte. 9 WB traffic further north of the UP to avoid relocation which could potentially add delay to the Project.
- 15. There is a stormwater drain line and two catch basins along the SB entrance/exit ramp to Rte. 9 WB in the prop. lay down area that will need protection.

Traffic Management Plan

1. The use of Flaggers is required on Projects with speed limits less that 40 MPH according to regulation 701 CMR δ 7.00. - Show on the TMP drawings Flagger

Wellesley – Bridge Replacement W-13-015, Cedar St. over Rte. 9

Project File #604007, 25% Review Comments

2/12/2010

positions and signage as per MassDOT Standard Details and Drawings for the Development of Temporary Traffic Control Plans.

Cross Sections

1. Provide cross sections for Stations 10+50 and 11+00.

Bridge Plans

- 1. Sheet 7: Identify the required High Performance Cement Concrete for the bridge deck.
- 2. Provide additional pier cap and abutment details including rebar.
- 3. Provide details on the height of wires in bridge sections and profiles. The proposed relocated wire locations need to be shown on the plans.
- 4. The prop. wing walls and abutment repair may require the relocation of utility poles at the northeast and southeast corners. To address the concern for potential project delays, it is requested that alternative wall alignments be provided that will minimize the need for utility poles relocations or bracing of these UP during construction in such a way that they do not have to be relocated.
- 5. Is there a geodetic disc on the bridge? If so, please show location.

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Briggs Engineering & Testing

A DIVISION OF PK ASSOCIATES, INC.

August 22, 2005

Lin Associates, Inc, 2001 Beacon Street Boston, MA 02136 Attn.: Bruce Yeamans

RE: Concrete Investigation - Cedar Street bridge over Route 9, Wellesley, MA

Dear Mr. Yeamans,

In accordance with our proposal, we have completed the extraction and laboratory analysis of the concrete samples. A total of eighteen (18) core samples, and 36-chloride samples were extracted at the locations shown on the sketch.

Upon completion of the coring operation, all of the samples extracted were brought to our Rockland laboratory for testing. Eighteen-(48) cores were tested for compressive strength in accordance with ASTM C 42, eight (3) cores were analyzed for ASR in accordance with ASTM C 856 and twenty four (36) samples were tested for chloride content in accordance with ASTM C 1218.

Compressive strength results for the cores are shown on the attached laboratory report. Concrete Microscopy, Inc conducted the ASR analysis; a detailed report listing all of their findings will be forwarded upon receipt.

The thirty- six (36) samples that were tested for chloride content had a wide range of results. They ranged from 4.89 ppm to 1440 ppm. The individual results by location are attached. Some studies have shown that the amount of water-soluble chloride ion in hardened concrete necessary to initiate corrosion in reinforcing steel is about 440 ppm. At low pH levels however corrosion may be initiated with chloride ion contents as low as 250 ppm. The core samples were extracted at the locations shown on the attached sketches.

Please do not hesitate to contact me if you have any questions or are in need of additional information.

Very truly yours, Briggs/Engineering & Testing A Division of PK Associates, Inc.

Paul M. Skoroflod President

-- www.hriggsengineering.com

100 Weymouth Street - Unit B-1 Rockland, MA 02370 Phone (781) 871-6040 • Fax (781) 871-7982 100 Pound Road Cumberland, RI 02864 Phone (401) 658-2990 • Fax (401) 658-2977

Table 1 Results of Total Chloride Ion Analysis of Concrete ASTM C1218

Cedar Street over Roiute 9 Wellesley, Massachusetts

Lab	Field		Depth	Chloride	(CL) Content
ample No.	Identification	Location	from surface	ppm	<u>lb./cu. yd. *</u>
<i>1</i> -14231	C1-1	Center Pier	0.0"-1.0"	232	0.9
1-14232	C1-2		1.0"-2.0"	95.6	0.4
4-14233	C2-1	Center Pier	0.0"-1.0"	324	1.2
1-14234	C2-2		1.0"-2.0"	95.2	0.3
4-14325	C3-1	Center Pier	0.0"-1.0"	48.9	0.2
1-14236	C3-2		1.0"-2.0"	19.5	0.1
1-14237	C4-1	Center Pier	0.0"-1.0"	149	0.6
1-14238	C4-2		1.0"-2.0"	4.89	0.2
1-14239	C5-1	Center Pier	0.0"-1.0"	114	0.4
1-14240	C5-2		1.0"-2.0"	5.43	0.2
1-14241	C6-1	Center Pier	0.0"-1.0"	75.7	0.3
1-14242	C6-2		1.0"-2.0"	1,5.3	0.1
1-14243	E1-1	East Abutment	0.0"-1.0"	689	2.7
1-14244	E1-2		1.0"-2.0"	841	3.3
4-14245	E2-1	East Abutment	0.0"-1.0"	530	2.1
4-14246	E2-2		1.0"-2.0"	298	1.2
1-14247	E3-1	East Abutment	0.0"-1.0"	554	2.1
4-14248	E3-2		1.0"-2.0"	304	1.2
1-14249	E4-1	East Abutment	0.0"-1.0"	111	0.4
1-14250	E4-2		1.0"-2.0"	103	0.4
4-14251	E5-1	East Abutment	0.0"-1.0"	113	0.4
1-14252	E5-2		1.0"-2.0"	100	0.4
1-14251	<u>E6-1</u>	East Abutment	0.0"-1.0"	73.2	0.3
1-14252	E6-2		1.0"-2.0"	56	0.2
4-14251	W1-1	West Abutment	0.0"-1.0"	391	1.5
1-14252	W1-2		1.0"-2.0"	659	2.6
1-14251	W2-1	West Abutment	0.0"-1.0"	546	2.1
1-14252	W2-2		1.0"-2.0"	304	1.2
4-14253	W3-1	West Abutment	0.0"-1.0"	879	3.4
1-14254	W3-2		1.0"-2.0"	407	1.6
1-14255	W4-1	West Abutment	0.0"-1.0"	1440	5.6
1-14256	W4-2		1.0"-2.0"	672	2.6
4-14257	W5-1	West Abutment	0.0"-1.0"	130	0.5
1-14258	W5-2		1.0"-2.0"	142	0.5
4-14259	W6-1	West Abutment	0.0"-1.0"	71.4	0.3
1-14260	W6-2		1.0"-2.0"	57.4	0.2

and the second second



CONCRETE CORE WORKSHEET

PROJECT: Cedar Street Bridge over Rte. 9			-	CAS	T DATE:	Unknown
CLIENT:	Lin Assoc	ciates, Inc.	-	TES	T DATE:	8/10/05
PROJECT NO .:	22849	REQ. f'c:	Unknown	-	LAB#:	M-12554
CORE	(")	(")	(")	(")	SO./IN.	(ams)
SAMPLE #	ORIG. LENGTH	CUT LENGTH	CAPPED LENGTH	DIA.	AREA	WEIGHT(SSD)
C.P.W.B. #1	6.51	5.26	5.47	2.75	5.94	1290.5
C.P.W.B. #2	3.35	3.28	3.61	2.75	5.94	792.0
C.P.W.B. #3	5.59	5.32	5.60	2.75	5.94	1255.5
C.P.W.B. #4	5.12	4.58	4.79	2.75	5.94	1113.0
C.P.W.B. #5	5.71	5.20	5.47	2.75	5.94	1262.0
C.P.W.B. #6	4.06	3.69	4.00	2.75	5.94	847.5
CORE	(lbs/cu.ft.)	(lbs.)	RATIO	CORR.	BREAK	PSI
SAMPLE #	UNIT WEIGHT	LOAD	L/D	FACTOR	TYPE	STRENGTH
C.P.W.B. #1	157.4	36430	2.0	1.00	D	6140
C.P.W.B. #2	154.9	39550	1.3	0.94	D	6260
C.P.W.B. #3	151.4	27700	2.0	1.00	D	4670
C.P.W.B. #4	155.9	45460	1.7	0.98	D	7500
C.P.W.B. #5	155.7	50550	2.0	1.00	D	8520
C.P.W.B. #6	147.4	27590	1.5	0.96	D	4460

This report represents cores extracted from the westbound face of the center pier. Remarks: Cores 1-3 were extracted at approximately 3' up from the sidewalk.

Cores 4-6 were extracted at approximately 1' below the bottom of the beam seat. All cores appeared to contain 1-1/2" maximum aggregate.

Tested By: Greg MacKay

Reviewed By: Mark Liebert



CONCRETE CORE WORKSHEET

PROJECT: Cedar Street Bridge over Rte. 9 CAST DATE: Unknown CLIENT: Lin Associates, Inc. TEST DATE: 8/10/05 PROJECT NO.: 22849 REQ. f'c: Unknown LAB#: M-12554 CORE (") (") (") (") SO./IN. (qms) SAMPLE # ORIG. LENGTH CAPPED LENGTH CUT LENGTH DIA. AREA WEIGHT(SSD) E.B. #1 7.11 3.14 3.31 2.75 5.94 738.5 E.B. #2 7.20 5.34 5.54 2.75 5.94 1266.0 E.B. #3 6.91 5.62 6.06 3.25 8.29 1810.5 E.B. #4 5.21 4.84 5.05 3.25 8.29 1596.0 E.B. #5 4.79 4.24 4.44 3.25 8.29 1404.0 E.B. #6 3.45 3.40 3.76 3.25 8.29 1146.0 CORE (lbs/cu.ft.) (lbs.) RATIO CORR. BREAK PSI SAMPLE # UNIT WEIGHT LOAD L/D FACTOR TYPE STRENGTH E.B. #1 150.9 45870 1.2 0.92 D 7110 E.B. #2 152.1 33710 2.0 1.00 D 5680 E.B. #3 148.0 28150 1.9 1.00 D 3400 E.B. #4 151.5 44960 1.6 0.97 D 5260 E.B. #5 152.1 65590 1.4 0.95 D 7510 E.B. #6 154.9 74450 1.2 0.92 D 8260

This report represents cores extracted from the eastbound abutment. Remarks:

Cores 1-3 were extracted at approximately 3' up from the sidewalk.

Cores 4-6 were extracted at approximately 1' below the bottom of the beam seat.

All cores appeared to contain 1-1/2" maximum aggregate.



CONCRETE CORE WORKSHEET

PROJECT:	Cedar Street Brid	ge over Rte. 9		CAS	T DATE:	Unknown
CLIENT:	Lin Assoc	iates, Inc.		TES	T DATE:	8/10/05
PROJECT NO .:	22849	REQ. f'c:	Unknown		LAB#:	M-12554
						•
CORE	(")	(")	(")	(")	SQ./IN.	(gms)
SAMPLE #	ORIG. LENGTH	CUT LENGTH	CAPPED LENGTH	DIA.	AREA	WEIGHT(SSD)
W.B. #1	5.99	5.43	5.64	3.25	8.29	1674.0
W.B. #2	3.76	3.24	3.45	3.25	8.29	992.0
W.B. #3	6.97	6.71	6.93	3.25	8.29	2056.6
W.B. #4	6.35	5.71	5.89	3.25	8.29	1779.0
W.B. #5	5.82	5.13	5.33	3.25	8.29	1639.0
W.B. #6	7.23	6.14	6.37	3.25	8.29	1948.5
CORE	(lbs/cu.ft.)	(lbs.)	RATIO	CORR.	BREAK	PSI
SAMPLE #	UNIT WEIGHT	LOAD	L/D	FACTOR	TYPE	STRENGTH
W.B. #1	141.6	29820	1.7	0.98	D	3520
W.B. #2	140.7	28880	1.1	0.90	D	3130
W.B. #3	140.8	33740	2.1	1.00	D	4070
W.B. #4	143.1	33500	1.8	1.00	D	4040
W.B. #5 ⁻	146.8	34630	1.6	0.97	D	4050
W.B. #6	145.8	45240	2.0	1.00	D	5460

Remarks: This report represents cores extracted from the westbound abutment.

Cores 1-3 were extracted at approximately 3' up from the sidewalk.

Cores 4-6 were extracted at approximately 1' below the bottom of the beam seat. All cores appeared to contain 1-1/2" maximum aggregate.

Reviewed By: Mark Liebert



6066 Shingle Creek Parkway, #138 Minneapolis, MN 55430 (763) 533-2461 Fax (763) 533-2198

TO:

Briggs Engineering & Testing Attn: Mr. Paul Skorohod 100 Weymouth Street - Unit B1 Rockland, Massachusetts 02370-0369

DATE:

PROJECT NO:

August 23, 2005

0805-3435

PROJECT: CEDAR STREET BRIDGE OVER ROUTE 9 WELLESLEY, MASSACHUSETTS

PETROGRAPHIC ANALYSIS

INTRODUCTION:

Three concrete cores, labelled "#2-Westbound Abutment," "#2-Center Pier, Westbound Side," and "#6-Eastbound Abutment," were received on August 5, 2005, from Mr. Paul Skorohod of Briggs Engineering & Testing, located in Rockland, Massachusetts. Mr. Skorohod reported that the cores were removed from the referenced project and requested petrographic (microscopical) examination in accordance with American Society for Testing and Materials (ASTM) Designation ASTM C 856-02, "Standard Practice for Petrographic Examination of Hardened Concrete," to review concrete properties and to detect alkali-silica reactions (ASR, an expansive reaction between certain minerals and alkalies in hydrated portland cement), if any.

TEST RESULTS:

- 1. ASR has not occurred in the core. That is, features associated with ASR such as cracks originating at aggregate particles and alkali-silica gel (the expansive byproduct of ASR) are not detected. Other indication of processes of chemical interaction and related deterioration are also not detected.
- 2. The concrete is not air entrained (the incorporation of air in the form of minute bubbles), based on the scarcity of spherical voids having diameters less than 1 millimeter (the dimension of entrained air voids, by definition). An appropriate volume, size and distribution of microscopic air bubbles intentionally incorporated in concrete (entrained air voids) help protect concrete from freezing damage by providing areas for freezing and migrating water and relieving the resultant development of disruptive hydraulic and osmotic pressures.

Air content is estimated at less than 2 percent. An air content of $5\frac{1}{2}\pm1\frac{1}{2}$ percent is recommended for concrete having a $1\frac{1}{2}$ in. maximum size aggregate and subjected to severe exposure (American Concrete Institute (ACI) Committee Report ACI 201.2R, "Guide to Durable Concrete," and ACI 212.3R, "Chemical Admixtures for Concrete."). Severe exposure is defined as outdoor exposure in a cold climate where the concrete may be in almost continuous contact with moisture prior to freezing, or where deicing salts or other aggressive exposure exists.

August 23, 2005 Two

- - - -

PETROGRAPHIC ANALYSIS

TEST RESULTS:(continued)

Although the concrete is not air entrained, freeze\thaw damage is not observed. Concrete may self desiccate as the residual cement continues to hydrate over the life of the structure, resulting in less freezable water and decreased permeability. Thus, concrete of relatively low water-cement ratio may be durable without air entrainment, provided the concrete has reached a reasonable maturity prior to exposure.

- 3. Water-cement ratio is interpreted at 0.40 to 0.43 in Cores "#2-Westbound Abutment" and "#2-Center Pier, Westbound Side," and 0.35 to 0.38 in Core "#6-Eastbound Abutment," based on physical and mineralogical properties of the cement paste. Water-cement ratio of concrete in a freezing environment and exposed to deicing salts is recommended not to exceed 0.45 (ACI 201.2R, "Guide to Durable Concrete").
- 4. Residual cement grains are coarse, an indication of relatively old concrete. Finely ground portland cement has increased cementitious value in comparison to coarsely ground cement due to three factors: (1) a fine powder coats the sand grains and other inert material more completely than a coarse one, resulting in more intimate contact and a denser mix; (2) finely ground cement has a greater surface area available for hydration; (3) hydration of coarse cement grains is hindered by the accumulation of hydration products coating the unreacted cement, resulting in the cement acting essentially as an inert material. However, coarsely ground cement in concrete made with low water-cement ratio, and well compacted and cured may develop a long-term, steady increase of denseness, strength and durability due to slow continuous cement hydration.
- 5. Paste-aggregate bond is moderately tight in all cores. The mechanical (strength) and physical (such as porosity, permeability, absorption) and chemical resistance properties of concrete are to a significant degree affected by the nature of the adhesive bond between aggregate particles and the hardened cement paste. A tight adhesive bond between cement paste and aggregates increases abrasion resistance and resistance to moisture penetration, and results in enhanced shrinkage restraint by the aggregate particles.
- 6. The cement paste is carbonated from the sawcut end nearest the exterior surface to maximum depths of 1-3/8 inch in Core "#2-Westbound Abutment," 3/8 inch in Core "#2-Center Pier, Westbound Side," and 7/16 inch in Core "#6-Eastbound Abutment". The depth of carbonated cement paste, an indication of relative permeability, results from the penetration of environmental carbon dioxide which converts calcium-containing hydration products to carbonate compounds. Well consolidated and cured concrete of relatively low water-cement ratio will carbonate to a depth of approximately 1/4 in. after 10 years of exposure, and the depth of carbonation will increase to approximately 1/2 in. after 50 years.
- 7. Additional details of petrographic observations are presented in the attached data sheets.

August 23, 2005 Three

PETROGRAPHIC ANALYSIS

TEST PROCEDURES:

Petrographic examination was performed in accordance with ASTM C 856-02, "Standard Practice for Petrographic Examination of Hardened Concrete." A longitudinal slice was sawcut between the ends of each core, polished, and examined utilizing a stereomicroscope at magnifications up to 250X, as were freshly fractured surfaces. A thin section (a flat slice of concrete mechanically reduced until translucent and mounted between glasses as a microscope slide) was prepared from each core in the following manner: An approximately 2-in. by 2-3/4-in. rectangular block was cut from the exterior-most surface to a depth of approximately 2 in., polished, affixed to a large format (2-in. by 3-in.) microscope slide, reduced to a thickness of approximately 25 micrometers, and examined utilizing a polarized-light microscope at magnifications up to 1000X to review cement paste mineralogy and micromorphology.

<u>REMARKS</u>:

The samples will be retained for a period of ninety days from the date of this report. Unless other disposition is requested by that time, the samples will be discarded.

Should you have any questions concerning this report, or if we may be of further assistance, please feel free to contact us at (763) 533-2461.

Dean E. Kofoed

Licensed Professional Geologist President/Principal Petrographer Concrete Microscopy, Inc.

	PETROGRAPHIC	EXAMINATION OF HARDENED	CONCRETE, ASTM: C	856-02		
CLIENT: Briggs Engineering &		Testing	DATE:	August 23, 2005		
	Rockland, Massachus	eus	CMI PROJECT NO:	0805-3435		
PROJECT:	CEDAR STREET BRIDGE OVER ROUTE 9		PERFORMED BY:	Dean E. Kofoed		
	WELLESLEY, MASS	ACHUSETTS	DATA SHEET:	1 of 3		
SAMPLE ID	ENTIFICATION:	Core "#2-Westbound Abutment."				
<u>GENERAL S</u> Sample	AMPLE OBSERVATION Dimensions:	15: 2-3/4 in. diameter, 2-5/8 in. long.				
Surface	Condition: Top -	Sawcut surface.				
	Bottom -	Sawcut surface.				
Reinforc	ement:	None observed.				
Cracks a Distincti	nd ve Features:	A hairline crack oriented at an ang extends from the exterior to a depti passing around most aggregate part	gle of approximately 45 de h of 2 in. where it passes o ticles.	grees from the core end ut of the core, the crack		
AIR CONTENT & DISTRIBUTION:		Estimated at less than 2%; not air er having diameters less than 1 millim	ntrained, based on the virtu eter.	al lack of spherical voids		
INTERPRET	ED WATER-CEMENT R	<u>ATIO</u> :	0.40 to 0.43			
MICROCRAC	KING:	Infrequent.				
PASTE-AGGI	REGATE BOND:	Moderately tight: fractures induced through many aggregate particles.	I in the laboratory utilizin	g a small hammer pass		
PASTE MATI Color:	<u>RIX</u> :		Medium gray.			
Hardness	:		Moderately hard.			
Luster:			Subvitreous.			
Depth of	Carbonation:		1 to 1-3/8 in. from	the exterior end.		
Unhydrat	ed Portland Cement Part	icles, %, By Volume of Paste:	2 to 3%.			
Calcium l	Hydroxide, %, By Volume	of Paste:	4 to 5%.	4 to 5%.		
Residual	Fly Ash, %, By Volume of	f Paste:	None observed.			
GGBFS, Granulated Ground Blast-Furnace Slag, % by Volume			None observed.			
AGGREGATE Coarse:	:	Natural siliceous gravel includes gra	nite, felsite, diabase, gneiss	, schist, and others.		
Fine:	Fine: Natural sand mainly comprised of quartz and feldspar includes the rock represented in the coarse aggregate fraction.			cludes the rock types		
Gradation and Size:		Well graded to a maximum size of 1-1/2 inch.				
Shape and	d Distribution:	Rounded to subrounded coarse ag Uniform aggregate distribution.	gregate. Angular to subro	ounded fine aggregate.		
SECONDARY	DEPOSITS:	None observed.				

Concrete Microscopy, Inc. • 6066 Shingle Creek Parkway, #138 • Minneapolis, Minnesota 55430 • 763-533-2461

	PETROGRAPHIC	EXAMINATION OF HARDENED	CONCRETE, ASTM: C	856-02	
CLIENT:	Briggs Engineering &	Testing	DATE:	August 23, 2005	
	Rockland, Massachuse		CMI PROJECT NO:	0805-3435	
PROJECT:	CEDAR STREET BR WELLESLEY, MASS	RIDGE OVER ROUTE 9 ACHUSETTS	PERFORMED BY:	Dean E. Kofoed 2 of 3	
	· · · · · · · · · · · · · · · · · · ·		DATA SHEET:		
SAMPLE IDE	NTIFICATION:	Core "#2-Center Pier, Westbound	Side."		
GENERAL SA	MPLE OBSERVATION	1 <u>8</u> ;			
Sample D	imensions:	2-3/4 in diameter, $2-7/8$ in long.			
Surface C	Condition: Fop -	Sawcut surface.			
Ĩ	Bottom -	Sawcut surface.			
Reinforce	ment:	None observed.			
Cracks an Distinctive	d e Features:	None observed.			
AIR CONTEN	T & DISTRIBUTION:	Estimated at less than 2%; not air en having diameters less than 1 millim	ntrained, based on the virtueter.	al lack of spherical voids	
INTERPRETE	D WATER-CEMENT R	ATIO:	0.40 to 0.43		
MICROCRACI	KING:	Infrequent.			
ASTE-AGGREGATE BOND:		Moderately tight: fractures induced through many aggregate particles.	I in the laboratory utilizing	ig a small hammer pass	
Color:	<u>IX</u> :		Medium gray.		
Hardness:			Moderately hard.		
Luster:			Subvitreous.		
Depth of C	Carbonation:		1/8 to 3/8 in. from	the exterior end.	
Unhydrate	d Portland Cement Part	icles, %, By Volume of Paste:	2 to 3%.		
Calcium H	ydroxide, %, By Volume	of Paste:	7 to 8%.		
Residual F	ly Ash, %, By Volume of	f Paste:	None observed.		
GGBFS, Granulated Ground Blast-		-Furnace Slag, % by Volume of Paste:	None observed.		
GGREGATE:		Natural alignous gravel includes and	nin falsin distance	· · · · · · · · · · · · · · · · · · ·	
Coarse;		watural shieeous graver menudes gra	nne, teisne, diabase, gneiss	s, senist, and others.	
Fine:		Natural sand mainly comprised o represented in the coarse aggregate	f quartz and feldspar in fraction.	cludes the rock types	
Gradation	and Size:	Well graded to a maximum size of 1	-1/2 inch.		
Shape and	Distribution:	Rounded to subrounded coarse ag Uniform aggregate distribution.	gregate. Angular to subro	ounded fine aggregate.	

	PETROGRAPHIC	EXAMINATION OF HARDENED	CONCRETE, ASTM: C	856-02			
CLIENT: Briggs Engineering &		Festing	DATE:	August 23, 2005			
	Rockland, Massachuse	tts .	CMI PROJECT NO:	0805-3435			
PROJECT: CEDAR STREET BR		IDGE OVER ROUTE 9	PERFORMED BY:	Dean E. Kofoed			
			DATA SHEET:	3 of 3			
SAMPLE ID	ENTIFICATION:	Core "#6-Eastbound Abutment."					
<u>GENERAL</u> Sample	SAMPLE OBSERVATION Dimensions:	<u>S:</u> 3-1/4 in. diameter, 3-3/16 in. long.					
Surface	Condition: Top -	Sawcut surface.					
	Bottom -	Sawcut surface.					
Reinford	ement:	None observed.					
Cracks a Distinct	and ive Features:	None observed.					
AIR CONTE	NT & DISTRIBUTION:	Estimated at less than 2%; not air en having diameters less than 1 millini	ntrained, based on the virtu eter.	al lack of spherical voids			
INTERPRET	ED WATER-CEMENT R	<u>\T10</u> :	0.35 to 0.38				
MICROCRA	CKING:	Infrequent.					
PASTE-AGG	REGATE BOND:	Moderately tight; fractures induced in the laboratory utilizing a small hammer pass through many aggregate particles.					
PASTE MATRIX: Color:			Medium gray.				
Hardnes	s:		Hard.				
Luster:			Subvitreous to vit	reous.			
Depth of Carbonation:			1/8 to 7/16 in. fro	m the exterior end.			
Unhydra	ted Portland Cement Part	icles, %, By Volume of Paste:	4 to 5%.	4 to 5%.			
Calcium	Hydroxide, %, By Volume	of Paste:	10 to 12%.				
Residual	Fly Ash, %, By Volume of	Paste:	None observed.				
GGBFS,	Granulated Ground Blast	Furnace Slag, % by Volume of Paste:	None observed.				
AGGREGAT	<u>E</u> :	Natural siliceous gravel includes gra	nnite, telsite, diabase, gneis	s. schist, and others.			
Fine:		Natural sand mainly comprised of quartz and feldspar includes the rock types represented in the coarse aggregate fraction.					
Gradatio	Gradation and Size: Well graded to a maximum size of		1-1/2 inch.				
Shape and Distribution:		Rounded to subrounded coarse ag Uniform aggregate distribution.	irse aggregate. Angular to subrounded fine aggregate.				
SECONDARY	Y DEPOSITS:	None observed.					







Mr. John Blundo, P.E. Chief Engineer, Massachusetts Highway Department, Ten Park Plaza, Boston, MA 02116-3973

SUBJECT: Wellesley - Cedar Street over Route 9 (Worcester Str.) Bridge No. W-13-015, Bin 2MH Footprint 4 Bridge R&R Program Contract No. 33112 Assignment No. 2 Project File No. 6040007 MHD Project Manager - Mr. Michael K. Bloukos Bridge Type Study

ATTN:

Mr. Alexander K. Bardow, P.E. Bridge Engineer

Dear Mr. Bardow:

Lin Associates has developed four (4) alternatives for the superstructure replacement of Bridge No. W-13-015. The four alternates differ primarily in the construction staging and final superstructure width. All four alternates utilize the same size steel girders and all will allow the same vertical clearance for Route 9 traffic. The roadway profile of Cedar Street will be raised approximately 2' to allow for the requested vertical clearance of 16'-5". Therefore, all four alternates will need modifications to the abutment backwalls and the wingwalls.

Both Cedar Street and Route 9 are major commuter routes. The Cedar Street bridge is also used by children walking to a nearby grammar school. Safety and maintenance of vehicular traffic and safety of pedestrian traffic during construction are major concerns. The four alternatives, therefore, must be compared not only for initial construction cost but also for safety and traffic maintenance during construction. Attached are sketches of bridge cross sections during all stages of construction for each alternative.

The alternatives are as follows:

Page 2 of 6

<u>Alternative 1</u>

This alternative was developed to achieve the bridge width of 54'-4" as described in the MHD Scope of Work. The existing bridge out-to-out width is 53'-3". The width of this alternate bridge is 54'-8".

Alternative 1 will be constructed in four stages. The grammar school walkers (pedestrians) currently cross over Route 9 on the sidewalk on the eastern side of Cedar Street. The stage construction will necessitate relocating the pedestrians to the other side of Cedar Street for each stage - a total of four moves.

Anticipated Time of Actual Bridge Construction

Activity (Sketches)

Time (@ Site)

Stage 1 (Figure 1) Stage 2 (Figures 1-2) Stage 3 (Figure 2) Stage 4 (Figure 3) 9 weeks 36 weeks 48 weeks 17 weeks

Total Alternative 1 = 110 weeks

SAY 2 YEARS, 1 MONTH

Advantages

Lowest Construction Cost - \$1,537,000

Shortest Bridge Construction Duration - 110 Weeks (2 Years, 1 Month)

Disadvantages

> Narrow (11'- 0") lanes with no shoulders in Stages 2 & 3.

> Temporary cantilevered timber sidewalks.

- > Four (4) pedestrian moves.
- \succ Four (4) construction stages.

Concerns

- 1'-6" clear between existing and proposed construction not much room for excavation support - a potential constructability problem.
- Vibration due to vehicular traffic may be accentuated on the cantilevered wood sidewalk - a potential perception problem for pedestrians.
- Cantilevering sidewalk off existing bridge can be problematic if concrete deck is deteriorated beyond quick repair.

Page 3 of 6

ADDENDUM NO. 1 June 3, 2010

<u>Alternative 2</u>

This alternative was developed to achieve the bridge width of 54'-4" as described in the MHD Scope of Work. Alternative No. 2 has a bridge width of 54'-4".

Alternative 2 will be constructed in six stages. During stage 2, Cedar Street vehicular traffic will be split - with the Contractor working in the middle. In stage 3, the vehicular traffic and pedestrian traffic will be split with the Contractor working in the middle. Rather than building the center pier in three separate stages, it was felt that construction would proceed more smoothly to support the existing superstructure on temporary shoring towers and construct the center pier in one stage.

Anticipated Time of Actual Bridge Construction

Activity (Sketches)

Preliminary Work (No Figure) Stage 1 (Figure 4) Stage 2 (Figure 5) Stage 3 (Figures 5 & 6) Stage 4 (Figure 6) Stage 5 (Figures 6 and 7)

Time (@ Site)

30 weeks 24 weeks 17 weeks 21 weeks 19 weeks 28 weeks

Total Alternative 2 = 139 weeks

SAY 2 YEARS, 9 MONTHS

Advantages

Achieves absolute minimum bridge width (54'-4").

> Two (2) pedestrian moves.

Disadvantages

- \triangleright Cost \$1,572,000 (2% costlier than Alternate 1).
- Construction Duration 139 weeks (2 Years, 9 Months) 28% longer than Alternative 1.

Concerns

- Necessary Contractor and Commuter interface when Contractor is working between opposing traffic.
- Shoring Towers in Route 9 travel way are necessary for pier construction.
- \succ Pedestrians are isolated in stages 3 and 4.

Page 4 of 6

Alternative 3

This alternative was developed to achieve a lesser number of construction stages than used for Alternatives 1 or 2. It will be constructed in three (3) stages. This alternative requires an extension of the abutments to the west and new west wingwalls. The bridge width is $59^{\circ}-71/2^{\circ}$ for this alternative.

Anticipated Time of Actual Bridge Construction

Activity (Sketches)

Time (@ Site)

Stage 1 (Figure 8) Stage 2 (Figure 9) Stage 3 (Figures 9 & 10) 63 weeks 48 weeks 17 weeks

Total Alternative 3 = 128 weeks

SAY 2 YEARS, 6 MONTHS

<u>Advantages</u>

> Two pedestrian moves.

> Three construction stages.

Disadvantages

- > Cost \$1,692,000 (10% costlier than Alternative 1).
- Construction Duration 128 weeks (2 Years, 6 Months) 17% longer than Alternative 1.
- > Narrow (11'-0") lanes with no shoulder in Stage 2.
- > Temporary cantilevered timber sidewalks.

Concerns

- 1'-6" clear between existing and proposed construction not much room for excavation support - a potential constructability problem.
- Vibration due to vehicular traffic may be accentuated on the cantilevered wood sidewalk - a potential perception problem for pedestrians.
- Cantilevering sidewalk off existing bridge can be problematic if concrete deck is deteriorated beyond quick repair.

Page 5 of 6

Alternative 4

This alternative was developed to achieve the minimum number (2) of construction stages and 12' minimum width travel lanes at all times all without cantilevering sidewalks. This alternative requires an extension of the abutments to the west and new west wingwalls. The bridge width is $67'-3 \frac{1}{2}''$.

Anticipated Time of Actual Bridge Construction

Activity (Sketches)

Time (@ Site)

Stage 1 (Figure 11) Stage 2 (Figure 12) 84 weeks 50 weeks

Total Alternative 4 = 134 weeks

SAY 2 YEARS, 7 MONTHS

Advantages

- \succ Two pedestrian moves.
- > Two construction stages.
- > 12'-0" wide travel lanes with no shoulders during all phases of construction.
- > Four (4) travel lanes on new bridge vs. three (3) for other alternatives.
- Lowest cost/lane (\$450,000 vs. \$500,000 and up for other alternatives).

Disadvantages

- Total Cost \$1,805,000 (17% costlier than Alternative 1).
- Construction Duration 134 weeks (2 Years, 7 Months) 23% longer than Alternative 1.

Concerns

1'-6" clear between existing and proposed construction - not much room for excavation support - a potential constructability problem. Yeamans to Bardow

January 13, 2006

Page 6 of 6

Recommendations

While Alternative 1 has the apparent lowest construction cost and shortest construction duration, Lin has reservations with the narrow temporary lane widths – especially since the adjacent lanes will carry opposing traffic – and with the temporary wooden sidewalks. This alternative is best used as a baseline against which all other alternatives are measured.

Discounting Alternative 1, the other alternatives will have about the same construction duration. Although, Alternative 4 has the highest construction cost Lin believes that the benefits of the added lane, the fewest number of traffic moves, and the fact that it is the safest alternate for both motorists and pedestrians during construction out weighs the initial cost. Therefore, Lin recommends that Alternative 4 be adopted for this project.

If you have any questions, please contact myself or Ed Chisholm.

Very truly yours,

LIN ASSOCIATES, INC.

Brue Memal

Bruce N. Yeamans, P.E. Project Manager

Cc: M. Bloukos, MHD Project manager w/Encl.





ADDENDUM NO. 1 June 3, 2010

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BR. NO. W-13-15 1. INSTALL TEMPORARY BARRIERS TO CREATE TEMPORARY TRAVEL LANES 2. DEMOLISH EXISTING EAST SIDEWALK, BUILD TEMPORARY SIDEWALK OVER U.S. ROUTE 9 WELLESLEY CEDAR STREET \exists 1 STAGE 1 CONST./DEMO. SEQUENCE PEDESTRIANS (MOVE 2) —TEMP. 5'-0" SIDEWALK (WOOD PLANK OR PRECAST CONC.) -REMOVE SIDEWALK & PARAPET WALL AND PREPARED SURFACE KNOCKOUT CONC. AS NECESSARY - 2'-4 1/2" 19 1/2" ØIT EAST NHHHH 6,-0" TEMP. TWO-WAY TRAVEL LANE TRAVEL LANE 11'-0" CONTRACTORS VEHICLE & EQUIP. RECOMMENDED *PEDESTRIANS = GRAMMAR SCHOOL WALKERS *PEDESTRIANS--CROWN LINE & PGL 12'-0" 22'-0" 3-12' TRAVEL LANES W/1'-6" SHOULDERS 19'-0" 10 SPACES @ 4'-10 1/8" = 48'-6' TRAVEL LANE STAGE 1 DEMOLITION STAGE 2 DEMOLITION EXISTING BRIDGE 11.-0" (LOOKING NORTH) 1'-6" .0-<u>-</u>0-E CONST. 12'-9" TRAVEL LANE TEMP. TWO-WAY TRAVEL LANE 53'-3" CONST.-+ Ĩ. TEMP SINGLE FACE CONC. BARRIER (BOLT-DOWN TYPE), TYP.--25'-6" TO BE DEMOLISHED 20'-0" LIN ASSOCIATES, INC. 12'-9" TRAVEL LANE 26'-1 1/2" PEDESTRIANS (MOVE 1) -2'-4 1/2" -19 1/2 WEST Œ

FIGURE

Page 9 of 20

SCALE: 1/8" = 1'-0"

ADDENDUM NO. 1 June 3, 2010

1. INSTALL TEMPORARY BARRIERS NEXT TO EDGE OF TEMPORARY SIDEWALK SHIFT TWO-WAY TRAFFIC TO EAST SIDE. SHIFT TWO-WAY TRAFFIC TO THE WEST SIDE OF BRIDGE.
 REMOVE EAST SIDE TEMPORARY SIDEWALK AND DEMOLISH THE REST BRIDGE SUPERSTRUCTURE. DEMOLISH ENTIRE SUPERSTRUCTURE OF WEST SIDE.
 CONSTRUCT WEST SIDE PORTION OF PROPOSED BRIDGE.
 BUILD TEMPORARY SIDEWALK AND INSTALL TEMPORARY BARRIERS AS SHOWN. STAGE 3 \sim STAGE 1225 TEMP. SIDEWALK-6'-0" T TO BE DEMOLISHED TEMP. TWO-WAY TRAVEL LANE TRAVEL LANE UNDER CONSTRUCTION 11 -0" 22'-0" 2 CONSTRUCTION 20'-0" DEMOLITION TRAVEL LANE -1'-6" CLEAR ٥ ا -C CONST. CONST. C CONST. -2'-0" ы 500 M 2'-0" STAGE SPACES @ 5'-6" = 22'-0" TEMP. TWO-WAY TRAVEL LANE TEMP. TWO-WAY TRAVEL LANE STAGE TRAVEL LANE TRAVEL LANE 11 - 0, 11 -0 UNDER CONSTRUCTION DIAPHRAGM @ S.W. AS NECESSARY 25'-6" 22'-0" 22'-0" PEDESTRIANS (MOVE 3) TRAVEL LANE TRAVEL LANE TEMP. 5'-0" WOODEN SIDEWALK 11'-0" -7,-0" 4

5'-0"

2'-9"

5'-0"

3. CONSTRUCT EAST SIDE PORTION OF PROPOSED BRIDGE AS SHOWN. BR. NO. W-13-15 = 22'-0" 5'-6" 0 SPACES STAGE 3 CONSTRUCTION 5'-6"

BR. NO. W-13-15

WELLESLEY

U.S. ROUTE 9

CEDAR STREET

OVER

ALT

I

SEQUENCE

Page 10 of 20

SCALE: 1/8".= 1'-0"

CONST./DEMO.

RECOMMENDED

LIN ASSOCIATES, INC.

FIGURE

ADDENDUM NO. 1 June 3, 2010





ADDENDUM NO. 1 June 3, 2010






· · . ·



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Page 17 of 20



 INSTALL TEMPORARY BARRIERS TO CREATE TEMPORARY TRAVEL LANES
DEMOLISH ENTIRE SUPERSTRUCTURE OF WEST SIDE.
DEMOLISH ENTIRE SUPERSTRUCTURES SIDE PORTION OF PROPOSED BRIDGE.
BULD TEMPORARY SIDEWALK AND INSTALL TEMPORARY BARRIERS AS SHOWN. TEMPORARY BARRIERS TO CREATE TEMPORARY BR. NO. W-13-15 FIGURE 11 OVER U.S. ROUTE 9 CEDAR STREET WELLESLEY STAGE 1 *PEDESTRIANS = GRAMMAR SCHOOL WALKERS 4 ALT 2'-4 1/2" 19 1/2" -19 1/2" -TEMP. TIMBER WHEEL GUARD -19 1/2" -Temp. Timber Wheel Guard l Page 19 of 20 . SEQUENCE 1'-0" EAST 16, -0" •0 | 6'-0" $4'-10 \ 1/4'' = 14'-6$ 3 SPACES @ TEMP. TWO-WAY TRAVEL LANE *PEDESTRIANS-TRAVEL LANE TEMP. TWO-WAY TRAVEL LANE TRAVEL LANE -CROWN LINE & PGL 12'-0" 12'-0" /DEMO. 3-12' TRAVEL LANES W/1'-6" SHOULDERS SCALE: 1/8" = 2 THROUGH LANES, 1 TURNING LANE 20'-0" & EXISTING 19'-0" STAGE 1 CONSTRUCTION 24'-0" DEMOLITION 24'-0" EXISTING BRIDGE TRAVEL LANE C EXISTING (LOOKING NORTH) TRAVEL LANE $4'-10\ 1/8'' = 19'-4\frac{1}{2}$ E EXISTING 12'-0" CONST., 4 SPACES @ - 1'-6" CLEAR 12'-0" 53'-3" 2'-6½" STAGE 1 772 RECOMMENDED 20'-0" TEMP SINGLE FACE CONC. BARRIER (BOLT DOWN TYPE), TYP. = 14'-61 TO BE DEMOLISHED e 32'-B" UNDER CONSTRUCTION SPACES @ 5'-6" = 27'-6" 20'-1 1/2" 3 SPACES 4'-10 1/4" 2'-4 1/2" [5'-0" WEST -TEMP. TIMBER WHEEL GUARD LIN ASSOCIATES, INC. ŝ 2'-7/5

ADDENDUM NO. 1 June 3, 2010



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CONTRACT NO. 65281 MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

AND

This Contract made this _______ day of _______ day of _______, 2010, at Boston, Massachusetts and governed by the laws of the Commonwealth of Massachusetts, between the Massachusetts Department of Transportation, a body politic and corporate, established by St. 2009, c. 25 ("MassDOT" or "Owner"), having a principal place of business at 10 Park Plaza, Boston, MA (MassDOT and the Secretary of DOT may hereinafter sometimes be collectively referred to as "MassDOT"),

AND

J.F. White Contracting Co. located at 10 Burr Street, Framingham, Massachusetts, 01701, and acting through its proper officials, hereinafter referred to as the DB Entity, covers the conduct of work on the Cedar Street Bridge Over Route 9, Bridge No. W-13-015 BIN 2MH, in the Town of Wellesley, Massachusetts, Design-Build Project. Both MassDOT and the DB Entity, when used together, are hereinafter referred to as the "Parties."

THIS DB CONTRACT IS MADE WITH REFERENCE TO THE FOLLOWING FACTS:

- On November 1, 2009, the Massachusetts Highway Department was abolished, and all assets, liabilities, and obligations became those of the Massachusetts Department of Transportation. Anywhere in this contract the terms Commission, Commonwealth, Department of Public Works, Department, Massachusetts Highway Department, MassHighway, Party of the First Part, or any other term intending to mean the former Massachusetts Highway Department is herein used, it shall be interpreted to mean the Massachusetts Department of Transportation or applicable employee of MassDOT unless the context clearly requires otherwise.
- Pursuant to St. 2009, c. 25 "An Act Modernizing the Transportation Systems of the Commonwealth", as amended, the Massachusetts Department of Transportation has by operation of law inherited all rights and obligations pursuant to any contract, and therefore parties to this contract hereby acknowledge and agree that its terms shall be liberally construed and interpreted to maintain the rights and obligations of the Massachusetts Department of Transportation. Furthermore, the parties hereby acknowledge and agree that the transfer of all rights and obligations from the Massachusetts Highway Department to the Massachusetts Department of Transportation shall not have the effect of altering or eliminating any provision of this contract in a manner that inures to the detriment of the Massachusetts Department of Transportation.
- The "Project" provides for the demolition and complete design and reconstruction of the Cedar Street Bridge Over Route 9, Bridge No. W-13-015 BIN 2MH, and appropriate roadway transitions to and from the structure, in the Town of Wellesley, Massachusetts, (as more specifically described in Sections 2.0 and 4.0 herein and in the definitions attached to this DB Contract as Exhibit A.2, the "Project");
- MassDOT determined to utilize a design-build ("DB") procurement and construction method for construction of the Project pursuant to M.G. L. c. 149A, s. 14 et seq. and Chapter 233 of the Acts of 2008;
- Upon completion of the two-part process for selecting a DB team, the MassDOT Selection Committee recommended that the contract be awarded to J.F. White Contracting Co., based on MassDOT's determination that the DB Entity's Price and Technical Proposals in fact best met the selection criteria as contained in the RFP and that the DB Entity's Proposals provided the best value to MassDOT;
- The Parties intend for this DB Contract to be lump sum, obligating the DB Entity to perform all work necessary to obtain completion of the Project by the deadline specified herein for the DB Price, subject only to certain specified limited exceptions set forth herein. In order to allow MassDOT to budget for the Project and to

reduce the risk of cost overruns, this DB Contract includes restrictions affecting the DB Entity's ability to make claims for an increase to the DB Price or an extension of the Contract Time;

- MassDOT has determined and the Parties agree that, if the DB Entity fails to complete the Project within the time limitations set forth in the Contract Documents (as they may be extended in accordance with the Contract Documents), MassDOT will suffer substantial losses and damages. Therefore, the Contract Documents provide that the DB Entity shall pay substantial Liquidated Damages to MassDOT in the event such completion is delayed; and
- The Conceptual Design for the Project and the RFP Documents form the basis for the Design to be furnished by the DB Entity. The Parties intend for the DB Entity to assume full responsibility and liability for the Design, including correction of any errors, omissions, inconsistencies or other defects in the Design and correction of any errors, omissions, inconsistencies or other defects in the RFP Documents, and for the DB Entity to indemnify, defend and hold harmless MassDOT with respect to any defects in the Project which may relate to errors, omissions, inconsistencies or other defects in the Conceptual Design.

NOW, THEREFORE, in consideration of the sums to be paid to the DB Entity by MassDOT, the foregoing premises and the covenants and contracts set forth herein, the Parties hereby agree as follows:

SECTION 1.0

CONTRACT COMPONENTS; INTERPRETATION OF CONTRACT DOCUMENTS; STANDARDS

1.1 REFERENCE DOCUMENTS AND STANDARDS

1.1.1 Reference Documents

Project "Reference Documents" to be used for Project development were provided with the "Request For Proposals" (RFP) titled, "Cedar Street Over Route 9, Wellesley, Massachusetts, Project No. 604007 Design-Build, Procurement," dated May 7, 2010, as amended, including, but not limited, to the following:

- Prevailing Wages
- Sketch Plans
- Modified Membrane Waterproofing Specification Section 965
- Hazardous Materials Specifications
- Bridge Rating Report (W-13-015)
- Bridge Inspection Reports (W-13-015)
- Price Adjustment for Structural Steel and Reinforcing Steel
- Division of Fisheries and Wildlife Letter Regarding Wellesley (Bridge W-13-015) dated November 27, 2006
- Massachusetts Historical Commission Clearance dated 2-12-2010
- Geotechnical Report
- Memorandum regarding Design Exceptions dated 4-8-2010
- October 2006 Functional Design Report with 2-19-2010 Update
- Survey CADD File
- RFQ Addenda No. 1, RFP Addenda Nos. 1-3

One CD with reference documents was provided to the DB Entity as part of the RFP package. The plans are provided for reference use only. The DB Entity acknowledges by receipt of such plans that they explicitly understand that while these plans have been advanced to the level shown by MassDOT, the DB Entity will be required to provide a final, complete project design that is stamped and sealed by their own designer of record, for review and approval by MassDOT and possible third parties. Revisions or additions to information in the reference plans being provided may be necessary based on comments received during the on-going MassDOT plan review and environmental permitting. MassDOT makes no representations as to the accuracy or completeness of information contained in any documents not obtained from MassDOT, and will not be responsible in any way for the DB Entity's reliance on or utilization of the contents of such documents.

1.1.2 AASHTO and MassDOT Standards

AASHTO and MassDOT standards are applicable to the final design and construction documents to be developed by the DB Entity, including, but not limited to the list below. MassDOT documents are available on the MassDOT web page. (Please note: the list below is not intended to represent a comprehensive list of all required documents. Additional standards may apply). All work performed under this Contract and Contract Amendments shall be in conformance with AASHTO

and MassDOT standards, except to the extent that the Contract specifically allows exceptions therefrom.

- 1. 2002 AASHTO Standard Specifications for Highway Bridges, 17th edition and Interims
- 2. 2005 MHD Bridge Manual, Revised August 2007 with the latest updates (available on-line)
- 3. 2006 MassHighway Project Development and Design Guide
- 4. 1988 MHD Standard Specifications for Highways and Bridges (English Edition)
- 5. February 25, 2010 English Supplemental Specifications to the 1988 MHD Standard Specifications for Highways and Bridges, latest edition
- 6. MHD Standard Special Provisions (English), latest edition
- 7. November 12, 2009 Massachusetts Highway Department Interoffice Memorandum from E. Naras through S. Eslinger, to A. Bardow Re: Standard Bridge Deck Pavements
- 8. 2006 MassHighway Right-of-Way Manual
- 9. English Bid Item Nomenclature List
- 10. 1977 Massachusetts Department of Public Works Construction and Traffic Standard Details and the 2003 Metric/English Supplemental Drawings
- 2003 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the Standard Municipal Traffic Code, with the October 2006 Massachusetts Amendments to the 2003 MUTCD and the Standard Municipal Traffic Code
- 12. 1968 Standard Drawings for Traffic Signals and Highway Lighting
- 13. 1990 Standard Drawings for Signs and Supports
- 14. July 2005 MassHighway Standard Details and Drawings for the Development of Traffic Management Plans
- 15. American Standard for Nursery Stock (ANSI Z-60.1-1996) or latest edition
- 16. All current MassHighway Engineering Directives

1.1.3 Federal Highway Administration Publication/Standard

The following FHWA publication is applicable to the final design and construction documents to be developed by the DB Entity:

 FHWA Publication No. FHWA-IF-09-010 – "Connection Details for Prefabricated Bridge Elements and Systems" dated 3/30/2009

1.1.4 **Project Requirements**

The DB Entity will conduct work in accordance with the "Project Requirements" referred to as the "Request For Proposals" (RFP) titled, "Cedar Street Over Route 9, Wellesley, Massachusetts, Project No. 604007 Design Build, Procurement," dated May 7, 2010, as amended; the DB Entity's Technical Proposal titled, "Technical Proposal Cedar Street over Route 9 – Wellesley, MA. Project #604007," dated July, 21, 2010; and the DB Entity's Price Proposal titled, "Price Proposal Cedar Street over Route 9 – Wellesley, MA. Project #604007;" dated July 2010, all of which are hereby incorporated by reference as though set forth in full herein. The DB Entity agrees that the services will be performed within the period required under the Contract. MassDOT's Contracting Officer may extend this Contract incrementally or in one step, by mutual agreement of MassDOT and the DB Entity, by written notification provided to the DB Entity by MassDOT's Contracting Officer. This right to extend the Contract in no way minimizes MassDOT's right to the timely receipt of the Project deliverables as specified in the Proposal.

1.2 CONTRACT COMPONENTS; INTERPRETATION OF CONTRACT DOCUMENTS

1.2.1 Contract Documents

The term "Contract Documents" shall mean this Contract, including all appendices and other documents listed in Section 1.2.2, including all amendments to the foregoing and all Change Orders issued. Capitalized terms appearing in the Contract Documents and not otherwise defined shall have the meanings ascribed to them in Exhibit A.2 of the Contract.

1.2.2 Order of Precedence

Each of the Contract Documents is an essential part of this Contract, and a requirement occurring in one is as binding as though occurring in all. The Contract Documents are intended to be complementary and to describe and provide for a complete set of documents necessary to complete the Project in accordance with the requirements of M.G.L. c 149A, s. 14 et seq. In the event of any conflict among the Contract Documents, the order of precedence shall be as set forth below.

1.2.2.1 For design standards and requirements:

- 1. Change orders and Contract amendments;
- 2. Contract;
- 3. Request For Proposal (RFP) Addenda;
- 4. RFP dated May 7, 2010;
- 5. Proposal documents, to the extent that they are consistent with the requirements of the other Contract Documents;
- 6. MassHighway Engineering Directives;
- 7. MassHighway Standard Special Provisions (English/Metric Units), dated August 8, 2008;
- 8. MassHighway English Supplemental Specifications, latest edition;
- 9. 1988 MHD Standard Specifications for Highways and Bridges English Edition;
- 10. 2006 MassHighway Project Development and Design Guide;
- 11. 2005 MassHighway Bridge Manual, Revised August 2007 with the latest updates;
- 12. November 12, 2009 Massachusetts Highway Department Interoffice Memorandum from E. Naras through S. Eslinger, to A. Bardow Re: Standard Bridge Deck Pavements
- 13. 2002 AASHTO Standard Specifications for Highway and Bridges, 17th Edition and interims;
- 14. 1977 Massachusetts Department of Public Works Construction and Traffic Standard Details and the 2003 Metric/English Supplemental Drawings;
- 15. MassHighway Standard Details and Drawings for the Development of Traffic Management Plans, latest edition;

- 16. MassHighway Right-of-Way Manual;
- 17. October 2006 Massachusetts Amendments to the 2003 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the Standard Municipal Traffic Code;
- 18. 2003 MUTCD, and the Standard Municipal Traffic Code;
- 19. 1968 Standard Drawings for Traffic Signals and Highway Lighting;
- 20. 1990 Standard Drawings for Signs and Supports; and
- 21. The American Standard for Nursery Stock (ANSI Z-60.1-1996) or latest edition.

1.2.2.2 For construction-related standards, specifications and requirements:

- 1. Change Orders and Contract amendments;
- 2. Contract;
- Design Documents, with specifications contained therein having precedence over plans and excluding any deviations from the requirements of the other Contract Documents contained therein which have not been approved in writing by MassDOT;
- 4. Request For Proposal (RFP) Addenda;
- 5. RFP dated May 7, 2010;
- Proposal documents, to the extent that they are consistent with the requirements of the other Contract Documents;
- 7. MassHighway Engineering Directives;
- 8. MassHighway Standard Special Provisions (English/Metric Units), dated August 8, 2008;
- 9. MassHighway English Supplemental Specifications, latest edition;
- 10. 1988 MHD Standard Specifications for Highways and Bridges English Edition;
- 11. 2006 MassHighway Project Development and Design Guide;
- 12. 2005 MassHighway Bridge Manual, Revised August 2007 with the latest updates;
- 13. November 12, 2009 Massachusetts Highway Department Interoffice Memorandum from E. Naras through S. Eslinger, to A. Bardow Re: Standard Bridge Deck Pavements;
- 14. 2002 AASHTO Standard Specifications for Highway and Bridges, 17th Edition and interims;
- 15. 1977 Massachusetts Department of Public Works Construction and Traffic Standard Details and the 2003 Metric/English Supplemental Drawings;
- 16. MassHighway Standard Details and Drawings for the Development of Traffic Management Plans;
- 17. MassHighway Right-of-Way Manual;
- 18. October 2006 Massachusetts Amendments to the 2003 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the Standard Municipal Traffic Code;
- 19. 2003 MUTCD, and the Standard Municipal Traffic Code;
- 20. 1968 Standard Drawings for Traffic Signals and Highway Lighting;
- 21. 1990 Standard Drawings for Signs and Supports; and
- 22. The American Standard for Nursery Stock (ANSI Z-60.1-1996) or latest edition.

1.2.2.3 For all other matters:

- 1. Change Orders and Contract amendments;
- 2. Contract;
- 3. Request For Proposal (RFP) Addenda;
- 4. RFP dated May 7, 2010;
- 5. Proposal documents, to the extent that they are consistent with the requirements of the other Contract Documents;
- 6. MassHighway Engineering Directives;
- 7. MassHighway Standard Special Provisions (English/Metric Units), dated August 8, 2008;
- 8. MassHighway English Supplemental Specifications, latest edition;
- 9. 1988 MHD Standard Specifications for Highways and Bridges English Edition;
- 10. 2006 MassHighway Project Development and Design Guide;
- 11. 2005 MassHighway Bridge Manual, Revised August 2007 with the latest updates;
- 12. November 12, 2009 Massachusetts Highway Department Interoffice Memorandum from E. Naras through S. Eslinger, to A. Bardow Re: Standard Bridge Deck Pavements
- 13. 2002 AASHTO Standard Specifications for Highway and Bridges, 17th Edition and interims;
- 14. 1977 Massachusetts Department of Public Works Construction and Traffic Standard Details and the 2003 Metric/English Supplemental Drawings;
- 15. MassHighway Standard Details and Drawings for the Development of Traffic Management Plans;
- 16. MassHighway Right-of-Way Manual;
- 17. October 2006 Massachusetts Amendments to the 2003 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the Standard Municipal Traffic Code;
- 18. 2003 MUTCD, and the Standard Municipal Traffic Code;
- 19. 1968 Standard Drawings for Traffic Signals and Highway Lighting;
- 20. 1990 Standard Drawings for Signs and Supports; and
- 21. The American Standard for Nursery Stock (ANSI Z-60.1-1996) or latest edition.

Notwithstanding the foregoing, in the event of a conflict within a Contract Document or set of Contract Documents with the same order of priority (including documents referenced therein), or in the event of a conflict pertaining to the order of precedence or other conflict with Contract Documents, MassDOT shall have the right to reasonably determine which provision applies, and if MassDOT makes such determination, it shall do so promptly. The DB Entity shall request MassDOT's determination promptly upon becoming aware of such conflict.

1.3 **REFERENCED STANDARDS**

Unless otherwise specified by MassDOT, any reference in the Contract Documents to a described publication or other agreement affecting any portion of the DB Work shall be deemed to mean the

latest edition or revision thereof and amendments and supplements thereto in effect on the Proposal Due Date.

In interpreting Referenced Standards, the following apply:

- a. References to the Project Owner shall mean MassDOT; and
- b. References to "Plan(s)" shall mean the Design Documents.

1.4 APPROVALS OR CONSENTS

In all cases where approvals or consents are required to be provided under the Contract Documents by MassDOT, the DB Entity or other parties to the Contract Documents, such approvals or consents shall not be withheld unreasonably except in cases where a different standard (such as sole discretion) is specified. In cases where sole discretion is specified the decision shall not be subject to "Dispute Resolution" hereunder.

1.5 DELIVERABLES

The DB Entity will provide MassDOT with all products and services stated within the Project Requirements.

1.6 SUBCONTRACT REQUIREMENTS

The following requirements shall apply to all Subcontracts:

Notwithstanding any Subcontract or agreement with any Subcontractors, the DB Entity shall be fully responsible for all of the DB Work. MassDOT shall not be bound by any Subcontracts, and no Subcontractor shall include a provision purporting to bind MassDOT.

As soon as a potential Subcontractor has been identified by the DB Entity, but in no event less than 14 Days prior to the scheduled initiation of DB Work by such proposed Subcontractor, the DB Entity shall notify MassDOT, in writing, of the name and address of such Subcontractor.

Each Subcontract shall include terms and conditions sufficient to ensure compliance by the Subcontractor with all applicable requirements of the RFP, and shall include those terms that are specifically required by the RFP to be included therein. All Subcontracts (including Subcontracts with Suppliers) shall incorporate terms substantially similar to those contained in this RFP and Contract (specifically including an agreement by the Subcontractor to participate in any dispute review proceeding identified in the RFP and Contract, if such participation is requested by either MassDOT or the DB Entity).

The DB Entity shall pay each Subcontractor under the contract for satisfactory performance of subcontract work not later than 10 business Days from the receipt of each payment the Prime Contractor receives from MassDOT. Failure to comply with this requirement may result in the withholding of payment to the Prime Contractor until such time as all payment due under this provision has been received by the Subcontractor(s) and/or referral to the Prequalification Committee for action which may affect the contractor's prequalification status.

The DB Entity further agrees to make payment in full, including retainage, to each Subcontractor not later than 10 business Days after the Subcontractor has completed all of the work required under its subcontract.

1.7 MAJOR PARTICIPANTS

Major Participants cannot be changed after contract award without written consent of MassDOT. Failure to receive approval of such a change may result in contract cancellation.

SECTION 2.0

PROJECT REQUIREMENTS AND PROVISIONS FOR WORK

2.1 PROJECT MANAGEMENT

2.1.1 General

The DB Entity shall plan, schedule and execute all aspects of the DB work and shall be responsible for coordinating its activities with all parties who are directly impacted by the DB Work. The DB Entity shall document and report all DB Work in accordance with the requirements of the Contract Documents.

Within five (5) days of the issuance of the Notice to Proceed, the DB Entity shall submit a Project Management Plan based on the Technical Proposal detailed in Section 3.3 Technical Proposal of the RFP which describes the organization, authority, reporting relationships, and procedures to be implemented to manage and control the DB Work. The DB Entity shall submit the Project Management Plan for review by MassDOT, and shall obtain MassDOT's approval thereof, and shall at all times comply with the requirements thereof. The Project Management Plan shall be consistent with the Technical Proposal.

The DB Entity shall at all times provide a DB Entity Project Manager ("Project Manager") who has been approved by MassDOT) who will have full responsibility for the prosecution of the DB Work and will act as a single point of contact in all matters on behalf of DB Entity. The DB Entity shall not change the Project Manager without the prior written approval of MassDOT in its sole discretion. In the event that DB Entity fails to obtain MassDOT's approval of a replacement before the existing Project Manager leaves, the DB Entity shall not be entitled to receive any progress payments hereunder until such time as the approved replacement has started work on the Project.

2.1.2 MassDOT's Role

MassDOT's role in the Project will be similar in structure to MassDOT Design-Bid-Build projects. MassDOT shall perform management oversight, design acceptance/approval and construction acceptance of the DB Work for the purpose of assuring that the DB Entity work meets the requirements of the RFP and Contract Documents approved by MassDOT. Oversight activities include design reviews, design acceptance/approval at key Design milestones (i.e. 75% Design Submittal, Final Design Submittal), and construction acceptance inspection and testing. MassDOT will also serve as a liaison with regulatory agencies in connection with the DB Entity's application for Environmental Approvals/Clearances and/or amendments. However, none of MassDOT's oversight activities shall relieve the DB Entity from its obligations as defined in the RFP.

MassDOT will make every effort to review and respond to complete design and permit application/amendment submittals within 30 Days. All submissions from the DB Entity must be complete and contain sufficient and/or required information such that the review can be completed and, as appropriate, the submission made to the environmental agencies. All submittals shall be in accordance with the DB Entity's design quality management procedures as approved by MassDOT.

MassDOT will be the applicant of record on all environmental permit applications unless otherwise required by statute, and all requests for permit or Environmental Approval/Clearance amendments. These submissions will be made to MassDOT for initial review and comment. Once approved and signed, the DB Entity is required to make the Environmental Approval submissions

to the agencies and distribute all required copies to other parties. MassDOT will also be responsible for administering the resulting contract, including: invoice review and approval for payment; schedule review and approval; performance evaluation; change order negotiation; dispute resolution; and other activities indicated herein.

MassDOT will identify a MassDOT employee to serve as the MassDOT Project Manager and may elect to retain the services of a Consultant (Designated Agent) to administer and oversee the DB Entity's activities including engineering design services, construction, and general support to MassDOT for administration of the Project. The MassDOT Designated Agent is not authorized to:

- Direct the performance of the DB Work unless continued performance of the DB Work appears likely to endanger the health, welfare or safety of workers or the public;
- Approve deviations from applicable standards and conditions;
- Authorize changes in or Design Exceptions from the approved Design Documents, or performance by the DB Entity of extra DB Work or changed DB Work;
- Waive any requirements or provisions of the RFP and Contract; or
- Approve Design Documents, Change Orders, or RFP and Contract amendments.

All submittals will be made electronically and by hard copy to both MassDOT and the Designated Agent (if utilized by MassDOT) simultaneously. Upon NTP, the DB Entity will be provided a table showing each submittal category and the appropriate MassDOT recipient.

2.1.3 Local Agency Role

The majority of DB work will occur within State Highway Layout. However, the section of Cedar Street south of Worcester Street is within County Layout and this effort will be subject to review, approval, inspection, testing, and/or acceptance by Wellesley Department of Public Works The DB Entity shall be responsible for obtaining needed local Governmental Approvals and ensuring coordination with Utility Providers.

2.1.4 DB Entity Obligations

The DB Entity shall design the Project and construct the Project as designed, in accordance with all professional engineering principles and construction practices, and in accordance with all standards identified in Contract Section 1.0, in a good and workmanlike manner, and free from defects in accordance with the terms and conditions of the Contract Documents. Except as otherwise specifically provided in the Contract Documents, all materials, services and efforts necessary to achieve Substantial Completion and Final Acceptance on or before the deadlines provided herein, shall be the DB Entity's responsibility; and the cost of all such materials, services and efforts shall be included in the DB price.

The DB Entity is required to design and construct the Project in accordance with Government approvals, Environmental Approvals/Clearances, environmental permits, the approved Project schedule, the approved Project Management Plan, the approved Quality System Manual (QSM), the approved Health and Safety Plan and all other applicable Laws, negotiations, ordinances, and other requirements, taking into account the Right-of-Way and other physical constraints affecting the Project, so as to achieve Substantial Completion and Final Acceptance by the deadlines specified herein.

The DB Entity shall at all times provide a Project Manager who is approved by MassDOT, who will have the full responsibility for the prosecution of the DB Work and will act as a single point of contact in all matters on behalf of the DB Entity.

The DB Entity shall obtain and pay the cost of obtaining all Governmental Approvals, and/or amendments to Environmental Approvals/Clearances or permits. The DB Entity shall undertake and perform all actions required by and all actions necessary to maintain in full force and affect all Governmental Approvals and Environmental Approvals/Clearances and/or permits, including the performance of all environmental mitigation measures required by the Contract Documents, Environmental Approvals/Clearances and/or permits, and applicable Law.

The DB Entity shall cooperate with MassDOT in connection with all matters relating to the Project, including review of the design of the Project and conducting inspections during the construction of the Project.

The DB Entity shall mitigate delay to the Project and mitigate damages due to delay in all circumstances, including resequencing, reallocating or redeploying its forces as appropriate. The DB Entity is responsible for all costs related to such delays

2.1.5 Ownership and Management of Documents

Provided MassDOT has made payment to the DB Entity, the ownership and management of the Project documents produced by the DB Entity is as follows: (a) Design Documents shall become the property of MassDOT upon preparation; (b) Construction Documents shall become the property of MassDOT upon delivery to MassDOT; and (c) information obtained or produced by the DB Entity in connection with the performance of its obligations under this Contract, including studies, technical and other reports and the like, shall become the property of MassDOT upon the DB Entity's preparation or receipt thereof.

In addition, permit applications for environmental permits and clearance documents issued by local, state, or federal agencies shall become the property of MassDOT upon delivery to MassDOT.

Copies of all such information shall be furnished to MassDOT upon preparation or receipt thereof by the DB Entity. The DB Entity shall furnish MassDOT with the original working drawings and final as-built drawings for the Project as a condition of Final Acceptance.

The DB Entity shall at all times provide a project manager (who has been approved by MassDOT) who will have full responsibility for coordination and management of Project documentation and will act as a single point of contact in all document related activities on behalf of the DB Entity.

2.1.6 **Project Quality Assurance**

To ensure that goals for Project quality will be met, MassDOT has established Quality Assurance (QA) requirements for DB projects. As outlined below, this includes a Design QA Program to address quality in the design process and a Construction QA Program to ensure the quality of construction.

2.1.6.1 Design QA Program

MassDOT's Design QA Program for DB projects includes the following two elements:

- Design Quality Control (QC) system by the DB Entity.
- Design Acceptance/Approval system by MassDOT.

2.1.6.2 Construction QA Program

The Construction QA Program for DB projects includes the following six core elements:

- Construction Quality Control (QC) system by the DB Entity
- Construction Acceptance system by MassDOT (or its Designated Agent)
- Independent Assurance (IA) by MassDOT (or its Designated Agent)
- Dispute Resolution system established by MassDOT
- Qualified/Accredited Laboratories (DB Entity, all Contractors and MassDOT)
- Qualified/Certified Inspection & Testing Personnel (DB Entity, all Contractors and MassDOT)

2.1.6.3 QA Program Responsibilities

The DB Entity is responsible for implementing a comprehensive Quality Control (QC) System that addresses Design QC activities, Construction QC activities, qualified/accredited laboratories, and qualified/certified inspection & testing personnel. MassDOT will be responsible for Design Acceptance/Approval actions, Construction Acceptance actions, an IA system, and a Dispute Resolution system.

2.1.6.4 QA Specifications and Pay Adjustments

MassDOT's Quality Assurance (QA) Specifications for Hot Mix Asphalt (HMA) Pavement (set forth in the Massachusetts Highway Department Interoffice Memorandum Re: Standard Bridge Deck Pavements from E. Naras through S. Eslinger to A. Bardow, dated November 12, 2009) shall be applied for construction of all pavement on the Project.

2.2 QUALITY CONTROL SYSTEM

The DB Entity shall establish and implement a Quality Control (QC) System to ensure that the performance of the DB Work fulfills the design and construction requirements of the Contract.

2.2.1 Quality Control System Objectives

The Quality Control System is intended to achieve the following objectives:

- Place the responsibility for achieving design quality and construction quality on the DB Entity.
- Establish procedures for coordinating and ensuring consistency and quality of work performed by sub-consultants or joint venture firms, Subcontractors, Fabricators, and Manufacturers.
- Ensure that all Design Documents and Construction Documents developed by the DB Entity are prepared in accordance with all standards identified in the Contract.
- Ensure that the quality of the materials and workmanship of all completed construction work meets the quality requirements set forth by MassDOT and the Contract.

2.2.2 Quality System Manual Submittal and Approval

Within 15 Days of Notice to Proceed, the DB Entity shall submit a Quality System Manual (QSM) based on the Technical Proposal detailed in Section 3.3, Technical Proposal, of the RFP. The QSM shall address the following Quality Control System elements:

- The Quality Control Organization and Roles
- Document Management Procedures
- Requirements for Design Quality Control
- Requirements for Construction Quality Control

The DB Entity shall submit the Quality System Manual for review by MassDOT, and shall obtain MassDOT's approval thereof, and shall at all times comply with the requirements thereof. The DB Entity shall not revise any portion of the approved QSM without the prior written approval of MassDOT.

2.2.3 Quality System Manual Contents and Format

The Quality System Manual (QSM) shall address each of the items described below and shall be prepared in accordance with the following outline:

2.2.3.1 Quality Control Organization and Roles

2.2.3.1.1 Quality Control Administrator

The Quality Control (QC) Administrator is considered one of the Project's key personnel. The QC Administrator shall be responsible for overall management of the QC System as established in the Quality System Manual. The QC Administrator shall be a Registered Professional Engineer currently licensed in the Commonwealth of Massachusetts and have a minimum of 10 years experience in transportation design or construction. The QC Administrator shall report directly to the DB Entity's Project Manager and coordinate all Project QC issues directly with MassDOT. The specific duties of the QC Administrator shall be outlined in the QSM.

The DB Entity shall not replace the QC Administrator without prior written approval by MassDOT. The DB Entity's request to replace the QC Administrator shall name a proposed replacement manager who shall be available full-time within 15 Days of MassDOT approval.

2.2.3.1.2 Design Quality Control Manager

The Design Quality Control (QC) Manager shall be responsible for implementation of all Design QC procedures and activities as established in the Quality System Manual. The Design QC Manager shall be a Civil Engineer (minimum B.S. in Civil Engineering and minimum 10 years experience in highway and/or bridge design) and shall report directly to the DB Entity's QC Administrator. The specific duties of the Design QC Manager shall be outlined in the QSM.

2.2.3.1.3 Construction Quality Control Manager

The Construction Quality Control (QC) Manager shall be responsible for implementation of all Construction QC procedures and activities as established in the Quality System Manual. The

Construction QC Manager shall be a Civil Engineer (minimum B.S. in Civil Engineering and certified as a NETTCP QA Technologist) and shall report directly to the DB Entity's QC Administrator. The specific duties of the Construction QC Manager shall be outlined in the QSM.

2.2.3.1.4 Project Design and Construction Personnel Role in Quality Control

All Design and Construction "Production Personnel" (i.e. staff performing design and construction work activity) on the Project, including the Environmental Permitting Manager, Design Manager, Construction Manager, Construction Superintendent(s), and all personnel working under their direction, shall have the "up front" responsibility for ensuring the quality of their work. These staff are expected to apply QC "self-checks" or "self-inspection" throughout the process of work production.

All Design and Construction Production Personnel shall receive periodic Quality Control training under the direction of the QC Administrator and QC Staff.

Formal Quality Control checks will be performed independent of Design Production Personnel by the Design QC staff and formal QC inspection and testing will be performed independent of Construction Production Personnel by the Construction QC staff throughout design and construction.

2.2.3.1.5 Quality Control Organization Chart

An Organization Chart shall be provided in the QSM which clearly shows the respective QC responsibilities and relationship between the formal QC staff and all Design and Construction Production Personnel on the Project, including the Environmental Permitting Manager, Design Manager, Construction Manager, Construction Superintendent(s), and all personnel working under their direction.

The Quality Control organizational structure, including the identification of full-time Design QC Team and Construction QC Team employees with specific Quality Control responsibilities shall be fully described and included in the QC Organizational Chart. The chart shall show lines of authority and reporting responsibilities. The persons and organizations performing Quality Control functions shall have sufficient authority and organizational freedom to identify quality problems, and to initiate, recommend, provide and verify the implementation of solutions. Persons performing Quality Control functions shall be at an organizational level that ensures that they are not influenced by the potential impact of implementation of the Quality System Manual requirements on the Project Schedule, performance or cost.

2.2.3.2 Document Management Procedures

The Quality Control procedures for the DB Entity's Design plans, specifications, reports, calculations and other Construction Documents shall be organized by engineering discipline (structural, civil, utilities, etc.). These procedures shall specify measures to ensure that appropriate quality requirements are specified and included in Design Documents and to control deviations from such requirements.

At a minimum, the following QC procedures shall be established and monitored by the QC staff:

- An electronic Project filing system (electronic folders).
- Standard file naming convention (for all types of documents).

- Electronic file revisions and redline markup standards.
- Email standards, protocols, and filing system.

2.2.3.3 Design Quality Control Requirements

2.2.3.3.1 Design Quality Control Organization

The Design QC Team will report and therefore be directly responsible to the DB Entity and work independently from the Design Production Personnel.

The Design QC Team members assigned the responsibility for Quality Control Checking of the design shall not be directly involved with the design of the item, segment, or phase being checked.

A chart shall be included showing the relationship of the Design QC Team and other Project staff (including the Construction QC Team).

2.2.3.3.2 Quality Control Activities by Design Production Personnel

The Project Design Production Personnel role in QC "self-check" activities shall be fully described in the QSM. At a minimum, the following Quality Control activities by the Design Production Personnel shall be included:

- Discipline Coordination Reviews.
- Independent Technical Reviews.
- Constructability Reviews.

2.2.3.3.3 Quality Control Activities by Design QC Team

The Design Quality Control Team roles and activities shall be fully described in the QSM. At a minimum, procedures for the following Quality Control activities by the Design QC Team shall be included:

- Review Comment Procedures and Forms.
- Validating and approving Computer Software.
- Review of Studies, Reports and other Design Documents.
- Detail Checking Report Forms.
- Detail Checking of Calculations (including Computer Program Input).
- Detail Checking of Plans.
- Detail Checking of Specifications & Special Provisions.
- Design QC Team Review of 75% Plans and Specifications.
- Design QC Team Review of Final Plans and Specifications.

• Procedures for formal documentation that the Design QC Team has reviewed all reports, calculations, plans, specifications, and other Construction Documents and finds that the documents meet the quality standards in the QSM.

2.2.3.3.4 Coordination Activities with Construction

The roles and activities requiring coordination between Design Production Personnel and Construction Production Personnel and Construction QC staff shall be fully described in the QSM. At a minimum, the following Quality Control activities shall be included:

- Review of Shop Drawings (by Design staff and by Design QC Team).
- Requests for Information.
- Notice of Design Change.
- Field Design Changes.
- Design Dispute Resolution Procedures (between Construction and Design Staff).

2.2.3.4 Construction Quality Control Requirements

2.2.3.4.1 Construction Quality Control Organization

The Construction QC Team will report and therefore be directly responsible to the DB Entity and work independently from the Construction "Production Personnel".

The Construction QC Team members assigned the responsibility for Quality Control inspection and testing of the construction Work Items shall not be directly involved with the "production & placement" activities for the item, segment, or phase being inspected.

A chart shall be included showing the relationship of the Construction QC Team and other Project staff (including the Design QC Team).

2.2.3.4.2 Quality Control Activities by Construction Production Personnel

The Project Construction Production Personnel role in QC "self-check" activities shall be fully described in the QSM. At a minimum, the following Quality Control activities by the Construction Production Personnel shall be included:

- Work Item Coordination Reviews.
- Pre-production & Pre-placement Checks.
- Self-Inspection during Work Item production & placement

2.2.3.4.3 Quality Control Activities by Construction QC Team

The Construction Quality Control Team roles and activities shall be fully described in the QSM. At a minimum, procedures for the following Quality Control activities by the Construction QC Team shall be included:

- Construction QC Team Review of 75% Plans and Specifications.
- Construction QC Team Review of Final Plans and Specifications.
- Procedures for formal documentation that the Construction QC Team has reviewed all other Construction Documents and finds that the documents meet the quality standards in the QSM.
- Development & review of QC Inspection and Testing Schedules to be included in the QSM and Quality Control Plans.
- Development & review of standard QC Operating Documents, including; Inspection Report Forms, Testing Report Forms, and QC Record Books.
- Development and review of Quality Control Plans required for Project Produced Materials Work Items.
- Performing QC Inspection at production facilities (i.e. plants) and at field placement.
- Performing QC Sampling & Testing at production facilities (i.e. plants) and at field placement.
- Documenting QC Inspection results and QC Testing results.
- Maintaining QC Record Books and QC Database.
- Performing analysis of QC Inspection Data and QC Testing Data.
- Providing regular feedback to Construction Production Personnel on results of QC Inspection and Testing Data.
- Addressing opportunities for improvement by identifying the root cause(s) of a problem and determining modification(s) to work processes to improve the delivery of services and construction activities. Ensuring appropriate process adjustments and corrective actions are implemented when determined necessary to provide the required level of quality.

2.2.3.4.4 Quality Control of Project Produced Materials

Applicable Work Items

The QSM shall address the three principal materials categories (as defined in AASHTO R 38), and identify all MassDOT standard Work Items to be addressed under the category of Project Produced Materials.

DB Entity Quality Control Plan(s)

- Identify Project standard Work Items requiring QC Plans.
- Outline the minimum information required in QC Plans using the NETTCP "Model Quality Control Plan" (October 2008) as a standard template.

Quality Control Inspection Schedules

- QC inspection shall be provided for the following Inspection Components:
 - o Equipment
 - Environmental Conditions
 - o Materials
 - Workmanship
- Identify the specific Inspection Attributes to be inspected for:
 - Production Facilities
 - Project Site
- Lot and Sublot sizes shall be established for each Inspection Attribute, unless already specified by MassDOT. Lot sizes shall not exceed 20 to 30 Sublots. Sublot sizes shall be no greater than the minimum frequencies for testing contained in the MassHighway Guide Schedule for Sampling & Testing (2005).
- Provide the Lot size and Sublot size for each Inspection Attribute to be inspected.

Quality Control Sampling and Testing Schedules

- QC Sampling QC sampling shall include:
 - Random Sampling (per ASTM D 3665)
 - Selective Sampling
- QC Testing Identify the specific Quality Characteristics to be tested for:
 - o Production Facilities
 - Project Site
- Lot and Sublot sizes shall be established for each Quality Characteristic, unless already specified by MassDOT. Lot sizes shall not exceed 20 to 30 Sublots. Sublot sizes shall be no greater than the minimum frequencies for testing contained in the MassHighway Guide Schedule for Sampling & Testing (2005).
- Provide the Lot size and Sublot size for each Quality Characteristic to be tested.

Quality Control Documentation

 Standard QC Report Forms and Record Books shall be established for inspection, sampling, and testing of all Work Items. QC documentation for Hot-Mix Asphalt shall be in accordance with the specifications set forth in the Massachusetts Highway Department Interoffice Memorandum Re: Standard Bridge Deck Pavements from E. Naras through S. Eslinger to A. Bardow, dated November 12, 2009. NETTCP standard Test Report Forms (TRFs) and Inspection Report Forms (IRFs) shall be used to document all QC inspection, sampling, and testing results.

- QC Inspection Records The following shall be included in the QSM:
 - Inspection Report Forms (IRFs)
- QC Sampling & Testing Records The following shall be included:
 - Random Sampling Forms
 - Test Report Forms (TRFs)
- QC Record Books Standard formats for the following shall be included:
 - Production Facility QC Record Books
 - Project Site QC Record Books

Quality Control Data Analysis

- Identify the minimum requirements for analysis of QC Inspection and Testing data for all Work Items. QC data analysis for Hot-Mix Asphalt shall be in accordance with the specifications set forth in the Massachusetts Highway Department Interoffice Memorandum Re: Standard Bridge Deck Pavements from E. Naras through S. Eslinger to A. Bardow, dated November 12, 2009).
 - o Identify the specific Conformance Measure(s) to be applied to QC Inspection data.
 - Identify the specific Quality Measure(s) and Quality Limits to be applied to QC Testing data.
- Identify QC Tools for monitoring quality during production and placement, including:
 - Control Charts
 - Running Quality Level (e.g., Quality Level Analysis)

2.2.3.4.5 Quality Control of Fabricated Structural Materials

Applicable Work Items

• Identify all MassDOT standard Work Items to be addressed under the category of Fabricated Structural Materials (as defined in AASHTO R 38).

Fabricator Quality System Manual

- All Fabricators shall be required to have a Quality System Manual (QSM).
- Outline the minimum information required in each Fabricator QSM using the QSM format and outline contained in AASHTO R 38 or similar format and outline acceptable to MassDOT.

DB Entity Quality Control Plan(s)

• Identify Project standard Work Items requiring QC Plans.
• Outline the minimum information required in QC Plans using the NETTCP "Model Quality Control Plan" (October 2008) as a standard template.

Quality Control Inspection Schedules

(Same requirements as Section 2.2.3.4.4 above.)

Quality Control Sampling and Testing Schedules

• (Same requirements as Section 2.2.3.4.4 above.)

Quality Control Documentation

• (Same requirements as Section 2.2.3.4.4 above.)

Quality Control Data Analysis

• (Same requirements as Section 2.2.3.4.4 above.)

2.2.3.4.6 Quality Control of Standard Manufactured Materials

Applicable Work Items

 Identify all MassDOT standard Work Items to be addressed under the category of Standard Manufactured Materials (defined in AASHTO R 38) or similar format and outline acceptable to MassDOT.

Manufacturer Quality System Manual

- All Manufacturers shall be required to have a Quality System Manual.
- Outline the information required in each Manufacturer QSM using the QSM format and outline contained in AASHTO R 38 or similar format and outline acceptable to MassDOT.

Project Site QC Inspection and Testing

- All Standard Manufactured Materials shall be delivered to the Project site with a standard Certificate of Compliance (COC) accompanied by a copy of all Manufacturer QC inspection and test results for the corresponding Lot of material, in accordance with AASHTO R 38.
- Identify requirements for random (per D 3665) Project site QC inspection and testing of each Lot of Standard Manufactured Material Work Item to verify the Manufacturer's COC data.

Quality Control Documentation

- All Manufacturer COC's shall be retained in Project Site QC Record Books.
- (Same requirements as Section 2.2.3.4.4 above.)

Quality Control Data Analysis

- Identify the minimum requirements for analysis of all Project site QC Inspection and Testing data.
- Identify the specific Conformance Measure(s) to be applied to QC Inspection data.
- Identify the specific Quality Measure(s) and Quality Limits to be applied to QC Testing data.
- Identify QC Tools for monitoring quality during production and placement, including:
 - o Control Charts
 - Running Quality Level (e.g. Quality Level Analysis)

2.2.3.4.7 Quality Control Laboratory Accreditation & Qualification

QC Laboratories Testing Project Produced Materials

- All laboratories performing QC testing of Project Produced Materials shall be qualified through one of the following:
 - AASHTO Accreditation Program (AAP)
 - NETTCP Laboratory Certification Program

QC Laboratories Testing Fabricated Structural Materials

• All laboratories performing QC testing of Fabricated Structural Materials shall be qualified to perform the specific QC testing required for the fabricated items through an appropriate Laboratory Accreditation Program or Laboratory Qualification Program, in accordance with the requirements contained in AASHTO R 38.

QC Laboratories Testing Standard Manufactured Materials

• All laboratories performing QC testing of Standard Manufactured Materials shall be qualified to perform the specific QC testing required for the manufactured items through an appropriate Laboratory Accreditation Program or Laboratory Qualification Program, in accordance with the requirements contained in AASHTO R 38.

2.2.3.4.8 Quality Control Personnel Qualification/Certification

QC Personnel Inspecting or Testing Project Produced Materials

- All QC personnel performing inspection, sampling, or testing of Project Produced Materials shall be certified through the NETTCP. QC personnel shall possess the specific certifications directly relevant for each of the following Work Items they are responsible for inspecting or testing:
 - o Earthwork
 - Subbase or Base Courses
 - Geotechnical Items
 - Hot Mix Asphalt (HMA)

• Portland Cement Concrete (PCC)

QC Personnel Inspecting or Testing Fabricated Structural Materials

- All QC personnel performing inspection, sampling, or testing of Structural Materials shall be certified through applicable national or regional certification programs. QC personnel shall possess the specific certifications directly relevant for each of the following Work Items they are responsible for inspecting or testing:
 - Fabricated Structural Steel & Coatings (AISC, AWS, NACE)
 - Precast/Prestressed Concrete (PCI Level II)

QC Personnel Inspecting or Testing Standard Manufactured Materials

 All QC personnel performing inspection, sampling, or testing of Standard Manufactured Materials shall be qualified through appropriate QC personnel qualification or certification programs in accordance with the requirements contained in AASHTO R 38.

2.3 ADMINISTRATION AND COORDINATION

2.3.1 Briefings for Community Groups, MassDOT, and Others

Public involvement is an important aspect of the Project development. The DB Entity shall be required to support MassDOT with preparation of materials and presentations required for communicating to all interested persons, groups and government organizations information regarding the development of the Project. The DB Entity shall not be compensated by MassDOT for the preparation of these materials and related costs associated with its public involvement.

The DB Entity will be responsible for coordinating, preparing and holding a formal Public Hearing.

2.3.2 Meeting Minutes

The DB Entity shall attend all meetings involving the DB Entity, MassDOT or its Designated Agent, and third parties including, but not limited to, Utility companies, railroads, municipalities and regulatory agencies as appropriate. For all meetings at which the DB Entity is in attendance, the DB Entity shall submit to MassDOT objective draft meeting minutes within five (5) Business Days after the meeting. Final meeting minutes incorporating any MassDOT comments shall be submitted to MassDOT within five (5) Business Days after receipt of MassDOT's approval or comments on such draft meeting minutes, as applicable. Draft meeting minutes may be submitted to MassDOT electronically; however, final MassDOT-approved meeting minutes shall be submitted as hard copies. The DB Entity shall be responsible for the distribution of final MassDOT-approved meeting minutes to all meeting attendees. Excluded from this requirement are internal meetings between the DB Entity's team members.

At a minimum, all meeting minutes shall contain a complete list of attendees (including their affiliations and telephone numbers), descriptions of issues discussed, decisions made, direction given, and remaining open issues (including identification of the party responsible for follow up and the target date for resolution). At the conclusion of the Project, one binder and one (1) CD with electronic files shall be provided containing all meeting minutes.

2.3.3 Coordination with Other Projects

During the construction phase of the Project, the DB Entity shall be required to coordinate its efforts with other planned MassDOT projects that may be under design and may also be under construction during the construction phase of the Project. This coordination also extends to municipality work that may be planned or executed within the Project timeframe.

2.3.4 Coordination of Traffic Officers/Road Flaggers

The DB Entity shall coordinate all requirements for traffic officers or road flaggers through the MassDOT Highway Division District 4 construction office, in accordance with Section 16.3.7 of the Contract. The process for payment of traffic control shall adhere to MassHighway specifications, 710 CMR 7.00 and the Road Flagger and Police Detail Guidelines. The DB Entity shall submit all Construction Zone Safety Plans to the local law enforcement agency having primary responsibility for the patrol and enforcement of vehicular law on the Public Road within which the Construction Zone is located. For purposes of this section the Construction Zone shall extend to the furthest point in all directions, inclusive of detour signs and detour traffic appurtenances.

2.3.5 Coordination of Emergency Responders

The DB Entity coordination efforts shall include all Emergency Responders, including but not limited to, Local Police, State Police, Fire Department of Wellesley, Ambulance Services and any other responders. This coordination effort shall encompass all phases of the Project from design through construction completion. The DB Entity acknowledges that once advance notice requirements are established, failure to adhere to the advance notice requirements could cause delays to construction progress. Failure to provide the required advanced notices is not grounds for delay claims or adjustments to calendar days and/or hours.

SECTION 3.0

INFORMATION SUPPLIED TO DB ENTITY/ ACKNOWLEDGEMENT BY DB ENTITY

The DB Entity shall have full responsibility to complete the formal design of all Project elements, regardless of the fact that MassDOT has supplied certain preliminary design work for certain portions of the Project to the DB Entity. All Design Documents shall be furnished to MassDOT after all review submissions have been completed. The DB Entity shall acknowledge that it has diligently reviewed and verified the MassDOT-Supplied Design for errors, omissions, inconsistencies or other defects and has incorporated into the DB Price all costs associated with correction of any such errors, omissions, inconsistencies and other defects. The DB Entity shall acknowledge and agree that:

The design documentation, including plans, calculations, reports, and comments are provided for reference only; and are conceptual in nature. All DB Entities acknowledge by receipt of such plans that they explicitly understand that while these plans have been advanced to a significant level of development, the DB Entity shall be required to provide a final, complete Project design that is stamped, sealed and certified by their own registered Professional Engineer of Record for review and approval by MassDOT and possible third parties. Revisions or additions to information in the reference plans being provided may be necessary based on comments received during the on-going environmental permitting;

The DB Entity is not entitled to rely on any documents or information provided by MassDOT other than the RFP Documents; and the DB Entity's right to rely on the Reference Documents is subject to the limitations set forth herein;

The DB Entity is responsible for correcting any errors, omissions and defects in the MassDOT-Supplied Design through the design and/or construction process, with the obligation to correct any errors, omissions, inconsistencies and other defects affecting therein, all at no additional cost to MassDOT;

MassDOT shall have no liability for errors, omissions and defects in the MassDOT-Supplied Design. The foregoing shall not be deemed to limit MassDOT's elimination of obligations with respect to Differing Site Conditions, or the DB Entity's right to receive any available insurance proceeds;

DB Entity's Warranties and indemnities hereunder cover errors, omissions and defects in the Project even though they may be related to errors, omissions and defects in the MassDOT-Supplied Documents;

The DB Entity has independently determined that the MassDOT-Supplied Design presents a feasible concept for the Project which can and shall be used as the basis for the completion of the Project, and agrees that it shall have no right to seek additional compensation or a time extension, except as specifically permitted by negotiated changes in the DB work; and

The DB Entity acknowledges and agrees that MassDOT shall not be responsible or liable in any respect for any loss, damage, injury, liability, cost, expense or cause of action whatsoever suffered by DB Entity, its employees, agents, officers or Subcontractors or any other Persons for whom DB Entity may be legally or contractually responsible, by reason of any use of any information contained in the MassDOT-Supplied Design or any action or forbearance in reliance thereon, except to the extent that negotiated changes in the DB work provides for an increase in the DB Price and/or extensions of the Completion Deadline with respect to such matter. The DB Entity further acknowledges and agrees that: (i) if and to the extent the DB Entity or anyone on the DB

Entity's behalf uses any of said information in any way, such use is made on the basis that the DB Entity, not MassDOT, has approved of such use and information and is responsible for said information; and (ii) the DB Entity is capable of conducting and is obligated hereunder to conduct any and all studies, analyses and investigations as it deems advisable to verify or supplement said information, and that any use of said information is entirely at the DB Entity's own risk and at its own discretion.

SECTION 4.0

PROJECT DESIGN

4.1 GENERAL DESCRIPTION AND EXISTING CONDITIONS

The scope of work contains but is not limited to the design and replacement/reconstruction of the bridge and raising the profile of Cedar Street to provide 15 feet 0 inches of vertical clearance. Work also includes modifications to the existing abutments, pier and wingwalls, requirements for traffic management for detours and appropriate roadway transitions to the structure. The DB Entity will be required to utilize a rapid build construction technique, which may include the use of Self-Propelled Modular Transporters (SPMT's) to replace the existing bridge superstructure.

The Design Build Entity shall be permitted to close Route 9 and Cedar Street for a period of 72 continuous hours starting from 10:00 PM on Friday, July 1, 2011 to perform demolition, abutment and wingwall extensions, superstructure installation and roadway grade work to the reclaimed material level. Other miscellaneous bridge and roadway work for Cedar Street including the final roadway paving will be allowed between June 20, 2011 and July 20, 2011, between the hours of 10:00 PM and 6:00 AM. Lane restrictions for Route 9 will only be permitted with written consent of MassDOT.

At the bridge approaches, the roadway pavement will be reclaimed and adjusted to final grade. Hot mix asphalt material, (surface, binder and base course) shall be placed on the reclaimed material. Suggested Traffic Management Plans have been submitted and reviewed by MassDOT. The plan set is on the CD that MassDOT provided to each DB Entity. The DB Entity shall develop a new TMP which adheres to the criteria set forth in Contract Section 4.6.1 and is approved by MassDOT.

The DB Entity shall continue the design work for the Cedar Street Bridge Over Route 9 in collaboration with MassDOT, and develop and complete the following documents and work efforts. Note that this list is not to be considered all inclusive.

Preliminary plans for both the highway and bridge design were included in RFP Appendix C.

The DB Entity shall provide the complete design for this bridge replacement Project in collaboration with MassDOT, and develop and complete the following documents and work efforts. Note that this list is not to be considered all inclusive:

- Final design for the bridge
- Any and all environmental permits to support final design and/or to allow any construction work to begin
- Coordination with abutters, landowners, environmental agencies, utilities, local boards and officials and any other party with an interest in or impact from the Project. Coordination will be done in conjunction with MassDOT.
- Complete design and construction Quality Assurance and Quality Control programs

4.2 CODES, STANDARDS AND SPECIFICATIONS

All design and construction shall be governed by Codes, Standards and Specifications relevant to public works for Highways and Bridges. The AASHTO, MassDOT and FHWA standards applicable to the final design and construction documents to be developed by the DB Entity, include, but are not limited to, the list set forth in Contract Section 1.

If there is a discrepancy between MassDOT Standards and AASHTO standards and criteria, MassDOT Standards and criteria shall govern. Unless specified elsewhere, the construction specifications shall conform to the MHD Standards, and with the standards, policies, and specifications identified in the Standard Specifications with all addenda, supplements, and revisions thereto.

The Work shall be completed in conformance with all current engineering and policy directives, and other correspondence normally available and distributed to design consultants from MassDOT.

For Utility related work, the DB Entity shall be responsible for obtaining and ensuring adherence of design and construction to the respective standards and criteria of the Utility Owner.

4.3 DESIGN REVIEWS AND SUBMITTALS

4.3.1 MassDOT Reviews

Oversight reviews will consist mainly of checks to ensure that RFP and Contract requirements and design criteria are being followed and that Quality Control activities are following the DB Entity's approved Quality System Manual. Oversight Reviews, at MassDOT's discretion, include, but are not limited to, review of Design Documents, electronic files, calculations, reports, specifications, geotechnical data, and other relevant design information.

4.3.2 Design Submittal Review Process

All submittals are subject to review and approval by MassDOT, its Designated Agent, if any, and others as provided herein. Re-submittal for review and approval of any Design Document or Construction Document may be required as appropriate to obtain approvals. MassDOT maintains the right to refuse and reject any submittal that does not comply with the MassDOT requirements related to the preparation and submittal of Contract Documents and Project requirements.

Refusal or rejection of submittals will not constitute grounds for delays in schedule. Acceptance of submittals, as confirmed by the QC Administrator, is necessary in order for construction to begin on a particular event.

All design submittals shall be in accordance with the 2006 Massachusetts Highway Department Project Development and Design Guide and shall be in English units. All submittals shall conform to the approved Quality System Manual submitted by the DB Entity. All submittals shall be electronic as well as hard copy. All submittals are required to be part of the overall schedule for the Project and such schedule shall show the 30 Day duration for review, a duration for response to comments, and a resubmittal activity.

Design Exceptions

For the 25% Highway Submission two design exceptions were requested and approved by MassDOT. The exceptions are for shoulder widths and for Worcester Street vertical curve lengths.

The DB Entity shall document and submit all further Design Exceptions in accordance with the process outlined in the 2006 Massachusetts Highway Department Project Development and Design Guide. MassDOT Engineering Directive E-09-005 provides direction regarding exemptions from controlling criteria. Design Exceptions must be approved by MassDOT prior to a 75% design submittal.

Over the Shoulder Reviews and 75% Design Submittal

Over the Shoulder reviews are examinations by MassDOT of design documents during the design process. The over-the-shoulder reviews will be conducted in the office of the DB Entity or its designer and in the presence of the DB Entity's design personnel with the intent to minimize disruption of on-going design work. Formal assembly and submittal of drawings or other documents will not be required. The review may be of progress prints, computer images, draft documents, working calculations, draft specifications and reports, or other design documents. The DB Entity shall schedule at least one over-the-shoulder review prior to the Progress Design Submittal.

The 75% Design Submittal shall consist of all documents required by the MassHighway Project Development and Design Guide. Approval of the 75% Design Documents shall be obtained from MassDOT prior to proceeding to Final Design.

Final Design Submittal

The Final Design Submittal shall consist of detailed, complete and checked drawings, reports and specifications necessary for construction of the applicable portion of the Project. Approval of the Final Design Documents will be in the form of a designation of "Approved for Construction." All documentation, including MassDOT written approval, relating to Design Exceptions from design standards shall be provided with the Final Design Submittal.

Within 30 Days of MassDOT approval of the final design of all items and segments of the Project, the DB Entity shall provide the Design Documents (plans, specifications, reports, and calculations) organized and indexed in accordance with MassDOT's project development uniform file system. All plans, specifications, and reports shall be signed and sealed by the Professional Engineer registered in the Commonwealth of Massachusetts who is in responsible charge. A written statement shall accompany the final Design Submittal from the QC Administrator indicating that the final Design Submittal is in conformance with all RFP and Contract requirements.

Re-submittal Process

Re-submittals of any Design Submittal may be required if deemed necessary by MassDOT, or any federal, state or local regulatory agency. Each re-submittal shall address all comments received from a prior submittal. The DB Entity shall not be entitled to any additional compensation or time extension due to any re-submittal requirement by MassDOT or federal, state, or local agency. Any marked-up documents shall be included in the re-submittal.

The DB Entity may continue its design efforts, at its sole risk, during the design submittal or resubmittal review process. Such continuation in no way relieves the DB Entity of the responsibility to incorporate MassDOT comments into the Design Documents, nor does it entitle the DB Entity to any additional compensation or time extension resulting from changes to the Design Documents required by the DB Entity's QC Team.

MassDOT will make every effort to review and respond to complete design and permit application/amendment submittals within 30 Days. However, the DB Entity acknowledges that MassDOT has not guaranteed any specific review period for internal reviews or reviews by federal, state, or local agencies, Utility or railroad owners. The period for each such review shall be established by the reviewing entity, at its discretion, after a plan submittal has been made to such entity.

After Design Documents receive designation as "Approved for Construction," the DB Entity shall, at a minimum, provide MassDOT with four (4) sets of signed and sealed Design Documents. In addition, the DB Entity shall provide MassDOT with one (1) set of photo mylars and electronic files of all signed and sealed plans.

Release for Construction/Approval

The DB Entity acknowledges and agrees that approval of the Design Documents shall be obtained from MassDOT and applicable local agencies prior to the issuance of an "Approved for Construction" designation by MassDOT.

4.4 EARLY START OF CONSTRUCTION PROCESS

The DB Entity's schedule and work plan shall identify the items, segments, or phases, including but not limited to clearing and grubbing, demolition, temporary construction, and environmental protection mitigation, that the DB Entity plans to release for early construction (i.e., construction that is to start prior to completion of Final Design Documents).

When the DB Entity has completed the Design for an item or segment and wishes to proceed with the early start of construction thereof, the QC Administrator shall certify that:

- The Design meets all applicable requirements;
- The Design has been checked in accordance with the DB Entity's approved QSM;
- Said item or segment is ready for construction; and
- The DB Entity has obtained all required State, Local, Environmental and Utilities approvals and permits.

MassDOT will then conduct an oversight review of the Design Submittal for said item or segment. The DB Entity shall develop a method to annotate (redline) the design package to document MassDOT's comments given at the design review and shall provide a method to document the incorporation of these comments in the formal final Design Submittal. After the DB Entity has incorporated the design review comments into its design and/or resolved any questions to the satisfaction of MassDOT, the DB Entity shall prepare a formal Design Submittal to MassDOT that shall include:

• All design plans;

- Design calculations;
- Design reports;
- Specifications;
- Electronic files; and
- Documentation that the DB Entity has obtained all required Governmental Approvals and Utility Owner Approvals.

The DB Entity shall address and/or incorporate any comments from MassDOT in its final design prior to MassDOT's acceptance of the final design. The DB Entity shall then resubmit the revised Design Documents to MassDOT.

The DB Entity shall not commence construction until the MassDOT review is complete and MassDOT concurs in writing with the QC Administrator's statement approving construction. MassDOT's concurrence with the QC Administrator's approval statement will not constitute approval or acceptance of the design or subsequent construction, nor relieve the DB Entity of its responsibility to meet the requirements hereof. Irrespective of whether MassDOT provides the DB Entity with the authority to begin construction on elements of the Project prior to completion of the entire design, the DB Entity shall bear the responsibility to assure that construction meets the RFP and Contract requirements.

4.5 HIGHWAY DESIGN

4.5.1 Survey

Limited survey information has been performed and was included on the MassDOT supporting information CD, included as part of the RFQ package. The DB Entity will be responsible for completing all survey requirements.

The DB Entity is responsible for verifying and accepting the available survey for use in preparation of the Final Design Documents.

The DB Entity is responsible for obtaining any additional survey as required for use in the preparation of the Final Design Documents. The survey base shall be in conformance to all MassDOT survey requirements. The DB Entity will be responsible for the installation of any bounds required.

4.5.2 Project Survey Control

All survey control for projects done by, or for, MassDOT shall be tied into the current State Plane coordinate system, and vertical datum, in use by MassDOT. Those datums are currently North American Datum of 1983 (NSRS2007) for horizontal control, and North American Vertical Datum of 1988 for vertical control.

Survey data, from preliminary design through as-built data after construction, shall be on the datums listed above. Care should be used with electronic CAD data during the entire Project that no translation or rotation of the data occurs. Field notebooks shall be obtained from the District Survey Office and all field notes shall be entered into those department books.

The DB Entity is responsible for replacement of installation of bounds as per MassDOT specifications.

Prior to establishment of the Project survey control, the Survey Section at MassDOT headquarters shall be contacted for advice on nearby control and procedures to achieve the required accuracy for the Project. When the control observations have been completed and adjusted, a copy of the adjustment results along with tie sketches of the points established and a brief description of the equipment and procedure used shall be submitted to the Survey Engineer at MassDOT headquarters.

Satellite-based Project network observations shall be tied to the nearest Federal Base Network (FBN) station or the nearest Cooperative Base Network (CBN) station as found on the National Geodetic Survey (NGS) website: <u>http://www.ngs.noaa.gov/PROJECTS/FBN/</u>, and adjustments shall achieve an accuracy of 0.015 m horizontally, and 0.025 m vertically (2 sigma or 95 percent confidence). Differential leveling observations shall be tied to the nearest second-order or better vertical control station retrieved from the National Geodetic Survey Datasheet website: http://www.ngs.noaa.gov/cgi-bin/datasheet.prl or from the Mass Highway Geodetic Control website: <u>http://www.mhd.state.ma.us/mhds/main.asp?ACTION=GC_V_QUERY</u>, and double-run leveling shall achieve a closure of: 6 mm x (km)^{1/2}.

4.5.3 Highway Design

The DB Entity shall design and reconstruct the replacement of an existing highway bridge and related highway approach work for the Cedar Street Bridge Over Route 9, Bridge No. W-13-015 BIN 2MH. Preliminary plans for both the highway and bridge design have been provided to the DB Entity.

There are no utilities carried on the existing bridge. However, there are overhead utilities over the bridge's east sidewalk. Poles south of the bridge are owned by Verizon and the poles north of the bridge are owned by Wellesley Power and Light. The utilities include electric, telephone, and cable.

The DB Entity will be responsible for preparing design plans and documents stamped by an Engineer registered in the Commonwealth of Massachusetts that are in conformance to the 2006 Massachusetts Highway Department Project Development and Design Guide and all amendments.

4.5.4 Pavement Design

The DB Entity shall establish proposed pavement limits. The pavement sections shown on the 25% highway plans have been approved by MassDOT. The DB Entity may submit for approval other pavement treatments, i.e. (full depth, cold plane & overlay, etc.) in accordance with Chapter 9 of the Massachusetts Highway Department Project Development and Design Guide. Traffic Counts are in the Functional Design Report which are in RFP Appendix C. Additional Traffic Counts are scheduled for July 3 through 5, 2010 and will be made available to the DB Entity as soon as they are available.

4.5.5 Highway Design Documents

The DB Entity, at its discretion, may elect to advance from the 25% submittal to the 100% submittal in the event that all comments can be resolved by the 100% submittal. Advancement to the 100% submittal is at the sole risk of the DB Entity.

The Design Submittals shall include, at a minimum, the following plans and supporting documentation as detailed in the Massachusetts Highway Department Project Development and Design Guidelines:

- 25% Highway Design Submittal
- 75% Highway Design Submittal (incorporating all comments included in RFP on previous plans)
- 100% Highway Design Submittal
- Design Exception Report
- Early Environmental Coordination Checklist
- Final PS&E Submittal
- Mylar submission of Highway Plans
- Final Highway Design Calculations

As required for the early start of construction process, plan sets and sheet types for partial construction work elements, prior to a completed final design, shall be coordinated with the QC process and MassDOT oversight.

4.6 TRAFFIC ENGINEERING

4.6.1 Traffic Management Plan (TMP)

The DB Entity shall submit a Traffic Management Plan (TMP) to MassDOT for review and approval. The TMP is for the alteration of traffic patterns and lane configurations necessary for the construction of the Project. Traffic management plans shall be in accordance with applicable MassDOT Standard Details and Drawings for the Development of Traffic Management Plans, and MUTCD standards.

The DB Entity may utilize the TMP depicted on the plan set on the CD that MassDOT provided the DB Entity, or the DB Entity may develop a new TMP. The TMP shall adhere to the following minimum criteria:

The DB Entity shall be permitted to close Route 9 and Cedar Street for a period of 72 continuous hours commencing at 10:00 PM on Friday, July 1, 2011, to perform demolition, abutment and wingwall extensions, superstructure installation and roadway work to a minimum of binder course for Cedar Street. Other miscellaneous bridge and roadway work may only have lane restrictions effecting Cedar Street which include the final paving and other road work which will be necessary

will be allowed between June 20, 2011 and July 20, 2011, between the hours of 10:00 PM and 6:00 AM. Lane restrictions for Route 9 will be permitted only with written consent of MassDOT. Prior to the roadway closure the DB shall establish a public notification procedure commencing at a minimum 30 days before the closure, other miscellaneous bridge and roadway work will be allowed between June 20, 2011 to July 20, 2011, between the hours of 10:00 PM and 6:00 AM. Night-time lane restrictions will be permitted with written consent of MassDOT. MassDOT will most likely not approve any lane restrictions for Route 9 other than the full closure described in Milestone No. 2.

4.6.2 Roadside Elements

With the exceptions noted in the available Documents, the DB Entity shall upgrade all existing warning, regulatory, supplemental, and guide signs within the Project limits. All sign legends shall be in English units for the DB Work.

Proposed signing plans shall include the layouts showing the locations of existing and proposed ground mounted and overhead signs, special sign details, legend, sign lighting, structural and foundation requirements. Any requirements for electric service shall be coordinated with the local electric utility and provided by the DB Entity.

An existing cantilever sign on Route 9 eastbound just west of the bridge may, for the DB Entity's operations be required to be temporarily removed and reset.

All temporary and permanent roadside design elements including, but not limited to, highway guardrail, construction barriers, bridge rail, sign supports, drainage outlets, etc. shall be designed in accordance with the 2006 AASHTO Roadside Design Guide and all amendments.

4.6.3 Pavement Markings

The DB Entity shall provide pavement markings within the Project limits.

The DB Entity will provide temporary and permanent pavement markings as required within the Project limits to complete the Project.

Permanent pavement markings shall consist of Thermoplastic material. Temporary markings may be paint or adhesive tape. The DB Entity will be responsible for the maintenance/replacement of all pavement markings within the Project limits through the entire Project duration.

Prior to final placement of proposed pavement markings, all temporary and existing pavement markings shall be entirely removed from the pavement surface.

4.6.4 Traffic Signals

The DB Entity shall submit, for review and approval, a Traffic Signal Plan to MassDOT for the Cedar Street/Worcester Street Intersection. Traffic signal plans shall be in accordance with the 2003 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the Standard Municipal Traffic Code, with the October 2006 Massachusetts Amendments to the MUTCD and the Standard Municipal Traffic Code. Submittals shall be consistent with the

requirements detailed in the 2006 Massachusetts Highway Department Project Development and Design Guide.

The DB Entity may utilize the Traffic Signal Plan depicted on the plan set that MassDOT provided the DB Entity, or the DB Entity may develop a new Traffic Signal Plan.

4.7 BRIDGE DESIGN

The Bridge shall be designed and detailed in accordance with the codes, standards and references listed elsewhere in the Contract Documents. The DB Entity shall thoroughly review the available documents and take complete responsibility for the preparation of the finalized Design Documents. Designs shall be completed by the DB Entity for Final Design Submittal to MassDOT. Any issues related to the available documents and constructability shall be raised during the procurement process.

The DB Entity shall be responsible for completing all necessary designs for the Final Design Submittal.

4.7.1 Bridge Design Development

MassDOT has advanced Design development through the "Sketch Plan" stage. The DB Entity will be responsible to continue the design while retaining all aesthetics shown on the "Sketch Plans." This will include a Geotechnical Report to support the DB Entity's design and methods of construction.

All plans, calculations, and comments are provided for reference only. The bridge design plans furnished to the DB Entity for this Project reference the use of AASHTO Bridge Design Specifications, 17th Edition and the previous MassDOT Bridge Manual information as the basis for design. The DB Entity acknowledges by receipt of such plans that they explicitly understand that while these plans have been advanced to the level described above, the DB Entity shall be required to provide a final, complete Project design that is stamped, sealed and certified by their own Professional Engineer of Record for review and approval by MassDOT and possible third parties. The Professional Engineer of Record must be registered in the Commonwealth of Massachusetts. Revisions or additions to information in the reference plans being provided may be necessary based on comments received during the on-going environmental permitting or MassDOT review process.

The scope of work is based on the Type Study, and Sketch Plans, as approved by MassDOT. In general the bridge shall be designed based on the following:

- The Project will be required to utilize a rapid build construction technique, which may include the use of Self-Propelled Modular Transporters (SPMT's) to replace the existing bridge superstructure.
- Design Loadings: HS25-44 per AASHTO Bridge Design Specifications, 17th Edition.

4.7.2 Bridge Design Documents

The Design Submittals shall include, at a minimum, the following plans and supporting documentation as indicated in the Massachusetts Highway Department Bridge Manual:

- First Structural Submission (Plans and Calculations)
- Final Bridge Plans
- Mylar submission of Bridge Plans
- Final Bridge Design Calculations
- Independent set of Bridge Calculations
- As Built Rating Report: Prepared in accordance with requirements in Chapter 7 of the MHD Bridge Manual.
- Specifications for Materials and Construction Methods

4.8 GEOTECHNICAL

4.8.1 Geotechnical Report

MassDOT's consultant has conducted subsurface exploration within the Project area and submitted a geotechnical report. The DB Entity is responsible for the preparation of a new Geotechnical Report. For the temporary bridge supports the DB Entity is responsible for assessing the geotechnical conditions at the site based on the existing borings, and conduct such additional subsurface investigations as necessary for the DB Entity to prepare a memo confirming the adequacy of the temporary support conditions.

4.8.2 Subsurface Investigations by the DB Entity

Subsurface geotechnical investigations have been completed for the bridge location and boring logs are presented on the sketch design drawings prepared by the MassDOT's consultant and furnished to the DB Entity. This information is provided to be used at the discretion of the DB Entity. The DB Entity may elect to perform additional subsurface explorations to aid in the development of the design.

The DB Entity acknowledges that it may be necessary to supplement borings with test pits and probes, and that MassDOT may require additional borings, test pits or probes in connection with any of MassDOT's reviews.

4.9 HYDRAULICS (Not Applicable)

4.10 AESTHETICS

The DB Entity will be responsible for retaining all aesthetic treatments as shown on the sketch plans.

4.11 HIGHWAY LIGHTING

The DB Entity will be responsible for maintaining or restoring existing lighting conditions.

4.12 LANDSCAPING

The Design Build Entity shall perform the scope of the landscape-related work set forth in the Landscaping Plan set that MassDOT has provided the DB Entity. The plan set contains plans that were previously submitted to MassDOT and MassDOT's comments on them

The scope of landscape-related work for this Project includes but is not limited to tree protection, invasive plant species management, restoration planting, and seeding as follows.

4.12.1 Tree Protection

Typical tree protection detail shall be provided by the DB Entity for all trees to be preserved as shown on the schematic drawing. Trees to remain shall be pruned and freed from climbing invasive non-native vines. Tree protection shall consist of preservation of Core Vegetation as shown on the plans and staked in the field by the Contractor and approved by MassDOT Landscape Architect, prior to construction.

Perimeter construction fencing shall be installed around perimeter of Tree Preservation Zones and maintained in good condition for the duration of the contract.

4.12.2 Invasive Plant Species Management

The DB Entity shall remove and control invasive non-native plant species including, but not limited to Oriental Bittersweet (Celastrus orbiculatus), tree of heaven (Ailanthus altissima) and Rose species (Rosa sp.).

4.12.3 **Restoration Planting**

Planting for the Project shall consist of six (6) types, as follows:

A. Core Planting Zones:

- a. The DB Entity shall extend the Tree Preservation Zone with similar plant species including those listed below. Additional species and acceptable substitutions shall be approved by the MassDOT Landscape Section before final design.
- b. Planting density shall be as follows.
 Western Tree Preservation Zone (2850 SF) = 25 trees Eastern Tree Preservation Zone (6250 SF) = 50 trees

Species shall be as Follows:

Evergreen Trees Austrian pine (Pinus nigra): 5 - 6 ft. ht. White pine (Pinus strobus): 5 - 6 ft. ht. Deciduous Trees Red maple (Acer rubrum): 2-2.5 in. cal. Scarlet oak (Quercus coccinea): 2 - 2.5 in. cal. Pin oak (Quercus palustris): 2 - 2.5 in. cal.

- B. Edge Planting Zones:
 - a. The DB Entity shall replace edge vegetation that will be impacted by construction. Typical edge plants shall be shrubs and ornamental trees including those listed below. Additional species and acceptable substitutions shall be approved by the MassDOT Landscape Section

before final design. Plant sizes shown are minimums. The planting plan shall include a representative mix of at least 50% of the species listed from each category.

b. Planting density shall be as follows. The plant ratio shall consist of 30% small trees/large shrubs and 70% shrubs.

Western Edge Planting Zone (6570 SF) = 210 plants Eastern Edge Planting Zone (905 SF) = 30 plants

Small Trees/Large Shrubs

Serviceberry species (Amelanchier sp.): 5-6 ft. ht. Eastern redbud (Cercis canadensis): 6-8 ft. Cockspur hawthorn (Crataegus crus-galli): 6-8 ft. Downy hawthorn (Crataegus mollis): 6-8 ft. Common witchhazel (Hamamelis virginiana): 3-4 ft. ht.

Shrubs

Red chokeberry (Aronia arbutifolia): 2-2.5 ft. ht. Black chokeberry (Aronia melanocarpa): 2-2.5 ft. ht. Sweetpepperbush (Clethra alnifolia): 2-2.5 ft. ht. Redtwig dogwood (Cornus sericea): 2-3 ft. ht. Northern bayberry (Myrica pensylvanica): 2-2.5 ft. Arrowwood viburnum (Viburnum dentatum): 2-2.5 ft. ht. Highbush cranberry (Viburnum trilobum): 3-4 ft. ht.

c. Prior to replanting, disturbed area shall be cleared and grubbed to remove old root systems. However, in order to minimize exposure of weed seeds in the soil (seed bank), the DB Entity SHALL NOT TILL the soil prior to planting. Invasive non-native plant species such as Oriental bittersweet (Celastrus orbiculatus) shall be removed from the site and treated with herbicide to control re-growth.

C. Ornamental Planting Zone:

- a. The DB Entity shall provide an attractive area as the entry way for pedestrian access up the stairway and over the bridge. This area shall be designed to minimize maintenance and discourage establishment of invasive plant species. A recommended strategy is to achieve coverage of the soil surface as quickly as possible in order to shade out seedlings.
- b. Plant species and sizes for Ornamental Planting Zone may be referenced from any of the other lists provided here.
- c. Minimum planting density shall be calculated by area with a typical spacing of 6 ft. on center for shrubs and 12 ft. on center for ornamental trees. Larger trees may be used as specimen trees.

North Ornamental Planting Zone (550 SF) = 30 shrubs (min.) South Ornamental Planting Zone (1600 SF) = 50 shrubs (min.)

d. Native species ornamental grasses such as switchgrass (Panicum virgatum) may be planted as a spacing of 3 ft. on center.

D. Southern Slopes:

a. The DB Entity shall minimize loss of existing trees during construction. Disturbed areas shall be cleared and grubbed then covered with a 2 inch minimum of compost and seeded to an erosion control seed mix.

 Trees larger than 4 inch caliper that are removed shall be replaced one-for-one as individual trees planted in tree saucers formed into the slope as per the standard MassDOT planting detail. Tree species shall be the following.

Red maple (Acer rubrum): 2-2.5 in. cal. Scarlet oak (Quercus coccinea): 2-2.5 in. cal. Pin Oak (Quercus palustris): 2-2.5 in. cal.

E. Seeding

- a. The DB Entity shall minimize maintenance of woody vegetation along the roadside by providing a "mow zone". Currently, the areas are flail mowed and unsightly. The grassed mow zone shall be cleared and grubbed to remove all woody roots. The areas shall be seeded to a native grass erosion control mix with a dominance of switchgrass (Panicum virgatum).
- b. Areas disturbed by construction or tree removals and not identified for a specific treatment shall be fine graded, patched with 2" compost and seeded to lawn grass.

F. Miscellaneous Site Protection and Restoration

- a: The trail marker sign post at the foot of the existing stairway shall be removed and replaced by the contractor.
- b. Any impacts to adjacent landscaping on private property shall be the responsibility of the DB Entity.

All landscaping shall be completed as per the MassHighway Standard Specifications as referenced in Section 6.6.2.

SECTION 5.0

ENVIRONMENTAL APPROVALS/ CLEARANCES, COMPLIANCE, MITIGATION

5.1 GENERAL STATEMENTS

The DB Entity is responsible at all times for complying with: (1) all conditions and schedules in any Environmental Approvals/Clearances, whether obtained by MassDOT or the DB Entity, and (b) all applicable Environmental Laws. Failure to comply with conditions or schedules in Environmental Approvals/Clearances will be grounds for termination hereof.

The DB Entity shall be responsible for any and all costs, liability, penalties, expenses, damages, including economic, property, natural resource and personal injury, or delays resulting from any non-compliance with Environmental Approvals/Clearances.

In accordance with the Chapter 291, Section 96 of the Acts of 2004, also known as the 2004 Transportation Bond Bill, and because there will be no increase in capacity or change in alignment to the roadway, the Project bridge is exempt from review under the Massachusetts Environmental Policy Act Regulations (301 CMR 11.00), the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00), and the Chapter 91 Waterways Regulations (310 CMR 9.00).

5.2 ENVIRONMENTAL APPROVALS/CLEARANCES TO BE OBTAINED BY THE DB ENTITY

It is the responsibility of the DB Entity, in coordination with MassDOT, to obtain all Environmental Approvals/Clearances other than those provided by MassDOT under Contract Section 5.3. The DB Entity will be required to prepare all documentation required for any application for an Environmental Approval/Clearance or any amendment to an Environmental Approval/Clearance. The DB Entity is also responsible for the preparation of all documentation required to satisfy any precedent conditions contained in Environmental Approvals/Clearances or amended Environmental Approvals/Clearances prior to the start of work.

Except where Environmental Approvals/Clearances are required solely because of MassDOT-Directed Changes, the cost of obtaining all Environmental Approvals/Clearances will be borne by the DB Entity. Except as provided in this Section, the DB Entity shall be responsible for any and all costs, including any liability, penalties, expenses, damages or delays resulting from any suspension, termination, interruption, denial or non-renewal of, or failure to obtain any Environmental Approval/Clearance not obtained by MassDOT.

If the DB Entity's erection, demolition, storage, or other procedures not originally allowed by existing environmental permits for required work to occur in or otherwise impact water or wetland resource areas, no associated work can occur until all required environmental permits have been either amended or obtained allowing such work. The DB Entity shall be responsible for preparing all documentation necessary for amending Environmental Approvals. As necessary, MassDOT shall be provided a reasonable opportunity to review completed applications for Environmental

Approvals prior to their submission. The DB Entity is further advised that MassDOT will not entertain a delay claim due to the time required to modify or obtain the environmental permits.

The proposed bridge structure is not mapped within the Natural Heritage and Endangered Species Program's Estimated or Priority Habitat. As part of the 75% Construction Plans and Contract Documents, the DB Entity shall obtain a letter from the USFWS stating that no federally listed species occur within the vicinity of the Project and that no further coordination is required. If the USFWS indicates that federally listed species occur within the Project vicinity the DB shall perform a detailed field review to identify any listed species.

5.3 ENVIRONMENTAL APPROVALS/CLEARANCES TO BE PROVIDED BY MASSDOT

No environmental approvals/clearances have been applied for or received by MassDOT. MassDOT will not be obtaining any environmental approvals/clearances in advance of the NTP for the Project.

5.4 COORDINATION BETWEEN THE DB ENTITY, MASSDOT AND REGULATORY AGENCIES

MassDOT will serve as the applicant of record for all Environmental Approvals/Clearances. All applications for Environmental Approvals or amendments will be prepared by the DB Entity. MassDOT will review the applications, sign as the applicant and submit the application to the agency with jurisdiction.

The DB Entity shall be responsible for preparing all documentation necessary to support applications for Environmental Approvals. MassDOT shall be provided a reasonable opportunity to review completed applications for Environmental Approvals prior to their submission.

MassDOT will serve as liaison between the DB Entity and regulatory agencies. The DB Entity shall not be authorized to negotiate with regulatory agencies on behalf of MassDOT but shall coordinate all negotiations with MassDOT.

The DB Entity is encouraged to develop a close working relationship with MassDOT and the regulatory agencies (other than the State Historic Preservation Officer) to ensure that its designs will be acceptable from an environmental perspective. MassDOT takes no responsibility for any time delay or cost associated with submissions that are refused, rejected, conditioned or modified by MassDOT or any regulatory agency or for any redesigns such agencies or MassDOT should require.

5.5 DUTY OF COMPLIANCE

The DB Entity is responsible at all times for complying with: (a) all conditions and schedules in any Environmental Approvals/Clearances, whether obtained by MassDOT or the DB Entity; and (b) all applicable Environmental Laws. Failure to comply with conditions or schedules in Environmental Approvals/Clearances will be grounds for termination thereof. The DB Entity shall be responsible for any and all costs, liability, penalties, expenses, damages, including economic, property, natural resource and personal injury, or delays resulting from any noncompliance with Environmental Approvals/Clearances.

5.6 ENVIRONMENTAL MITIGATION

The DB Entity is responsible for preparing all designs and specifications for environmental mitigation and for complying with all mitigation requirements and schedules contained in Environmental Approvals/Clearances, including requirements for replacement of wetlands, mitigation for floodplain impacts, stream restoration and any monitoring of mitigation areas required by regulatory agencies, and precautions for construction adjacent to "sensitive resource areas." The DB Price includes the cost of all such mitigation, including any additional mitigation required as a result of amendments to Environmental Approvals/ Clearances, except where such additional mitigation is required solely as a result of a MassDOT-Directed Change.

5.7 MAINTENANCE OF MITIGATION SITES

The DB Entity shall inspect, care for and maintain any mitigation sites during construction and shall warrant and guarantee plant survival for one year following plant installation. During this period, the DB Entity shall maintain in a growing condition all newly established plantings, seedings and soddings and shall protect new tree growth and other vegetative growth against injury, replacing all dead or dying plants or reseed areas requiring replacement to achieve the prescribed success standards.

5.8 NPDES

The DB Entity shall verify if this Project is subject to the Environmental Protection Agency (EPA) Construction General Permit. Pursuant to the Federal Clean Water Act, construction activities which disturb one acre or more are required to apply to the U.S. Environmental Protection Agency (EPA) for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities. On July 14, 2008 (73 FR 40338), EPA issued the final 2008 NPDES Construction General permit for construction activity. The permit contains substantially the same terms and conditions as the 2003 CGP.

On July 1, 2003 (68 FR 39087), EPA published the final NPDES construction general permit for construction activity. On August 4, 2003 (68 FR 45817), EPA reissued the General Permit for the Commonwealth of Massachusetts and included state specific requirements.

The NPDES General Permit involves the submission of a Notice of Intent (NOI) to the EPA prior to the start of construction (defined as any activity that disturbs land, including clearing and grubbing). There is a seven (7) Day review period commencing from the date EPA enters the NOI into their database. The DB Entity is advised that, based on the review of the NOI, EPA may require additional information, including but not limited to, the submission of the Storm Water Pollution Prevention Plan (SWPPP) for review. Work may not commence on the Project until final authorization has been granted by EPA and the Massachusetts Department of Environmental Protection (DEP) if applicable (see below). Any additional time required by EPA or DEP for review of submittals will not constitute a basis for claim of delay.

If the Project discharges to an Outstanding Resource Water, vernal pool, or is within a coastal Area of Critical Environmental Concern (ACEC) as identified by the DEP, a separate filing to DEP is required. Filing fees may be associated with a DEP filing and shall be paid by the DB Entity.

Separate NOIs must be submitted by all required Permittees, including but not limited to, MassDOT (typically MassDOT), and the Operator (the DB Entity). In cases where the Municipality or other party would either be classified as MassDOT, Operator, and/or have control over the plans and specifications or day-to-day site operations, said Municipality or party must also submit an NOI. The DB Entity is responsible to ensure that all required Permittees have submitted an NOI and shall provide proof of same to MassDOT prior to the start of any work.

The NPDES General Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the aforementioned statutes and regulations. The SWPPP shall include the NPDES General Permit conditions and required information, MassDOT Performance Standards and detailed descriptions of erosion and sedimentation controls to be implemented during construction. It is the responsibility of the DB Entity to prepare the SWPPP to meet the requirements of the most recently issued NPDES General Permit and, if applicable, the DEP requirements. The DB Entity shall submit three (3) copies of the draft SWPPP to MassDOT for review and approval at least four weeks prior to any regulated site activities. It is the responsibility of the DB Entity to be familiar with the NPDES General Permit conditions and the conditions of any Wetlands Protection Act Order of Conditions or Negative Determination, DEP Water Quality Certification, Army Corps of Engineers Section 404 Permit and all other environmental permits and regulations applicable to this Project. The DB Entity shall include in the SWPPP the methods and means necessary to comply with applicable conditions of said permits and regulations.

It is the responsibility of the DB Entity to complete the SWPPP in accordance with the NPDES General Permit and DEP requirements, provide all information required, and obtain all certifications as required by the NPDES General Permit. Any amendments to the SWPPP required by site conditions, schedule changes, revised or additional work, construction methodologies, regulations and the like are the responsibility of the DB Entity. Amendments will require the approval of MassDOT prior to implementation.

Included in the NPDES General Permit conditions is the requirement for inspection of all erosion controls and site conditions on a weekly basis as well as after each incidence of rainfall exceeding 0.5 inches in twenty-four hours.

The DB Entity shall choose a qualified individual (herein after referred to as the "Inspector") who will be on-site during construction to perform these inspections. MassDOT must approve the DB Entity's Inspector. In addition, if MassDOT determines at any time that the Inspector's performance is inadequate, the DB Entity shall provide an alternate Inspector. Written Weekly Inspection forms, Storm Event Inspection forms, and Monthly Summary Reports shall be completed and provided to MassDOT within two (2) business Days of completion. Monthly Summary Reports must include a summary of construction activities undertaken during the reporting period, general site conditions, erosion control maintenance and corrective actions taken, the anticipated schedule of construction activities for the next reporting period, any SWPPP amendments, and representative photographs.

The DB Entity is responsible for preparation of the SWPPP, all required certifications, inspections, forms, reports and any and all corrective actions necessary to comply with the provisions of the NPDES General Permit. In addition, the DB Entity shall provide MassDOT with at least five (5) copies of all documents associated with the SWPPP including, but not limited to, the final approved SWPPP, required SWPPP amendments (including revisions/addenda pre, during and post-construction), certifications, NOIs, Notices of Terminations (NOTs), Weekly Inspection forms, Storm Event Inspection forms, Monthly Summary reports (including photographs). These are to be distributed by the DB Entity to MassDOT's Construction Engineer, Area Engineer, Resident Engineer, MassDOT's Environmental Engineer, and the Construction Environmental Coordinator. Additional copies are to be provided by the DB Entity if requested by MassDOT.

Work associated with performance of inspections of all erosion controls and site conditions is considered incidental to this Item.

The Standard Specifications require adequate erosion control for the duration of the Contract. Inspection of these controls is considered incidental to the applicable items. Additional erosion controls beyond those specified in bid items elsewhere in this contract which are selected by the DB Entity to facilitate and/or address the DB Entity's schedule, methods, and prosecution of the work shall be considered incidental to this item.

The CGP requires the submission of a Notice of Termination (NOT) from all Permittees (Operators, MassDOT, etc.) when final stabilization has been achieved. Approval of final stabilization by MassDOT and confirmation of submission of all NOTs by the DB Entity will be required prior to submission of the Resident Engineer's Final Estimate.

5.9 HAZARDOUS MATERIALS

Based on the status of the Project, MassDOT believes that it is likely that hazardous materials including lead paint and treated wood products will be encountered during the demolition/construction activities. The DB Entity should independently assess the likelihood of encountering hazmat during construction activities.

In the event the DB Entity encounters Unknown Contamination within the Project limits, the DB Entity shall (a) promptly notify MassDOT and advise MassDOT of any obligation to notify state or federal agencies under Environmental Laws; and (b) take reasonable steps including design modifications and/or revisions to construction techniques, to avoid excavation or dewatering in areas with Unknown Contamination. The DB Entity shall afford MassDOT the opportunity to inspect sites containing Unknown Contamination before any action is taken which would inhibit MassDOT's ability to ascertain the nature and extent of the Unknown Contamination. Where excavation or dewatering of Unknown Contamination is unavoidable, the DB Entity shall utilize appropriately-trained personnel, shall select the most cost-effective approach to Hazardous Materials Management, and shall price such Hazardous Materials Management based on the unit prices set forth in Exhibits P and Q.

Compensation for Hazardous Materials Management of Unknown Contamination will not be allowed unless the DB Entity demonstrates to MassDOT's satisfaction that (a) the Hazardous Materials could not have been avoided by reasonable design modifications or construction techniques and (b) the requested compensation represents the most cost-effective approach to Hazardous Materials Management. Upon such demonstration, the DB Entity shall be entitled to reimbursement from the Project Contingency as provided in Section 17.8. To the extent that any proceeds of insurance are available to pay the cost of any Hazardous Materials Management for Unknown Contamination, the DB Entity shall not be entitled to any reimbursement from the Project Contingency.

The following Special Provisions shall be followed in the handling and disposal of contaminated soils and groundwater:

Item 181.2 – Disposal of Regulated Soil – Unlined Landfill: In-State Facility

Item 181.3 – Disposal of Regulated Soil – Lined Landfill: In-State Facility

Item 181.4 - Disposal of Regulated Soil - Unlined Landfill: Out-of-State Facility

Item 181.5 - Disposal of Regulated Soil - Lined Landfill: Out-of-State Facility

Item 181.6 – Disposal of Regulated Soil – Asphalt Batching Facility

Item 181.7 – Disposal of Hazardous Waste – Hazardous Waste Landfill

Item 181.8 – Disposal of Hazardous Waste – TSCA Facility

Item 181.9 – Disposal of Hazardous Waste – Hazardous Waste Incinerator

Item 183.21 - Disposal of Granular-activated Carbon

Item 183.11 - Treatment of Contaminated Groundwater

These provisions are set forth in Exhibits P and Q of the Contract.

5.10 Health and Safety Plan

A Health & Safety Plan (HASP) shall be prepared by a Certified Industrial Hygienist or other experienced individual with the appropriate training required by OSHA to prepare such a plan, and it shall include the components required by OSHA 29 CFT 1910.120(b). The preparer's name and work experience shall be included as part of the Health and Safety Plan submittal. The HASP must be stamped by a Certified Industrial Hygienist certifying that it complies with all applicable laws, regulations, standards and guidelines, and that it provides a degree of protection and training appropriate for implementation on the Project during the execution of this contract.

The HASP shall be designed to identify, evaluate, and control health and safety hazards associated with the work on this Project and provide for emergency response if needed. The HASP shall be a dynamic document with provision for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. Health and safety procedures provided by the DB Entity shall comply with all the appropriate regulations that address employee working conditions (e.g. OSHA, RCRA, CERCLA). In addition, guidelines of NIOSH, OSHA, USCG, EPA, etc. shall be followed. Equipment used for the purpose of health and safety shall be approved and meet pertinent standards and specifications of the appropriate regulatory agencies.

A copy of the Health and Safety Plan shall be maintained on-site at all times by the DB Entity. The on-site copy shall contain the signature of MassDOT and each on-site employee of MassDOT, the DB Entity and Subcontractors. The employee's signature on the Health and Safety Plan shall be deemed prima facie evidence that the employee has read and understands the plan. A copy of the plan with signatures shall be submitted to MassDOT at the conclusion of the Contract, or at MassDOT's request. Signature sheets shall be submitted monthly, or at the request of MassDOT. The DB Entity's Price Proposal shall include the cost of minimizing contact with or avoiding excavation of soil and dewatering in Known Contaminated Areas by design approach and/or construction techniques. Where excavation or dewatering is unavoidable, the DB Entity shall utilize appropriately-trained personnel and shall select the most cost-effective approach to Hazardous Materials Management. Wherever feasible and consistent with applicable Environmental Laws, contaminated soil and groundwater shall not be disposed off-site. All Hazardous Materials shall be managed in accordance with applicable Environmental Laws and Environmental Approvals.

SECTION 6.0

UTILITIES

6.1 GENERAL STATEMENT

Construction of the Project may affect both existing and proposed Utilities. The DB Entity shall complete Utility Work to ensure that Utilities are properly identified and that all necessary relocations occur so as to enable the DB Entity to achieve completion of the Project in accordance with the Contract Document requirements. Services include: the identification of Utilities requiring relocation, notifications to and negotiations of design and agreements with Utility Owners, coordination of design and construction efforts for the Utility Work. The MassDOT web page lists the applicable utilities contacts, which is subject to change, as follows:

- Wellesley Municipal Light
- National Grid Gas
- Verizon
- Wellesley Water & Sewer
- Comcast
- AT&T/TCG, C/o
- Wellesley Fire Alarm
- Town Engineer

Don Newell781-235-7600 x3399Dennis Peri781-907-2836Karen Nunes508-991-3522Joseph Duggan781-235-7600 x3350Jean MacLaren603-695-1461David Edgar781-221-8400 x7005David Lizak781-235-7600 x3395Stephen Fader781-235-7600 x3310

6.2 GENERAL DB ENTITY RESPONSIBILITIES

The DB Entity shall be solely responsible for the completion of the Utility Work.

The DB Entity shall be responsible for verifying that the Utility as designed and constructed is compatible and interfaces properly with the Project. The DB Entity shall be responsible for confirming that all Governmental Approvals have been obtained by each Utility Owner which may be performing any Utility Work and for verifying that such work complies with the requirements of the applicable Governmental Approval.

The DB Entity shall carry out the Utility Work carefully and skillfully and shall support and secure its work so as to avoid damage to all Utilities. Unless otherwise directed by the Utility Owner, the DB Entity shall not move or remove any Utility without the Utility Owner's written consent. At the completion of all construction, the conditions of all Utilities shall be as safe and permanent as before. If any Utilities are damaged by the DB Entity, the DB Entity shall notify the affected Utility Owners which may cause the damage to be repaired at the DB Entity's expense.

6.3 ASCERTAINING THE LOCATION OF UTILITIES

The DB Entity bears full responsibility at its own expense for ascertaining the existence and exact location and size of any Utility to be relocated or otherwise impacted on either a temporary or permanent basis.

6.4 COMMENCEMENT OF UTILITY WORK

Subject to the availability of Right-of-Way, the DB Entity may commence the Utility Work at any time following the date specified in the Notice to Proceed or under an approval by MassDOT for the early start of construction. The DB Entity is responsible for causing the Utility Work to be completed in order to permit construction of the Project according to the construction schedule as approved by MassDOT.

6.5 MEETINGS AND COOPERATION WITH UTILITY OWNERS

The DB Entity shall be responsible for all coordination with the affected Utility Owners that is necessary in order to accomplish the Utility Work (including obtaining information, coordination of scheduling, design review, inspections, approvals and acceptances). The DB Entity shall notify MassDOT at least two Business Days in advance of each meeting with a Utility Owner's representative scheduled by the DB Entity and shall allow MassDOT to participate in the meeting. The DB Entity shall provide copies of all correspondence with the Utility Owner within seven Days after receipt or sending.

The DB Entity shall make diligent efforts to obtain the cooperation of each Utility Owner as necessary for the Project. The DB Entity shall immediately notify MassDOT if the DB Entity becomes aware that a Utility Owner is not cooperating in providing needed DB Work or approvals. After such notice, the DB Entity shall continue to diligently seek to obtain the Utility Owner's cooperation, and shall assist MassDOT as reasonably requested by MassDOT, with regard to the problem. MassDOT agrees to use its reasonable efforts to assist the DB Entity in obtaining the cooperation of the Utility Owners, but such assistance shall not be deemed to relieve the DB Entity of its sole and primary responsibly for the satisfactory compliance of its obligations set forth in the Contract Documents.

6.6 INSPECTION OF UTILITY WORK

The DB Entity shall permit Utility Owners to inspect the Utility Work.

6.7 ENVIRONMENTAL COMPLIANCE PERTAINING TO UTILTY WORK

The DB Entity shall comply with all applicable Environmental Laws in performance of the Utility Work, including the requirement set forth in Section 5.6, Environmental Approvals/Clearances, Compliance Mitigation.

6.8 AGREEMENTS BETWEEN DB ENTITY AND UTILITY OWNERS

The DB Entity shall not enter into any agreement with any Utility Owner that purports to bind MassDOT in any way, nor shall any agreement be deemed to modify the terms of the Contract Documents.

6.9 POLICY OF AVOIDING RELOCATIONS

The location of Utilities and potential impacts of Relocations shall be considered by the DB Entity in developing changes to MassDOT supplied designs with the following goals: (a) avoiding Relocations to the extent practicable; (b) if a Relocation is not reasonably avoidable, protecting the

Utility in place to the extent practicable; and (c) otherwise minimizing the potential costs and delays relating to the Relocations to the extent practicable.

6.10 LEGAL ACTIONS

Should the DB Entity reasonably believe that any Utility Owner will not undertake or permit any Relocation in a manner consistent with the timely completion of the Project, MassDOT will consider requests by the DB Entity to exercise any legal rights that MassDOT may have (as deemed appropriate by MassDOT in its sole discretion) with respect to the Utility Owner. Such request shall be accompanied by evidence reasonably satisfactory to MassDOT that the DB Entity has made diligent efforts to obtain the Utility Owner's cooperation but has been unsuccessful.

6.11 SCHEDULING AND COST RISKS

The DB Entity specifically assumes all cost risks and risk of schedule delays associated with the Utility Work.

6.12 UTILITY DIARIES/AS-BUILTS

The DB Entity shall maintain "utility diaries" and "as-built" utility maps of a quality acceptable to MassDOT. The standards for preparation of all Design Documents relating to utilities and final asbuilt plans shall conform to all applicable MassDOT requirements. A status of this effort will be provided to MassDOT no less than every thirty (30) Days.

The Commonwealth of Massachusetts

MassDOT Highway Division

CONTRACT AWARD

Type of Contract: CONSTRUCTIO	N Contract #: 65281
Division: CONSTRUCTION	Project I.D. #: 604007
Project/Location: WELLESLEY -	Bridge Replacement (W-13-015) – Cedar Street over Route 9. (Design/Build) (Accelerated Bridge Program)
Vendor/Party Name and Address: 1 st Ranked Best-Value Design Build Team	J. F. White Contracting Company 10 Burr Street, Framingham, MA 01701
Maximum Obligation: \$4,090,000.00	Completion Date/Duration: August 20, 2011
Account No: 6121-0800	Federal Aid No.: NFA
For Construction Contracts Only: Th	is is a Design/Build – Best Value Contract.
Bid Opening Date August 10, 2010	Number of Bidders: 4

Office Estimate: \$5,300,000.00

Bid Amount: \$3,450,000.00 1st Ranked Best-Value Team 34.91% Below Estimate.

Second Ranked Bidder: Barletta Heavy Division, Inc. Second Best-Value Amount: \$3,617,000.00

Description:

The low bidder has been determined to be prequalified at the time of the bid opening and the award of this contract will not violate his rating.

See attached Bid Tabulation Sheets.

A memo dated August 25, 2010, from the Design/Build Selection Committee and Program Manager sent to the Chief Engineer has been received recommending award of this contract to J. F. White Contracting Company.

All M/WBE Requirements have been met by the low bidder. The M/WBE firms are Lamson Engineering Corp. and Green International Affiliates, Inc. (Design). Regis Steel Corp.; McCoy Fence, Inc.; The Dow Company, Inc.; Saugus Construction Corp. (Construction)

It is recommended that this contract be awarded to J. F. White Contracting Company, the lowest responsible and eligible bidder at their submitted bid totaling \$3,450,000.00.

Approvals:	×	1	00
Frank Lucherski 8	127/10	- Thomas aD	11a06 9/10
Construction Contracts Engineer	Date 💋	WChief Engineer	Date /
Hans 2 ml of	B.27.6	Mangeller	ALW 8/31/10
Director, ABP Delivery Program	Date	Chief Counsel	Date
Mattin Bat 8	13(10	mom	A This
C.E.P.Q	Date	Administrator	" Date
Jarun & Basson	9/2/10	NIR	
Director of Contracts & Records	Date	Secretary & CEO	Date
M-H-D CON-AWARD 11-01-09			13 J.S
			Date: SEP 0 1 2010



Deval L. Patrick, Governor Timothy P. Murray, Lt. Governor Jeffrey B. Mullan, Secretary & CEO Luisa Paiewonsky, Administrator



NOTICE TO PROCEED

October 4, 2010

Contract No. 65281 Wellesley

J. F. White Contracting Co. 10 Burr Street Framingham, MA 01701

Dear Sir/Madam:

Enclosed is a signed copy of your contract with the Commonwealth, Contract No. 65281 dated September 21, 2010 for Bridge Replacement (W-13-015) - Cedar Street over Route 9 in Wellesley (Design/Build) (Accelerated Bridge Program).

Upon receipt of your signed contract, it is incumbent upon you to contact the District Engineer to make the required arrangements before commencing work on this project.

Very truly yours. niros

Tanya M. Barros Director of Contracts and Records

TMB:cl Encl.

cc: Construction District 6 Resident Engineer Bridge Civil Rights Office Fiscal Management Construction Contracts Utilities Paul Jay, CEPO Plans & Records

Completion Date: August 20, 2011 Project No. 604007

MASSACHUSETTS DEPARTMENT OF REVENUE

CERTIFICATE OF EXEMPTION FORM ST-2

Certification is hereby made that the organization herein named is an exempt purchaser under General Laws, Chapter 64H, Sections 6(d) and (e). All purchases of tangible personal property by this organization are exempt from taxation under said chapter to the extent that such property is used in the conduct of the business of the purchaser. Any abuse or misuse of this certificate by any tax-exempt organization of any unauthorized use of this certificate by any individual constitutes a serious violation and will lead to revocation. Willful misuse of this Certificate of Exemption is subject to criminal sanctions of up to one year in prison and \$10,000 (\$50,000 for corporations) in fines.

COMMONWEALTH OF MASSACHUSETTSEXEMPTION NUMBER EMASSACHUSETTS DEPARTMENT OF TRANSPORTATION046-002-284HIGHWAY DIVISIONISSUE DATETEN PARK PLAZA, ROOM 752010/27/92BOSTON, MA 02116CERTIFICATE EXPIRES ON
NONE

NOT ASSIGNABLE OR TRANSFERABLE

COMMISSIONER OF REVENUE NAVJEET BAL

CONTRACTOR NAME AND ADDRESS:

J. F. White Contracting Co. 10 Burr Street Framingham, MA 01701

CONTRACT NUMBER: 65281

LOCATION/PROJECT: Wellesley - Bridge Replacement (W-13-015) -Cedar Street over Route 9 in Wellesley (Design/Build) (Accelerated Bridge Program)



Deval L. Patrick, Governor Timothy P. Murray, Lt. Governor Jeffrey B. Mullan, Secretary & CEO Luisa Paiewonsky, Administrator

Massachusetts Department of Transportation **Highway Division**

October 4, 2010

Contract No. 65281 Wellesley

J. F. White Contracting Co. 10 Burr Street Framingham, MA 01701

Gentlemen/Madame:

Enclosed please find an Exempt Purchaser Certificate, Form ST-5C that substantiates the Tax Exempt status of this Department under the provisions of Chapter 64H, S.6 (f).

Your company to purchase materials and supplies for the contract listed above may use this exemption number.

The contractor is responsible for signing, completing and filing this certificate with vendors for whom they are purchasing materials and supplies under this contract.

If your contract is extended beyond the completion date on the Tax Exempt Certificate, please notify the Director of Contracts & Records for issuance of a new certificate.

Very truly yours,

arros

Tanya M. Barros Director of Contracts and Records

TMB:cl encl.

CONTACT: Tanya M. Barros MassDOT – Highway Division Ten Park Plaza, Room 7520 Boston, MA 02116 (617) 973-7454

> Ten Park Plaza, Suite 4160, Boston, MA 02116 Tel: 617-973-7000, TDD: 617-973-7306 www.mass.gov/massdot

Leading the Nation in Transportation Excellence



Form ST-5C Contractor's Sales Tax Exempt Purchase Certificate

Rev. 5/01
Massachusetts
Department of
Revenue

Part A. To be completed by governmental body, agency or IRC Section 501(c)(3) certified exempt organization

Exempt number	Contract number
E 046 - 002 - 284	65281
Name of exempt organization	and an and a second a second a se
MassDOT - Highway Division	
Authorizing signature	Date
- Janua M. Darros	October 4, 2010
Part B. To be completed by purchasing contract	or or subcontractor claiming exemption under
MGL Ch. 64H, sec. 6(d), (e), (f) or (tt)	3
Purchaser (contractor subcontractor)	
Address	
Address	
Address	Vendor registration number (if applicable)

Contract/subcontract number 65281	Contract/subcontract date September 21, 2010	Estimated date of completion
	September 21, 2010	August 20, 2011

Part C. To be completed by purchasing contractor or subcontractor claiming exemption. See instructions. I claim the exemption corresponding to the box checked below, and certify as follows (check appropriate box below):

1. Description under MGL Ch. 64H, sec. 6(d) or (e): Contractor as Agent of Exempt Entity. I certify that the purchaser is a contractor or subcontractor engaged in the performance of the above described contract and that the purchaser is acting as an agent of one the entities described below (check appropriate box) in purchasing tangible personal property (other than building materials and supplies described in MGL Ch. 64H, sec. 6(f)):

Governmental body or agency described in MGL Ch. 64H, sec. 6(d) (local public school, city/town government, state agency, etc.). Attach Form ST-2, Certificate of Exemption. If Form ST-2 is not available, enter agency's exemption number.

Tax exempt organization (under IRC Section 501(c)(3)) as described in MGL Ch. 64H, sec. 6(e) (parochial school, Scout troop, PTO, etc.). Attach Form ST-2, Certificate of Exemption. If Form ST-2 is not available, enter agency's exemption number.

To the best of my knowledge and belief, the quantities of tangible personal property noted on the reverse side are exempt from the sales/use tax under the provisions of MGL Ch. 64 H, sec. 6(d) or (e) as they are purchased by a purchaser acting as an agent for either a Massachusetts governmental body or for a tax-exempt organization under IRC section 501(c)(3).

2. Description under MGL Ch. 64H, sec. 6(f): Building Materials and Supplies. I certify that the purchaser is a contractor or subcontractor engaged in the performance of a contract for the construction, reconstruction, alteration, remodeling or repair of a building or structure for a governmental body or agency or for a certified IRC Section 501(c)(3) exempt organization or other project described in MGL Ch. 64H, sec. 6(f). To the best of my knowledge and belief, the described quantities of building materials and supplies noted on the reverse side are exempt from sales/use tax under the provisions of MGL Ch. 64H, sec. 6(f), and the described quantities of these materials and supplies are being purchased for use exclusively in the above contract.

3. Exemption under MGL Ch. 64H, sec. 6(tt): Consulting/Operating Contractor as Agent of Governmental Entity. I certify that the purchaser is a consulting or operating contractor or subcontractor as defined in MGL Ch. 64H, sec. 6(tt) and that the purchaser is authorized and acting as an agent of, and providing "qualified services," as defined in MGL Ch. 64H, sec. 6(tt), to a governmental body or agency described in MGL Ch. 64H, sec. 6(dt). Attach Form ST-2. If Form ST-2 is not available, enter agency's exemption number. To the best of my knowledge and belief, the quantities of tangible personal property noted on the reverse side are exempt from the sales/use tax under the provisions of MGL Ch. 64 H, sec. 6(tt). The purchaser has been authorized under the above contract by a governmental body.

Regardless of the exemption claimed, I will maintain adequate records to show the disposition of all property purchased under this certificate. I understand that I am fully liable for the payment of any sales/use tax due in the event that the property purchased under this certificate is used in a non-exempt manner.

Signed under the penalties of perjury.		and the second sec
Signature ·	Title	

Location and description of project and description of kind and quantity of property or receipts/invoices must be attached or noted on the back of this form. This form is approved by the Commissioner of Revenue and may be reproduced.

² South Constraints and the second seco

Part D. Location and description of project

Wellesley - Bridge Replacement (W-13-015) - Cedar Street over Route 9 (Design/Build) (Accelerated Bridge Program)

Part E. Description of kind and quantity of property purchased

Date	Description	Quantity	Cost
			\$
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	· · · · · · · · · · · · · · · · · · ·	Total cost	\$

Additional information about the use of this form may be obtained from: Massachusetts Department of Revenue, Bureau of Desk Audit, Exempt Organization Unit, 200 Arlington Street, Chelsea, MA 02150; (617) 887-6970.

50M 6/01 CRP0101

Form ST-5C Instructions

Instructions to Vendors

In general, this form is intended for use by contractors and subcontractors purchasing building materials and supplies; as well as other types of tangible personal property for use in various tax-exempt projects. The applicable exemptions governing these purchases are found in MGL Ch. 64H, secs. 6(d), (e), (f), or (tt). Contractors and subcontractors must complete all appropriate sections of this form when making purchases for which they are claiming exemption. These exemptions and requirements are described briefly, below.

Part C

1. Contractors and subcontractors purchasing certain property (excluding building materials and supplies) as agents acting on behalf of governmental bodies and agencies or 501(c)(3) organizations. In general, contractors or subcontractors purchasing tangible personal property (other than building materials and supplies for use in projects described in MGL Ch. 64H, sec. 6(f), which are discussed in section 2, below) as duly authorized agents acting on behalf of governmental bodies or agencies or Internal Revenue Service certified tax exempt 501(c)(3) organizations must check Box 1 under Part C of Form ST-5C. If the purchase is made by an agent acting on behalf of a 501(c)(3) entity, the agent must also attach a copy of the exempt entity's Form ST-2, Certificate of Exemption, to this form. If the purchase is made by an agent of a governmental body or agency. Form ST-2 should also be attached. However, if the governmental body or agency does not present its agent with Form ST-2, the agent should submit other documentation evidencing its principal's exempt governmental status. Overhead items purchased in connection with such contracts, for example, office furniture and equipment, consumable supplies for the contractor's own use and not for the use of the governmental agency or 501(c)(3) organization, are not eligible for this exemption. Rather, a contractor, as the consumer of such items, must pay sales/use tax on these purchases.

Use of Form ST-5: Agents of exempt governmental entities or 501(c)(3) organizations who are not contractors or subcontractors purchasing the above property (i.e., property other than building materials and supplies described in MGL Ch. 64H, sec. 6(f)) should not use this form. Instead, such purchasers, for example, scout troops or Parent Teacher Organizations purchasing tangible personal property on behalf of exempt entities for fundraising purposes, should follow the instructions for Form ST-5, Exempt Purchaser Certificate, and present it to their vendors, along with a copy of the exempt governmental or 501(c)(3) entity's Form ST-2.

2. Contractors purchasing building materials and supplies for use in projects described in MGL Ch. 64H, sec. 6(f). Contractors or subcontractors purchasing building materials or supplies for use in an exempt project described in MGL Ch. 64H, sec. 6(f), for example, contracts for the construction, reconstruction, alteration, remodeling or repair of a building or structure owned by or held in trust for the benefit of for a governmental body or agency mentioned in MGL Ch. 64H, sec. 6(d) and used exclusively for public purposes, or for an IRS certified section 501(c)(3) exempt organization mentioned in MGL Ch. 64H, sec. 6(e), must check Box 2 under Part C of Form ST-5C.

Items that do not constitute "building materials and supplies" within the meaning of MGL Ch. 64H, sec. 6(f) include office supplies, furniture and equipment and other overhead items purchased for use by the contractor or its employees in performing its contracts. Contractors and subcontractors, as the consumers of such items, must pay sales/use tax on these purchases.

Exempt purchases of building materials and supplies are limited to those materials and supplies used, consumed, employed or expended in the construction, reconstruction, alteration, remodeling or repair of any building, structure, public highway, bridge or other such public work as well as such materials and supplies physically incorporated therein. Exemptions also include rental charges for construction vehicles, equipment and machinery rented specifically for use on the site of any tax-exempt project or while being used exclusively for the transportation of materials for any such tax-exempt project under Massachusetts General Laws, Chapter 64H, section 6(f). Form ST-5C applies only to the contract specified therein. You must record the name of the purchaser, the sales price and date of each separate sale made under such certificate. A copy of a valid Form ST-2, Certificate of Exemption, must be submitted at the time of sale. The contract number, or other identifying designation of an unnumbered contract, must appear on purchase orders and invoices. The vendor must retain a copy of Form ST-5C accompanied by Form ST-2 as well as other tax records. See Record Retention Regulation 830 CMR 62C.25.1.

Instructions continued on reverse

3. Consulting or operating contractors purchasing certain property as agents of, and providing "qualified services" to governmental entities under MGL Ch. 64H, sec. 6(tt). "Consulting or operating contractors or subcontractors," as defined in MGL Ch. 64H, sec. 6(tt) purchasing tangible personal property on behalf of, and acting as agents of, and providing "qualified services" (as defined in MGL c. 64H, sec. 6(tt)) to a governmental body or agency described in MGL Ch. 64H, sec. 6(d) must check Box 3 under Part C of Form ST-5C. Operating and consulting contractors or subcontractors who contract with a state governmental body or agency to furnish services relative to the feasibility, environmental impact, engineering, architecture, design, management or operation, of a public project or facility are exempt from the sales/use tax for purchases of tangible personal property made as agents of the state governmental body when that property is (i) completely expended in the performance of the contract, (ii) title and possession of the property is turned over to the governmental body or (iii) the property becomes an ingredient or component part of the property that will be turned over to the governmental body as part of the performance of the contract. Such contractors or subcontractors must attach a copy of the exempt governmental entity's Form ST-2 provided by the entity on whose behalf it is making the purchases. If the exempt governmental entity does not present its contractors or subcontractors with Form ST-2, the contractor/subcontractor must present other documentation evidencing its principal's exempt governmental status. Overhead items purchased by contractors for their own use in performing contracts for exempt governmental entities are not eligible for this exemption. Rather, a consulting or operating contractor or subcontractor, as the consumer of such items, must pay sales/use tax on these purchases.

Any abuse or misuse of this certificate by any tax-exempt organization, or any unauthorized use of this certificate by any individual, constitutes a serious violation and will lead to revocation. Willful misuse of this Certificate of Exemption is subject to criminal sanctions of up to one year in prison and \$10,000 (\$50,000 for corporations) in fines.

If necessary, additional information may be obtained from: Massachusetts Department of Revenue Bureau of Desk Audit Exempt Organization Unit 200 Arlington Street Chelsea, MA 02150 (617) 887-6970


Deval L. Patrick, Governor Timothy P. Murray, Lt. Governor Jeffrey B. Mullan, Secretary & CEO Luisa Paiewonsky, Administrator



Notice of Contract Award

September 10, 2010

Contract No. 65281 Wellesley

J. F. White Contracting Company 10 Burr Street Framingham, MA 01701

Gentlemen/Madame:

On September 2, 2010, the Massachusetts Department of Transportation (MassDOT), Highway Division has awarded the contract to J. F. White Contracting Company for Bridge Replacement (W-13-015) - Cedar Street over Route 9 in Wellesley (Design/Build) (Accelerated Bridge Program).

You are hereby notified that, under the "Notice to Contractors" you will be required within fourteen days from this date to execute the contract which is now ready for your signature. Pursuant to the Department's Standard Specifications, should you fail to execute the contract and furnish the bonds and certificate of insurance within fourteen days, the Highway Administrator may be asked to determine that you have abandoned the contract, and retain your check as liquidated damages.

The contract in duplicate is enclosed. Please sign both copies of the contract and bonds, have the bonds executed by a surety company and return them as soon as possible. Your corporate seal should be attached to both the contract and bonds. Date of contract for above purposes shall be date of your signature. Please insert this date in clause of the contract and on the bonds.

At the same time you return the signed copies of contract and bonds, please return the enclosed certificate for worker's compensation and liability insurance required for this contract. Please note that the expiration date of your insurance coverage must be on or after the date for completion of this contract.

I am also enclosing a suggested form of vote of the board of directors of your company, authorizing the officer who signs the contracts and bonds for your company to do so. There is attached to this vote a certificate showing that said vote is in full force and effect and has not been amended or rescinded. This certificate should be dated the date of your contract and should bear the imprint of your corporate seal. Kindly return the certificate and vote with the copies of the contract.

Your attention is called to the fact that the work must not be commenced until you receive your signed copy of the contract. PLEASE NOTE THAT THE FOURTEEN DAY LIMITATION PERIOD WILL BE STRICTLY ENFORCED.

Very truly yours,

Jane M. Barros

Director of Contracts and Records

TMB:cl

cc: Construction District 6

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Leading the Nation in Transportation Excellence

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION REQUEST FOR ALLOCATION OF BOND FUNDS PRIOR TO ENCUMBRANC

REQ	QUEST FOR AL	LOCATION OF	F BOND FUNDS P	RIOR	TO ENCUMBRANCE	8/24/2010
·····	ENCUMBERAN	NCE DOCUME	NT ID		1	
TRANS	DEPT.	ROrg	I NUMBER	2	1	<u>~12.2.2.</u>
CT	DOT	0618	INTF00X02011C0	0065281	1	604007
			· •		1	Project File #
SECTION A:						
APPROPRIATION	SUB. OBJ.	ORG. ACT	EWO or PARS#	<u>N/P</u>	FEDERAL AID NO.	AMOUNT
6121-0800	00 N2T	0603 050	H604007C11	1	NFA	4,090,000.00
						<u> </u>
			1			\$4,090,000.00
SECTION B. OBLI	GATION BV FI	SCAL VEAD FO	ΤΡ ΜΗΗ ΤΙ VE ΑΒ		DACTS	
APPROPRIATION	6121-0800	SCAL TEAK FO	JK MULTI-TEAK	CONT	KAC15	TOTAL
2011	\$3,600,000,00					\$2.600.000.00
2012	\$490,000,000.00					\$3,000,000.00
2012	\$190,000.00					\$490,000.00
						·····
TOTALS	\$4,090,000,00					\$4 000 000 00
Wellesley			<u>NFA</u>	Bridge R	Replacement	
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	<u>FED. AID #</u>	<u>FED. AID #</u>	NON FED. AID		<u>CITY/IOWN</u>	TOTALS
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CONTINGENCIES:			\$3,450,000.00			\$3,450,000.00
TRAFFIC POLICE			\$120,000,00			\$120,000,00
TFL FPHONE			\$2,500,00			\$120,000.00
OTHER			\$2,500.00			\$2,500.00
TRAINEES:						
PARTNERING:						
Totals:			\$4.090.000.00			\$4,090,000,00
	1					<u>\$1,020,000.00</u>
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Recommended:	SECTION HEA	D/DESIGNEE:	Approved: Constr	ruction	Engineer	
TO BE COMPLETE	D BY FISCAL N	MANAGEMEN'	TO BE COMPLE	TED B	Y CEPO:	8/27/11
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APPROVED:			EXPENSE BUDG	ET: 🖊	Mophu	mulfa
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FIN 681-REVISED Sept	tember 2005				•	

MMARS CT Form	
Document ID: CT DOT 0618 INTF00X02011C0065281 Org 20 digit ID	
Header Section Vendor Section	
Doc Name:	
Commodity Section	
Commodity Code: 721317000000 Service From: 10/4/10 Line Type: Service Service To: 8/22/2011 Contract Amount: \$4,090,000.00 Service To: 8/22/2011	
Accounting Information Department: DOT Line #: 1 Department: DOT Event Type: PR05 Unit: 0603 Line Amount: \$3,600,000.00 Appropriation: 6121-0800 BFY: 2011 Object Code: N21	
Detail Accounting Information Program: H604007 Phase: C11 Activity: 050N	
Accounting Information Department: DOT Line #: 2 Unit: 0603 Event Type: PR08 Unit: 0603 Line Amount: \$490,000.00 Appropriation: 6121-0800 6121-0800 BFY: 2012 Object Code: N21 0600	
Detail Accounting Information Image: C11 Program: H604007 Phase: C11 Activity: 050N	
Accounting Information Image: Constraint of the second s	D
Detail Accounting Information Program: H604007 Phase: C11 Activity: 050P	
Prepared By: Matt Hopkinson Matt Hopkinson Approved By: Millian Co. Block Title: Arch Construction Force Date: DR 121/112	
Entered By: <u>Mc</u> Date: <u>05</u> (2) Verified By: <u>04</u> Date: <u>15</u> [2]	

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TO:]	Francis Kuch Construction	arski Contrac	ts Engineer	in an		nangan kan managan din ka sa
FROM	: .	Walter Helle Construction	r Enginee	er			
DATE:	1	August 25, 2	010				
RE:]	RECOMME	ENDATI	ON AS TO A	WARD (ABP)		
Projis N	lo.:	60400	7				
Project	Location	: WELI	LESLEY				,
Federal Project	Aid No.: Descripti	NFA	CE DED	I ACEMENT	(W 12.015) CEDAD	ST OVED DOUT	
Bids Op	bescripti bened: dder:	Augus	t 10, 201	ONTRACTIN	G COMPANY	SI OVER KOUT	29 (ADP - DD)
Compa	rison of "	Prices: O	FFICE I	ESTIMATE	LOW BID		
r			\$5,300),000.00	\$3,450,000.00	1	
The low	v bid cont	ained items	that varie	ed by a consid	erable amount from th	e Preliminary Offic	e Estimate.
<u>Item No.</u>	Descript	ion	<u>UOM</u>	Quantity	Office Estimate	Low Bid	<u>Average 2 Thru 4</u>
101.01	CLEAR GRUBI	LING AND NG	LS	1	\$20,000.00	\$85,000.00	\$40,000.00
115.1	DEMO BRIDG 015	LITION OF E NO. W-13	LS -	1	\$546,000.00	\$160,000.00	\$225,000.00
149.2	PUBLIC OUTRE	C EACH	LS	1	\$50,000.00	\$10,000.00	\$70,000.00
184.1	DISPOS TREAT PRODU	SAL OF ED WOOD JCTS	TON	1	\$4,000.00	\$1.00	\$1,667.33
220.202	DRAIN	AGE	LS	1	\$20,000.00	\$15,000.00	\$37,666.67
748.2	MOBIL	IZATION	LS	1	\$170,000.00	\$100,000.00	\$213,333.33
756.01	ENVIR PROTE MEASU	ONMENTA CTION JRES	L LS	1	\$20,000.00	\$10,000.00	\$27,333.33
771.	LANDS	CAPING	LS	1	\$130,000.00	\$45,000.00	\$85,333.33
850.11	ROADV FLAGG	WAY ERS	LS	1	\$15,000.00	\$25,000.00	\$20,000.00
851.21	MAINT TRAFF	TENANCE C FIC (TMP)	OF LS	1	\$150,000.00	\$220,000.00	\$53,333.33

Page 2

Projis No.: 604007

Project Location: WELLESLEY

Federal Aid No.: NFA

Description of Project: BRIDGE REPLACEMENT (W-13-015) - CEDAR ST OVER ROUTE 9 (ABP - DB) Bids Opened: August 10, 2010

RECOMMENDATION AS TO AWARD (SWP)

<u>Item No.</u>	Description	<u>UOM</u>	Quantity	Office Estimate	Low Bid	Average 2 Thru 4
900.14	EXCAVATION AN BACKFILL FOR BRIDGE	DLS	1	\$15,000.00	\$50,000.00	\$31,666.67
900.9	PUNCH LIST/AS- BUILT REQUIREMENTS	LS	1	\$50,000.00	\$4,999.00	\$16,666.67
995.05	BRIDGE STRUCTURE- SUBSTRUCTURE	LS	1	\$250,000.00	\$525,000.00	\$228,333.33
998.1	SELF PROPELLED MODULAR TRANSPORTER (SPMT)	LS	1	\$500,000.00	\$338,000.00	\$673,333.33

The prices of the low bidder for Item(s) #101.01, #850.11, #851.21, #900.14, #995.05 are considered unrealistically high.

The prices of the low bidder for Item(s) #115.1, #149.2, #184.1, #220.202, #748.2, #756.01, #771., #900.9, #998.1 are considered unrealistically low.

In view of the circumstances, it is recommended that this contract be awarded to the low bidder, J.F. WHITE CONTRACTING COMPANY

Interoffice Correspondence

APPROVED.

Commonwealth of Massachusetts

Massachusetts Department of Transportation Highway Division

	WER.
TO:	Frank Tramontozzi, P.E., Chief Engineer
FROM:	Walter Heller, Director of Delivery and Preservation
DATE:	August 24, 2010
RE:	Wellesley: Design Build Project – Accelerated Bridge Project Bridge Replacement: Br. No. W-13-015 Design Build Procurement Part 2 – Request for Proposals Projis No. 604007 Selection Committee Recommendation for Best Value Selection

I am writing to seek your acceptance of the recommendations of the Selection Committee for the Wellesley – Cedar Street over Route 9 Bridge Replacement - Design Build (Accelerated Bridge Program) project with respect to the results of the review of the Technical/Cost Proposals received by the Committee on July 21, 2010. The Committee reviewed technical proposals from four design build entities: Barletta, J.F. White, S&R and SPS.

The apparent Best Value bidder was the firm J.F. White and Finley Engineering Group / Gill Engineering Associates as the designer. Their adjusted score was 8,073.44. The price submitted with their proposal is \$3,458,500.00, inclusive of police detail allowances. The method of determining the apparent Best Value bidder is provided below. Upon your approval, letters will be sent to the four teams advising them of the best value bidder and contract negotiations will be initiated with the J.F. White Contracting Company. The following is a summary of the procurement process to date.

Process

This project is proposed to be delivered utilizing the Design Build methodology, as stipulated in MGL c 149A ss 14 et seq and as implemented in accordance with MHD's Design Build Guidelines approved by the Inspector General's office. This selection is part two of the two-part process and is an evaluation of the technical and cost proposals from the four firms listed above. The apparent Best Value bidder was determined by dividing the price submitted with the proposal by the technical score provided by the Selection Committee. The lowest "adjusted" score of the four entities is the apparent Best Value bidder. Part one of the two-part process was the Request for Qualifications and part two is the Request for Proposals. The process used for selecting the four firms participating in part two was detailed in previous correspondence forwarded to your office on February 01, 2010. This correspondence outlined the process of the Request for Qualifications and the criteria used in selecting the four participants.

Part 2: Review of Request for Proposals (RFP)

- Develop Proposal Evaluation Form
- Receive Proposals from four selected DB Entities and verify complete/ review Pass/Fail requirements
- Review technical proposal and prepare preliminary evaluations
- Meet to discuss preliminary evaluations
- Oral Presentations by DB Entities
- Finalize technical scores prior to price opening
- Open prices, divide by technical score for lowest adjusted score
- Provide recommendation of Best Value bidder

Prior to the submittal of the technical cost proposals, three addendums to the RFP was issued and distributed to the DB Entities. The addendum responded to DB Entity questions submitted by a specified date and time. All parties receiving the addenda were required to acknowledge receipt.

Significant Dates

The table below details the significant dates of the RFP selection process.

RFP Issued to Short List DB Entities	05/07/10	5 PM
Mandatory Pre-Bid Conference	05/17/10	11:00AM
Close Date for Written Questions or Clarification from DB Entities	05/20/10	12:00 PM
Technical/Cost Proposals Due	07/21/10	12:00 PM
Oral Presentations	07/29/10	9am to 4pm
Price Proposal Opening and Selection of Best Value Bidder	08/10/10	2:00 PM
Anticipated Notice to Proceed	09/01/10	

Π

Selection Committee

On January 11, 2010 the Chief Engineer appointed the following individuals to the Wellesley – Cedar Street over Route 9 Bridge Replacement - RFP Selection Committee:

Walter Heller – Boston ABP Farhad Ghom – Boston ABP Matt Hopkinson – District 4 Team Leader Murthy Kolla – District 4 Tom Weil – District 4

The task of the Committee members for this phase of the selection process were; review the proposals for completeness, evaluate the proposals by providing scores for 6 aspects of the proposal related to management of the firm and 4 aspects related to the technical content of the proposal. These ten aspects represented the basis for scoring and accounted for 100% of the total score. A copy of the evaluation form is attached for reference. The Committee members were to each determine a technical score for the proposal without any knowledge of the price. The ten scores for each firm were added to determine the overall technical score of the proposal. After all the scores were complete, the prices were opened at a public opening and the bid price was divided by the technical score. This quotient is the adjusted score and the firm with the lowest adjusted score was the apparent best value bidder.

Legal and Other Assistance

Legal assistance during the review of the RFP's was provided by Alicia Murphy from the General Counsel's Office. Ms. Murphy provided legal advice for matters related to the proposals and preparation of the contract. Christine Mizioch also provided direction to the Committee regarding, selection criteria, scoring and reporting.

Chronology

On April 8, 2010, the selection committee determined that 4 DB Entities would be included on the "short list" of teams asked to submit technical proposals. The DB Entities were:

- Barletta,
- J.F. White,
- S&R
- SPS.

The short listed teams were notified in writing on April 8, 2010, that they are requested to submit a technical proposal for the Wellesley – Cedar Street over Route 9 (Br No W-13-015) Design Build Project.

The firms were advised the deadline for submittal of the proposals was July 21, 2010. Before the proposals were received, the Selection Committee developed a spreadsheet, outlining the evaluation criteria and weight factors to be used in the Selection Process. Firms were advised in the RFP of the format the proposals were to follow and the content for which they would be scored.

During the preparation of the proposals, firms presented questions to Christine Mizioch. Approximately 27 questions were received during the "Written Question/Clarification period." The responses were contained in an addendum issued on June 3, 2010. Bidders were required to acknowledge receipt of the addendum. All four firms acknowledged receipt of the material and no disparity exists concerning information presented to the bidders.

Issues

There was no specific issues that unveiled themselves throughout the RFP review process.

Determination of the Technical Score

Each selection committee member was provided with a copy of the evaluation matrix that was previously developed by said committee. It was agreed the proposals would be evaluated for management and technical qualities. The evaluation of these two sections comprised 100% of the score.

	Barletta	S&R	SPS	JF White
DB Composite Scores	SCORE	SCORE	SCORE	SCORE
Walter Heller.	79.70	66.70	83.55	79.90
Farhad Ghom	92.00	79.50	93.00	94.50
Matt Hopkinson.	82.44	77.10	89.90	85.25
Murthy Kolla	79.19	73.28	83.93	88.33
Tom Weil	70.70	64.50	80.60	80.40
Totals	404.03	361.08	430.98	428.38

The technical scores determined by each of the five committee members are as follows:

Determination of the Lowest Adjusted Score (Best Value)

A pubic price opening was held on August 10, 2010 in the Conference Room 1 at 2:00 pm. The Committee members in attendance included Walter Heller. Todd Dubois was in

attendance, as well as a representative from each of the four bidders. Prices were opened and the prices are as follows (bid amount inclusive of the police allowances):

Barletta	\$3,677,000.00
S&R	\$5,400,001.00
SPS	\$4,267,200.00
JF White	\$3,458,500.00

The lowest adjusted score was determined by dividing the price by the technical score. The scores and calculations are provided below:

Barletta	\$3,677,000.00/404.03 = 9,100.81
S&R	\$5,400,001.00/361.08 = 14,955.14
SPS	\$4,267,200.00/430.98 = 9,901.16
JF White	\$3,458,500.00/428.38 = 8,073.44

JF White was determined to be the apparent Best Value bidder with a low adjusted score of 8,073.44. The price proposal packages were reviewed and it has been determined that JF White is the Best Value bidder.

Based on the information presented above, the Selection Committee recommends the Design Build Entity JF White be awarded the project to replace bridge no. W-13-005 in the Town of Wellesley. The selection committee can be made available to discuss the selection process or to answer any questions that may arise. Letters will be sent to all four DB Entities notifying them of the outcome of the selection process. Please contact Christine Mizioch at (617) 973-8291 if you have any questions.

CC: Monica Conyngham, General Counsel Kucharski, Francis, Construction Contracts Selection Committee Members

V



Request for Proposal Evaulation Criteria (RFP) - Design/Build

Wellesley - Cedar Street over Route 9 - 604007

	DB Management Proposal (40%)
Quality Control System	Approach to Quality Control organization and roles.
(10%)	Approach to document management procedures.
	Approach to Design Quality Control requirements.
_	Approach to Construction Quality Control requirements
Design Services (10%)	Approach to coordination of civil/structural engineering. Litilities, constructs hility, any issues to be
	requirements
	Approach to implementation of design submittal reviews and compliance with requirements of the operation
	System.
	Approach to addressing unique challenges and/or design concerns
	Approach to limited disturbance of traffic
	Plan to assure consistency and quality of the Design
Construction and	Approach to construction management.
Construction Manageme	nt Approach to ensure timely delivery of materials to achieve the Project schedule
(6%)	Approach to quality assurance during construction and the means by which it will integrate with
N 1 2	MassDOT's construction inspection and material testing obligations
	Approach to the resolution of internal disputes and disputes between the Proposer and MassDOT
	Innovative approaches to construction, including off site work.
Schedule and Cost	The proposed management system to control and coordinate cost and schedule, including design
Control (7%)	schedule.
	Specific procedures proposed for tracking progress and expenditures, the roles and responsibilities for
	reporting results.
	Methods for meeting Completion milestones and Payment Milestones.
	Approach to integrating subcontractor, permitting and utility company activities into the Project Schedule
	Plans for initating early work and critical path items.
Organizational Structure;	The Proposer's overall organizational structure, both functionally and from a staffing perspective.
Management Personnel	Management plan to address risk issues.
Experience (5%)	Plans to facilitate communication between organizations and personnel, including among participants and
	between the Proposer and MassDOT.
	Experience and ability of management personnel and key personnel.
WBE/WBE Participation	Efforts to include MBE/WBE participation in the Project.
<u> </u>	
	DB Technical Proposal (60%)
Civil/Maintenance of	Approach to maintenance of traffic and construction staging to minimize impacts on the community.
raffic/Construction	Approach to communication of traffic maintenance and construction staging plans to the public,
Staging (24%)	communities and agencies.
	Approach to drainage and roadway design and any additional required ROW to complete the Project.
	Traffic Signal Ungrades
	Annroach to roadway Safety
ridges and Structures	Approach to incorporation of Accelerated Bridge Construction Technology into the project
	Approach to design and construction of bridges and structures including meterials, stimula that
24 /0)	foundations, design life considerations, and aasthetice
	Approach if any to design and construction of temporary off location abutments and nice
	Approach to deotechnical design requirements for structures
	Concept plans
	Durability and life cycle cost analysis of the proposed structure and the maintainability of the structure
nvironmental Issues (2%)	Proposed measures for ensuring compliance with requirements of the Environmental Laws/Approvels/
	Clearances.
	Potential Impacts of Environmental Approvals/Clearances on the design presented in the Proposal
	Approach for coordinating with federal, state and local agencies and MassDOT to secure Environmental
· · · ·	Approvals/Clearances.
<u>,</u>	Plans for required mitigation.
	Plan for managing schedule impacts resulting from Environmental Approval/Clearance delays
ľ	Permanent erosion and sediment control measures.
	Approach for Hazardous Materials Management.
Utilities (10%)	Approach to designing and coordinating the location/relocation/protection of utility facilities
	Proposed methods for notifying, meeting with and satisfying the requirements of Utility Owners for the
1	and the second

CERTIFICATION OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this Proposal is in all respects bona fide, fair and made without collusion or fraud with another person. As used in this certification, the word "person" shall mean any natural person, partnership, corporation, joint venture or other business or legal entity.

Kevin K. Egan, Exec.Vice President Signature of individual submitting Proposal

 $\frac{J.F. White Contracting Company}{Name of Proposer}$ Subscribed and sworn to before me this $\frac{24}{2}$ day of $\frac{1}{2}$, 2010. $\frac{CYNTHIA F. DUERDEN}{Notary Public}$ (seal] $My \text{ commissioner expires:} \qquad 3/3/11$ $CYNTHIA F. DUERDEN Motory Public}$ $CYNTHIA F. DUERDEN Motory Public}$ $CYNTHIA F. DUERDEN Motory Public}$

DUPLICATE OR MODIFY THIS FORM AS NECESSARY SO THAT IT ACCURATELY DESCRIBES THE ENTITY SUBMITTING THE PROPOSAL AND SO THAT IT IS SIGNED ON BEHALF OF ALL PARTNERS, MEMBERS, OR JOINT VENTURERS OF THE TEAM. mass // 22

Massachusetts Department of Transportation

508-879-4700

Tel No:

Project No. 604007

ţ		DOCUMENT B00842 - DES	SIGN BUILD				
	BY MIN	SCHEDULE OF PARTIC ORITY OR WOMEN BUSINESS	IPATION ENTERPRISES (M	CONSTRUCT WBE)	ION CONTRACTS		
	MHD PROJECT NUMBER:	604007		Annual Stream	1 0 2010		
	PROJECT LOCATION:	Wellesley	Wellesley				
	DATE OF BID OPENING:	<u>7/21/10</u> - 8/10/10					
	NAME OF GENERAL BIDDE	R: <u>J.F.White Contracting Co.</u>					
PROVED: OCR by Date Date Subject to "Commercially Usr" Function" cor pliance with paragraphs 1 thro 5 of Page 1	Name Address and Phone Number of M/WBE	Name of Activity	(a) M/WBE Contractor Activity Amount	(b) M/WBE Other Buşiness Amount	(c) Total amount eligible for credit under rules in Section VIII of the Special Provisions		
	Lamson Engineering Corp. 437 Cherry St, #109 Newton, MA 02465 617-558-0102 Green International Associate 239 Littleton Road, Suite 3 Westford, MA 01886 978-923-04	Geotechnical	25,000.00		25,000.00		
		Survey and Base Mapping	25,000.00		25,000.00		
	Regis Steel Corp. 14 Wood Road, Unit 7 Braintree, MA 02184 781-356-88	F & I Reinforcing Steel 84	60,000.00		60,000.00		
	McCoy Fence Inc. 14 Baird Street Dorchester, MA 02124 617-288-	Guardrail and Fencing	35,000.00		35,000.00		
pliance of the L	Dow Company Inc. 1112 Broadway Road Dragut, MA 01826 978-682-1414	Utilities and Excavation	100,000.00	an an ann an an ann ann ann ann ann ann	100,000.00		
, incluc	Saugus Construction One Farm Lane Georgetown, MA 01833 978-352-	F & I Structural Steel	180,000.00		180,000.00		
ling full f Inten,	Total Bid Amount	TOTALS:	\$ 425,000.00		\$ 425,000.00		
	\$ 3,450,000.00	M/WBE Percentage of Total bid:	% 12.3		% 12.3		

Column (a) must be at least one-half of the M/WBE percentage goal.

Date:

Z 11

NAME AND TITLE (PRINT):

SIGNATURE

.

Commonwealth of Massachusetts

Kevin K. Egan, Executive Vice President

7/21/2010

BIDDERS ARE CAUTIONED TO READ THE SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN BUSINESS ENTERPRISES.

END OF DOCUMENT



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007
PROJECT LOCATION:	Wellesley
DATE OF BID OPENING:	8/10 /2010

<u>LAMSON ENGINEERING CORP</u>. (Minority or Women's Business Enterprise)

TO:

FROM

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE-by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

m h ham 7/20/2010 WBE Signature



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

MHD Project Number:

Project Location:

Wellesley

604007

Date of Bid Opening:

8/10/2010

Name of General Bidder:

J.F.White Contracting Co.

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	Amount
	Geotechnical / Bridge Engineerin	80		25,000.00
		TOTAL AMC	DUNT:	25,000.00

M/WBE COMPANY NAME:	LAMSON ENGINEERING CORP.
M/WBE SIGNATURE:	thin L. Lan
NAME AND TITLE (PRINT):	KIN C. LAM, President
TELEPHONE NUMBER:	617-5580101 FAX NUMBER 617-558-0007

END OF DOCUMENT



DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR June 15, 2010

Mr. Kin C. Lam Lamson Engineering Corporation 437 Cherry Street, #109 Newton, MA 02465

Dear Mr. Lam:

COMMONWEALTH OF MASSACHUSETTS

ADMINISTRATION AND FINANCE SUPPLIER DIVERSITY OFFICE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 <u>http://www.somwba.state.ma.us</u>

> Telephone (617) 973-8692

Facsimile (617) 973-8637

The Massachusetts Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Lamson Engineering Corporation and the required certification renewal information and documentation. Accordingly, SDO (f/k/a: SOMWBA) has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Lamson Engineering Corporation as a minority-owned business enterprise (MBE) with the business description of STRUCTURAL, CIVIL, GEOTECHNICAL AND HYDRAULICS ENGINEERING has been renewed effective the date of this letter. The company will remain listed in the SDO (f/k/a: SOMWBA) Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of May 15, 2012, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SDO (f/k/a: SOMWBA) no later than 30 business days prior to May 15, 2012.

- 1) All company financial statements since the date of the company's then most recent SDO (f/k/a: SDO (f/k/a: SOMWBA) certification;
- A <u>signed</u> copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SDO (f/k/a: SOMWBA) renewal;
- Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

A notarized statement that indicates:

"I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the

company's then most recent date of SDO (f/k/a: SOMWBA) certification as defined in State regulations 425 CMR 2.00 The Massachusetts Supplier Diversity Office."

5) <u>A notarized statement that indicates either "A or B" as referenced below.</u>

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SDO (f/k/a: SOMWBA) certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SDO (f/k/a: SOMWBA) certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SDO (f/k/a: SOMWBA) renewal."

6) <u>A notarized statement that indicates:</u>

"I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s):"

Furthermore, you have a continuing duty to notify SDO (f/k/a: SOMWBA) of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SDO (f/k/a: SOMWBA) to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SDO (f/k/a: SOMWBA) in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SDO (f/k/a: SOMWBA) certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification and all required information and documentation to SDO (f/k/a: SOMWBA) no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SDO (f/k/a: SOMWBA) of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (617) 973-8648.

Verv truly

Reginald A. Nunnally Executive Director



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007
PROJECT LOCATION:	Wellesley
DATE OF BID OPENING: <u>8/10</u>	/2010
FROM Green International	Affiliates, Inc.
	(wimority of women's Business Enterprise)

TO:

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

7/20/10 Hilam Date M/WBE Signature



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION - Page 2

MHD Project Number:

Project Location:

	604007	 	
V	Wellesley		

Date of Bid Opening:

Name of General Bidder: J.F. White Contracting Co.

8/10/2010

<u>Item number</u> if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	<u>Amount</u>
	Survey, Base mapping		· ·	25,000.00
			•	
	`			
		·····		
				•

 M/WBE COMPANY NAME:
 Green International Affiliates, Inc.

 M/WBE SIGNATURE:
 Image: Company Name

 NAME AND TITLE (PRINT):
 President

 TELEPHONE NUMBER:
 978-923-0400

TOTAL AMOUNT:

END OF DOCUMENT

G:Vudy\FORMS\Form Wellesley MWBE Letter of Intent.doc

25,000.00



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 Internet: www.somwba.state.ma.us

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

EDITH A. SILVA EXECUTIVE DIRECTOR TELEPHONE: (617) 973-8692

FACSIMILE: (617) 973-8637

September 25, 2008

Mr. Dipak Khaund Green International Affiliates, Inc. 239 Littleton Road, Suite 3 Westford, MA 01886

Dear Mr. Khaund:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of **Green International Affiliates, Inc.** and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Green International Affiliates, Inc. as a minority business enterprise (MBE) with the business description of CONSULTING CIVIL ENGINEERS SPECIALIZING IN TRANSPORTATION, STRUCTURAL, WATER RESOURCES AND ENVIRONMENTAL AND CIVIL AND SITE ENGINEERING has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of October 1, 2010, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to October 1, 2010.

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- 2) A <u>signed</u> copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal;
- 3) Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

4) A notarized statement that indicates:

- "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Woman/Woman/Portuguese business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."
- 5) A notarized statement that indicates either "A or B" as referenced below.

42 63

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."
- A notarized statement that indicates:
 - A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firms certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, (617)973-8648.

Very truly yours,

Mark Waterbury Deputy Director, Certification

6)



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 - DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007			
PROJECT LOCATION:	Wellesley			
DATE OF BID OPENING:	7/21/2010			
FROM/	$\frac{72615}{(\text{Minority or Wo)}}$	O_{FZZL} men's Business Enterpr	rise)	
		1	,	

TO:

J.F. White Contracting Co. (Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

212	7/19/10
M/WBE Signature	Date



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

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MHD	Project	Number:	
		1	

L	604007		
v	Wellesley	 	

Date of Bid Opening:

Project Location:

Name of General Bidder: J.F.White Contracting Co.

7/21/10

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Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	Amount	
	F & I Reinforcing Steel			60,000.00	
· ·					
	· · ·				
		TOTAL AMO	DUNT:	60,000.00	
M/WBE COMPAN M/WBE SIGNATI NAME AND TITI	$\frac{1}{2615} \xrightarrow{736}$ $\frac{1}{2615} \xrightarrow{736}$ $\frac{1}{2615} \xrightarrow{736}$ $\frac{1}{2615} \xrightarrow{736}$ $\frac{1}{2615} \xrightarrow{736}$	-2.4.1)			
TELEPHONE NUMBER: 781-356-8884 FAX NUMBER 781-356-0945					

END OF DOCUMENT



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE

Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 www.mass.gov/somwba

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR

March 1, 2010

Mr. Jamesy Regis Regis Steel Corporation 14 Wood Road, Unit #7 Braintree, MA 02184

Dear Mr. Regis:

Congratulations on your recertification! The State Office of Minority and Women Business Assistance (SOMWBA) is pleased to notify you that your firm was recertified as a minority-owned business enterprise (MBE) with the certified business description, IRON CONTRACTORS: STEEL ERECTION, REINFORCING.

Your company will be listed in both the SOMWBA Directory and in the Massachusetts Central Register which are published at regular intervals. The SOMWBA Directory is sent to other state agencies and private organizations that seek to fulfill MBE utilization requirements.

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Certification is not a fixed designation and SOMWBA reserves the right to monitor your company, do random spot checks, site visits and to conduct periodic reviews of your company's books, contracts, company structure, facilities, job locations; to seek other relevant information and documentation; and to revoke certification of your firm should this become necessary.

Your company's certification automatically will expire two years from the date of certification. If your company continues to meet all applicable certification criteria, no later than thirty (30) business days before your firm's certification renewal date of January 7, 2011, and every two years thereafter, please send SOMWBA the following documents to renew your certification:

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- 2) All U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA certification;

TELEPHONE: (617) 973-8692

FACSIMILE: (617) 973-8637 3) Corporations must submit all Annual Certificates of Condition since the date of the company's then most recent certification; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED

4) <u>A notarized statement that indicates:</u>

A. "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."

B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) <u>A notarized statement that indicates:</u>

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

Very truly yours,

Reginald A. Nunnally Executive Director



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007
PROJECT LOCATION:	Wellesley
DATE OF BID OPENING:	August 10, 2010
FROM McCoy Fence,	Inc.
	(Minority or Women's Business Enterprise)

TO:

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

7/20/10



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

MHD Project Number:

604007

Project Location:

Wellesley

Date of Bid Opening:

August 10, 2010

Name of General Bidder: J.F. White Contracting Co.

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit</u> Price	<u>Amount</u>
	Fence and Guardrail			35,000.00
				× ·
		<u> </u>		

TOTAL AMOUNT:

35,000.00

M/WBE COMPANY NAME:	McCoy Fence, Inc			
M/WBE SIGNATURE:	Ralph '	McCo	y-	
NAME AND TITLE (PRINT):	Ralph McCoy, President		0	
TELEPHONE NUMBER:	617-288-7811	FAX NUMBER	617-288-7512	

END OF DOCUMENT

B00843 - 2

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DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

EDITH A. SILVA EXECUTIVE DIRECTOR

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116

Internet: www.somwba.state.ma.us

TELEPHONE: (617)973-8692

FACSIMILE: (617)973-8637

December 31,2009

Mr. Ralph McCoy McCoy Fence, Inc. 14 Baird Street Dorchester, MA 02124

Dear Mr. McCoy:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of McCoy Fence, Inc. and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of McCoy Fence, Inc. as a minority business enterprise (MBE) with the business description of FENCING AND GUARDRAIL INSTALLATION has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked Unless revoked, this certification will last for a period of two years and will automatically expire as of October 1, 2009, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to October 1, 2010.

- All company financial statements since the date of the company's then most recent SOMWBA certification; 1)
- A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent 2) SOMWBA renewal:
- Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) 3) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

- A notarized statement that indicates: 4)
 - "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Woman/Woman/Portuguese business enterprise have occurred since the date Α. of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."
- A notarized statement that indicates either "A or B" as referenced below. 5)

- A. ""I certify under the pains and penalties of perjury that (insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) A notarized statement that indicates:

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firmis certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, (617)973-8648.

Very truly yours,

Mark Waterbury Deputy Director, Certification



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007
PROJECT LOCATION:	Wellesley
DATE OF BID OPENING:	8/10/2010
FROM THE Down C	(Minority or Women's Business Enterprise)
TO:	J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

111	
Just AU VP	7-16-10
M/WBE Signature	Date



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION - Page 2

MHD Project Number:

Project Location:

Wellesley

604007

Date of Bid Opening:

8/10/10

Name of General Bidder: J.F.White Contracting Co.

<u>Item number</u> if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit</u> Price	<u>Amount</u>
	Utilities and Excavation			100,000.00
		TOTAL AMO	DUNT:	100,000.00
M/WBE COMPANY NAME: THE Dow Company Func				
M/WBE SIGNATURE:				

NAME AND TITLE (PRINT):

<u>MICHAEL S. DOW V.P.</u> 978 - 682 - 1414 FAX NUMBER 978 - 654 - 5190

TELEPHONE NUMBER:

END OF DOCUMENT



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116

www.mass.gov/somwba

TELEPHONE: (617) 973-8692

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FACSIMILE: (617) 973-8637

DEVALL PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR

March 29, 2010

Ms. Mary H. Dow Dow Company, Inc., The 1112 Broadway Road Dracut, MA 01826

Dear Ms. Dow:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Dow Company. Inc., The and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Dow Company, Inc., The as a woman-owned business enterprise (WBE) with the business description of SITE WORK; EXCAVATION; INTERIOR DEMOLITION; UNDERGROUND PIPING (DBE ONLY) has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of April 1, 2012, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to April 1, 2012.

- All company financial statements since the date of the company's then most recent SOMWBA 1) certification;
- 2) A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal;
- 3) Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

A notarized statement that indicates: 4) · · ·

经总统 医尿道 化过度器 法自由公司 医生物

. . . . "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the

Page 2

company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) A notarized statement that indicates:

"I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (617) 973-8648.

Verv truly

Reginald A. Nunnally Executive Director



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 - DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007		
PROJECT LOCATION:	Wellesley		
DATE OF BID OPENING: <u>8/10/10</u>			
FROM Saugus (Construction Corp.		
	(Minority or Women's Business Enterprise)		

TO:

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

shall and 7/16/10

M/WBE Signature



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

MHD Project Number:

Project Location:

Wellesley

604007

Date of Bid Opening:

8%10/10

Name of General Bidder: J.F.White Contracting Co.

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	Amount
	F & I Sfructural Steel			180,000.00
		TOTAL AMC	OUNT:	180,000.00

M/WBE COMPANY NAME:	Saugus Construction Corp
M/WBE SIGNATURE:	Usha Wood
NAME AND TITLE (PRINT):	Usha Wood, President
TELEPHONE NUMBER:	978-352-7171 FAX NUMBER 978-352-7998

END OF DOCUMENT

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 www.somwba.state.ma.us

Telephone

(617) 973-8692

Facsimlle

(617) 973-8637



DEVAL L. PATRICK

TIMOTHY P. MURRAY

EDITH A, SILVA EXECUTIVE DIRECTOR

January 16, 2009

Ms. Usha N. Wood Saugus Construction Corporation One Farm Lane Georgetown, MA 01833

Dear Ms. Wood:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Saugus Construction Corporation and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Saugus Construction Corporation as a Minority and woman business enterprise (MBE and WBE) with the business description of INSTALLER OF STEEL ERECTION AND REINFORCING has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of January 13, 2011, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to January 13, 2011.

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- 2) A <u>signed</u> copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal;
- 3) Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and
PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

4) A notarized statement that indicates:

11.40 INT 910 00F 1990

"I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman/ Portuguese business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) A notarized statement that indicates:

"I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate

your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (617) 973-8648.

Very truly yours,

Edith A. Silva Executive Director

			ADMINIS	STRATIVE ENGINEERING BID TABS		Date: 08/10/2010 03:34	Ma
Project No Location	: 604007 : WELLESL	ΈΥ	AE ID : 48524 Description :	BRIDGE REPLACEMENT	(W-13-015) - CEDAR (Bids Open Date : 10 A ST OVER ROUTE 9 (ABP - DE	aug 2010 3)
				Office Estin	late	J.F. WHITE CONTRACT	ING COMPANY
Item No	Quantity	Units	Description	Unit Price	Amount	Unit Price	Amount
100.01	1,000	ጭ	SCHEDULE OF OPERATIONS \$100,000.00 FIXED PRICE	\$100,000.000	\$100,000.00	\$100,000.000	\$100,000.00
101.01	1.000	LS	CLEARING AND GRUBING	\$20,000.000	\$20,000.00	\$85,000.000	\$85,000.00
115.1	1.000	LS	DEMOLITION OF BRIDGE NO. W-13- 015	\$546,000.000	\$546,000.00	\$160,000.000	\$160,000.00
120.2	1.000	LS	EARTHWORK	\$60,000.000	\$60,000.00	\$100,000.000	\$100,000.00
149.2	1.000	ГS	PUBLIC OUTREACH	\$50,000.000	\$50,000.00	\$10,000.000	\$10,000.00
184.1	1.000	TON	DISPOSAL OF TREATED WOOD PRODUCTS	\$4,000.000	\$4,000.00	\$1.000	\$1.00
220.202	1.000	LS	DRAINAGE	\$20,000.000	\$20,000.00	\$15,000.000	\$15,000.00
472.11	1.000	LS	ROADWAY AND PAVEMENT WORK	\$90,000.000	\$90,000.00	\$350,000.000	\$350,000.00
748.2	1.000	LS	MOBILIZATION	\$170,000.000	\$170,000.00	\$100,000.000	\$100,000.00
756.01	1.000	LS	ENVIRONMENTAL PROTECTION MEASURES	\$20,000.000	\$20,000.00	\$10,000.000	\$10,000.00
771.	1.000	ΓS	LANDSCAPING	\$130,000.000	\$130,000.00	\$45,000.000	\$45,000.00
850.11	1.000	LS	ROADWAY FLAGGERS	\$15,000.000	\$15,000.00	\$25,000.000	\$25,000.00
851.21	1.000	LS	MAINTENANCE OF TRAFFIC (TMP)	\$150,000.000	\$150,000.00	\$220,000.000	\$220,000.00
874.8	1.000	LS	TRAFFIC SIGNING/SAFETY ITEMS	\$200,000.000	\$200,000.00	\$155,000.000	\$155,000.00
900.14	1.000	LS	EXCAVATION AND BACKFILL FOR BRIDGE	\$15,000.000	\$15,000.00	\$50,000.000	\$50,000.00
6.006	1.000	LS	PUNCH LIST/AS-BUILT REQUIREMENTS	\$50,000.000	\$50,000.00	\$4,999.000	\$4,999.00

MassDOT Highway Division

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 1 of 8

 Date:
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			ADMINI	STRATIVE ENGINEERII BID TABS	NG	Date: 08/10/2010 03:3	4 PM
Project No Location	: 604007 : WELLESL	ЕУ	AE ID : 48524 Description :	BRIDGE REPLACEMEN'	r (W-13-015) - CEDA	Bids Open Date : 10 R ST OVER ROUTE 9 (ABP -	Aug 2010 DB)
				Office Esti	imate	J.F. WHITE CONTRA	TING COMPANY
Item No	Quantity	Units	Description	Unit Price	Amount	Unit Price	Amount
995.05	1.000	LS	BRIDGE STRUCTURE-SUBSTRUCTURE	\$250,000.000	\$250,000.00	\$525,000.000	\$525,000.00
995.06	1.000	LS	BRIDGE STRUCTURE-SUPERSTRUCTURE	\$2,850,000.000	\$2,850,000.00	\$1,000,000.000	\$1,000,000.00
996.003	1.000	LS	FRECAST BRIDGE COMPONENTS (FRECASTING AND DELIVERY)	\$60,000.000	\$60,000.00	\$157,000.000	\$157,000.00
998.1	1.000	LS	SELF PROPELLED MODULAR TRANSPORTER (SPMT)	\$500,000.000	\$500,000.00	\$338,000.000	\$338,000:00

MassDOT H AY Division

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\$3,450,000.00

Total :

\$5,300,000.00

Total :

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			ADMINIS	OT A AY UIVISION STRATIVE ENGINEERIN	()	Page: 3 of 8 Date: 08/10,	8 /2010 03:34 PM	
-				BID TABS				
Project No Location	: 604007 : WELLESI	ХЭ	AE ID : 48524 Description :	BRIDGE REPLACEMENT	(W-13-015) - CEDAR	Bids Open & ST OVER ROUTE	Date : 10 Aug 9 (ABP - DB)	1 2010
				BARLETTA HEAVY DIV	ISION INC.	SPS	S NEW ENGLAND	
Item No	Quantity	Units	Description	Unit Price	Amount	Unit	t Price	Amount
100.01	1.000	ŝ	SCHEDULE OF OPERATIONS \$100,000.00 FIXED PRICE	\$100,000.000	\$100,000.00	\$100,(000.000	\$100,000.00
101.01	1.000	LS	CLEARING AND GRUBING	\$50,000.000	\$50,000.00	\$10,(000.000	\$10,000.00
115.1	1.000	LS	DEMOLITION OF BRIDGE NO. W-13- 015	\$175,000.000	\$175,000.00	\$220,0	000.000	\$220,000.00
120.2	1.000	LS	EARTHWORK	\$75,000.000	\$75,000.00	\$32 [,] (000.000	\$35,000.00
149.2	1.000	LS	PUBLIC OUTREACH	\$5,000.000	\$5,000.00	\$25,0	000.000	\$25,000.00
184.1	1.000	TON	DISPOSAL OF TREATED WOOD PRODUCTS	\$1.000	\$1.00	\$2,C	000.000	\$5,000.00
220.202	1.000	LS	DRAINAGE	\$25,000.000	\$25,000.00	\$18,C	000.000	\$18,000.00
472.11	1.000	LS	ROADWAY AND PAVEMENT WORK	\$500,000.000	\$500,000.00	\$525,0	000.000	\$525,000.00
748.2	1.000	LS	MOBILIZATION	\$100,000.000	\$100,000.00	\$390,0	000.000	\$390,000.00
756.01	1.000	LS	ENVIRONMENTAL FROTECTION MEASURES	\$20,000.000	\$20,000.00	\$12,0	000.000	\$12,000.00
771.	1.000	LS	LANDSCAPING	\$125,000.000	\$125,000.00	\$11,0	000.000	\$11,000.00
850.11	1.000	LS	ROADWAY FLAGGERS	\$15,000.000	\$15,000.00	\$2°0	00.000	\$2,000.00
851.21	1.000	LS	MAINTENANCE OF TRAFFIC (TMP)	\$35,000.000	\$35,000.00	\$25,0	000.000	\$25,000.00
874.8	1.000	LS	TRAFFIC SIGNING/SAFETY ITEMS	\$150,000.000	\$150,000.00	\$250,0	00.000	\$250,000.00
900.14	1.000	ĽS	EXCAVATION AND BACKFILL FOR BRIDGE	\$25,000.000	\$25,000.00	\$20,0	00.000	\$20,000.00
900.9	1.000	LS	PUNCH LIST/AS-BUILT REQUIREMENTS	\$15,000.000	\$15,000.00	\$25,0	00.000	\$25,000.00

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	•		ENIMOR	ISTRATIVE ENGINEERI BID TABS	5N.	Date: 08/10/2010 03:34	Md
Project No Location	: 604007 : WELLESL	Ϋ́ΕΥ	AE ID : 48524 Description :	BRIDGE REPLACEMEN	fT (W-13-015) - CED/	Bids Open Date : 10 AR ST OVER ROUTE 9 (ABP - D	Aug 2010 B)
				BARLETTA HEAVY DI	IVISION INC.	SPS NEW ENGLA	ND INC
Item No	Quantity	Units	Description	Unit Price	Amount	Unit Price	Amount
995.05	1.000	LS	BRIDGE STRUCTURE-SUBSTRUCTURE	\$100,000.000	\$100,000.00	\$415,000.000	\$415,000.00
995.06	1.000	LS	BRIDGE STRUCTURE-SUPERSTRUCTURE	\$1,551,999.000	\$1,551,999.00	\$975,000.000	\$975,000.00
996.003	1.000	LS	PRECAST BRIDGE COMPONENTS (PRECASTING AND DELIVERY)	\$150,000.000	\$150,000.00	\$350,000.000	\$350,000.00
998.1	1.000	LS	SELF PROPELLED MODULAR TRANSPORTER (SPMT)	\$400,000.000	\$400,000.00	\$820,000.000	\$820,000.00
				Total :	\$3,617,000.00	Total :	\$4,236,000.00

MassDOT H ay Division

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			ADMINIS	FTRATIVE ENGINEERING BID TABS	Date: 08/10/2010 03:3	34 PM
Project No Location	: 604007 : WELLESI	ΈY	AE ID : 48524 Description :	BRIDGE REPLACEMENT	Bids Open Date : 1((W-13-015) - CEDAR ST OVER ROUTE 9 (ABP -	0 Aug 2010 DB)
Item No	Quantity	Units	Description	S&R CORPORAT. Unit Price	LON Amount Trick Profession	
100.01	1.000	ŵ	SCHEDULE OF OPERATIONS \$100,000.00 FIXED PRICE	\$100,000.000	\$100,000.00	Amount
101.01	1.000	LS	CLEARING AND GRUBING	\$60,000.000	\$60,000.00	
115.1	1.000	ΓS	DEMOLITION OF BRIDGE NO. W-13-015	\$280,000.000	\$280,000.00	
120.2	1.000	LS	EARTHWORK	\$170,000.000	\$170,000.00	
149.2	1.000	LS	PUBLIC OUTREACH	\$180,000.000	\$180,000.00	
184.1	1.000	TON	DISPOSAL OF TREATED WOOD PRODUCTS	\$1.000	\$1.00	
220.202	1.000	LS	DRAINAGE	\$70,000.000	\$70,000.00	
472.11	1.000	LS	ROADWAY AND PAVEMENT WORK	\$480,000.000	\$480,000.00	
748.2	1.000	LS	MOBILIZATION	\$150,000.000	\$150,000.00	
756.01	1.000	LS	ENVIRONMENTAL PROTECTION MEASURES	\$50,000.000	\$50,000.00	
.771.	1.000	LS	LANDSCAPING	\$120,000.000	\$120,000.00	
850.11	1.000	LS	ROADWAY FLAGGERS	\$40,000.000	\$40,000.00	
851.21	1.000	LS	MAINTENANCE OF TRAFFIC (TMP)	\$100,000.000	\$100,000.00	
874.8	1.000	LS	TRAFFIC SIGNING/SAFETY ITEMS	\$300,000.000	\$300,000.00	
900.14	1.000	LS	EXCAVATION AND BACKFILL FOR BRIDGE	\$50,000.000	\$50,000.00	
6.006	1.000	LS	PUNCH LIST/AS-BUILT REQUIREMENTS	\$10,000.000	\$10,000.00	

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MassDOT E Ay Division

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ADMINISTRATIVE ENGINEERING MassDOT H AY Division

Date: 08/10/2010 03:34 PM **Page:** 6 of 8

BID TABS

AE ID : 48524

: WELLESLEY : 604007

Project No Location

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Bids Open Date : 10 Aug 2010 Description : BRIDGE REPLACEMENT (W-13-015) - CEDAR ST OVER ROUTE 9 (ABP - DB)

				S&R CORPOR	ATION		
Item No	Quantity	Units	Description	Unit Price	Amount	Ilait Brice	1
995.05	1.000	LS	BRIDGE STRUCTURE-SUBSTRUCTURE	\$170,000.000	\$170,000.00	DD1144	Amount
995.06	1.000	LS	BRIDGE STRUCTURE-SUPERSTRUCTURE	\$1,450,000.000	\$1,450,000.00		
996.003	1.000	LS	PRECAST BRIDGE COMPONENTS (PRECASTING AND DELIVERY)	\$570,000.000	\$570,000.00		
998.1	1.000	LS	SELF PROPELLED MODULAR TRANSPORTER (SPMT)	\$800,000.000	\$800,000.00		
				Total :	\$5,150,001.00		

				ADMINISTRATIVE ENGINEERING	Dat	te: 08/10/2010 03:	:34 PM
				BID AVERAGE REPORT			
Project No		: 6040	07	AE ID : 48524 IBM	File Number:	Bids Open Date :]	10 Aug 2010
Location		: MELL	ESLEY Descr	ription : BRIDGE REPLACEMENT	(W-13-015) - CEDAR ST	OVER ROUTE 9 (ABP	- DB)
Item No	Quantity	Units	Description		Office Estimate	Low Bid	Average 2 thru 4
100.01	, ~1	ŵ	SCHEDULE OF OPERATIONS \$1	100,000.00 FIXED PRICE	\$100,000.000	\$100,000.00	\$100,000.00
101.01	Ļ	LS	CLEARING AND GRUBING		\$20,000.000	\$85,000.00	\$40,000.00
115.1	4	LS	DEMOLITION OF BRIDGE NO.	W-13-015	\$546,000.000	\$160,000.00	\$225,000.00
120.2	Ļ	LS	EARTHWORK		\$60,000.000	\$100,000.00	\$93,333.33
149.2	7	ΓS	PUBLIC OUTREACH		\$50,000.000	\$10,000.00	\$70,000.00
184.1	4	TON	DISPOSAL OF TREATED WOOD	PRODUCTS	\$4,000.000	\$1.00	\$1,667.33
220.202	1	LS	DRAINAGE		\$20,000.000	\$15,000.00	\$37,666.67
472.11	Ц	LS	ROADWAY AND PAVEMENT WORK		\$90,000.000	\$350,000.00	\$501,666.67
748.2	1	LS	MOBILIZATION		\$170,000.000	\$100,000.00	\$213,333.33
756.01	1	LS	ENVIRONMENTAL PROTECTION N	MEASURES	\$20,000.000	\$10,000.00	\$27,333.33
771.	Ц	ILS	LANDSCAPING		\$130,000.000	\$45,000.00	\$85,333.33
850.11	Ч	ILS	ROADWAY FLAGGERS		\$15,000.000	\$25,000.00	\$20,000.00
851.21	Ц	LS	MAINTENANCE OF TRAFFIC (Th	MP.)	\$150,000.000	\$220,000.00	\$53,333.33
874.8	Ч	LS	TRAFFIC SIGNING/SAFETY ITE	EMS	\$200,000.000	\$155,000.00	\$233,333.33
900.14	1	LS	EXCAVATION AND BACKFILL FC	JR BRIDGE	\$15,000.000	\$50,000.00	\$31,666.67
6.006	H	LS	PUNCH LIST/AS-BUILT REQUIR	LEMENTS	\$50,000.000	\$4,999.00	\$16,666.67

MassDOT H ay Division

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4 1 1 1			MassDOT H ay Division	Page:	: 8 of 8	
			ADMINISTRATIVE ENGINEERING BID AVERAGE REPORT	Date:	: 08/10/2010 03:	34 PM
Project No		6040	07 AE ID : 48524 IBM F1.	.1e Number: B	ids Open Date : 1	0 Aug 2010
Location		WELL	ESLEY Description : BRIDGE REPLACEMENT (W-	-13-015) - CEDAR ST OV	ER ROUTE 9 (ABP -	- DB)
Item No	Quantity	Units	Description	Office Estimate	Low Bid	Average 2 thru 4
995.05	1	LS	BRIDGE STRUCTURE-SUBSTRUCTURE	\$250,000.000	\$525,000.00	\$228,333.33
995.06	~~1	LS	BRIDGE STRUCTURE-SUPERSTRUCTURE	\$2,850,000.000	\$1,000,000.00	\$1,325,666.33
996.003	Ч	LS	PRECAST BRIDGE COMPONENTS (PRECASTING AND DELIVERY)	\$60,000.000	\$157,000.00	\$356,666.67
998.1	1	ΓS	SELF PROPELLED MODULAR TRANSPORTER (SPMT)	\$500,000.000	\$338,000,00	55 233 33

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\$673,333.33

\$338,000.00

\$500,000.000

SECTION 7.0

RAILROAD COORDINATION – NOT APPLICABLE

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SECTION 8.0

RIGHT-OF-WAY

8.1 GENERAL STATEMENT

Based on the preliminary plans, MassDOT believes that two temporary easements will be required for the Project. MassDOT will issue a ROW certificate at NTP. The following requirements detail the process if additional acquisitions, easements, or any other Right-of-Way action is required.

8.2 ADDITIONAL PROPERTIES

The DB Entity shall make reasonable efforts to restrict additional costs to the Project by ensuring that all elements of the Project fall within the limits of the Right-of-Way currently available for the Project as an alternative to the acquisition of Additional Properties wherever possible. The DB Entity shall exercise particular care to avoid the need to acquire land owned by a public entity and used for a use inconsistent with highway use, since the acquisition of such properties by MassDOT may require the enactment of special legislation.

The DB Entity shall be responsible for completing the Right-of-Way administrative process as set forth in this Section 8 that will be necessary in order for MassDOT to acquire the Additional Properties. Acquisition of the Additional Properties will be limited to that land and those interests in land necessary for Project purposes, but will also include any portions of the Additional Properties deemed by the owners of such Additional Properties and MassDOT to be an uneconomic remainder. Additional Properties will not be considered to include properties necessary for excessive work space (as determined by MassDOT), the DB Entity lay-down areas or material storage areas.

8.3 PLANS FOR ACQUISITION OF ADDITIONAL PROPERTIES

8.3.1 General

The DB Entity shall be responsible for the preparation of all property/land acquisition materials related to any Additional Property in accordance with MassHighway's Project Development and Design Guidelines, the Federal Aid Policy Guide (FAPG) relating to such documentation, and with MassDOT Standards. All dimensions are to be shown in the English system. Bar scales for both systems shall be provided on all plans. The DB Entity acknowledges that it is familiar with the requirements of MassDOT's Right-of-Way Bureau and Manual and with the requirements applicable to Right-of-Way plans.

Included as a part of the DB Work is preparation of Preliminary and Final Design plans. If the proposed design layouts result in the need to acquire any Additional Property for the Project or to transfer any property to a municipality (to the extent required). Separate layouts will be required for each municipality, the DB Entity shall be required to prepare separate plans and written instruments for advance takings and/or additional easements to the extent required by MassDOT.

8.3.2 Schedule

The DB Entity shall, within 30 Days of determining the need to acquire Additional Property, prepare a schedule for the delivery of any Additional Property then identified and submit the same to MassDOT for approval and shall integrate the delivery schedule into the overall Project schedule. The schedule shall indicate the date for the acquisition of the Additional Properties and the completion of the plans and other Right-of-Way activities required by the Contract Documents. The schedule shall allow MassDOT at least five months following MassDOT's approval of a Case Folder to provide access to any Additional Property that is vacant and shall allow at least 18 months from the date of MassDOT's approval of a Case Folder for any Additional Property which involves the relocation of occupants, except in the case where the acquisition of an Additional Property will require the enactment of special legislation, in which case no schedule can be estimated by MassDOT.

Delays that cause any Additional Property (except for those requiring special legislation) to be inaccessible to the DB Entity beyond the time set forth above shall be considered an Owner Caused Delay to the extent that the Critical Path is delayed. MassDOT shall notify the DB Entity of any such delay in the dates for acquisition of the Additional Properties. In such an event, the DB Entity shall immediately determine whether the delay impacts the Critical Path and, if so, to what extent the delay may be avoided through alternative construction methods or otherwise. Upon such notice, the DB Entity shall promptly meet with MassDOT to determine the best course of action.

8.4 THE DB ENTITY'S RIGHT-OF-WAY RESPONSIBILITIES

The DB Entity shall be responsible for completing all necessary administrative activities and for preparing all required documentation sufficient for MassDOT to acquire the Additional Properties by either eminent domain or negotiated purchase, except that MassDOT will retain the primary responsibility for appraisal review, approval of the Real Estate Review Board (if necessary) and (to the extent applicable) the Federal Highway Administration, acquisition negotiation (with assistance from The DB Entity and the DB Entity's consultants as necessary), and the approval by the MassDOT of acquisition documents, and the adoption and recording of acquisition documents. All Right-of-Way activities must be completed in compliance with the Right-of-Way Manual http://intraway.mhd.state.ma.us/docs/Manuals/rowmanual.pdf, and the Federal Highway Administration's Right-of-Way Project Development Guide (PDG).

After identifying the Additional Properties as set forth in Section 8.3, but before beginning the assembly of the Case Folders as set forth in Section 8.4.3, the DB Entity shall meet with the Director of MassDOT's Right-of-Way Bureau or his/her representative to discuss Right-of-Way acquisition procedures.

8.4.1 Acquisition Process Summary

The DB Entity's major activities with respect to the acquisition of the Additional Properties include:

- a. Identification of Additional Properties
- b. Meeting with the Director of the Right-of-Way Bureau
- c. Owner and occupant interviews
- d. Preparation of title examinations
- e. Survey and plan preparation work (ROW and Layout Plans)

- f. Preparation of real/personal property report
- g. Obtain Certificate of Municipal Liens
- h. Establish effect, if any, of environmental condition of the Additional Properties on value
- i. Identification and valuation of tenant-owned improvements
- j. Obtain appraisals and establish use and occupancy charges
- k. Obtain Case Folder approval of MassDOT
- I. Prepare the layout schedule
- m. Prepare a recordable order of taking and taking plan
- n. Establish use and occupancy charge
- o. Document condition of property
- p. Assist in document preparation to notify owner/occupants/lienholders
- q. Assist in negotiations with property owner(s) after the acquisition approval by the MassDOT
- r. Manage properties (as necessary)

8.4.2 Relocation Process Summary

The DB Entity shall be required to coordinate and perform the administrative requirements necessary in order to relocate any occupants from any Additional Property proposed to be acquired by the DB Entity. All work prepared by the DB Entity with respect to relocation shall be performed in accordance with applicable State and Federal Law (including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended).

The DB Entity's major activities with the relocation of occupants from the Additional Properties include:

- a. Interview owner/occupant (prepare Commercial Site Occupant Record)
- b. Prepare relocation plan
- c. Obtain approval as relocation advisory agency
- d. Identify alternative sites
- e. Prepare personal property inventory*
- f. Identify specific relocation site*
- g. Prepare move specifications*
- h. Obtain move-cost estimates*
- i. Review estimates
- j. Issue recommendation
- k. Obtain approval of relocation amount from Right-of-Way Bureau
- I. Issue authorization to move
- m. Monitor relocation
- n. Prepare claim package
- o. Check outstanding claims

p. Obtain relocation claim approval from MassDOT

* Performed in cooperation with occupant.

8.4.3 The DB Entity's Responsibilities for Case Folders

The DB Entity shall prepare and submit to MassDOT for each Additional Property a Case Folder (using MassDOT's standard case folder style) containing all necessary documentation for acquiring the Additional Property, including that information set forth below. A separate Case Folder shall be prepared for each owner. The DB Entity shall provide all field survey work, base mapping and other services necessary to complete the Case Folder documentation at its own expense. The Case Folder shall be labeled on its cover with the parcel number(s) of the property to be acquired and shall contain the documentation as required in Section 8. 4.4 through Section 8.4.12, inclusive.

8.4.4 Cover Sheet

The cover sheet shall set forth the following information for the Additional Property: 1) parcel number; 2) station number; 3) location of property; 4) name of owner; 5) extent of acquisition (partial or full acquisition); 6) duration of need for property (permanent or length of temporary use); 7) type of granting instrument (fee, easement, etc.); 8) Federal aid project number; and 9) MassDOT Project Info number.

8.4.5 Right-of-Way Acquisition Justification Form

The Right-of-Way Acquisition Justification Form shall justify the acquisition of the Additional Property. The Right-of-Way Acquisition Justification Form included in the Case Folder shall have been previously approved by MassDOT and shall contain the following information:

- a. Parcel Number, owner, MassDOT's name, location, Federal-aid project number and MassDOT Project Info number;
- b. Nature of the property interest to be acquired (fee, permanent easement, etc.);
- c. Physical dimensions and limits of the acquisition; and
- d. Value engineering analysis, if applicable

8.4.6 Real/Personal Property Report

The real/personal property report shall detail the items making up each Additional property, and classify such items as real estate, tenant-owned improvements or personal property. Particular attention should be paid to items which have questionable classifications.

8.4.7 Right-of-Way Bureau Forms

Completed Right-of-Way Bureau forms shall be provided for each Additional Property, including:

- a. Record of owner interviews; and
- b. Structure and occupancy report (for occupied properties).

8.4.8 Appraisal(s)

For each Additional Property, the DB Entity shall cause a fair market value appraisal of the real property to be prepared, including the improvements making up a part of the realty (fixtures and equipment). The appraisal(s) shall be prepared by an appraiser(s) listed on MassDOT's list of approved real estate appraisers or by MassDOT's Right-of-Way Bureau staff appraisers. For properties expected to cost more than \$300,000.00 to acquire, two complete appraisals are required. All appraisals shall be prepared in conformance with Law (including the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, Public Law 91-646, as amended) and with professional appraisal methods for each Additional Property to be acquired. The form of all such appraisals shall be approved by MassDOT.

8.4.9 Appraisal Map

A full-size (1 in.= 40 ft.) and half-size appraisal map (1 in.= 80 ft.), folded so that the parcel number(s) of the Additional Property is visible, shall be inserted in a clear sheet protector in the Case Folder. A completed parcel base map is required to prepare the appraisal map. The appraisal map shall show the total Additional Property with the taking and remainder areas clearly noted.

8.4.10 Legal Description

A legal description section shall be included in the Case Folder noting the form of granting instrument (fee, easement, etc.) adequate to effect the desired acquisition of the Additional Property, signed by a land surveyor licensed to practice in the Commonwealth. A separate legal description is required for each parcel of the Additional Property. The DB Entity shall also cause a plan or plans to be prepared showing the dimensions of each Additional Property. For properties intended to be placed within the State Highway Location Line, a State Highway Alteration Plan is required. All plans shall be in recordable form and shall be prepared in a form and manner acceptable to MassDOT in all respects.

8.4.11 Title Examination

The Case Folder shall include a current title report for each Additional Property and a copy of each exception listed. The title process requires delivery of a preliminary title report for review by MassDOT, followed by an amended title report if necessary. Each title report shall note any encumbrances or title clearance requirements. The title report included in each Case Folder shall be updated to 30 Days or less prior to the date of the Case Folder's submittal to MassDOT and shall incorporate all corrections requested by MassDOT. Title examinations shall be completed by licensed attorneys on MassDOT's approved list. As soon as practicable following its completion, a copy of each title examination shall be forwarded to: Director, MassDOT, Right-of-Way Bureau, 10 Park Plaza, Boston, MA 02116.

8.4.12 Valuation Environmental Report

The Case Folder shall include a report prepared by a licensed site professional documenting the environmental condition of the Additional Property, which report may be based on field investigations and/or historical review, as appropriate for the particular Additional Property. The report shall be completed in coordination with the appraiser(s) retained by the DB Entity and shall be available to the appraiser(s) prior to the completion of the required appraisal reports. All reports must indicate the approximate cost to remediate the Additional Property to achieve its current use and its highest and best use based on available technology for the purpose of permitting the DB Entity's appraiser(s) to estimate the effect, if any, that the environmental condition of the Additional

Property has on its fair market value, and shall be consistent with MassHighway Policy Directive Number P-94-005 dated 11-2-94 entitled "Hazardous Waste Policy for Department Projects, Policy Directive #2, Valuation of Contaminated Property."

8.5 REPRESENTATIONS BY THE DB ENTITY

The DB Entity or its representative shall not represent himself as an agent of MassDOT while communicating with any of the owners or occupants of the Additional Properties for the purposes of completing any of the documentation to be contained in the Case Folders without prior MassDOT approval. The DB Entity or its representative shall not appear before any owner or occupant of any Additional Property for the purposes of completing any of the documentation to be contained in the Case Folders without prior or occupant of any Additional Property for the purposes of completing any of the documentation to be contained in the Case Folders without either being accompanied by an authorized representative or employee of MassDOT or first presenting to that owner or occupant a letter, executed by MassDOT, stating that neither the DB Entity nor its agent or representative is an agent or representative of MassDOT for the purposes of the acquisition of the Additional Property or the preparation of any relevant documentation. The DB Entity or its representative shall at all times conform with the requirements of applicable Law in all communications with the owners or the occupants of the Additional Properties.

8.6 **REVIEW OF THE CASE FOLDERS**

Within 30 Business Days following MassDOT's receipt of a completed Case Folder, MassDOT shall review the documents contained therein and shall notify the DB Entity of any deficiencies. If the Case Folder is deficient in any way, the DB Entity shall correct every deficiency and resubmit the Case Folder for MassDOT's approval. A Case Folder shall be deemed deficient if any of its components fails to meet the criteria established in Section 8.4.3 above. With each submittal or resubmittal, a 10 Day review period begins during which time MassDOT may approve or disapprove the information in the Case Folder. This process shall continue until MassDOT has received a complete Case Folder with no deficiencies.

MassDOT may, at its discretion, determine that the acquisition of any Additional Property as proposed in the Case Folder is unnecessary for completion of the Project and will therefore not be acquired by MassDOT.

8.7 AMENDMENTS TO CASE FOLDERS

The DB Entity shall be responsible for any expenses incurred by MassDOT associated with the DB Entity's request to amend information in a Case Folder after its submission to MassDOT.

8.8 **NEGOTIATIONS AND RELATED PROCEEDINGS**

Negotiations and/or condemnation proceedings for any Additional Property will be brought by MassDOT at MassDOT's expense within a reasonable time following MassDOT's approval of the Case Folder for said Additional Property. The DB Entity shall assist MassDOT as requested during the negotiation and/or condemnation proceedings, including providing updated or new appraisals, preparing for court testimony, negotiating with the property owner(s) and providing witnesses to testify with respect to the DB Entity's work products. The DB Entity will not be required to provide any expert witnesses other than the Person who originally performed the work and/or that Person's employees.

Once begun, MassDOT will provide the DB Entity with monthly reports regarding the status of the acquisition process for any Additional Property. MassDOT shall notify the DB Entity of the availability of the Additional Property within seven Days after MassDOT has received access to said Additional Property and shall notify the DB Entity of any access restrictions.

8.9 COOPERATION AND COORDINATION WITH OWNER

At all times throughout the Right-of-Way acquisition process set forth in this Section 8, the DB Entity shall cooperate and coordinate its activities with the Director of MassDOT's Right-of-Way Bureau.

SECTION 9

PROJECT SCHEDULE REQUIREMENTS

9.1 PROJECT SCHEDULE SUBMITTALS

9.1.1 General – Prosecution of Work

Prosecution of Work (Milestones) (Supplementing Subsection 8.03 of the Standard Specifications)

The DB Entity shall complete the Work in accordance with the following milestones:

Milestone #1

Milestone #1 shall be limited and defined as follows:

The superstructure has been constructed off-site on temporary supports such that it is ready for moving into the permanent location. Abutment and pier caps and all other precast items are onsite, finished and cured and ready for installation. Traffic Management Plan items including, but not limited to detour signs placed but covered, and a minimum of 8 Variable Message Boards are placed in operation beginning June 1, 2011, advising of the upcoming closure of the bridge. All submittals including, but not limited to shop drawings, materials certifications and approvals including all QC documentation, special provisions, and supplemental reports are complete for all work to date. Tools/equipment required for final placement of the superstructure and substructure components are on-site. Any and All utility relocations are completed to their temporary or final location.

Milestone #2

Milestone #2 shall be limited and defined as follows:

The existing bridge is demolished; abutment, pier and wingwall modification is complete; reconstruction of the roadway including the road base, new superstructure and signalized intersection controls is complete; restoration of Route 9 to its original condition including signs, guardrails and pavement is complete; adjustment of detour signs and any other temporary work or damage on Route 9 that occurred is complete to MassDOT's approval. Cedar Street is open to traffic; however, binder course at a minimum will be acceptable until final paving can occur.

The allowable roadway closure/detour of Route 9 and Cedar Street necessary to achieve Milestone #2 shall begin no sooner than 10:00 PM Friday July 1, 2011. Closure shall be limited to a single continuous period not exceeding 72 hours, ending no later than 10:00 PM Monday, July 4, 2011.

Milestone #3 – Substantial Completion

Milestone #3 shall be limited and defined as follows:

Substantial Completion of the Project, which is defined as final paving, curbing, sidewalk and intersection work is complete; traffic signalization is operational and adjusted to permanent configuration; all pavement striping and all landscaping is complete; and temporary easements are restored and vacated.

Milestone #4 – Final Acceptance

Milestone #4 shall be limited and defined as follows:

Final Acceptance of the Project, which is defined as Milestones #1 through #3 is complete, all Punch List Work is complete and one hundred percent of all other Project work is complete. One hundred percent completion shall be when MassDOT has accepted all of the Work and has no outstanding issues/requirements that require any effort by the DB Entity, including but not limited to: construction work of any kind, reports, financial information/requirements, materials certifications, testing results, outstanding change orders, contract requirements, and all of the requirements set forth in Contract Section 9.1.5.

Final Acceptance must occur no later than 365 days from the issuance of the Notice to Proceed.

9.1.2 Initial Project Schedule/Payment Schedule Submittal

Prior to the issuance of the Notice to Proceed, the DB Entity shall submit an Initial Project Schedule based on the Technical Proposal detailed in Section 3.3 Technical Proposal of the RFP (attached hereto as Exhibit R). The Initial Project Schedule Submittal shall divide the DB Work into activities with appropriate logic ties to show the DB Entity's overall approach to the planning, scheduling and execution of the DB Work. The document submitted to MassDOT as the Initial Project Schedule Submittal shall not be considered the Project Schedule unless and until it is approved by MassDOT.

The Initial Project Schedule Submittal shall clearly define the progression of the DB Work from the Notice to Proceed to completion of the DB Work by using separate activities for: (i) all significant DB Work components; (ii) the procurement of approvals; (iii) submittal preparation and submission; (iv) submittal review and return; (v) material and equipment procurement and delivery to the site or storage locations; (vi) interfaces with adjacent work and work to be completed by others (such as utility companies and public agencies); (vii) DB Entity milestones; (viii) Earned Value; and (ix) Substantial Completion and Final Acceptance.

The DB Entity is required to show all design submittals; MassDOT review timeframes, resubmittals and acceptance activities; all permit and Right of Way requirements with appropriate durations; and Public Hearing dates in the schedule. The schedule of values will contain all activities for which payment will be requested for each lump sum (LS) item.

The DB Entity shall reflect the DB Payment schedule (attached hereto as Exhibit C) among the activities scheduled on the Initial Project Schedule Submittal. The price for each activity shall be all-inclusive, i.e., it shall include all direct and indirect costs, overhead, risks and profit. Activity durations shall be in Days. Activity durations shall be no longer than thirty (30) Days and no less than two (2) Hours, unless otherwise accepted by MassDOT.

The DB Entity shall use standard activity identification numbers, descriptions and codes in all schedule submittals, in a manner acceptable to MassDOT.

9.1.3 **Project Schedule Requirements**

Schedule of Operations (Contract Progress Schedule) (Supplementing Subsection 8.02, Division I of the MassHighway Standard Specifications)

A. General Requirements

Within ten (10) Work Days after Notice to Proceed, the DB Entity shall submit, for MassDOT's acceptance, a Schedule of Operations, hereinafter called the Contract Progress Schedule. The Contract Progress Schedule shall consist of a timeline showing how the DB Entity plans to complete the various items of the Work within the time specified in the Contract.

B. Specific Requirements

1. All Schedule Types

All schedule types described below, baseline, statused, proposal, recovery, and all Time Entitlement Analyses (TEAs) shall clearly define the progression of the Work from Notice to Proceed to Final Acceptance by using separate activities for each of the following items:

- 1) Notice to Proceed
- 2) All components of the Work
- 3) Procurement of permits by the DB Entity or MassDOT
- 4) Submittal preparation and submission
- 5) Submittal review and return, generally thirty (30) Calendar Days
- 6) Material and equipment procurement and delivery to the site or storage location
- 7) Interfaces with adjacent work, utility companies, public agencies, and/or any other third party work affecting this Contract
- 8) Interim milestones listed in Section 9.1.1
- 9) The critical path, clearly defined and labeled
- 10) Float, as defined below, clearly identified
- 11) Substantial Completion
- 12) Punchlist completion period
- 13) Final Acceptance

Float shall be defined as the amount of time between when an activity can start (Early Start Date) and when an activity must start (Late Start Date). Float belongs to the Project and is a shared commodity between MassDOT and the DB Entity and is not for the exclusive use or benefit of either party. Either party has full use of the float until it is depleted. The float may be claimed by whichever party first demonstrates a need for it, i.e., that Contract Milestones and/or the Contract Completion Date, has been delayed. The DB Entity shall demonstrate this need as required herein.

The DB Entity shall uniquely identify each schedule submittal. Resubmissions shall use the same revision number, followed by the letters A, B, C, and so on, and shall fully address MassDOT's comments.

All schedules shall be prepared as time-scaled bar charts using computerized scheduling software, such as Microsoft Project, Primavera Contractor, or an equivalent software approved by MassDOT, and shall be submitted to MassDOT in two formats; printed on 11" X 17" sized paper and copied on a portable electronic data storage medium. All electronic submissions shall be virus-free.

2. Baseline Contract Progress Schedule

The Contract Progress Schedule shall be submitted within five (5) Calendar Days after Notice to Proceed. This schedule shall only reflect the Work contained in the Contract and shall not include any delayed or change order work.

Once the Contract Progress Schedule has been accepted by MassDOT, it will represent the asplanned schedule of the Work and shall be known as the Baseline Contract Progress Schedule. Until such time as this schedule is statused under Contract Subsection 9.1.3.B.3 and Subsection 8.02 of the MassHighway Standard Specifications, the Baseline Contract Progress Schedule shall also be the Contract Progress Schedule of Record.

3. Statused Contract Progress Schedules

Statused (updated) Contract Progress Schedules shall be submitted by the DB Entity to coincide with each Contract Quantity Estimate (CQE or "Pay Estimate"). Except as provided elsewhere in this subsection, Statused Contract Progress Schedules shall update and replace the Contract Progress Schedule of Record.

A Statused Contract Progress Schedule shall consist of the following:

1. Schedule Narrative

The schedule narrative shall: A.) itemize and describe the flow of work for all activities on the critical path; B.) compare Early and Late Dates for activities on the critical path; C.) give progress highlights and quantify Calendar Days gained or lost versus the Contract Progress Schedule of Record; D.) describe delays, and the DB Entity's plan to recover schedule, if appropriate; E.) describe the DB Entity's plan, approach, methodologies, and resources to be employed for completing the various operations and elements of the Work; F.) itemize shifts, holidays; and G.) uniquely identify each calendar used.

2. Summary Progress Schedule

The Contract Progress Schedule shall be coded such that MassDOT may produce a summarylevel schedule from each electronic file submitted that identifies major physical classes, structures, facilities, and/or other elements of the Work. Such summary activities shall be shown in relationship to the Contract Duration. The activity descriptions of the summary-level activities shall be subject to the acceptance of MassDOT.

3. All documentation required by the Contract to support the CQE

Each Statused Contract Progress Schedule shall reflect updated progress to the status date, shall forecast the finish dates for in progress activities and remaining activities, but shall not change any activity descriptions, durations, or sequences without the acceptance of MassDOT. Updated progress shall be limited to as-built sequencing and as-built dates for completed and in progress activities. As-built data shall include actual start dates, remaining Calendar Days, and actual finish dates for each activity.

Statused Contract Progress Schedules shall be prepared in the approved electronic format described above and shall be submitted in two formats; printed on 11" X 17" sized paper and copied on a portable electronic data storage medium.

No CQE shall be approved by MassDOT until the Contract Progress Schedule has been submitted.

4. Proposal Schedules & Time Entitlement Analyses

A Proposal Schedule or Time Entitlement Analysis (TEA) shall be submitted to MassDOT as part of all Extra Work Order (EWO) proposals, all requests for extensions of Contract Time, all claims, or any other proposed change to the Contract that may cause a deviation from the Contract Progress Schedule of Record as further discussed in Section 17 of the Contract. If a Proposal Schedule or TEA is requested by MassDOT, the DB Entity shall submit one within ten (10) Calendar Days.

Proposal Schedules and TEAs shall be used for the negotiation of EWOs and/or other changes to the Contract as discussed in the subsections referenced in the paragraph above. Proposal Schedules and TEAs shall incorporate all proposed activities required to implement the change and detail all impacts on pre existing activities. Accepted changes shall be included in the next Statused Contract Progress Schedule.

Proposal Schedules and TEAs shall be prepared and submitted as required in Contract Subsection 9.1.3.B.3 and Subsection 8.02 of the MassHighway Standard Specifications.

5. Recovery Schedules

The DB Entity shall promptly report to MassDOT all schedule delays during the prosecution of the Work.

The DB Entity shall promptly develop a Recovery Schedule whenever one of the following occurs:

- The Contract Progress Schedule of Record's critical path exceeds the greater of: a) A delay of thirty (30) Calendar Days, or, b) A delay equal to 5% of the Calendar Days remaining until the Contract Completion Date;
- 2) The DB Entity cannot comply with the Contract Progress Schedule of Record;
- 3) MassDOT requests a Recovery Schedule. If requested by MassDOT, the DB Entity shall submit a separate Recovery Schedule, prepared in accordance with this Section 9.1.3.B.3 within ten (10) Work Days and submit it no later than the submittal of the next Statused Contract Progress Schedule.

Recovery Schedules shall be used by the DB Entity to notify MassDOT of revisions to logic ties and activities of the Contract Progress Schedule of Record. Recovery Schedules shall include a separate time-scaled logic diagram of the activities impacted and a narrative describing the causes of any delay and the actions planned to recover schedule to meet the Contract Completion Date.

Recovery Schedules shall be prepared in the approved electronic format described above and shall be submitted in two formats; printed on 11" X 17" sized paper and copied on a portable electronic data storage medium.

Failure to submit a Recovery Schedule could result in withholding of full or partial Contract Quantity Estimate payments by MassDOT.

C. Schedule Reviews

MassDOT will respond to each schedule submittal within fifteen (15) Calendar Days of receipt providing comments and disposition; either accepting the schedule or requiring revision and resubmittal.

Schedules shall be resubmitted within ten (10) Work Days after receipt of MassDOT's comments.

MassDOT's comments may address whether items of the Work have been omitted, if activity durations are reasonable, or that the means, methods, timing, and/or sequencing of the Work are practicable. The planning, scheduling, and execution of the Work and the accuracy of their representation in the Contract Progress Schedule shall remain the sole responsibility of the DB Entity.

The DB Entity shall not be relieved from its responsibility for satisfactorily completing the Work within the specified Contract Time due to its failure to submit an acceptable Contract Progress Schedule.

D. Disputes

As stated in Contract Section 9.1.3.C, all schedules shall be submitted, reviewed, dispositioned, and accepted in the timely manner specified so as to provide the greatest possible benefit to the execution of this Contract.

Any dispute concerning the acceptance of a schedule or any other question of fact arising under this subsection shall be determined by MassDOT.

Pending resolution of any dispute, the last schedule accepted by MassDOT will remain as the Contract Schedule of Record as described in Contract Subsection 9.1.B, paragraphs 2 and 3.

E. Basis of Payment

The DB Entity is required to comply with all schedule submittal requirements of Section 9.0 of the Contract. A fixed price of \$100,000 will be provided to the DB Entity for these Project schedule submittal requirements.

Payment will be made under Item No. 100.01, Schedule of Operations (Fixed Price \$100,000), with the following breakdown:

Fifteen percent (15%) of the fixed price will be made when the Baseline Contract Progress Schedule is accepted as "Resubmittal Not Required" (As-Planned Schedule).

The remaining (85%) will be pro-rated in equal amounts on each subsequent application for payment upon MassDOT's receipt and acceptance of the monthly schedule update submittals. The number of months to be used for the pro-rating will be the number of remaining months estimated to complete the work.

9.1.4 Incentive/Disincentive Provisions

For the purposes of this contract, MassDOT is instituting an Incentive/Disincentive specification. This specification is to encourage the DB Entity to use innovative methodologies and techniques to achieve early project completion and to achieve certain milestones. Conversely, if the DB Entity fails to achieve certain milestones, MassDOT shall assess Disincentive Deductions.

For purposes of determining whether the DB Entity shall receive an Incentive Payment, the number of calendar days set forth in Milestone Number 1 will not be adjusted under any circumstance for any reason, cause, or circumstance whatsoever, regardless of fault, save and except in the instance of a catastrophic event and/or declared state of emergency. However, Milestone Numbers 2, 3, and 4 may be adjusted by 7 day increments, at the sole discretion of MasssDOT, with the input of the DB Entity and the Town of Wellesley, due to expected severe weather. This decision involving severe weather will be discussed at the completion of Milestone No. 1.

Payment: The Incentive Payments for achieving Milestone No. 1. 2, 3 or 4 or the Disincentive Deductions shall be a payout schedule under this Contract. Any partial day will be rounded down to the nearest whole day. For hourly incentive payment, the time will be rounded down to the nearest whole hour.

Liquidated Damages: Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the MassHighway Standard Specifications for Highways and Bridges – Failure to Complete Work on Time.

9.1.4.1 Incentive Milestone Payments

- <u>Incentive Milestone #1 Payment</u>: If the DB Entity achieves Milestone #1 by June 20, 2011 at 11:59 PM, MassDOT shall make an Incentive Payment of \$50,000.
- Incentive Milestone #2 Payment: If the DB Entity starts Milestone #2 on July 1, 2011 at 10:00
 PM and completes Milestone #2 less than 72 continuous hours later, MassDOT shall make an
 Incentive Payment of \$2,500 per hour for each less. This incentive is limited to a maximum of
 \$150,000.
- <u>Incentive Milestone #3 Payment</u>: If the DB Entity achieves Milestone #3 by July 20, 2011 at 11:59 PM, MassDOT shall make an Incentive Payment of \$50,000.
- <u>Incentive Milestone #4 Payment</u>: If the DB Entity achieves Milestone #4 by August 20, 2011 at 11:59 PM, MassDOT shall make an Incentive Payment of \$50,000.

9.1.4.2 Disincentive Milestone Deductions

- <u>Disincentive Milestone #1 Deduction</u>: If the DB Entity fails to achieve Milestone #1 by 11:59 PM on June 20, 2011, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day until the DB Entity achieve Milestone #1. The maximum Disincentive Deduction shall not exceed \$50,000.
- <u>Disincentive Milestone #2 Deduction</u>: If the DB Entity fails to achieve Milestone #2 within 72continuous hours beginning July 1, 2011, MassDOT shall assess the DB Entity a Disincentive Deduction of \$2,500 per hour until the DB Entity achieves Milestone #2. The maximum Disincentive Deduction shall not exceed \$150,000.
- <u>Disincentive Milestone #3 Deduction</u>: If the DB Entity fails to achieve Milestone #3 by 11:59 PM on July 20, 2011, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day until the DB Entity achieve Milestone #3. The maximum Disincentive Deduction shall not exceed \$50,000.
- <u>Disincentive Milestone #4 Deduction</u>: If the DB Entity fails to achieve Milestone #4 by 11:59 PM on August 20, 2011, MassDOT shall assess the DB Entity a Disincentive Deduction of \$25,000 per day until the DB Entity achieve Milestone #4. The maximum Disincentive Deduction shall not exceed \$50,000.

The occurrence of Final Acceptance shall not relieve the DB Entity from any of its continuing obligations, including any required warranty obligations.

9.1.5 Substantial Completion/Final Acceptance

9.1.5.1 Substantial Completion

The DB Entity shall provide notice to MassDOT when all of the following have occurred:

- The DB Entity has completed the Project (except for Punch List items, final cleanup and other items included in the requirements for Final Acceptance).
- The DB Entity has ensured that all construction associated with the Project has been performed in accordance with the requirements of the Contract documents.

- The DB Entity has ensured that the Facility may be operated without damage to the Facility or any other property and without injury to any person.
- The DB Entity has ensured that the Facility is ready to be opened to the public.
- All testing requirements have been satisfactorily completed and documented.

As promptly as is practicable after receipt of notice pursuant to this Section, and in no event later than 30 Days thereafter, MassDOT shall advise the DB Entity in writing of any of the following of which MassDOT then has knowledge: (a) defects in the DB Work; and/or (b) deficiencies in the Project; and/or (c) deviations of any installed equipment, materials and workmanship from the requirements of the RFP and Contract Documents. The DB Entity shall, at its own cost and expense, promptly correct such defects, deficiencies and deviations.

Substantial Completion of the Project shall be deemed to have occurred when all of the following have occurred:

- The DB Entity has corrected all defects, deficiencies and deviations with respect to the Project and MassDOT has notified the DB Entity in writing of its acceptance (or waiver pending Final Acceptance) of such corrections; provided that final clean-up shall not be required to be performed as a condition to Substantial Completion.
- The DB Entity has received all applicable Governmental Approvals required to be obtained by the DB Entity pursuant to this RFP and Contract Documents.
- The entire Project Site is ready to be fully opened for public travel.
- A Punch List has been developed and mutually agreed to by the DB Entity and MassDOT.

Liquidated Damages

Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the Supplemental Specifications to the Standard Specifications.

9.1.5.2 Final Acceptance

Promptly after Substantial Completion, the DB Entity shall perform all DB Work, if any, which was waived for purposes of Substantial Completion, and shall satisfy all of its other obligations under the RFP and Contract Documents, including ensuring that the Project has been completed and all components have been properly adjusted and tested. Final Acceptance of the Project shall be deemed to have occurred when all of the following have occurred:

- All requirements for Final Acceptance of the Project shall have been fully satisfied.
- MassDOT shall have received all Design Documents, As-Built Documents, Right-of-Way record maps, surveys, test data and other deliverables required under the RFP and Contract.
- All special tools purchased by the DB Entity as provided in the RFP and Contracts shall have been delivered to MassDOT and all replacement spare parts shall have been purchased and delivered to MassDOT free and clear of Liens.

- All of the DB Entity's and Subcontractors' personnel, supplies, equipment, waste materials, rubbish and temporary facilities shall have been removed from the Right-of-Way.
- The DB Entity shall have delivered to MassDOT a certification representing that there are no outstanding claims of the DB Entity or claims, liens or stop notices of any Subcontractor or laborer with respect to the DB Work, other than any previously submitted unresolved claims of the DB Entity and any claims, liens or stop notices of a Subcontractor or laborer being contested by the DB Entity (in which event the certification shall include a list of all such matters with such detail as is requested by MassDOT and, with respect to all Subcontractor and laborer claims, liens and stop notices, shall include a representation by the DB Entity that it is diligently and in good faith contesting such matters by appropriate legal proceedings which shall operate to prevent the enforcement or collection of the same). For purposes of such certificate, the term "claim" shall include all matters or facts which may give rise to a claim.
- The Punch List items shall have been completed to the reasonable satisfaction of MassDOT, all of the DB Entity's other obligations under the RFP and Contract shall have been satisfied in full or waived, and MassDOT shall have delivered to the DB Entity a Notice of Final Acceptance to the effect of the foregoing.

The occurrence of Final Acceptance shall not relieve the DB Entity from any of its continuing obligations, including any required warranty obligations as per the MassHighway Standard Specifications and industry standards.

SECTION 10

CONSTRUCTION

10.1 QUALITY ASSURANCE REQUIREMENTS

The DB Entity shall perform the QC inspection, sampling and testing outlined in the DB Entity's approved Quality System Manual. At all points in performance of the DB Work at which specific inspections or approvals by MassDOT are required by the RFP, the DB Entity shall not proceed beyond that point until MassDOT has completed such inspection and testing or approval or waived its right to inspect and approve, which waiver shall be in writing.

The QC/QA Program is a critical component of the design and construction of this Project. It is intended to represent assurance to MassDOT that the DB Entity is executing in accordance with the Contract Documents. The proposed QC System by the DB Entity is the backbone for which MassDOT will gauge compliance and evaluate the DB Entity's comprehension of the QC scope. MassDOT's role in construction is to provide verification of the quality of materials and workmanship through Acceptance inspection, sampling and testing as is typically performed on MassDOT construction projects. MassDOT is also responsible for Independent Assurance (IA) inspection, sampling and testing to periodically evaluate the reliability of MassDOT's Acceptance personnel and equipment and the DB Entity's QC personnel and equipment. The DB Entity will have a Quality Control System that addresses the quality of both design and construction. The DB Entity shall prepare and implement a Quality System Manual (QSM) in accordance with the requirements set forth in Section 2.2 herein.

As part of MassDOT's oversight role, all materials and each part or detail of the DB Work shall also be subject to inspection and testing by MassDOT.

10.2 ACCESS TO QC LABAORATORY FACILITIES BY MASSDOT AND OTHERS

MassDOT reserves the right to check QC laboratory testing equipment, personnel procedures and techniques for compliance with specified standards under the Independent Assurance (IA) program. MassDOT also reserves the right to access the QC laboratory facilities, at no additional cost to MassDOT, to witness the testing, and to verify compliance of the testing procedures, testing techniques, and test results with the requirements contained in the DB Entity's approved Quality System Manual.

10.3 SUPERVISION AND CONSTRUCTION PROCEDURES

The DB Entity shall take all reasonable precautions and be solely responsible for the safety of, and shall provide protection to prevent damage, injury or loss to: (a) all employees of the DB Entity and its Subcontractors performing the DB Work and other persons who are on site or would reasonably be expected to be affected by the DB Work; (b) the DB Work and materials and equipment to be incorporated therein; and (c) all other property on, adjacent to, or near the Right-of-Way.

The DB Entity shall provide adequate security for the site and shall be responsible for damage or loss to all property at the site.

The DB Entity shall provide appropriate security for MassDOT designated/approved staging areas and shall be responsible for damage or loss to all property at the site owned by the DB Entity, MassDOT or any other Person which results from DB Work or is directly related to the DB Entity's actions.

The DB Entity shall ensure that all of its activities and the activities of its employees, agents, officers and Subcontractors and all other Persons for whom the DB Entity may be legally or contractually responsible are undertaken in a manner that will minimize the effect on surrounding property and the public to the maximum extent practicable.

In the event of the DB Entity's discovery of (a) any historic, archaeological or paleontological resources; or (b) any Differing Site Conditions, the DB Entity shall immediately notify MassDOT therefore verbally, to be followed immediately by written notification. The DB Entity shall immediately stop work in and secure the area pending further instructions. In such event, MassDOT shall view the location within 48 hours of receipt of such notification and shall advise the DB Entity at that time whether DB Work should be resumed or whether further investigation is required.

In the event of the DB Entity's discovery of any remains that appear to be human, the DB Entity shall immediately suspend work, secure the area, and verbally notify the Middlesex County Medical Examiner's Office as well as MassDOT. If the remains are determined to be human and are judged to be more than 100 years old, MassDOT shall notify the State Archaeologist and arrange for a site visit. The DB Entity shall not resume work in the affected area until so directed by MassDOT.

MassDOT shall promptly conduct further investigations as deemed appropriate. MassDOT shall use reasonable efforts to determine within five (5) business Days after receipt of such notification whether the resource or condition falls within the scope of causes (a) or (b) of the preceding paragraph and shall immediately notify the DB Entity of its determination once made. MassDOT shall at that time also advise the DB Entity of any action to be taken regarding the situation. (If a threatened or endangered species, or archaeological or paleontological or historic resource is present, the notice shall also advise the DB Entity what course of action MassDOT intends to take with respect thereto and whether the location should be fenced off or whether DB Work can resume.)

MassDOT shall have the right to require the DB Entity to recommence DB Work in the area at any time, even though an investigation may be on-going. The DB Entity shall promptly recommence DB Work in the area upon receipt of notification from MassDOT to do so.

Notwithstanding the foregoing, the DB Entity shall not be obligated to stop DB Work upon discovery of (a) any resources or conditions which the RFP documents indicate are present in the location in question, or (b) where the DB Entity can take actions pertaining to the resources or conditions permitted under the terms of a Government Approval. The DB Entity shall provide prompt notice to MassDOT of any such discovery.

10.4 ROLES AND RESPONSIBILITY

MassDOT has an interest and a duty to perform due diligence on behalf of the public to audit the processes and selected elements of the work. MassDOT's Acceptance inspection and testing and monitoring of the DB Entity's Quality Control activities, and periodic IA evaluations are necessary and will be accommodated by all members of the DB Entity's organization and its agents. While MassDOT will be performing Acceptance inspection and testing of the work, independent of the DB Entity's QC System, the DB Entity maintains the sole responsibility for quality, safety, compliance with all applicable Laws, and other components both direct and indirect to the work.

10.5 COMMENCEMENT OF CONSTRUCTION

The DB Entity shall not commence construction of any portion of the Project prior to occurrence of all the following events except with the prior written approval of MassDOT:

- MassDOT shall have approved or accepted: (i) the Hazardous Materials Management Plan when planned construction involves or may involve contact with Hazardous Materials, the Hazardous Materials Management Plan; (ii) the Project Schedule; and (iii) the Design related to that portion of the Project; (iv) any applicable construction means and methods as required; (v) the Project Quality System Manual (QSM) and all relevant Quality Control Plans; and (vi) the Project Management Plan.
- All Governmental Approvals necessary for construction of the applicable portion of the Project shall have been obtained and all conditions of such Governmental Approvals which are a prerequisite to commencement of such construction shall have been performed.
- All required insurance and bonds shall remain in full force and effect.
- The DB Entity shall have completed all required investigations to establish and confirm the existence and location of Utilities in such portion of the Project.
- All rights of entry or other approvals are necessary in order to permit the DB Entity to enter into physical possession of the property upon which such portion of the Project will be constructed.
- All required Pre-Construction meetings have been held.

Any Early Start of Construction shall be at the sole and complete risk of the DB Entity, and any changes, reconstruction, removals and schedule delays required for compliance with the final approved Design Documents shall be at the DB Entity's sole cost and expense. If the approved Design Documents for the Project require changes to the DB Work previously performed, the DB Entity shall make such changes to the DB Work at its sole cost and expense, and with no contract time extension.

10.6 HOUSEKEEPING AND MAINTENANCE OF THE RIGHT-OF-WAY

Throughout all phases of construction, including suspension of DB Work, and until Final Acceptance, the DB Entity shall keep the Right-of-Way and work site clean and free from rubbish and debris.

The DB Entity shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate applicable Environmental Laws or Governmental Approvals.

During the 72 hour shutdown, the DB Entity may remove existing appurtenances such as guard rail, curbing and sloped edging to facilitate access. Prior to the reopening of Route 9 to traffic, Route 9 shall be completely restored to its original or better condition as determined by MassDOT, and this shall include pavement restoration if required within the 72 hour shut

down. No work will be allowed outside of the 72 hour shut down on Route 9 that requires reducing the width or any portion of the roadway.

If the DB Entity defaults or neglects to maintain the Project free from accumulation of waste and rubbish as set forth above or otherwise fails to comply with the use of site and clean-up procedures required by the RFP, and fails within a 24 hour period after receipt of oral notice, subsequently confirmed in writing, to commence and continue correction of such default or neglect with diligence and promptness, MassDOT may after such twenty-four (24) hour period, immediately, without prejudice to other remedies MassDOT may have, correct such deficiencies. In such case, MassDOT shall deduct from payments then or thereafter due the DB Entity, the cost of correcting such deficiencies. If payments then or thereafter due the DB Entity are not sufficient to cover such amounts, the DB Entity shall pay the difference to MassDOT on demand.

10.7 PROTECTION OF RIVER AND FLOOD CONTROL CHANNELS

The DB Entity shall keep construction material away from drainage structures, flood control channels, rivers and any water ways. The DB Entity shall not allow lumber, blocking, chips, loose piles, rubbish, and all flotsam, jetsam, and contaminants of whatever nature to be deposited in the above mentioned water ways. Should any such item be found floating near the site, it shall be immediately removed by the DB Entity at the DB Entity's expense.

10.8 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

The DB Entity shall restore any damaged or injured property to a condition similar or equal to that existing before the damage or injury occurred. The repairing, restoring, rebuilding, or making good such damage or injury shall be at no additional cost to MassDOT.

10.9 ENVIRONMENTAL CONSTRUCTION COMPLIANCE

The DB Entity is solely responsible for compliance with any Environmental Approvals or approvals provided by MassDOT or as amended by the DB Entity.

Prior to the commencement of work, the DB Entity shall identify the edge of all resource areas located within 50 feet of the estimated limits of work. The DB Entity shall also delineate the limits of work as approved in the Environmental Approvals obtained by MassDOT. Such limits shall be re-delineated as permit amendments are secured.

Prior to any site activity including site preparation or clearing, the DB Entity shall attend a preconstruction meeting with MassDOT and the regulatory agencies.

Upon completion of all work included in the Contract documents, inclusive of mitigation designed and constructed by the DB Entity, the DB Entity shall submit to MassDOT:

- A written statement by a Professional Engineer registered in Massachusetts, certifying that the Project has been developed in accordance with the conditions of the Environmental Approvals and amendments, and mitigation plans.
- Two sets of as-built drawings prepared by a Professional Engineer registered in Massachusetts showing all mitigation areas.

• A report by a wetland specialist describing the condition of the mitigation and restoration areas.

10.10 MATERIAL ON SITE

The DB Entity may use materials such as stone, gravel, sand or other materials found in excavations within the area of construction if such material meets MassDOT Specification requirements. Sufficient samples shall be taken to ensure uniformity and continued compliance with previously submitted testing reports as material gradation and quality can vary significantly within a given natural deposit. Material which is excavated and does not meet specification shall be removed as excess material from the Right-of-Way and disposed of off-site by the DB Entity at no cost to MassDOT.

10.11 NONCONFORMING WORK

Nonconforming Work is DB Work that MassDOT determines does not conform to the requirements of the Contract Documents. Nonconforming Work shall be removed and replaced so as to be in conformity with the requirements of the Contract Documents, at the DB Entity's expense, and the DB Entity shall take all action necessary to prevent similar deficiencies from occurring in the future. The fact that MassDOT may not have discovered the Nonconforming Work shall not constitute acceptance of the Nonconforming Work. If the DB Entity fails to correct (or begin correction of) the Nonconforming Work within 10 Days of receipt of notice from MassDOT requesting correction, MassDOT may cause the Nonconforming Work to be remedied or removed and replaced, and may deduct the cost of doing so from any moneys due or to become due to the DB Entity and/or otherwise obtain reimbursement from the DB Entity for such cost.

The DB Entity shall be solely responsible for identifying, documenting and reporting to MassDOT all instances of DB Work that have not been constructed with the absolute strictest adherence to the approved drawings and specifications. The DB Entity is responsible for coordinating with MassDOT on test results so that they have current information. The DB Entity will report in the form of a Non-Conformance Report (NCR), which shall be submitted to MassDOT in writing within 24 hours. A copy of the NCR shall be simultaneously sent to the DB Entity's design engineer.

The NCR shall clearly describe the element of DB Work that is nonconforming and the reason for the non-conformance. The DB Entity's design engineer who stamped and sealed the drawings for the DB Work shall evaluate the effect of the non-conformance on performance, safety and life of the Project and its elements. If remedial actions are necessary, they shall be documented and bear the stamp of a registered professional engineer in the Commonwealth of Massachusetts. The DB Entity's Construction QC Manager must also sign off on the NCR stating that the remedial actions to be employed have undergone the same level of QC as the design.

The DB Entity shall maintain a log of all NCR's and submit this log to MassDOT and the Construction QC Manager on a bi-weekly basis regardless of any status change. Each NCR shall be numbered sequentially, given a brief description, a status if it is not closed, and an expected date for closure. MassDOT will not grant final acceptance for any portion of the DB Work that has an outstanding NCR. All NCR's must be closed with a stamp of the DB Entity's Professional Engineer registered in the Commonwealth of Massachusetts.

MassDOT shall have the authority to call for removal of any Nonconforming Work should MassDOT not agree with the remedial actions set forth by the DB Entity in any given NCR. MassDOT shall also retain the right to write its own NCR's based on the observance, sampling and testing of the DB Work. These MassDOT-generated NCR's shall require the same review and ultimate closure by the DB Entity as a DB Entity-generated NCR. MassDOT reserves the right to make cost adjustments for work that, although not in conformance with specifications, is nevertheless satisfactory to remain in place.

10.12 SCHEDULING AND NOTICE TO MASSDOT

The DB Entity shall notify MassDOT in writing at least five (5) Days prior to commencing planned construction activities, including fabrication, to allow MassDOT to schedule its resources. In addition, the DB Entity shall notify MassDOT in writing by Friday noon of all scheduled construction activities for the following week.

10.13 DOCUMENTATION

During performance of the DB Work, the DB Entity shall collect and preserve the following data in written form acceptable to MassDOT:

- Daily manpower and equipment reports for the DB Entity and each Subcontractor for construction-related activities.
- Daily occurrence logs for construction-related activities maintained by the DB Entity's Project executive or his designee(s), in which shall be recorded daily in narrative form all significant occurrences on the Project, including (i) weather; (ii) asserted Force Majeure events; (iii) events and conditions causing or threatening to cause any significant delay or disruption or interference with the progress of the DB Work; (iv) significant injuries to person or property; (v) a listing of each activity depicted on the current Project Schedule status submittal which is being actively prosecuted; and (vi) a daily record of all labor, materials and equipment expenses which are being incurred. For any local agency betterments or utility-related DB Work such data shall be maintained separately for each local agency or Utility. For Hazardous Materials Management, such data shall be maintained separately for each local agency or der has not been executed or that may be the subject of a future claim, the DB Entity shall identify this DB Work on separate daily occurrence logs.
- Quality records documenting all Quality Control operations, inspections, activities, sampling and tests performed, including the work of Subcontractors. Such records shall include any delays encountered and work that does not conform to the requirements of the RFP together with the corrective actions taken regarding such work.
- Certifications and QC Reports.

The DB Entity shall maintain and submit records weekly that include factual evidence that required activities and tests have been performed, including the following: (i) type, number, and results of Quality Control activities, including reviews, inspections, tests, audits, monitoring of work performance, and materials analysis; (ii) related data such as qualifications of personnel, procedures, and equipment and qualified testing laboratory used; (iii) the inspector or data recorder, the type of test or observation employed, the results and the acceptability of the work and action taken in connection with deficiencies; (iv) nature of

nonconforming work and causes for rejection; (v) proposed corrective action; (vi) corrective actions taken; and (vii) sampling and test results of corrective actions.

A Construction/Materials certificate of compliance and documentations at completion shall be submitted with the as-built plans and signed by the DB Entity's Construction QC Manager and Quality Control Administrator, indicating that all materials incorporated in the Facility conform with RFP and Contract requirements.

10.14 CONSTRUCTION DIGITAL RECORDING

The DB Entity shall engage a qualified commercial photographer to take photographs / video during construction to document the projects progress and activities. The photographer shall be an individual of established reputation that has been regularly engaged as a professional photographer for not less than 5 years. The DB Entity shall submit to MassDOT for approval the name and credentials of the photographer whom will be responsible for taking the photographs during construction.

10.14.1 Progress Photographs

The DB Entity shall take digital photographs on or about the last day of the month and also during and after completion of important stages of work as determined by MassDOT, the DB Entity shall take a minimum of twelve (each month), but not more than twenty four images(each month) as directed, showing progress of construction.

The DB Entity shall provide the following deliverables for each submission:

- a) Digital Image Files (4 DVD Copies)
- b) Glossy Color Prints (4 Copies)

Original unedited image files provided shall conform to the following requirements:

- a) 300 dpi for professional prints up to 8"x10"
- b) JPEG format
- c) Digital Cameras used for the purpose of creating the above noted image files shall have a minimum sensor size of 15 million pixels with images taken at no less than 360 ppi for an 8"x12" image size
- d) Image files shall be named and a photo thumbnail index created with the following file naming convention: Project number_date _photo number.jpg For example: If the first set of photos on DVD for project number 0301-0078, is taken on 12/13/01, the first photo of the submission shall be file named: 03010078_121301_1.jpg and the tenth photo of the set shall be file named: 03010078_121301_10.jpg. In the second set of photos on DVD, submitted 1/12/02, the first photo of the set shall be file named: 03010078_011202_1.jpg
- e) A photo index (thumbnails) index sheet shall be included on the disk.

Color Prints shall conform to the following requirements:

- a) Glossy color prints (8"x10" (plus binding edge)).
- b) Single weight, fabric backed paper with binding edge
- c) 1" wide margin punched for standard 3 ring binder
- d) Identification on rear side of each photo indicating, Project Name, Project Number, Contractor, View locations and orientation, date and time of exposure.
- e) Prints shall be free of logos, copy rights, trademarks or any other identifying marks not indicated above. This requirement shall apply to both the front and back.
- f) A hardcopy 8 ½" x 11" key plan with an arrow for each photograph taken shall be provided with each DVD submission. Each arrow shall be labeled with the corresponding photograph number and shall be oriented to show the point of view of the photograph.

Submit photos of each view within five (5) calendar days of taking photographs.

Each DVD and DVD jewel case shall be labeled with the name of the project, State project number, name of the Contractor, date of submission, and name and address of the photographer.

Project progress photos shall be submitted as digital files on write-once DVD in a jewel case on a monthly basis. All subsequent DVD submissions shall include the image files of the previous submissions and the photo thumbnail indexes that contain all current and previous photos.

Before starting construction, take one set of color photographs of the site and surrounding properties from different points of view as selected by the Engineer. Take photographs to show existing conditions to the property before starting work.

Take one set of color photographs at no greater than monthly intervals, coinciding as closely as possible with the completion of a major construction phase. The photographer shall select the vantage points for each shot each month to best show the status of construction and progress since the last photographs were taken. Prior to taking any photographs, review the proposed vantage points for each shot with the Engineer. Photographs are for a record of the progress of work. Therefore, they shall be taken at a maximum interval of one month, whether or not they show any completion of work performed during the preceding month.

Take one set of color photographs upon notification by the Engineer of Final Inspection of the Project. Prior to taking any photographs, review the proposed vantage points for each shot with the Engineer. Take photographs from opposing views of the site in an effort to display various characteristics of the new construction.

10.14.2 Archival Photographic Prints

Up to twenty (20) supplemental archival photographs shall be prepared as follows:

a) 8"x10" archival quality color prints on archival-quality photographic paper.
b) All photographs shall be identified on the back in pencil, with no affixed labels, unmounted but sleeved in archival-quality, un-buffered envelopes,

c) The contents of each envelope identified and numbered in pencil on the envelope.

d) MassDOT shall identify which image(s) is (are) desired.

The DB Entity shall produce four copies of a single Glossy Color Print (20" X 30") in a black wooden frame with UV protective glass and a 2 inch black matted border (4 Framed Copies). This Color Print is intended to capture the heavy lifting operation and technology used by the Contractor during the Route 2 road closure period. The selected picture will be at the discretion of the Engineer

10.14.3 Time Lapse Photography / Videography

The DB Entity shall provide time lapse documentation of the building of the bridge with specific emphasis with specific emphasis on the period of time associated with the road closure of Route 9. The DB Entity shall be responsible for the development of coordinating, shooting and producing a short movie documenting the rapid build of the bridge conforming to the following minimum requirements:

- a) Digital Video shot in high definition 1080i or 1080p or still photos at sufficiently high resolution to achieve same. The images shall be taken every 2 minutes for the duration as specified below or as directed by MassDOT.
- b) Time lapse movie of the seventy-two (72) hour road closure including a period of 6 hours before and 6 hours after the closure period. The finished movie time shall be compressed as required by MassDOT.
- c) Images for the movie shall be shot from a fixed location as approved by the MassDOT. The location shall be identified by the DB Entity and approved by MassDOT. MassDOT reserves the right to require test images from the proposed location.
- d) The equipment utilized shall be sufficiently robust both physically and electronically to assure quality images. The equipment shall have the capabilities to clearly record the activities regardless of the site conditions, including but not limited to, extreme temperature changes, vibration, lighting conditions, weather cycles and other site factors.
- e) The equipment shall be maintained throughout the duration to assure capture of the required information.
- f) 8 DVD copies of the finished movie shall be prepared and submitted
- g) The movie shall be free of logos, copy rights, trademarks or any other identifying marks not indicated above.

In addition, the DB Entity shall video document the moving and placing of the structure as directed by MassDOT. The documentation shall conform to the requirements above, however no time compression is desired.

Deliverables are to be provided as a condition of Final Acceptance and will be paid under the Punch List/As-Built item.

Failure to provide all deliverables required in this Contract Section 10.14 shall result in the Contract Section 9.1.4.2 Disincentive Milestone #4 Deduction being assessed.

10.15 SHOP AND WORKING DRAWINGS

The DB Entity shall consult with MassDOT and all other applicable local agencies that may require review of shop and working drawings, and shall coordinate the preparation, submittal and review of all such shop and working drawings. Where permits are required from railroads or Utilities, or other local agencies, shop and working drawings shall be submitted to them for review and approval in accordance with their requirements.

Shop and working drawings for the permanent DB Work shall include, but not be limited to structural steel fabrication plans, wing-wall fabrication plans, cast-in-place concrete (walls, foundations) reinforcing plans, anchor bolt layouts, shop details, erection plans, equipment lists and any other information specifically required by the Standard Specifications or local agencies. The shop and working drawings shall be reviewed and approved by the DB Entity's design engineers who prepared the Design Documents.

Shop and working drawings that have the potential to affect public health, welfare and safety shall be submitted to MassDOT and the local agency with jurisdiction for review and approval at the same time as they are submitted to the DB Entity's design engineer for review and approval, and shall be accompanied by a standard form which will be provided by MassDOT.

The DB Entity shall obtain all necessary approvals for shop drawings and working drawings and said approvals along with copies of all approved drawings shall be provided to MassDOT one business Day prior to the start of DB Work detailed by the drawings. No changes shall be made by the DB Entity in any approved shop or working drawings after they have been approved.

Any fabrication completed prior to the approval of the final plans by MassDOT is at the sole risk of the DB Entity. Upon completion of the plans, the DB Entity shall back check the shop drawings to assure compliance with the approved drawings. If any element must be re-fabricated due to errors, omissions or other factors and which was fabricated at the risk of the DB Entity, it will be done at no additional cost to MassDOT and MassDOT reserves the right to seek a credit for inspectional services provided by MassDOT at the fabricator.

10.16 AS-BUILT DRAWINGS

As a condition to Final Acceptance, the DB Entity shall provide to MassDOT the Project's record drawings consisting of one (1) full size (24" x 36") mylar film positive set of reproducible drawings, two (2) full size hard copy sets, and 3-D electronic files of final plans (As-Built Documents) depicting the final completed Project, including all changes with all of the relevant data showing drainage systems, underground utilities, traffic controls, signing placement, highway alignment and grade revisions, and bridge detail changes. The DB Entity shall also provide other relevant Project data such as bridge shop plans, boring logs and pile driving records in hard copy sets as well as electronic TIFF (Tagged Image File Format) files for archiving as stipulated in relevant provisions of the Massachusetts Highway Department Standards Specifications for Highway and Bridges.

10.17 AS-BUILT RATING REPORT

As a condition of Final Acceptance, the DB Entity shall provide to MassDOT a Structure Rating Report establishing the bridge load carrying capacity. This report shall be prepared by a Professional Engineer registered in the Commonwealth of Massachusetts in full compliance with requirements of Chapter 7 of the Massachusetts Highway Department Bridge Manual.

10.18 FINAL CLEAN-UP

As a prerequisite to Final Acceptance of the Project by MassDOT, the DB Entity shall remove and dispose of all debris, excess materials, temporary structures, and construction equipment from the Right-of-Way and all parts of the Project shall be left in a neat and presentable condition.

SECTION 11.0

MINORITY AND WOMEN BUSINESS ENTERPRISES AND EQUAL EMPLOYMENT OPPORTUNITY PARTICIPATION

11.1 M/WBE PARTICIPATION

The Design Build Contractor acknowledges that the goal for this Project is 12% participation by Minority/Women Business Enterprise (M/WBE) certified firms. The goal is to be achieved individually during each of the design and construction portions of the Project. This goal remains in effect throughout the life of the Project. The DB Contractor shall comply with all provisions set forth in the RFP and related Addenda in meeting the M/WBE Project goal.

11.2 STATE M/WBE AND EEO COMPLIANCE

The Design Build Contractor shall comply with the requirements of MassDOT Standard Special Provisions 00718, 00820, 00821, 00842, 00843, attached hereto in Exhibit O.

SECTION 12.0

PERFORMANCE AND PAYMENT SECURITY

12.1 BONDS

The DB Entity shall provide to MassDOT and maintain at all times during the term of this Contract security for performance of the DB Work as defined in Section 3.04 of the June 6, 2006 Supplemental Specifications to the 1988 Standard Specifications for Roads and Bridges (or other assurance satisfactory to MassDOT in its sole discretion).

12.1.1 Surety Financial Requirements

Any bond provided in accordance with this Section 12.1 shall be issued by a Surety that is listed on the United States Treasury approved surety list, or as otherwise approved by MassDOT in its sole discretion.

12.1.2 Performance by Surety or Guarantor

Performance by a Surety or a Guarantor of any of the obligations of the DB Entity shall not relieve the DB Entity of any of its obligations hereunder.

SECTION 13

INSURANCE

The DB Entity shall procure and maintain, at its expense, insurance in conformance with Section 7.05 of the MassHighway Standard Specifications for Highways and Bridges, as well as additional types and amounts of insurance set forth in this Section 13.

13.1 GENERAL LIABILITY INSURANCE

The DB Entity shall take out and maintain insurance of the following kinds and amounts in addition to any other kinds or bonds required under other provisions of the Contract, with no compensation therefore other than that provided by the contract price.

- 1. Contractor's Public Liability and Property Damage Liability Insurance. The DB Entity shall furnish evidence to MassDOT that, with respect to the operations the DB Entity performs, the DB Entity carries regular Contractors' Public Liability Insurance providing for a limit of not less than \$1,000,000 for all damages arising out of bodily injuries to or death of one person, and subject to that limit for each person, a total limit of \$2,000,000 for all damages arising out of bodily insurance providing for a limit of accident, and regular Contractor's Property Damage Liability Insurance providing for a limit of not less than \$1,000,000 for all damages arising out of injury to or destruction of property in any one accident, and subject to that limit per accident, a total or aggregate limit of \$2,000,000 for all damages arising out of injury to or destruction of property in any one accident, and subject to that limit per accident, a total or aggregate limit of \$2,000,000 for all damages arising out of injury to or destruction of property in any one accident.
- 2. Contractor's Protective Public Liability and Property Damage Liability Insurance. The DB Entity shall furnish evidence to MassDOT that, with respect to the operations performed for him/her by Subcontractors, the DB Entity carries on his/her own behalf regular Contractor's Protective Public Liability Insurance providing for a limit of not less than \$1,000,000 for all damages arising out of bodily injuries to or death of one person, and subject to that limit for each person, a total limit of \$2,000,000 for all damages arising out of bodily injuries to or death of regular Contractor's Protective Property Damage Liability Insurance providing for a limit of not less than \$1,000,000 for all damages arising out of bodily injuries to or death of two or more persons in any one accident, and regular Contractor's Protective Property Damage Liability Insurance providing for a limit of not less than \$1,000,000 for all damages arising out of injury to or destruction of property in any one accident and, subject to that limit per accident a total or aggregate limit of \$2,000,000 for all damages arising out of injury or destruction of property during the policy period.

13.2 PROFESSIONAL LIABILITY INSURANCE

The DB Entity shall provide professional liability coverage with limits not less than \$1,000,000 per claim and aggregate, protecting against any negligent act, error or omission arising out of design or engineering activities with respect to the Project, including coverage for acts by the DB Entity and others for whom the DB Entity is legally responsible. The policy shall have a retroactive date no later than the date hereof and shall have a five-year extended reporting period with respect to events which occurred but were not reported during the term of the policy. The policy shall include as insureds the DB Entity and any of its Subcontractors (including design subconsultants) of any tier. The policy must also indemnify MassDOT for

any liabilities, damages or judgments, and reasonable attorneys' fees and related costs due to a Breach of Professional Duty of the Named Insured(s) and/or their subconsultants. The policy shall not contain any provision or exclusion the effect of which would be to prevent, bar, or otherwise preclude MassDOT from making a claim against the Policy.

13.3 VALUABLE PAPERS INSURANCE

The DB Entity shall provide valuable papers insurance with a limit of not less than \$100,000 each loss. Such insurance shall assure the restoration of any plans, drawings, computations, field notes, or other similar data relating to the services covered by the Contract Documents in the event of loss or destruction until all data is turned over to MassDOT.

13.4 COMMENCEMENT OF DB WORK

The DB Entity shall not commence work under this Contract until it has obtained the insurance required under this Section 13 and such insurance has been approved by MassDOT, nor shall the DB Entity allow any Subcontractor to commence work under its Subcontract until the insurance required of the Subcontractor has been obtained and approved by the DB Entity, and a Notice to Proceed has been issued by MassDOT. If the insurance provided by the DB Entity fails to comply with the requirements listed herein, or if the DB Entity fails to maintain such insurance, then MassDOT maintains the right to suspend the DB Entity's right to proceed until proper evidence is provided.

SECTION 14

RESPONSIBILITY FOR LOSS OR DAMAGE; TITLE

The DB Entity's responsibility for the Work is set forth in section 7.18 of the Standard Specifications.

If insurance proceeds with respect to any loss or damage are available, then MassDOT shall arrange for such proceeds to be paid to the DB Entity as repair or replacement work is performed by the DB Entity to the extent that MassDOT has not previously paid for such repair or replacement work. The release of such proceeds to the DB Entity shall not be a condition precedent to its performing such replacement or repair work.

SECTION 15

FORCE MAJEURE

Neither party will incur any liability to the other if its performance of any obligation under this Contract is prevented or delayed by causes beyond its control and without the fault or negligence of either party. Causes beyond a party's control may include, but are not limited to, acts of God or war, changes in controlling law, regulations, orders or the requirements of any governmental entity, severe weather conditions, civil disorders, natural disasters, fire, epidemics and quarantines, general strikes throughout the trade, and freight embargoes.

Force Majeure shall mean any of the following events (provided such events are beyond the control of the DB Entity, its employees, agents, officers or subcontractors or any other persons performing any of the work for whom the DB Entity may be contractually or legally responsible) which materially and adversely affects the DB Entity's obligations and which event (or the effects of which event) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by the DB Entity:

- a. Any earthquake, hurricane or other natural disaster;
- b. Any man-made disaster, such as fires and explosions;
- c. Any epidemic, blockade, rebellion, war, riot, act of sabotage or civil commotion, or any national strikes;
- d. Any Change in law which modifies the scope of the DB Work or specifically targets the Project or DB Entity;
- e. Any release of hazardous Material by a third party for whom the DB Entity has no responsibility and with whom the DB Entity has no relationship, which is required to be reported to the DEP, and which renders use of the roadway or construction unsafe absent assessment, containment, and/or remediation;
- f. Issuance of a temporary restraining order or other form of injunction by a court, except if arising out of the act, omission or breach of obligation of the DB Entity or its subcontractors, agents or employees; and
- g. Any highway accident causing catastrophic damage to the Facility.

The Term "Force Majeure" shall be limited to the matters listed above and specifically excludes from its definition the following matters which might otherwise be considered force majeure:

- i. any fire or other physical destruction or damage, or delays to the Project which occur by action of the elements, including lightening, explosion, drought, rain, flood, snow, storm, except as specified in (a) above;
- ii. any strike, labor dispute, work slowdown, work stoppage, secondary boycott, walkout, or other similar occurrence;
- iii. the suspension, termination, interruption, denial or failure to obtain or nonrenewal of any Governmental Approval, except as described in (e) and (f) above;
- any Change in Law (such as increases in tax rates) which does not result in a change in the scope of the DB Work or DB Entity services (i.e. the Change in Law would not require a change in the design of the Project);

- v. any delay related to any Utility Work or failure to obtain approval from a Utility Owner;
- vi. any delay or cost risk for which coverage is to be provided through insurance required hereunder; and
- vii. all other matters not caused by the Owner or beyond the control of the Owner and not listed in (a) through (g) above.

The DB Entity shall notify MassDOT orally within five (5) Days and in writing within ten (10) Days of the date on which the DB Entity becomes aware, or should have reasonably become aware, that such cause would prevent or delay its performance. Such notification shall (i) describe fully such cause(s) and its effect on performance, (ii) state whether performance under the contract is prevented or delayed and (iii) if performance is delayed, state a reasonable estimate of the duration of the delay. The DB Entity shall have the burden of proving that such cause(s) delayed or prevented its performance despite its diligent efforts to perform and shall produce such supporting documentation as MassDOT may reasonably request. After receipt of such notification, MassDOT may elect either to terminate the Contract or to extend the time for performance as reasonably necessary to compensate for the DB Entity's delay.

In the event of a declared emergency by competent governmental authorities, MassDOT by notice to the DB Entity, may suspend all or a portion of the Contract under Section 18.

SECTION 16

PAYMENT

16.1 DB PRICE

As full compensation for the DB Work and all other obligations to be performed by the DB Entity under the Contract Documents, the DB Entity shall be paid a lump sum of Three Million, Four Hundred Fifty Thousand Dollars (\$ 3,450,000) (such sum, as it may be adjusted from time to time to account for Change Orders, is referred to herein as the "DB Price"). The DB Price shall be paid in accordance with this Section 16 and may be changed only by a Change Order issued in accordance with Section 17, adjustments in the prices of hot-mix asphalt mixtures, diesel fuel and gasoline, structural steel and reinforcing steel, and Portland cement concrete, in accordance with Special Provisions 00811, 00812, 00813, 00813A and 00814 attached hereto in Exhibit O.

The DB Entity acknowledges and agrees that, subject only to the DB Entity's rights under Section 17, the DB Price includes: (a) all designs, equipment, materials, labor, insurance and bond premiums, home office, jobsite and all other overhead, profit and services related to the DB Entity's performance of its obligations under the Contract Documents (including all DB Work, equipment, materials, labor and services provided by Subcontractors); (b) performance of each and every portion of the DB Work; (c) the cost of obtaining all Governmental Approvals (except for those Governmental Approvals for which MassDOT is responsible); and (d) payment of any duties and other fees and/or royalties imposed with respect to the DB Work and any equipment, materials, labor or services included therein.

The DB Entity further acknowledges and agrees that the DB Price includes reasonable costs and expenses incurred in developing the Design of the Project and the construction cost estimate.

16.2 METHOD OF PAYMENT

Payment to the DB Entity of the DB Price shall be made in accordance with the DB Entity's satisfactory completion (as evidenced by MassDOT's written acceptance) of Payment Milestones as contained in the Payment Schedule approved by MassDOT and further defined by this section, and in conjunction with Section 9.0 of the MassHighway Standard Specifications for Highways and Bridges unless otherwise defined by this section. The Payment Schedule lists Milestones for each Bid Item. Milestones shall have a dollar value and percentage that represent the value of each Milestone, subject to Section 17 of this Contract, and are an absolute limit to the monies paid under the Milestone. The Payment Schedule is attached hereto as Exhibit C.

MassDOT may, at its discretion, withhold payment to the DB Entity under this Section 16 in the event that the DB Entity fails to meet a Payment Milestone as set forth in the Payment Schedule.

Payment shall be measured by work on individual (breakdown) bid items as shown on the Payment Schedule (Exhibit C).

Milestone payments shall be based on these individual (breakdown) bid items rather than for the aggregated bid shown on the Payment Schedule.

16.3 SCHEDULE OF PAYMENTS

16.3.1 Payment by MassDOT

Upon approval of a Payment Request, MassDOT will produce a "Contractor Payment Estimate" for signature by the DB Entity. The DB Entity shall be paid within thirty (30) Days of submittal of an approved signed Contractor Payment Estimate to MassDOT. MassDOT shall pay the DB Entity the amount of the Payment Request approved for payment less any applicable Retainage and less any amounts which MassDOT is otherwise entitled to have withheld. In no event shall the DB Entity be entitled to a payment for any activity eligible for payment from the fixed price portion of the DB Price in excess of the demonstrated percentage completion of such activity. In the event such monies due under any Contractor Payment Estimate are not paid within sixty (60) Days of submittal to MassDOT of an approved signed Contractor Payment Estimate, interest on such amount shall accrue from such date at the rate provided in Mass. Gen. L. c. 30, § 39K.

16.3.2 Payment to Subcontractors

Upon receipt of payment for the DB Work from MassDOT, the DB Entity shall promptly pay each Subcontractor (out of the amount paid to the DB Entity on account of such Subcontractor's portion of the DB Work) the amount to which such Subcontractor is entitled, less any Retainage provided for in the Subcontract, as well as any other offsets and deductions provided in the Subcontract or by Law. The DB Entity shall, by appropriate contract with each Subcontractor, require each Subcontractor to make payments to other Subcontractors and Suppliers in a similar manner. MassDOT shall have no obligation to pay or to cause the payment of any funds to a Subcontractor, except as may otherwise be required by Law. Interest on late payments to Subcontractors shall be the DB Entity's responsibility, and shall not be a part of the DB Price.

16.3.3 Continued Performance During Disputes

Failure by MassDOT to pay any amount in dispute shall not postpone, alleviate, diminish or modify in any respect the DB Entity's obligation to perform under the Contract Documents, including the DB Entity's obligation to achieve Final Acceptance and complete all DB Work in accordance with the Contract Documents, and the DB Entity shall not cease or otherwise limit its performance under the Contract Documents on account of any such amount. Any dispute regarding such payment shall be resolved pursuant to Section 28. Upon resolution of any such dispute, subject to the limitations specified in Section 17, MassDOT shall pay to the DB Entity's proper submission of the invoice to MassDOT as a result of the dispute resolution, then the payment shall, subject to the limitations specified in Section 28 include interest on the amount owing, from the date that the payment was due (based on the agreement of the parties or the decision of the judge) until the date of payment, which shall accrue at the rate provided pursuant to Mass. Gen. L. c. 30, § 39K.

16.3.4 Retainage

There will be no Retainage for the first fifty (50) percent of the DB Price as determined by MassDOT pursuant to section 9.04 of the Standard Specifications. For the second fifty (50) percent of the DB Price there will be a Retainage of five (5) percent of the value of all items of work. Retainage shall be released in accordance with Chapter 30, Section 39G, of the Massachusetts General Laws and the following.

The Retainage (subject to reduction as specified below) shall be held by MassDOT until thirty (30) Days following the DB Entity's completion of the Punch List and submittal to MassDOT of all As-Built Drawings. At such time, MassDOT shall release to the DB Entity all Retainage other than amounts applied to the payment of Damages or which MassDOT deems advisable, in its discretion, to retain to cover any existing or threatened claims, Liens and stop notices relating to the Project, or the cost of any uncompleted DB Work. Final payment of such Retainage not applied to Damages shall be made upon the DB Entity's showing, to MassDOT's reasonable satisfaction, that all such matters have been resolved, including delivery to MassDOT of a certification representing that there are no outstanding claims of the DB Entity or any claims, Liens or stop notices of any Subcontractor, Supplier or laborer with respect to the DB Work, or, in the event such claims, Liens or stop notices are outstanding, that the DB Entity has bonded them or otherwise indemnified MassDOT against such events to the satisfaction of MassDOT.

16.3.5 Deductions

In addition to the deductions provided for above, MassDOT may deduct from each Milestone Payment the following:

- a. any Damages which have accrued as of the date of the Milestone Payment;
- b. any sums expended by MassDOT in performing any of the DB Entity's obligations under this DB Contract which the DB Entity has failed to perform;
- c. the adjusted value of Nonconforming Work that is suitable to remain in place (see MassHighway Standard Specifications for Highways and Bridges, Section 5.10 Removal of Defective or Unauthorized Work); and
- d. any other sums which MassDOT is entitled to recover from the DB Entity under the terms of the DB Contract.
- e. The failure by MassDOT to deduct any of these sums from a Milestone Payment shall not constitute a waiver of MassDOT's right to recover such sums or to deduct such funds from future progress payments.

16.3.6 MassDOT Contingency

MassDOT represents that the Project budget includes a MassDOT Contingency comprised of monies to be used by MassDOT to fund certain changes, modifications or additions to the DB Work in accordance with this Section 16.3.6. The following costs shall be payable from the MassDOT Contingency:

- a. costs incurred in the Hazardous Materials Management in accordance with Section 5, including approved design and construction;
- b. costs directly attributable to MassDOT-Directed Changes;
- c. costs incurred for Police Details;
- d. costs related to MassDOT-Caused Delays;
- e. other costs identified by MassDOT as being necessary for the completion of the Facility but not contained in any Payment Milestone and which are not otherwise a part of the DB Work.

MassDOT shall retain any unused contingency.

The DB Entity's responsibilities with respect to pursuing claims made on MassDOT Contingency are set forth in Section 17.

16.3.7 Traffic Officers, Road Flaggers and Railroad Flagging

The DB Entity shall provide such traffic officers or road flaggers as MassDOT determines appropriate for traffic control within the construction zone, in accordance with 701 CMR 7.00 and the Road Flagger and Police Detail Guidelines. The MassDOT District 4 District Highway Director (DHD) shall have control and responsibility over the safety, security, and closure of the construction zone. Such officers shall wear regulation policemen's uniforms. They may be reserve, special, or regular officers not subject to the control of the DB Entity. Compensation for the services of said traffic officers will be paid by the DB Entity to their employers at their regular rate of pay in effect in the city or town in which the work is being performed.

MassDOT will reimburse the DB Entity for the exact amount paid by the DB Entity for the services of all required traffic officers. There will be no mark up on the cost of hired traffic officers.

The rate of wages paid by the DB Entity to such traffic officers shall be the same as those paid to traffic officers working on special details.

16.3.8 Final Acceptance and Final Payment

When in the opinion of MassDOT the DB Contract has been satisfactorily completed, the DB Entity shall be notified in writing of the date of such acceptance, upon which date the DB Entity's responsibility shall cease except as provided in any bond and as provided in Section 16.3.10 – "No Waiver of Legal Rights."

MassDOT shall, as soon as practicable after the physical completion of the DB Contract. make final estimate of the amount of work done thereunder and the value of such work. Within 65 Days from and after the date the work has been accepted, MassDOT shall forward to the DB Entity a copy of the final estimate or semifinal estimate as stipulated in Chapter 30. Section 39G of the General Laws, as amended, together with an agreement form for acceptance. After such acceptance has been filed with MassDOT, payments of the entire sum will be made, so found to be due thereunder after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the DB Contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment. If within six months from the date the final estimate is forwarded to the DB Entity, the DB Entity has not filed a valid (as determined by the MassDOT) written reason(s) for not accepting the final estimate, the final estimate will be considered acceptable to the DB Entity and payment of the final estimate made. The acceptance by the DB Entity of the final payment shall operate as and shall be a release to MassDOT and every member, agent and employee thereof, from all claims by the DB Entity for anything done or furnished for, or relating to the work or for any act or neglect of MassDOT or of any person relating to or affecting the work, except the claim against MassDOT for the remainder if any there be, of the amounts kept or retained as provided in Section 28.6.

16.4 NO WAIVER OF LEGAL RIGHTS

MassDOT shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the physical completion and final acceptance of the work and payment therefor, from showing the true amount and character of the work performed and

materials furnished by the DB Entity, nor from showing that any such measurement, estimate or certificate is untrue or is incorrectly made, nor that the work or materials do not in fact conform to the Contract. MassDOT shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the DB Entity or his/her sureties, or both, such damage as it may sustain by reason of his/her failure to comply with the terms of the DB Contract. Neither the acceptance by MassDOT nor any representative of MassDOT, nor any payment for any acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by MassDOT, shall operate as a waiver of any portion of the Contract of any power herein reserved, or of any right to damages. A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

Any remedy provided in the DB Contract shall be taken and construed as cumulative, that is, in addition to each and every other remedy herein provided; and MassDOT shall also be entitled as of right to a writ of injunction against any breach of the provisions of the DB Contract.

SECTION 17.0

CHANGES IN THE DB WORK

17.1 CHANGE ORDERS

This Section 17 sets forth the requirements for obtaining all Change Orders under this Contract relating to the DB Work. The DB Entity hereby acknowledges and agrees that the DB Price constitutes full compensation for performance of all of the DB Work, subject only to those exceptions specified in this Section 17, and that MassDOT is subject to constraints which limit its ability to increase the DB Price or extend the Final Completion date. The DB Entity hereby waives the right to any Claim for a time extension or for any monetary compensation in addition to the DB Price and other compensation specified in this Contract for the DB Work, except as set forth in this Section 17. To the extent that any other provision of this Contract expressly provides for a Change Order relating to the DB Work to be issued, such provision is hereby incorporated into this Section 17.

17.1.1 Requirements Relating to Change Orders

The term "Change Order" shall mean a written amendment to the terms and conditions of the Contract Documents issued in accordance with this Section 17. MassDOT may issue unilateral Change Orders as specified below in Section 17.2.2. Change Orders may be requested by the DB Entity only pursuant to Section 17.3. A Change Order shall not be effective for any purpose unless executed by MassDOT, as specified herein. Change Orders may be issued only for the following purposes (or combination thereof):

- a. to modify the scope of the DB Work;
- b. to revise a deadline in the Schedule;
- c. to revise the DB Price; and
- d. to revise other terms and conditions of the Contract Documents.

Upon MassDOT's approval of the matters set forth in the Change Order (whether it is initiated by MassDOT or the DB Entity), MassDOT shall sign such Change Order form indicating approval thereof. A Change Order may, at the sole discretion of MassDOT, direct the DB Entity to proceed with the work with the amount of any such adjustment to be determined in the future in accordance with the terms of the Contract.

MassDOT may at any time issue a Directive Letter to the DB Entity in the event of any desired change in the DB Work or in the event of any dispute regarding the scope of DB Work. The Directive Letter will describe the work in question and will state the basis for determining compensation, if any. The DB Entity will proceed immediately with the work as directed, pending the execution of a formal Change Order (or, if the letter states that the DB Work is within the DB Entity's original scope of DB Work, the DB Entity will proceed with the work as directed but shall have the right to submit the question of entitlement to a Change Order and the amount of allowable compensation and time to dispute resolution in accordance with Section 28 of the Contract).

Before starting to work on any item which the DB Entity considers to be outside of the original scope of the DB Work, as a condition precedent to its right to receive additional payment

therefore or an extension of a Completion Deadline in connection with such work, the DB Entity shall have received one of the following:

- a. A Directive Letter from MassDOT stating that it is issued pursuant to Section 17.1; or
- b. A Change Order for such work signed by MassDOT.

In addition to provision of a Proposed Change Order (PCO) Notice and subsequent Change Order request pursuant to Section 17.3, receipt of a letter from MassDOT under this section shall be a condition precedent to the DB Entity's right to make a claim that a MassDOT-Directed Change has occurred, provided that no Directive Letter shall be required for alleged MassDOT-Directed Changes directly attributable to delays caused by bad faith actions, active interference, gross negligence or comparable tortious conduct by MassDOT. The fact that a Directive Letter was issued by MassDOT shall not be considered evidence that in fact a MassDOT-Directed Change occurred. The determination whether a MassDOT-Directed Change in fact occurred shall be based on an analysis of the original DB Entity requirements and a determination whether the Directive Letter in fact constituted a change in those requirements. The foregoing requirements shall not imply that a Directive Letter would be required in order for the DB Entity to have the right to receive compensation for DB Work within its original scope (such as Utility work) for which additional compensation is specifically allowed under this Section 17.

17.1.2 Right of MassDOT to Issue Change Orders

MassDOT may, at any time and from time to time, without notice to any Surety or Guarantor, authorize and/or require changes in the DB Work within the general scope of the DB Entity pursuant to a Change Order. All additions, deductions or changes to the DB Work as directed by Change Orders shall be executed under the conditions of the original Contract Documents.

17.2 PROCEDURE FOR ISSUANCE OF CHANGE ORDERS BY MASSDOT

This Section 17.2 concerns Change Orders issued by MassDOT following a Notice of Proposed Change and Change Orders unilaterally issued by MassDOT.

17.2.1 Notice of Proposed Directed Change

If MassDOT desires to issue a MassDOT-Directed Change or to evaluate whether to initiate such a change, then MassDOT may, at its discretion, issue a Notice of Proposed Directed Change. MassDOT may at any time ask the DB Entity to provide two alternative Change Order forms in accordance with this Section 17.2.1. MassDOT-Directed Changes will be identified as having been requested by MassDOT in order to establish the liability of MassDOT for the costs of such change.

Within seven (7) Days of the DB Entity's receipt of a Notice of Proposed Directed Change, MassDOT and the DB Entity shall arrange an initial consultation (at no charge to MassDOT) to define the proposed scope of work. Within fourteen (14) Days after completion of the initial consultation, MassDOT and the DB Entity shall consult concerning the estimated cost and time impacts. The DB Entity shall provide data regarding such matters as requested by MassDOT. After the initial consultation and provision of data as described in this Section 17.2.1, MassDOT shall notify the DB Entity whether MassDOT: (i) wishes to issue a Change Order; (ii) wishes to request the DB Entity to prepare a Change Order form as discussed at the meeting; (iii) wishes to request the DB Entity to modify the work plan and prepare a Change Order form based on the modified plan; or (iv) no longer wishes to issue a Change Order.

If so requested, the DB Entity shall, within fourteen (14) Days after receipt of the notification described in Section 17.2.1, comply with all applicable requirements of Section 17.5 and Section 17.6, incorporating and fully reflecting all requests made by MassDOT. If the DB Entity determines that it cannot meet the time allowed, the DB Entity shall notify MassDOT in writing of the DB Entity's proposed deadline for providing the Change Order form, which deadline shall be subject to approval by MassDOT. The cost of developing the Change Order form, including any modifications thereto requested by MassDOT, shall be made at the DB Entity's cost and expense, except that costs of design and engineering work required for preparation of plans or exhibits necessary to the Change Order form shall be included in the Change Order as reimbursable items.

In the event that the Parties agree that a change in the requirements relating to the DB Work has occurred but disagree as to whether the change justifies additional compensation or time, or disagree as to the amount of any increase to be made to the DB Price or extension of a Completion Deadline to be made, MassDOT may, in its sole discretion, order the DB Entity to proceed with the performance of the work in question notwithstanding such disagreement. Such order may, at MassDOT's option, be in the form of: (a) a Time and Materials Change Order as provided in Section 17.7; or (b) a Directive Letter under Section 17.1.1.

17.2.2 Unilateral Change Orders for MassDOT-Directed Changes

MassDOT may issue a Change Order for a MassDOT-Directed Change at any time, regardless of whether it has issued a Notice of Proposed Directed Change. Any such Change Order shall state that the DB Entity shall be entitled to compensation in accordance with Section 17.7 for the additional work required thereby.

17.3 THE DB ENTITY INITIATED CHANGE ORDERS

17.3.1 Eligible Changes

The DB Entity may request a Change Order to extend a Completion Deadline only for the following delays changing the duration of a Critical Path:

- a. MassDOT-Caused Delays;
- b. Delays directly attributable to events included within the definition of Force Majeure (Section 15) for which a workaround is infeasible; and

The DB Entity may request a Change Order to increase the DB Price, subject to strict compliance with the requirements of this Section 17.3, only for increased costs in the DB Work as follows:

- a. Additional costs directly attributable to MassDOT-Caused Delays or MassDOT-Directed Changes (payable outside of the Project Contingency);
- b. Additional costs of Hazardous Materials Management to the extent specified in Section 17.8;

- c. From the Project Contingency, for additional costs as specified in Section 17.9 regarding "Force Majeure" events as described therein; and
- d. Differing subsurface or latent physical conditions in accordance with M.G.L. c. 30, § 39N that were not reasonably anticipated to be addressed by the DB Contractor in completing the design of the project or otherwise acknowledged by the DB contractor at the time of the execution of this Contract.

17.3.2 Conditions Precedent

The following requirements constitute conditions precedent to the DB Entity's entitlement to request a Change Order in all circumstances except those involving a Notice of Proposed Change or involving a price increase under Section 17.2. The DB Entity agrees that the filing of PCO Notices and subsequent filing of Requests for Change Orders with MassDOT pursuant to this Section 17.3 are necessary in order to begin the administrative process for the resolution of the DB Entity disputes. The DB Entity understands that it shall be forever barred from recovering against MassDOT as stated below if it fails to give notice of any act, or failure to act, by MassDOT or MassDOT's Authorized Representative or the happening of any event, thing or occurrence pursuant to a proper PCO Notice, and thereafter complies with the remaining requirements of this Section 17.3.

The DB Entity shall deliver to MassDOT a PCO Notice stating that an event or situation has occurred within the scope of this Section 17.3 and shall state which subsection thereof is applicable. The first notice shall be labeled "PCO No. 1" and subsequent notices shall be numbered sequentially.

Each PCO Notice shall be delivered as promptly as possible after the occurrence of such event or situation. In the event that any PCO Notice is delivered later than ten Days after the DB Entity first discovered (or should have discovered in the exercise of due diligence) the occurrence which is described therein, the DB Entity shall be deemed to have waived the right to collect any and all costs incurred prior to the date of delivery of the written notice, and shall be deemed to have waived the right to seek an extension of any Completion Deadline with respect to any delay in any Critical Path which accrued prior to the date of delivery of the written notice. The DB Entity's failure to provide such written notice within 60 Days after the DB Entity first discovered (or should have discovered in the exercise of reasonable prudence) the occurrence of a given event or situation shall preclude the DB Entity from any relief.

The PCO Notice shall state in detail the facts underlying the potential claim, the reasons why the DB Entity believes additional compensation or time will or may be due and the date of occurrence.

If the claim relates to a decision of MassDOT or any Person which the Contract leaves to the discretion of such Person or as to which the Contract provides that such Person's decision is final, the PCO Notice shall set out the facts supporting the DB Entity's objection to the decision, including facts supporting any contention that the decision was capricious or arbitrary or is not supported by substantial evidence.

Within fourteen (14) Days after receipt of a PCO Notice, MassDOT may respond in writing to the DB Entity to: (a) confirm that a change has occurred; or (b) deny that a change has occurred; or (c) advise the DB Entity that the necessary information has not been submitted to decide which of the above alternatives applies, and indicate the needed information and date by which it is to be received for further review. Failure of MassDOT to respond shall not affect the DB Entity's obligation to provide a Request for Change Order within the time periods specified in this Section 17.

Any adjustments made to the Contract shall not include increased costs or time extensions for delay resulting from the DB Entity's failure to provide requested additional information under this Section 17.3.

The DB Entity shall deliver all Requests for Change Orders under this Section 17.3 to MassDOT within thirty (30) Days after delivery of the PCO Notice, or such longer period of time as may be necessary, provided that the DB Entity shall have notified MassDOT in writing prior to expiration of said 30-Day period how much additional time is required. The Change Order Request(s) shall: (a) state in detail the facts underlying the potential claim, the reasons why the DB Entity believes additional compensation or time will or may be due and the date of occurrence; (b) state the name, title, and activity of each MassDOT representative knowledgeable of the facts underlying the potential claim; (c) identify any documents and the substance of any oral communication involved in the claimed change; (d) state in detail the basis for a claim of necessary time extension or accelerated schedule performance, if applicable; (e) state in detail the basis for a claim that the work is not required by the DB Entity, if applicable; (f) identify particular elements of the DB Contract performance for which additional compensation may be sought under this Section 17; (g) identify any potential Critical Path impacts; and (h) provide an estimate of the time within which a response to the notice is required to minimize cost, delay, or disruption of performance. MassDOT may require design and construction costs to be covered by separate Change Order Requests. If the DB Entity fails to deliver a complete or incomplete Request for Change Order within the appropriate time period, the DB Entity shall be required to provide a new PCO Notice before it may submit a Request for Change Order, Such new, replacement PCO Notice shall be retroactive to the date of the original PCO Notice unless MassDOT suffers prejudice as a result of the submission of such incomplete Change Order Request.

Each Request for Change Order provided under Section 17.3 shall meet all requirements set forth in Section 17.4; provided that if any such requirements cannot be met due to the nature of the occurrence, the DB Entity shall provide an incomplete Change Order which fills in all information capable of being ascertained and which shall include a list of those Change Order requirements which are not fulfilled, together with an explanation reasonably satisfactory to MassDOT stating why such requirements cannot be met, shall provide such information regarding projected impact on the Critical Path as is requested by MassDOT and in all events shall include sufficient detail to ascertain the basis for the proposed Change Order and for any ascertainable amounts with respect thereto. The DB Entity shall furnish, when requested by MassDOT, such further information and details as may be required to determine the facts or contentions involved. The DB Entity agrees that it shall give MassDOT access to any and all of the DB Entity's books, records and other materials relating to the DB Work, and shall cause its Subcontractors to do the same, so that MassDOT can investigate the basis for such proposed request for Change Order. The DB Entity shall provide MassDOT with a monthly update to each outstanding incomplete request for Change Order, describing the status of all previously unfulfilled requirements and stating any changes in projections previously delivered to MassDOT, time expenditures to date and time anticipated for completion of the activities for which the time extension is claimed.

MassDOT may reject the DB Entity's claim at any point in the process. Once a complete Request for a Change Order is provided, MassDOT's failure to respond thereto within twentyone (21) Days of delivery of the Request shall be deemed a rejection of such Request. Although MassDOT intends to review incomplete Change Orders for the purposes described in Section 17.3, MassDOT shall have no obligation to review the back-up associated with any Request for Change Order until a complete Change Order is provided.

The DB Entity acknowledges and agrees that, due to the limited availability of funds for the Project, timely delivery of notification of such events and situations and requests for Change Orders and updates thereto are of vital importance to MassDOT. MassDOT is relying on the DB Entity to evaluate promptly, upon the occurrence of any event or situation, whether the event or situation will affect a Critical Path and, if so, whether the DB Entity believes additional compensation or a time extension is appropriate. If an event or situation occurs which may affect the DB Price or a Critical Path, MassDOT will evaluate the situation and determine whether it wishes to make any changes to the definition of the Project so as to bring it within MassDOT's funding and time restraints. The following matters (among others) shall be considered in determining whether MassDOT has been prejudiced by the DB Entity's failure to provide notice in a timely fashion: the effect of the delay on alternatives available to MassDOT (that is, a comparison of alternatives which are available at the time notice was actually given and alternatives which would have been available had notice been given within ten Days after occurrence of the event or when such occurrence should have been discovered in the exercise of reasonable prudence) and the impact of the delay on MassDOT's ability to obtain and review objective information contemporaneously with the event. Such prejudice may result in denial of the Request.

Prior to submission by the DB Entity of any Request for a Change Order which is based in whole or in part on any facts alleged in a submittal by any Subcontractor to the DB Entity, the DB Entity shall have reviewed all such Subcontractor claims and determined in good faith whether the claims are justified as to both entitlement and amount, and the DB Entity's Request for a Change Order shall include only those items which the DB Entity has certified are so justified and which otherwise meet all requirements hereunder for the DB Entity-initiated Change Orders. The DB Entity shall include with its request a summary of its analysis of all Subcontractor claims components.

17.3.3 Submission of Request for Change Order

The DB Entity shall initiate each Request for a Change Order, after satisfaction of all conditions precedent set forth above, by submitting a Change Order Request and supporting documentation to MassDOT for its review and approval. If the DB Entity submits a Request for Change Order requesting an extension of the Completion Deadline as permitted by Section 17.3, then the DB Entity shall also provide an alternative Change Order including a Recovery Schedule in accordance with the Contract Project Schedule Requirements defined in this Contract.

17.3.4 Performance of Disputed DB Work

In the event that MassDOT refuses to issue a Change Order based on the DB Entity's request, the DB Entity shall nevertheless promptly perform all work as specified in an appropriate Directive Letter from MassDOT, with the right to submit the issue of entitlement to a Change Order to dispute resolution in accordance with Section 28.

17.4 CONTENTS OF CHANGE ORDERS

17.4.1 Form of Change Order

Each Change Order and Request for Change Order shall be prepared in form acceptable to MassDOT, and shall otherwise meet all applicable requirements of this Section 17. Each Change Order shall specify whether it is subject to contingencies, and shall identify the applicable subsection of this Section 17 under which the Change Order is issued.

17.4.2 Information Regarding Effect of Change

Each Request for a Change Order prepared by the DB Entity shall include as attachments a detailed cost estimate relating thereto setting forth all consequences of the event, situation or proposed change giving rise to the proposed Change Order, and including: (a) if the DB Entity claims that such event, situation or change requires a modification to the DB Work, the proposed modification of the DB Price and payment portion of the Project Schedule (if any) occasioned by such change and all facts justifying such modification in a format acceptable to MassDOT; and (b) if the DB Entity claims that such event, situation or change affects a Critical Path, an impacted delay analysis indicating all activities represented or affected by the change, with activity numbers, durations, predecessor and successor activities, resources and cost, with a narrative report, in a form satisfactory to MassDOT, which compares the proposed new schedule to the current approved schedule.

17.4.3 Justification

For all Requests for Change Orders initiated by the DB Entity hereunder, the Change Order form shall include an attachment containing a detailed narrative justification therefore, describing the circumstances underlying the proposed change, identifying the specific provision(s) of Section 17 which permit a Change Order to be issued, and describing the data and documents (including any required data and reports) which establish the necessity and amount of such proposed change.

17.4.4 The DB Entity Representation

Each Change Order form shall contain a written representation by the DB Entity that the amount of time and/or compensation requested includes all known and anticipated impacts or amounts, direct, indirect and consequential, which may be incurred as a result of the event or matter giving rise to such proposed change.

17.5 DETERMINATION OF TERMS OF CHANGE ORDER

17.5.1 Cost Categories and Mark-ups

The amount of each Change Order, whether established pursuant to Section 17.6 or Section 17.7, shall be calculated based on, and shall be limited to, the categories of costs and the mark-ups thereto specified in Section 17.7.

17.5.2 Exclusion from Price Increase

Any increase in the DB Price allowed hereunder shall exclude: (a) costs caused by the breach of the DB Entity or fault or negligence, or act or failure to act of the DB Entity, its employees, agents, officers or Subcontractors or any other Persons for whom the DB Entity may be contractually or legally responsible; and (b) costs which could reasonably be avoided by the DB Entity, including resequencing, reallocating or redeploying its forces to other portions of the DB Work or to other activities unrelated to the DB Work (including in the equation any additional costs reasonably incurred in connection with such reallocation or redeployment).

17.5.3 Delay Damages and Time Extensions

No Acceleration Costs or other delay damages shall be compensable hereunder under any circumstances except in the case of delays which qualify as MassDOT-Caused Delays or delays caused by Force Majeure events as described in Section 17.9. Acceleration Costs are permitted only with respect to Change Orders issued as an alternative to allowing an extension of the Completion Deadline hereunder as contemplated by Sections 17.5.3 (a) and 17.5.3 (c).

Before the DB Entity may obtain any time extension or increase in the DB Price as set forth in Section 17.3.1, the DB Entity shall be required to demonstrate to MassDOT's satisfaction that:

- a. Its schedule which defines the affected Critical Path sets forth a reasonable method for completion of the DB Work;
- b. The change in the DB Work or other event or situation which is the subject of the Request for Change Order has caused or will result in an identifiable and measurable disruption of the DB Work which has or will impact a Critical Path, has consumed or will consume all available float which was generated by MassDOT or by deletion of DB Work from the DB Entity's scope;
- c. The delay or damage was not aggravated by any breach of the DB Entity or fault or negligence, or act or failure to act of the DB Entity, its employees, agents, officers or Subcontractors or any other Persons for whom the DB Entity may be contractually or legally responsible, and could not reasonably have been avoided by the DB Entity, including by resequencing, reallocating or redeploying its forces to other portions of the DB Work;
- d. The delay for which a time extension or compensation is sought is not concurrent with any delay for which the DB Entity is responsible; and
- e. the DB Entity shall have provided documentation of such costs satisfactory to MassDOT, provided that if the DB Entity has not otherwise been compensated for extended overhead resulting from the delay, the rate for extended overhead specified herein shall apply, without requiring proof of actual overhead costs, and provided that additional maintenance expenses shall be determined as specified in Section 17.5.

17.5.4 DB Work Performed Without Direction

Except as directed by MassDOT, work that is not part of the DB Work shall be deemed to have been performed voluntarily and the DB Entity shall not be entitled to a Change Order in connection therewith.

17.6 NEGOTIATED CHANGE ORDERS

For any work undertaken by the DB Entity (on its own behalf and on behalf of its Subcontractors) under a Change Order, MassDOT and the DB Entity shall endeavor to negotiate a reasonable cost for each Change Order other than unilateral Change Orders issued by MassDOT under Section 17.2.

17.6.1 Cost Proposal

The DB Entity shall submit a detailed cost proposal identifying all categories of costs in accordance with the requirements of Section 17.7, with mark-ups not exceeding the amounts

set forth therein, supported by documentation satisfactory to MassDOT: (a) showing all impacts on the DB Entity from additions to the DB Work, deletions and modifications shown in the Change Order being priced; and (b) setting out the proposed costs in such a way that a fair evaluation can be made. MassDOT shall have the right to require that any or all of the information submitted by the DB Entity be used in evaluating the proposal. No mark-up shall be allowed in excess of the percentages specified in Section 17.7.

17.6.2 Identification of Conditions

The DB Entity shall identify all conditions with respect to prices or other aspects of the proposal, such as pricing contingent on firm orders being made by a certain date or the occurrence or non-occurrence of an event.

The DB Entity shall contemporaneously collect, record in writing, segregate and preserve: (a) all data necessary to determine the costs described in this Section 17.6 with respect to all DB Work which is the subject of a Change Order or a proposed Change Order, specifically including costs associated with Design as well as Utility Relocations, and (b) all data necessary to show the actual impact (if any) of the change on each Critical Path with respect to all DB Work which is the subject of a Change Order or a proposed Change Order, if the impact on the Project Schedule is in dispute.

17.6.3 Negotiated Change Orders

A negotiated Change Order shall specify scheduling requirements, time extensions and all costs of any nature arising out of the DB Work covered by the Change Order. Notwithstanding the foregoing, the Parties may mutually agree to use a multiple-step process involving issuance of a Change Order which includes an estimated construction cost and which provides for a revised Change Order to be issued after a certain design level has been reached, thus allowing a refinement and further definition of the estimated construction cost.

17.6.4 Unit Priced Change Orders

In the event that the Parties negotiate a unit-priced Change Order, measurement shall be as specified in Section 9.01 of the Standard Specifications, and the unit prices shall not be subject to change regardless of any change in the estimated quantities.

17.7 TIME AND MATERIALS CHANGE ORDERS

MassDOT may at its discretion issue a Time and Materials Change Order at any time. The Time and Materials Change Order shall instruct the DB Entity to perform the work, indicating expressly the intention to treat the items as changes in the DB Work, and setting forth the kind, character, and limits of the work as far as they can be ascertained, the terms under which changes to the DB Price will be determined and the estimated total change in DB Price anticipated thereunder. Upon final determination of the allowable costs, MassDOT shall issue a modified Change Order setting forth the final adjustment to the DB Price. The costs and . mark-ups shall be calculated based on the following:

a. For construction-related labor: (1) the actual cost for direct labor, material (less value of salvage, if any) and use of equipment, plus 10 percent of this total for overhead; plus (2) actual cost of Workmen's Compensation and Liability Insurance, Health, Welfare and Pension benefits, Social Security deductions, and Employment Security Benefits; plus (3) 10 percent of the total of (1) and (2);

- b. For non-construction-related labor: (1) the actual wages (i.e. the base wage paid to the employee exclusive of any fringe benefits); plus (2) a labor surcharge in the amount of 135%, which shall constitute full compensation for all state and federal payroll, unemployment and other taxes, insurance, fringe benefits and all other payments made to, or on behalf of, the workers, in excess of actual wages;
- c. The estimated proportionate cost of surety bonds;
- For work performed by a Subcontractor, the DB Entity shall accept as full payment therefore an amount equal to the cost to the DB Entity of such work as determined by the Project Manager, plus 10 percent of such cost, and;
- e. The DB Entity shall accept as full payment for other direct costs the cost of any justified change-related direct cost not covered by the categories of costs contained in subparagraphs (a) through (d) above. Back-up documentation supporting each cost item for this category shall be provided by the DB Entity and approved by MassDOT prior to any payment authorization being granted.

No allowance shall be made for general superintendence and the use of small tools and manual equipment.

The DB Entity shall, when requested by the Project Manager, furnish itemized statements of the cost of the DB Work ordered and give the Project Manager access to all accounts, bills and vouchers relating thereto. Unless the DB Entity shall furnish such itemized statements and access to all accounts, bills and vouchers, the DB Entity shall not be entitled to payment for any items of extra work for which such information is sought by MassDOT.

17.7.1 Basis for Compensation

The DB Entity shall contemporaneously collect, record in writing, segregate and preserve: (a) all data necessary to determine the costs described in this Section 17.7 with respect to all DB Work which is the subject of a Change Order or a proposed Change Order, specifically including costs associated with Design as well as Utility Relocations, but specifically excluding negotiated Change Orders; and (b) all data necessary to show the actual impact (if any) of the change on each Critical Path with respect to all DB Work which is the subject of a Change Order, if the impact on the Project Schedule is in dispute. Such data shall be provided the authorized representative of MassDOT reviewing any Claim or dispute regarding compensation for such DB Work under Section 28.

17.7.2 Time and Materials Records

The DB Entity shall maintain such records as MassDOT deems sufficient to distinguish the direct cost of work completed under a Time and Materials Change Order from the cost of other work. It shall furnish daily, on forms approved by MassDOT, reports of all such work. The reports shall itemize all costs for labor, materials, and equipment rental and give total of costs to date. For workers, the reports shall include hours worked, rates of pay, names and classifications. For equipment, the reports shall include size, type, identification number, rental rate, and hours of operation. All such records and reports shall be made immediately available to MassDOT upon its request. The cost of furnishing such reports shall be included in the DB Entity's overhead and fee percentages.

All reports prepared by the DB Entity pursuant to Section 17.7 above shall be signed by the DB Entity or its authorized representative. MassDOT will compare its records with the DB Entity's reports, make the necessary adjustments and compile the costs of work completed

under a Time and Materials Change Order. When such reports are agreed upon and signed by both Parties, they will become the basis of payment.

17.8 COMPENSATION FOR HAZARDOUS MATERIALS MANAGEMENT

17.8.1 Reimbursable Costs

Reimbursable Costs of Hazardous Materials Management ("Reimbursable Costs") will be based on unit prices as defined in Exhibit P: Item 183.21, Disposal of Granular-Activated Carbon; Item 183.11 – Treatment of Contaminated Groundwater, in accordance with Section 9.03 of the Supplemental Specifications to the 1988 Standard Specifications for Roads and Bridges, dated June 6, 2006. Upon approval, the DB Entity shall be entitled to reimbursement from the Project Contingency of 90% of the Reimbursable Costs of Hazardous Materials Management. Measurement of quantities will be in accordance with Section 9.01 of the Standard Specifications for Highways and Bridges, 1988 edition. The DB Entity shall give MassDOT notice in advance of any measurement of quantities, so as to allow MassDOT the opportunity to oversee the process. For Hazardous Materials Management work for which no unit prices are provided, Reimbursable Costs shall be based on time and materials in accordance with the procedures described in Section 17.7 of this Contract, except that there shall be no mark-up for profit.

17.8.2 Waiver

The DB Entity shall be deemed to have waived the right to collect any and all costs incurred in connection with any work relating to Hazardous Materials Management if MassDOT is not afforded the opportunity to inspect sites containing Hazardous Materials before any action is taken which would inhibit MassDOT's ability to ascertain, based on a site inspection, the nature and extent of the materials or if MassDOT is not afforded the opportunity to oversee the measurement of Hazardous Materials quantities.

17.8.3 Insurance

If the cost of any Hazardous Materials Management for Unknown Contamination is covered by insurance, the DB Entity shall be entitled to reimbursement of eligible costs from proceeds of insurance up to the limits of the applicable policy, less any deductibles, which are the DB Entity's responsibility. To the extent that such proceeds are available, the DB Entity shall not be entitled to any reimbursement from the Project Contingency.

17.8.4 Actions Against Third Parties

During the term of the Contract, the DB Entity shall be permitted to commence appropriate actions against third parties that may be legally responsible for Hazardous Materials Management costs in connection with Hazardous Materials within the Right-of-Way, subject to MassDOT's prior approval of any such action in each instance. Unless MassDOT otherwise informs the DB Entity in writing, all costs associated with any action to recover Hazardous Materials Management costs from third parties will be borne by the DB Entity. Any amount recovered under this Section 17.8. shall be deposited into the Project Contingency.

17.9 DIFFERING SITE CONDITIONS AND CERTAIN FORCE MAJEURE EVENTS

17.9.1 Differing Site Conditions

The DB Entity shall be fully responsible for, and thus shall not receive a Change Order with respect to, any additional costs and delays due to Differing Site Conditions.

17.9.2 Force Majeure Events

Subject to the limitations contained in, and upon the DB Entity's fulfillment of all applicable requirements of this Section 17, MassDOT shall be responsible for, and agrees to issue Change Orders: (a) to compensate the DB Entity for additional costs incurred arising from the events described in the definition of "Force Majeure"; and (b) to extend the time for completion of the DB Work as the result of any delay in the Critical Path caused by a Force Majeure event to the extent that it is not possible to work around the problem.

17.10 ELIMINATED DB WORK

Should any DB Work contained in the Contract be found unnecessary, MassDOT will, upon issuance of a Change Order (or a Directive Letter followed by a Change Order) to the DB Entity, eliminate the work from the Contract, and this action shall not invalidate the Contract. When the DB Entity is notified of eliminated work, reimbursement will be made for actual work done and all costs incurred, including mobilization of materials prior to the date that DB Entity received notification. Credit for the eliminated DB Work shall be based on the DB Entity's estimated price for such work included in the Proposal, plus the mark-ups for overhead and profit allocated to such DB Work included in the Proposal.

17.11 MASSDOT-DIRECTED CHANGES OUTSIDE OF SCOPE

If any MassDOT-Directed Change materially alters the scope of the DB Work, an adjustment, excluding anticipated profit, will be made to the DB Price. The basis for the adjustment shall be agreed upon prior to performance of such work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the DB Entity in such amount as MassDOT may determine to be fair and equitable. The term "materially alter" as used in this Section 17.11 shall be construed to apply only to circumstances involving a direction to perform work which is not related to the Project or a direction to delete or modify DB Work such that this Contract would no longer be considered a design-build Contract for the Project of the nature described in the RFP Documents.

17.12 RESTRICTIONS AND LIMITATIONS ON CHANGE ORDERS

The DB Entity acknowledges and agrees that MassDOT shall bear responsibility only for limited matters involving delays and costs and the consequences resulting therefrom as set forth in this Section 17. The DB Entity shall bear responsibility for all other matters, including but not limited to the following:

- a. Errors, omissions, inconsistencies or other defects in the RFP Documents;
- b. Any design changes requested by MassDOT as part of the process of approving the Design for consistency with the requirements of the Contract Documents;

- d. Action or inaction of subcontractors or other contractors (including failure to organize and integrate their work with the DB Work);
- e. Subsurface moisture content;
- f. Untimely delivery of equipment or material, or unavailability or defectiveness or increases in costs of material, equipment or products specified by the Contract Documents, except to the extent resulting from a Force Majeure event;
- g. All costs covered by insurance proceeds received by or on behalf of the DB Entity;
- h. Correction of Nonconforming Work and review and acceptance thereof by MassDOT (including rejected Design Submittals);
- i. Failure by the DB Entity to comply with the requirements of the Contract Documents;
- j. Any delay not on a Critical Path;
- k. All events beyond the control of MassDOT for which MassDOT has not agreed to assume liability hereunder;
- I. Delays in issuance of any permit or approval by any entity with jurisdiction over the subject matter of such permit or approval that is required to be obtained by the DB Entity; and
- m. Delays from any other situations (other than Force Majeure events) which, while not within one of the categories delineated above, were or should have been anticipated because such situations are referred to elsewhere in this Contract or arise out of the nature of the DB Work.

The DB Entity hereby assumes responsibility for all such matters, and acknowledges and agrees that assumption by the DB Entity of responsibility for such costs and delays, and the consequences and costs resulting therefrom, is reasonable under the circumstances of this Contract. THE DB ENTITY HEREBY EXPRESSLY WAIVES ALL RIGHTS TO ASSERT ANY AND ALL CLAIMS BASED ON ANY CHANGE IN THE DB WORK, DELAY OR ACCELERATION (INCLUDING ANY CONSTRUCTIVE CHANGE, DELAY, SUSPENSION OR ACCELERATION) FOR WHICH DB ENTITY FAILED TO PROVIDE PROPER AND TIMELY NOTICE OR FAILED TO PROVIDE A TIMELY CHANGE ORDER FORM AS REQUIRED BY SECTION 17.3, AND AGREES THAT DB ENTITY SHALL BE ENTITLED TO NO COMPENSATION OR DAMAGES OR TIME EXTENSIONS WHATSOEVER IN CONNECTION WITH THE DB WORK EXCEPT TO THE EXTENT THAT THE CONTRACT DOCUMENTS EXPRESSLY SPECIFY THAT THE DB ENTITY IS ENTITLED TO A CHANGE ORDER OR OTHER COMPENSATION OR DAMAGES.

17.13 DISPUTES

The failure of MassDOT and the DB Entity to agree to any Change Order under this Section 17 shall be a dispute to be resolved pursuant to Section 28. Except as otherwise specified in the Change Order, execution of a Change Order by the Parties shall be deemed accord and satisfaction of all claims by the DB Entity of any nature arising from or relating to the DB Work covered by the Change Order.

17.14 NO-COST CHANGES

Changes in the DB Work which have no net cost effect on the DB Price shall not require a Change Order provided the Final Design Documents are approved by MassDOT.

17.15 NO RELEASE OR WAIVER

No change to this Contract, including but not limited to an extension of time granted hereunder shall release the DB Entity's Surety [or Guarantor] from its obligations. The DB Entity shall continue the DB Work in accordance with all of the provisions of the Contract, and the Contract shall be and shall remain in full force and effect during the continuance and until the completion unless formally suspended or annulled in accordance with the terms hereof. Permitting the DB Entity to finish the DB Work or any part thereof after the Completion Date established for the Project, or the making of payments to the DB Entity after such date, shall not constitute a waiver on the part of MassDOT of any rights under this Contract.

Neither the grant of an extension of time beyond the Completion Date of any part of the DB Work, nor the performance and acceptance of any part of the DB Work specified by the DB Entity after the deadline established for the Project, shall be deemed to be a waiver by MassDOT of its right to declare a Default under the Contract for abandonment or failure to complete the DB Work within the time specified or to impose and deduct damages as may be provided herein.

SECTION 18.0

SUSPENSION OF ALL OR PART OF THE DB WORK

18.1 SUSPENSION FOR CONVENIENCE

MassDOT may order the DB Entity in writing to suspend, delay, or interrupt all or any part of the DB Work for a period of time not to exceed 24 hours, as MassDOT may determine to be appropriate for the convenience of MassDOT. Any suspension for convenience in excess of 24 hours, or any suspensions greater than 26 in number, will be considered a MassDOT-Directed Change.

18.2 SUSPENSION FOR OTHER REASONS

MassDOT has the authority to suspend the DB Work wholly or in part, for such period as MassDOT deems necessary because of the failure on the part of the DB Entity to perform any requirement of the Contract Documents. The DB Entity shall promptly comply with the written order of MassDOT to suspend the DB Work wholly or in part. The suspended DB Work shall be resumed when appropriate corrective action has been taken and MassDOT lifts the suspension in writing.

MassDOT has the right to undertake appropriate efforts to cause the DB Entity to perform any and all requirements of the Environmental Approvals. Actions which may be undertaken by MassDOT in connection with any such failure include the right to direct the DB Entity to take specified corrective action or to stop DB Work.

The DB Entity shall not be entitled to any increase in the DB Price or extension of the Contract Time in connection with any suspension under this Section18, including for the work described in Section 18.3, except to the extent that the suspension is considered to be a MassDOT-Directed Change.

18.3 TRAFFIC SAFETY IN THE EVENT OF SUSPENSION

In the event that a suspension of DB Work is ordered under this Section 18, the DB Entity shall undertake all work necessary to provide a safe, smooth, and unobstructed passageway through the construction area for use by public traffic during the period of such suspension.

SECTION 19.0

TERMINATION

MassDOT has the right to terminate this Contract for any of the following reasons. Termination shall be effective upon written notice to the DB Entity.

19.1 TERMINATION FOR CONVENIENCE

MassDOT shall have the right to terminate the Contract for its convenience if MassDOT determines termination to be in its best interest. The DB Entity shall be paid for work satisfactorily performed and for all materials purchased prior to the effective date of the termination, but in no event shall the DB Entity be entitled to recover loss of profits on the work not performed or materials not purchased.

The amount otherwise due the DB Entity under this Section 19 shall be reduced by: (a) all unliquidated advance or other payments, on account theretofore made to the DB Entity applicable to the terminated portion of this Contract; (b) the amount of any claim which MassDOT may have against the DB Entity in connection with this Contract; and (c) the agreed price for, or the proceeds of sale of, any materials, supplies or other things acquired by the DB Entity or sold, pursuant to the provisions of this Section 19, and not otherwise recovered by or credited to MassDOT.

19.2 NON-APPROPRIATION

MassDOT's obligation to make payments during any MassDOT fiscal year succeeding the current fiscal year shall be subject to availability and appropriation of funds. When funds (state and/or federal) are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year period, MassDOT shall have the right to terminate the Contract. The DB Entity shall be reimbursed for the reasonable value of any nonrecurring costs incurred but not amortized in the price of the supplies or services delivered under this Contract. Such reimbursement shall not include loss of profit, loss of use of money, or administrative or overhead costs. The reimbursement amount may be paid from any appropriations available for that purpose.

19.3 TERMINATION FOR CAUSE

MassDOT shall have the right to terminate the Contract for the DB Entity default under Section 20, Default, upon written notice to the DB Entity. The MassDOT shall also have the right, upon written notice to the DB Entity, to terminate the Contract for other cause as specified in this contract or by law. If it is later determined that MassDOT erred in terminating the Contract for cause, then, at MassDOT's discretion, the Contract shall be deemed to have been terminated for convenience under Section 19.1.

19.4 THE DB ENTITY'S RESPONSIBILITIES AFTER RECEIPT OF NOTICE OF TERMINATION

After receipt of a Notice of Termination, and except as otherwise directed by MassDOT, the DB Entity shall immediately proceed as follows, regardless of any delay in determining or adjusting any amounts due under this Section 19:

- a. Stop DB Work as specified in the notice.
- b. Place no further Subcontracts, except as necessary to complete the continued portion of the DB Work, if any, or for mitigation of damages.
- c. Terminate all Subcontracts to the extent they relate to the DB Work terminated except to the extent that continuation of the Subcontracts is necessary in order to mitigate damages.
- d. Assign to MassDOT or its designee, in the manner, at the times, and to the extent directed by MassDOT, all of the rights, title, and interests of the DB Entity under the Subcontracts so terminated, in which case MassDOT will have the right, in its sole discretion, to settle or pay any or all claims arising out of the termination of such Subcontracts.
- e. Settle all outstanding liabilities and claims arising out of such termination of Subcontracts, with the approval or ratification of MassDOT, to the extent it may be required, which approval or ratification shall be final.
- f. Transfer title and deliver to MassDOT or its designee, in the manner, at the times, and as and to the extent, if any, directed by MassDOT:
 - i. fabricated or unfabricated parts, the DB Work in process, completed DB Work, supplies and other material produced or acquired for the DB Work terminated; and
 - ii. the Design Documents, Construction Documents and all other completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, records, samples, information and other property that would have been required to be furnished to MassDOT if the DB Work had been completed.
- g. Complete performance in accordance with the Contract Documents of all DB Work not terminated.
- h. Take all action that may be necessary, or that MassDOT may direct, for the protection and preservation of the property related to the Contract Documents that is in the possession of the DB Entity and in which MassDOT has or may acquire an interest.
- i. Use its best efforts to sell, in a manner, at the times, to the extent, and at the price or prices directed or authorized by MassDOT, any property of the types referred to in Section 19.4.f; provided, however, that the DB Entity:
 - i. is not required to extend credit to any purchaser; and
 - ii. may acquire the property under the conditions prescribed and at prices approved by MassDOT. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by MassDOT under the Contract Documents or paid in any other manner directed by MassDOT.

19.5 INVENTORY AFTER TERMINATION

The DB Entity shall submit to MassDOT a list of termination inventory not previously disposed of and excluding items authorized for disposition by MassDOT. Within forty-five (45) Days of receipt of such list, the DB Entity shall deliver such inventory to MassDOT and MassDOT shall accept title to such inventory as and to the extent MassDOT in its sole reasonable discretion deems appropriate.

19.6 PAYMENT

MassDOT may, from time to time, under such terms and conditions as it may prescribe and in its discretion, make partial payments on account against costs incurred by the DB Entity in connection with the terminated portion of this DB Contract, whenever in the opinion of MassDOT the aggregate of such payments shall be within the amount to which DB Entity will be entitled hereunder. Such payments shall be calculated as follows:

- a. for all completed items of work for which there is a Payment Milestone Plan(s), the original Payment Milestone(s);
- b. for all work on partially completed items, a sum agreed to by the DB Entity and MassDOT calculated as: (i) the actual cost for direct labor, materials (less salvage value, if any) and use of equipment plus 10% of this total for overhead; (ii) the actual cost for Worker's Compensation and Employer's Liability Insurance, Health, Welfare and Pension benefits, Social Security deduction, and Employment Security Benefits; (iii) six (6%) percent of the total of (i) and (ii) for profit; (iv) the estimated proportionate cost of surety bonds; and (v) the actual cost to the DB Entity for work performed by a Subcontractor plus ten percent (10%) of such cost. No allowance shall be made for general superintendence and the use of small tools and manual equipment;
- c. for costs of settlement as: (i) reasonable and necessary accounting, legal, clerical and other costs of work discontinuance; and reasonable and necessary storage, transportation and other costs incurred for the preservation, protection or disposition of the discontinued work; (ii) when requested by MassDOT, the DB Entity shall furnish itemized statements of the cost of the work performed and shall give MassDOT access to all accounts, bills and vouchers relating thereto and unless the DB Entity, when requested, shall furnish such itemized statements and access to all accounts, bills and vouchers relating thereto and access to all accounts, bills and vouchers, he shall not be entitled to payment for the work for which such information is sought by MassDOT; and (iii) except as provided herein, the DB Entity shall not be paid and the DB Entity shall not have any claims or loss of anticipated profits, for loss of expected reimbursement or for any increased expenses resulting directly or indirectly from the discontinuance of any or all work or from unbalanced allocations, among the contract items, of overhead expense on the part of the DB Entity and subsequent loss of expected reimbursement therefore or for any other cause; and for the amount of any Retainage.
- d. DB Entity shall incorporate the provisions of this Section 19.6 in its contracts with each of its Subcontractors.
- e. Whatever sum of money may become due and payable to MassDOT by the DB Entity under this Section 19.6 may be retained out of money belonging to the DB Entity in the hands and possession of MassDOT, including without limitation any progress payment in process but not paid or retainage.

SECTION 20.0

DEFAULT AND REMEDIES

20.1 DEFAULTS AND REMEDIES

MassDOT may, subject to the provisions of Section 15, Force Majeure, and in addition to its other rights under the Contract, following notice and opportunity to cure as specified herein, declare the DB Entity in default by written notice thereof to the DB Entity, and terminate (as provided in Section 19, Termination Provisions) the whole or any part of this Contract for any of the following reasons:

- a. DB Entity fails either:
 - i. to promptly begin the DB Work under the Contract Documents; or
 - ii. to prosecute the DB Work in accordance with the Project Schedule;
- DB Entity fails to perform the DB work with sufficient resources to assure the prompt completion thereof (i.e. DB Entity fails to provide and thereafter meet a recovery schedule as required in this Contract);
- c. DB Entity fails to perform the DB work in accordance with the Contract Documents, or refuses to remove and replace rejected materials or unacceptable DB work;
- d. The DB Entity discontinues the prosecution of the DB Work (exclusive of work stoppage):
 - i. due to termination or suspension by MassDOT; or
 - ii. due to and during the continuance of a Force Majeure event or suspension by MassDOT;
- e. The DB Entity fails to resume performance of DB Work which has been suspended or stopped, within a reasonable time after receipt of notice from MassDOT to do so or (if applicable) after cessation of the event preventing performance;
- f. The DB Entity or any Guarantor has become insolvent, or generally does not pay its debts as they become due, or admits in writing its inability to pay its debts or makes an assignment for the benefit of creditors;
- g. Any representation or warranty made by the DB Entity or any Guarantor in the Contract Documents or any certificate, schedule, instrument or other document delivered pursuant to the Contract Documents shall have been false or materially misleading when made;
- h. The DB Entity breaches any agreement, representation or warranty contained in the Contract Documents, including minimum wage payments and equal employment opportunity requirements, or failure to provide financial guarantees (if necessary), appropriate performance and payment bonds, insurance policies or certificates or financial data as specified in this Contract;
- i. The DB Entity assigns or transfers the Contract Documents or any right or interest herein, except as expressly permitted hereunder or thereunder;
- j. The DB Entity fails to discharge or obtain a stay of any final judgment(s) or order for the payment of money against it in excess of \$100,000 in the aggregate arising out of the prosecution of the DB Work (provided that for purposes hereof posting of a bond in the amount of 125% of such judgment or order shall be deemed an effective stay);

- k. The DB Entity fails, absent a valid dispute, to make payment when due for labor, equipment or materials in accordance with its agreements with Subcontractors and applicable Law, or shall have failed to comply with any Law or failed reasonably to comply with the instructions of MassDOT consistent with the Contract Documents;
- I. The DB Entity or any Guarantor is a party to fraud which affects the performance under this Contract;
- m. Any Guarantor, or any Person which provided a guaranty to MassDOT with respect to this Contract, revokes or attempts to revoke its obligations under any guaranty, or otherwise takes the position that such instrument is no longer in full force and effect;
- n. The DB Entity fails to timely observe or perform or cause to be observed or performed any covenant, agreement, obligation, term or condition required to be observed or performed by the DB Entity under this Contract;
- o. The DB Entity fails to execute and deliver any Contract Document as and when required under this Contract;
- p. The DB Entity commences a voluntary case seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar Law now or hereafter in effect; seeks the appointment of a trustee, receiver, liquidator, custodian or other similar official of the DB Entity or any substantial part of the DB Entity's assets; files an answer admitting the material allegations of a petition filed against the DB Entity in any involuntary case commenced against the DB Entity; consents to any such relief or to the appointment of or taking possession by any such official in any voluntary case commenced against the DB Entity; makes an assignment for the benefit of creditors; fails, is unable, or admits in writing the inability generally to pay the DB Entity's debts as they become due; takes any action to authorize any of the foregoing; or any of the foregoing acts or events shall occur with respect to Guarantor;
- q. An involuntary case is commenced against the DB Entity: seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to the DB Entity or the DB Entity's debts under any bankruptcy, insolvency or other similar Law now or hereafter in effect; seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of the DB Entity or any substantial part of the DB Entity's assets; seeking the issuance of a writ of attachment, execution, or similar process; or seeking like relief, and such involuntary case shall not be contested by the DB Entity in good faith or shall remain undismissed and unstayed for a period of 90 Days; or any such involuntary case or cases shall be commenced against Guarantor (but not necessarily in the same proceeding or concurrently) and such case or cases shall not be contested by Guarantor in good faith or shall remain undismissed and unstayed for a period of 00 Days.

20.2 OPPORTUNITY TO CURE

The DB Entity shall be entitled to fifteen (15) Days' notice and opportunity to cure any of the breaches described in Section 20 above (other than any breach which by its nature cannot be cured); provided that if such breach is capable of cure but by its nature cannot be cured within fifteen (15) Days, MassDOT shall allow an additional period of time as may be reasonably necessary to cure the breach so long as the DB Entity commences such cure within such fifteen (15) Day period and thereafter diligently prosecutes such cure to completion. In the case of an emergency, MassDOT shall have the right to shorten the fifteen (15) Day cure period by so specifying in the notice of breach. If any breach described in Section 20 is not subject to cure or is not cured within the period (if any) specified in this Section 20, MassDOT may declare that "the DB Entity Default" has occurred.

20.3 DB ENTITY DEFAULT: MASSDOT REMEDIES

Upon the occurrence of the DB Entity Default, MassDOT may exercise any one or more of the following remedies as MassDOT in its sole and absolute discretion shall determine:

- a. any and all remedies available at Law or in equity, including recovery of damages to the extent provided in this Contract or by Law;
- b. in the event of the DB Entity default, MassDOT's termination of all the DB Entity's rights under the Contract and of all the DB Entity's rights of entry upon possession and control and operation of the Project, (which termination shall be subject to Section 19);
- c. if requested by MassDOT, the DB Entity shall withdraw from the Right-of-Way, shall assign to MassDOT such of the DB Entity's Subcontracts as MassDOT may request and shall remove such materials, equipment, tools and instruments used by, and any debris or waste materials generated by, the DB Entity in the performance of the DB Work as MassDOT may direct and MassDOT may take possession of any and all Design Documents, Construction Documents and all other completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, records, information, schedules, samples, shop drawings and other documents and site facilities of the DB Entity that MassDOT deems necessary for completion of the DB Work;
- d. MassDOT, without incurring any liability to the DB Entity, shall have the right (either with or without the use of the DB Entity's materials, equipment, tools and instruments) to take the performance of the DB Work from the DB Entity, and, subject to payment of the DB Entity's direct costs by MassDOT, MassDOT may appropriate or use the DB Entity's materials, equipment, tools and instruments located on the Right-of-Way as may be suitable and acceptable and may enter into a contract with another Person for the completion of the DB Work in accordance with the terms and provisions of the Contract Documents, or use such other methods as will be required for the completion of the Project in the opinion of MassDOT;
- e. MassDOT may offset any sums MassDOT owes to the DB Entity by any sums owing to MassDOT from the DB Entity, including Liquidated Damages or other damages owing MassDOT under the Contract; or
- f. the DB Entity shall be liable to MassDOT (in addition to any Liquidated Damages payable hereunder) for all costs reasonably incurred by MassDOT or any party acting on MassDOT's behalf in completing the DB Work or having the DB Work completed by another Person. Upon occurrence of an Event of Default, MassDOT shall be entitled to withhold all or any portion of further payments to the DB Entity until such time as MassDOT is able to determine how much (if any) remains owing to the DB Entity. Promptly upon such determination, MassDOT shall notify the DB Entity in writing of the amount, if any, that the DB Entity shall pay MassDOT or MassDOT, including attorneys' fees and costs, together with the cost of completing the DB Work under the Contract, will be deducted from any moneys due or which may become due to the DB Entity. If such expense exceeds the sum which would have been payable under the Contract, then the DB Entity and its Surety(ies) and Guarantor(s) shall be liable and shall pay to MassDOT the amount of such excess.
SECTION 21.0

DAMAGES

21.1 LIQUIDATED DAMAGES

The DB Entity understands and agrees that if the DB Entity fails to complete the DB Work in accordance with the Contract Documents, MassDOT will suffer substantial losses and damages. The DB Entity agrees that it shall be liable for all such losses and damages. The DB Entity and MassDOT have agreed to liquidate damages with respect to certain types of losses and damages. The DB Entity acknowledges and agrees that the Damages are intended to compensate MassDOT solely for the DB Entity's failure to meet the deadlines for completion of the Project; and shall not excuse the DB Entity from liability from any other breach of Contract requirements, including any failure of the DB Work to conform to applicable requirements.

The DB Entity acknowledges and agrees that because of the unique nature of the Project, and the fact that inconvenience to the traveling public due to the closure of the bridge will be one of the significant impacts of any completion delay, it is impracticable to ascertain and determine the actual damages which would accrue to MassDOT, and the public in the event of the DB Entity's failure to achieve MassDOT Final Acceptance of the Project on or before the Completion Deadline. Therefore, the DB Entity agrees to pay MassDOT for a liquidated amount (the Liquidated Damages) as deemed compensation to MassDOT for such damages, which shall be comprised of an amount which shall be One Thousand, Fifty Dollars (\$1,050) for MassDOT's administrative costs due to the delay for each Day after the required date for Final Acceptance as specified in the Contract Documents, but not to exceed 365 Days. The DB Entity understands and agrees that any Liquidated Damages payable in accordance with this Section 21 are in the nature of liquidated damages and not a penalty and that such sums are reasonable under the circumstances existing as of the date of execution and delivery of this Contract.

21.2 OFFSET, REDUCTION; WAIVER

Except as set forth in Section 16.3.5, MassDOT shall have the right to deduct any amount owed by the DB Entity to MassDOT under this Contract from any amounts owed by MassDOT to the DB Entity under this Contract, including any Retainage which may be payable by MassDOT to the DB Entity pursuant to this Contract.

Permitting or requiring the DB Entity to continue and finish the DB Work or any part thereof after the Substantial Completion shall not act as a waiver of MassDOT's right to receive damages hereunder or any rights or remedies otherwise available to MassDOT.

Damages, to the extent not paid as provided in Section 21.1, shall be payable by the DB Entity to MassDOT within thirty (30) Days after the DB Entity's receipt of an invoice therefore from MassDOT.

SECTION 22.0

LABOR AND EMPLOYMENT REQUIREMENTS

22.1 KEY PERSONNEL; QUALIFICATIONS OF EMPLOYEES

MassDOT shall have the right to review the qualifications of each Person to be appointed to a key position (including Persons employed by Participants or Subcontractors) identified as Key Personnel above and to approve or disapprove the use of such Person in such position prior to the commencement of any DB Work by such Person. The DB Entity shall notify MassDOT in writing of any proposed changes in any Key Personnel. The DB Entity shall not change, or permit any change in, any Key Personnel without the prior written consent of MassDOT.

DB Entity acknowledges that it has identified Persons to fill the Key Personnel roles listed above and that MassDOT has relied upon DB Entity's identification of such Persons in the selection of DB Entity to perform the Work. Such Persons are identified in Exhibit D. In the event that any of the Persons listed on Exhibit D are removed from the Project but remain employed by DB Entity or Subcontractor, then DB Entity shall provide MassDOT with a written explanation for such removal to be approved by MassDOT, whose approval shall not be unreasonably withheld.

22.2 NON-PERFORMING PERSONNEL

All persons performing DB Work shall have the skill and experience and any licenses required to perform the DB Work assigned to them. If MassDOT determines in its sole discretion (in accordance with Section 8.07 of the MassHighway Standard Specifications for Highways and Bridges, 1988 Edition) that any Person employed by the DB Entity, any Participant or any Subcontractor is not performing the DB Work in a proper and skillful manner, then at the written request of MassDOT, the DB Entity shall remove such Person from the Project and such Person shall not be reemployed on the Project without the prior written approval of MassDOT. If such Person is not removed or if the DB Entity fails to ensure that skilled and experienced personnel are furnished for the proper performance of the DB Work, then MassDOT may suspend the affected portion of the DB Work by delivery of written notice of such suspension to the DB Entity. Such suspension shall in no way relieve the DB Entity or the Participant of any obligation contained in the Contract Documents or entitle the DB Entity or the Participant to a Claim or Change Order. Once compliance is achieved, the DB Entity or the Participant shall be entitled to and shall promptly resume the DB Work.

22.3 LABOR HARMONY AND PREVAILING WAGE

The DB Entity shall ensure labor harmony during all phases of the Project, including construction and reconstruction. Among other remedies, failure to maintain labor harmony will be grounds for termination of the DB Contract for default, and if such failure results in delay in completion of the Project, such failure will be grounds for assessment of Liquidated Damages. The DB Entity shall require prevailing wages to be paid for labor performed on the Project in accordance with the requirements of Mass. Gen. L. c. 149, §§ 26-27H, inclusive.

22.4 **RESPONSIBILITY FOR EMPLOYEES AND SUBCONTRACTORS**

The DB Entity shall supervise and be responsible for acts and omissions of the DB Entity's employees, agents, officers and Subcontractors and other Persons performing portions of the DB Work, as though all such Persons were directly employed by the DB Entity.

22.5 SUBCONTRACTS

Any subcontract must first be approved by MassDOT. Subletting of any portion of the Contract shall be done in conformance with Section 8.00 Prosecution and Progress, of the 1988 Standard Specifications for Highways and Bridges.

Each instrument evidencing any agreement of the DB Entity or any Participant with any Subcontractor shall provide, in terms and in form and substance satisfactory to MassDOT, that:

- a. The rights of the DB Entity or the Participant (as appropriate) under such instrument are assigned to MassDOT contingent only upon written request from MassDOT or its successor or assign following default by the DB Entity or such Participant or termination or expiration of this DB Contract; and
- b. All warranties (express and implied) of such Subcontract shall inure to the benefit of MassDOT.

The DB Entity shall provide MassDOT with a list of all Subcontracts for the Project from time to time upon request, and shall allow MassDOT access to all Subcontracts and records regarding Subcontracts, the DB Entity shall deliver to MassDOT, within ten (10) Days after execution, reasonably redacted copies of all Subcontracts and, within ten (10) Days after receipt of a request therefore from MassDOT, reasonably redacted copies of all other contracts or documents as may be requested.

22.6 SPECIAL PROVISIONS FOR RIGHT-TO-KNOW ACT REQUIREMENTS (JANUARY 1986, DOCUMENT 00710)

The DB Entity's attention is directed to Massachusetts General Laws, Chapter 111F, commonly known as the Right-To-Know Act, and to the regulations promulgated pursuant thereto. Among the provisions of the Right-To-Know Act is a requirement that employers make available to employees Materials Safety Data Sheets (MSDS) for any substance on the Massachusetts Substance List (MSL) to which employees are, have been, or may be exposed.

To ensure prompt compliance with these regulations and legislation, the DB Entity shall:

- a. Deliver to MassDOT, prior to the start of any work under this contract, copies of MSDS for all MSL substances to be used, stored, processed or manufactured at the worksite by the DB Entity.
- b. Train employees of MassDOT, who may be exposed to MSL substances as a result of the DB Entity's work under this contract, with regard to those specific substances in accordance with requirements of the Right-To-Know Act.
- c. Observe all safety precautions recommended on the MSDS for any MSL substance to be used, stored, processed, or manufactured at the worksite by the DB Entity.

d. Inform MassDOT in writing regarding specific protective equipment recommended in the MSDS for MSL substances to which employees of MassDOT may be exposed as a result of the DB Entity's work under this contract.

MassDOT shall not be liable for any delay or suspension of work caused by the refusal of its employees to perform any work due to the DB Entity's failure to comply with the Right-To-Know Act. The DB Entity agrees to hold MassDOT or the Secretary of MassDOT harmless and fully indemnified for any and all claims, demands, fines, actions, complaints, and causes of action resulting from or arising out of the DB Entity's failure to comply with the requirements of the Right-To-Know Act.

22.7 STATE LABOR AND WAGE REQUIREMENTS

The DB Entity shall comply with the provisions of MassHighway standard Special Provisions 00860 and 00861 attached hereto in Exhibit O.

SECTION 23.0

VALUE ENGINEERING

The DB Entity at any time may submit cost reduction or value/quality improvement proposals which may change the drawings, specifications or other requirements of the Contract Documents. Such a proposal shall be identified as a Value Engineering Change Proposals ("VECP"). In order for a proposal to be accepted under this Section, each VECP shall:

- Be initiated and originated by the DB Entity. In the event the DB Entity's proposal encompasses proposals which have been considered, identified or initiated by MassDOT, the DB Entity's proposal may be determined as ineligible for an equitable adjustment under this Section;
- Be identified by the DB Entity at the time of submission as submitted pursuant to this Section;
- c. Require a change to the Contract Documents;
- d. Decrease the Contract Price or improve value or service at no increase or some increase in cost.

Any VECP the DB Entity submits shall be in sufficient detail to clearly define the proposed change, including:

- a. A description of the difference between the existing and the proposed Contract requirements, and the comparative advantages and disadvantages of each;
- b. Contract requirements that are recommended to be changed if the proposal is accepted;
- c. A detailed estimate of the amount of the net savings, as defined below, that will result from acceptance of the proposal; and
- d. A statement of the time by which the proposal must be accepted so as to obtain the maximum Price reduction, noting any effect upon the Contract completion time.
- e. Information on the effect of the proposal on contract duration (if any).

MassDOT may accept or reject part or all of any VECP by giving the DB Entity written notice thereof. Until such notice is issued, the DB Entity shall remain obligated to perform in accordance with the terms of the Contract Documents. VECPs will be processed expeditiously; however, MassDOT shall not be liable for any delay in acting upon any proposal submitted pursuant to this Section. The decision of MassDOT as to acceptance of any such proposal shall be final.

The DB Entity has the right to withdraw part or all of any VECP at any time prior to acceptance by MassDOT.

When a VECP submitted pursuant to this Section is accepted, it shall be executed and delivered as a Change Order under Section 17.

The net savings resulting from the change shall be shared between the DB Entity and MassDOT on the basis of fifty percent (50%) for the DB Entity and fifty percent (50%) for MassDOT. Net savings shall be determined by deducting from the gross savings the DB Entity's costs of developing and implementing the proposal and the amount of increased costs to MassDOT resulting from the change.

SECTION 24.0

COOPERATION AND COORDINATION WITH OTHER CONTRACTORS AND LOCAL AGENCIES

24.1 COOPERATION WITH OTHER CONTRACTORS

MassDOT reserves the right to contract with other contractors for performing additional work on or near the Right-of-Way. The DB Entity shall cooperate with such other contractors to the extent reasonably necessary for the performance by such other contractors of their work, and shall cause its employees, agents, officers and Subcontractors and other Persons for whom the DB Entity may be contractually or legally responsible to so cooperate. If other separate contracts are awarded by MassDOT which affect the DB Work, the DB Entity shall conduct its DB Work without interfering with or hindering the progress or completion of the work being performed by other contractors.

24.2 INTERFERENCE BY OTHER CONTRACTORS

If the DB Entity asserts that any of MassDOT's other contractors have hindered or interfered with the progress or completion of the DB Work, then the DB Entity's remedy shall be to seek recourse against such other construction contractors as per Section 5.06 of the MassHighway Standard Specifications for Highways and Bridges, 1988 Edition. To the extent legally necessary, MassDOT will assign its right to pursue claims against other contractors in the name of MassDOT to the DB Entity. MassDOT agrees that it shall include provisions similar to this Section 24 in any other construction contracts which interface with the Project. Notwithstanding the foregoing, if the DB Entity asserts that any hindrance or interference by MassDOT's other construction contractors satisfies the definition of an occurrence entitling the DB Entity to a Change Order (in which case such hindrance or interference shall be a MassDOT-Caused Delay), the DB Entity may pursue the rights and remedies set forth in Section 17.

24.3 COORDINATION WITH LOCAL AGENCIES AND OWNERS OF PROPERTY

The DB Entity shall coordinate with Local Agencies and with owners of property adjoining the Project, as more particularly described in this DB Contract.

SECTION 25.0

[RESERVED]

SECTION 26.0

DB ENTITY REPRESENTATIONS AND WARRANTIES

26.1 GENERAL

The DB Entity warrants that:

- a. The DB Entity has and throughout the term of this Contract shall maintain all required authority, license status, professional ability, skills and capacity to perform the DB Entity's obligations hereunder and shall perform them in accordance with the requirements contained in the Contract;
- b. The DB Entity has evaluated the feasibility of performing the DB Work within the deadlines specified herein and for the DB Price, without relying on any matter other than the Contract Documents, and has reasonable grounds for believing and does believe that such performance (including achievement of Substantial Completion by the Completion Deadline for the DB Price) is feasible and practicable;
- c. All DB Work shall conform to all professional engineering principles and construction standards generally accepted as standards of the industry in the Commonwealth and shall be free of errors and omissions and Design Exceptions not previously approved by MassDOT in accordance with the Contract Documents;
- d. Each Person executing this Contract or any other Contract Documents on behalf of the DB Entity has been or will at such time be duly authorized to execute each such document on behalf of the DB Entity;
- e. The DB Entity has taken or caused to be taken all requisite action to authorize the execution and delivery of, and the performance of its obligations under, this Contract and the other Contract Documents;
- f. There is no action, suit, proceeding, investigation or litigation pending and served on the DB Entity which challenges the DB Entity's authority to execute, deliver or perform, or the validity or enforceability of, this Contract and the other Contract Documents to which the DB Entity is a party, or which challenges the authority of the DB Entity's Authorized Representative executing this Contract or the other Contract Documents, and the DB Entity has disclosed to MassDOT any pending and unserved or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which the DB Entity is aware;
- g. Except where the defect is inherent in the specification, the Project shall be free of defects, including design defects, errors and omissions, and shall be free of Design Exceptions not previously approved by MassDOT in accordance with the Contract Documents;
- h. The Facility shall be fit for use for its intended functions;
- i. Construction of the Project shall be performed in a workmanlike manner using materials and equipment of good quality; and
- j. The DB Work shall meet all of the requirements of the Contract Documents;
- k. The DB Entity owns, or will own, and has, or will have, good and marketable title to all materials, equipment, tools and supplies furnished, or to be furnished, by it and its

Subcontractors that become part of the Project or the Facility, or are purchased for the operation, maintenance or repair thereof, free and clear of all Liens.

26.2 WARRANTY PERIOD

With respect to plant materials and landscaping, the DB Entity's warranties shall remain in effect until three (3) years after Final Acceptance. If MassDOT determines that any of the DB Work has not met the standards set forth in this Section 26, at any time during the warranty period for such DB Work, then the DB Entity shall correct such DB Work as specified below, even if the performance of such corrective work extends beyond the stated warranty period.

26.3 WARRANTY COSTS

All costs of correcting rejected DB Work pursuant to Section 26.2, including additional testing and inspections, shall be deemed included in the DB Price. The DB Entity shall reimburse MassDOT or pay MassDOT's expenses made necessary thereby within 10 Days after the DB Entity's receipt of invoices therefore. Any disagreement relating to this Section 26 shall be subject to the dispute resolution provisions contained in Section 28, provided that the DB Entity shall proceed as directed by MassDOT pending resolution of the dispute.

26.4 APPLICABILITY OF WARRANTIES TO RE-DONE DB WORK

The DB Entity's warranties shall apply to all DB Work redone pursuant to the terms of this Contract and Contract Documents. The DB Entity's warranty for re-done elements of the DB Work shall extend beyond the original warranty period if necessary to provide a one-year warranty period following acceptance of re-done DB Work.

26.5 SUBCONTRACTOR WARRANTIES

Without in any way derogating the DB Entity's own representations and warranties (including the warranties contained in this Section 26 and other obligations with respect to all of the DB Work), the DB Entity shall obtain from all Subcontractors and cause to be extended to MassDOT appropriate representations, warranties (for periods at least co-extensive in duration with the DB Entity's warranties for such DB Work), guarantees and obligations with respect to design, materials, workmanship, equipment, tools and supplies furnished by such Subcontractors (a) shall be written so as to survive all inspections, tests and approvals hereunder, and (b) shall run directly to and be enforceable by the DB Entity, MassDOT and/or their respective successors and assigns. The DB Entity hereby assigns to MassDOT all of the DB Entity's rights and interest in all extended warranties for periods exceeding the applicable warranty period which are received by the DB Entity from any of its Subcontractors.

Upon receipt from MassDOT of notice of a failure of any of the DB Work to satisfy any Subcontractor warranty, representation, guarantee or obligation, the DB Entity shall be responsible for enforcing or performing any such representation, warranty, guaranty or obligation, in addition to the DB Entity's other obligations hereunder. MassDOT's rights under this Section 26 shall commence at the time such representation, warranty, guaranty or obligation is furnished and shall continue until the expiration of the DB Entity's relevant warranty (including extensions for redone DB Work). Until such expiration, the cost of any equipment, material, labor (including re-engineering) or shipping shall be for the account of

the DB Entity if such cost is covered by such a warranty and the DB Entity shall be required to replace or repair defective equipment, material or workmanship furnished by Subcontractors.

26.6 NO LIMITATION OF LIABILITY

The foregoing warranties are in addition to all rights and remedies available under the Contract Documents or applicable Law, and shall not limit the DB Entity's liability or responsibility imposed by the Contract Documents or applicable Law with respect to the DB Work, including liability for design defects, latent construction defects, strict liability, negligence or fraud.

26.7 DAMAGES FOR BREACH OF WARRANTY

If the DB Entity fails or refuses to provide the warranty remedy described in this Section 26, notwithstanding a valid request by MassDOT, the DB Entity shall be liable for the cost of performance of the warranty work by others.

SECTION 27.0

INDEMNIFICATION AND RELEASES

27.1 INDEMNIFICATIONS BY THE DB ENTITY

The DB Entity shall release, defend, indemnify and hold harmless the Massachusetts Department of Transportation, and its successors and assigns and its shareholders, officers, directors, agents and employees (collectively referred to in this Section 27 as the Indemnified Parties) from and against any and all claims, demands, liabilities, judgments, penalties, costs, expenses and damages, including personal injury, property damages and natural resource damages, and including attorney and expert consultant fees and costs incurred, arising out of, relating to or resulting from:

- a. The breach or alleged breach of the Contract Documents by the DB Entity, its employees, agents, officers or Subcontractors or any other Persons performing any of the DB Work for whom the DB Entity may be contractually or legally responsible;
- b. The failure or alleged failure by the DB Entity or its employees, agents, officers or Subcontractors or any other Persons for whom the DB Entity may be contractually or legally responsible, to comply with any applicable Laws, including Environmental Laws in performing the DB Work or undertaking any Contract activities;
- c. Any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions in performance of the DB Work or undertaking any Contract activities under the Contract Documents, or arising out of any use in connection with the Project or any development of methods, processes, designs, information, or other items furnished or communicated to MassDOT or another Indemnified Party pursuant to the Contract Documents, provided that this indemnity shall not apply to any infringement resulting from MassDOT's failure to comply with specific written instructions regarding use provided to MassDOT by the DB Entity;
- d. The alleged error, omission, negligent act or willful misconduct of the DB Entity, its employees, agents, officers or Subcontractors or any other Persons performing any of the DB Work or undertaking any Contract activities, for whom the DB Entity may be contractually or legally responsible;
- e. Any and all claims by any governmental or taxing authority claiming taxes based on gross receipts, purchases or sales, the use of any property or income of the DB Entity or any of its subcontractors or any of their respective agents, officers or employees with respect to any payment for the DB Work made to or earned by the DB Entity or any of its Subcontractors or any of their respective agents, officers or employees under the Contract Documents;
- f. Any and all stop notices and/or Liens filed in connection with the DB Work, including all expenses and attorneys' fees incurred in discharging any stop notice or Lien, provided that MassDOT is not in default in payments owing to the DB Entity with respect to such DB Work;
- g. Any Release(s) of Hazardous Materials attributable to the negligence, willful misconduct, or breach of contract by the DB Entity or any of its officers, employees, agents, Subcontractors, visitors, or any other persons for whom the DB Entity has responsibility;
 (ii) the Release of any Hazardous Materials caused to be present on the Right-of-Way or

elsewhere by the DB Entity or any of its officers, employees, agents, subcontractors, visitors, or any other persons for whom the DB Entity has responsibility regardless of whether those are the persons who actually caused the Release and regardless of the cause for the Release; or (iii) any Hazardous Materials Management, including assessment, containment or remediation, conducted in connection with or required for the purpose of any development;

- h. The claim or assertion by contractors of inconvenience, disruption, delay or loss caused by interference of the DB Entity (or its employees, agents, officers or Subcontractors or any other Persons for whom the DB Entity may be contractually or legally responsible) with or hindering the progress or completion of work being performed by other contractors relating to the Project, or failure of the DB Entity or its employees, agents, officers or Subcontractors or any other Persons for whom the DB Entity may be responsible to cooperate reasonably with other contractors in accordance with the requirements of the Contract Documents; or
- i. Any claim, demand or cause of action brought against MassDOT in connection with the Project or the DB Work, resulting from any action of the DB Entity or failure of the DB Entity to comply with the requirements of the Contract Documents.

Subject to Section 27.1, the DB Entity shall release, defend, indemnify and hold harmless the Indemnified Parties from and against any and all claims, damages, losses, liabilities and costs, including attorneys' fees, arising out of, relating to or resulting from errors, omissions, inconsistencies or other defects in MassDOT-Supplied Design, regardless of whether such errors, omissions, inconsistencies or defects were also included in MassDOT-Supplied Design or RFP Documents.

27.2 **RESTRICTIONS**

The DB Entity's indemnity obligations hereunder shall not extend to any loss, damage or expense incurred by an Indemnified Party to the extent caused by:

- a. The reckless or willful misconduct, bad faith or fraud of such Indemnified Party or its agents, servants or independent contractors who are directly responsible to such Indemnified Party, or
- b. Any defect inherent in prescriptive design or construction specifications included in the Contract Documents, provided the DB Entity complied with such standard and did not actually know of its deficiency or, if the DB Entity actually knew of its deficiency, unsuccessfully sought MassDOT's waiver of or approval of a deviation from such standard; or
- c. MassDOT's material breach of any of its obligations under the Contract Documents.

Such indemnities shall not be construed to effect any extension of statutes of limitations otherwise applicable to causes of action for breach of contract held by MassDOT against the DB Entity.

27.3 EMPLOYEE CLAIMS

In claims by an employee of the DB Entity, Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 27.1 shall not be limited by a limitation on the amount or type of

damages, compensation or benefits payable by or for the DB Entity or a Subcontractor under workers' compensation, disability benefit or other employee benefits laws.

27.4 RELEASE

To the maximum extent permitted by Law, the DB Entity hereby releases and discharges MassDOT from any and all duty and obligation to cause permitting, Right-of-Way acquisition, Utility Relocation, construction, equipping, operations, maintenance, policing, renewal, replacement, traffic management or other management of or for the Project or Right-of-Way to satisfy the standards and requirements set forth in the Contract Documents, except for MassDOT's duties and responsibilities expressly set forth in the Contract Documents.

27.5 NO RELIEF FROM RESPONSIBILITY

No rights of MassDOT described in Section 27.1 above, no exercise or failure to exercise such rights, no failure of MassDOT to meet any particular standard of care in the exercise of such rights, no issuance of permits or certificates of completion or acceptance and no Final Acceptance shall:

- relieve the DB Entity of its responsibility for the selection and the competent performance of all Subcontractors, architects, engineers and other consultants (except those hired by MassDOT);
- b. relieve the DB Entity of any of its obligations or liabilities under the Contract Documents;
- c. be deemed or construed to waive any of MassDOT's rights and remedies under the Contract Documents; or
- d. be deemed or construed as any kind of representation or warranty, express or implied, by MassDOT.

Except as set forth in Section 19.1, the DB Entity shall not be entitled to, and waives all right to recover, indirect, incidental or consequential damages, including lost profits, whether such damages arise in contract, tort or other legal theory and irrespective of fault, negligence or strict liability.

MassDOT's obligations and liabilities are strictly limited to those set forth in the Contract Documents and the DB Entity shall not have, may not assert, and waives any Claim against MassDOT based on any supposed or alleged duties arising in tort other than gross negligence, reckless misconduct or fraud; and MassDOT's payment of any monetary damages or other compensation or award hereunder shall be conditioned upon legislative appropriation of the payment to the DB Entity.

27.6 RIGHT TO RELY

Notwithstanding the provisions of Sections 27.3 and 27.4 above: (a) the DB Entity shall be entitled to rely on specific written deviations MassDOT gives under this Contract; (b) MassDOT is not relieved from any liability arising out of a knowing, intentional misrepresentation under any written statement MassDOT delivers; and (c) MassDOT is not relieved from its obligations under the Contract Documents. The DB Entity's sole remedy for damages resulting from this Section 27.6(a) – (c) is to initiate a Request for Change Order under Section 17.

SECTION 28.0

DISPUTE RESOLUTION

28.1 MANDATORY NATURE OF PROCESS

All Disputes between the DB Entity and MassDOT (or, as provided by Section 28.7 below, between the DB Entity's Subcontractors and MassDOT) shall be resolved as provided by this Section 28.

28.2 DEMANDS AND DISPUTES; DISPUTES GOVERNED BY THIS SECTION; PRIORITIES

A Demand is any written request for relief in any form arising out of or relating to the Contract Documents or the Project, including all contract claims, statutory claims, equitable claims, and claims for extension of time. Section 28.1 through Section 28.8 shall only apply to, and the MassDOT Claims Committee shall only have the authority to consider, claims that arise between the Parties under the Contract Documents, and shall not apply to:

- a. claims that are not actionable against MassDOT by the DB Entity on its own behalf or on behalf of any of its Subcontractors;
- b. claims arising in tort;
- c. claims relating to the scope or applicability of indemnities provided under the Contract Documents;
- d. claims for injunctive relief or equitable remedies; or
- e. claims against insurance companies.

A Demand becomes a Dispute if the DB Entity disagrees with a Final Determination issued by MassDOT pursuant to Section 28.6.2 and proceeds in accordance with Section 28.6.3.

Participation in and completion of this dispute resolution process is a condition precedent to commencement of an administrative proceeding under Law or commencement of a court action as provided in Section 28.8.

All references to Demands or Disputes brought by the DB Entity refer also to Demands or Disputes brought by the DB Entity on behalf of any of its Subcontractors, provided that the additional requirements of Section 28.7 have been met.

28.3 OVERVIEW OF PROCESS

As described below, the dispute resolution process shall involve the following steps, each of which must be taken before the next is available, provided however that MassDOT may submit claims to the Claims Committee at any time and that the parties may, by mutual agreement, submit their dispute to mediation or other alternative dispute resolution ("ADR") process, at any time:

- a. informal efforts will be made to resolve issues presented by a Demand through negotiations between the parties;
- b. if the Demand is not resolved in negotiation, MassDOT will issue a Final Determination on the issues presented; and
- c. if the DB Entity is not satisfied with MassDOT's Final Determination, the DB Entity may submit the Dispute to the Claims Committee.
- d. If the DB Entity is not satisfied with the resolution of the Dispute by the MassDOT Claims Committee, the Dispute may be submitted to the MassDOT Administrative Law Judge or to Superior Court for further consideration.

28.4 CONTINUATION OF DB WORK

At all times during this dispute resolution process or any subsequent administrative or court proceeding, the DB Entity and all Subcontractors shall proceed with the DB Work diligently, without delay, in accordance with the DB Contract, and as directed by MassDOT. In addition, all parties shall continue to comply with all provisions of the Contract Documents.

28.5 RECORDS RELATED TO DISPUTE

Throughout the course of any work that is the subject of any Demand or Dispute, the DB Entity shall keep complete records of the extra costs and time incurred related to the Dispute. These records shall be retained for a period of not less than seven (7) years from the date of resolution of the Dispute.

28.6 DISPUTE RESOLUTION: PRE-CLAIMS COMMITTEE PROCESS

28.6.1 Notice of Demand

If the DB Entity disagrees with anything required in any written or oral order from MassDOT, including any direction, instruction, interpretation, or determination by MassDOT, including determinations on PCOs or Requests for Change Orders (including without limitation default determinations resulting from MassDOT's failure to issue a Change Order decision within 135 Days), the DB Entity shall deliver to MassDOT promptly, but not more than ten (10) Days after learning of the disagreement, either:

- a. a signed Demand; or
- b. an immediate oral notification of a potential Demand which is confirmed by a signed Demand within seven (7) Days.

At a minimum, the Demand must include the following information:

- a. the nature and circumstances of the Demand;
- b. the Contract Document provisions relevant to the Demand;
- c. the estimated dollar cost, if any, of the work in dispute; and
- d. an analysis of the impact, if any, that an outcome favoring the DB Entity would have on the Project Schedule.

If the Demand is related to MassDOT's denial of a PCO or Request for Change Order, then the Demand must include an update of the information previously submitted.

The DB Entity shall also provide any additional information, at MassDOT's request, that MassDOT determines is necessary for its evaluation of the Demand. Failure to provide notice in accordance with this Section 28.6.1 shall constitute a waiver of all claims in any way related to the disagreed upon work provided that MassDOT is prejudiced by any such failure or delay.

Notwithstanding the foregoing the DB Entity may, but shall not be required to, submit a Demand to MassDOT prior to exhaustion of the Change Order procedure set forth in Section 17. However, in no event shall the DB Entity claim be deemed to be waived until at least seven (7) Days after exhaustion of the Change Order procedures set forth in Section 17.

28.6.2 Negotiation; Response to Demand

Upon receipt of a Demand, the Parties shall attempt to resolve the issue(s) presented through negotiations between MassDOT and the DB Entity's authorized representatives. The two parties shall meet in good faith promptly after the time that a Demand under Section 28.6.1 is made (or such other time as may be agreed to by the Parties). There shall be at least one meeting to attempt a resolution through negotiation, which shall be continued upon agreement by all parties.

Within fourteen (14) Days following the conclusion of these negotiations, if agreement is not reached, MassDOT shall issue a Final Determination on the matters under dispute. If MassDOT determines that the Demand is valid, MassDOT shall take steps to address the issues presented by the Demand as appropriate, including the execution of a Change Order. The Determination must be in writing, or, if oral, confirmed in writing within seven (7) Days of the oral determination.

28.6.3 Appeal to MassDOT's Claims Committee

Within fourteen (14) Days after the receipt date of MassDOT's Final Determination denying a Dispute or within 135 Days of filing a Demand, if no extension is agreed to by the parties, whichever occurs first, the DB Entity may file an Appeal with MassDOT's Chief Engineer to request review and hearing before MassDOT's Claims Committee. The DB Entity shall also provide any additional information, at MassDOT's request, that MassDOT's Claims Committee determines is necessary for its evaluation of the Demand or Dispute. The DB Entity's Demand or Dispute information must be enhanced to include sufficient description and information to enable understanding by a third party who has no knowledge of the Dispute or familiarity with the Project and this documentation must also include a description of the efforts undertaken to resolve the Dispute.

The DB Entity shall have the opportunity to present the Dispute at a quarterly meeting of the Claims Committee to be scheduled within a reasonable time after the filing of the Appeal. Within thirty (30) Days after the Claims Committee meeting or receipt of any additional information or documents submitted upon request, whichever is later, the Claims Committee shall issue a recommended decision to the Chief Engineer. The Chief Engineer will provide to the DB Entity a written decision of the Chief Engineer on each Dispute summarizing the reason(s) for the decision.

Pending a final judicial resolution of a controversy or claim, the DB Entity shall proceed diligently with the performance of the Contract in a manner consistent with the determination of the Chief Engineer.

28.7 CLAIMS AGAINST CONTRACTORS FOR PAYMENT OF LABOR, MATERIALS AND OTHER PURPOSES.

The DB Entity shall pay all bills for labor, materials, rental of equipment and for such other purposes as set forth in M.G.L. c. 149, Section 29 and M.G.L. c. 30, Section 39A, General Laws, and all amendments thereto. It is understood that the Payment Bond required by Subsection 12.1 is the sole security for petitions brought pursuant to said sections. The DB Entity and MassDOT shall also comply with the provisions of M.G.L. c. 30, Sections 39F and G.

28.8 SUBSEQUENT PROCEEDINGS

28.8.1 Exclusive Jurisdiction and Venue

The DB Entity may, at its election, submit the Dispute to the MassDOT Administrative Law Judge ("ALJ") or Superior Court for further consideration. The DB Entity agrees that either on appeal of a decision from the ALJ or on direct appeal, the exclusive jurisdiction and venue for any legal action or proceeding, at Law or in equity, arising out of or relating to the Contract Documents or the Project, shall be the Superior Court Department of the Commonwealth of Massachusetts in the County of Suffolk. The DB Entity waives all objections it might have to the jurisdiction or venue of such court and hereby consents to such jurisdiction, regardless of the DB Entity's residence or domicile, for any such action or proceeding. This Section 28.8 does not relieve DB Entity's obligation to submit the Dispute to Superior Court within the applicable statutes of limitations or repose and MassDOT does not hereby waive its rights to assert defenses based upon such statutes.

28.8.2 Admissibility of Claims Committee Proceedings

The admissibility, in any administrative or judicial proceeding subsequent to this Dispute resolution process, of the parties' submittals, the Claims Committee's official records (including its findings and recommendations), and MassDOT's Final Determination shall be in the discretion of the appropriate administrative officer or the Superior Court in accordance with applicable rules of Law.

SECTION 29

DOCUMENTS AND RECORDS

29.1 REPORTING REQUIREMENTS

The DB Entity shall deliver to MassDOT financial and narrative reports, statements, certifications, budgets and information as and when required under the Contract.

The DB Entity shall ensure that MassDOT receives, as and when produced or received, all financial, narrative, consultant and other reports, statements, certifications, budgets and information which the DB Entity produces or causes to be produced. In addition, the DB Entity shall furnish or cause to be furnished to MassDOT such information and statements as MassDOT may reasonably request from time to time for any purpose related to the Project, this Contract or the other Contract Documents.

29.2 MAINTENANCE OF, ACCESS TO AND AUDIT OF RECORDS

The DB Entity shall maintain at its Project Administration Office a complete set of all books and records prepared or employed by the DB Entity in its management, scheduling, cost accounting and other activities related to the Project. The DB Entity shall grant to MassDOT such audit rights and shall allow MassDOT such access to and the right to copy such books and records as MassDOT may request in connection with the issuance of Change Orders, the resolution of disputes, and such other matters as MassDOT reasonably deem necessary for purposes of verifying compliance with this Contract and applicable Law.

Where the payment method for any DB Work is on a time and materials basis, such examination and audit rights shall include all books, records, documents and other evidence and accounting principles and practices sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of such DB Work. If an audit indicates the DB Entity has been overcredited under a previous progress report or progress payment that overcredit will be credited against current progress reports or payments.

For cost and pricing data submitted in connection with pricing Change Orders, (unless such pricing is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the public, or prices set by Law or regulation), MassDOT and its representatives shall have the right to examine all books, records, documents and other data of the DB Entity related to the negotiation of or performance of DB Work under such Change Orders for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. Such right of examination shall extend to all documents deemed necessary by MassDOT and its representative to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

Additional audit requirements are set forth in the Standard Specifications.

29.3 RETENTION OF RECORDS

The DB Entity shall maintain all records and documents relating to the DB Work (including copies of all original documents delivered to MassDOT) for seven (7) years after MassDOT Final Acceptance or termination date, as applicable. The DB Entity shall notify MassDOT where such records and documents are kept. Notwithstanding the foregoing, all records which relate to Demands being processed or actions brought under the dispute resolution provisions of Section 28 shall be retained and made available until such actions and Demands have been finally resolved. Records to be retained include all books and other evidence bearing on the DB Entity's costs under the Contract Documents. The DB Entity shall make these records and documents available for audit and inspection to MassDOT, at the DB Entity's office, at all reasonable times, without charge, and shall allow such Persons to make copies of such documents (at no expense to the DB Entity). If approved by MassDOT, photographs, microphotographs or other authentic reproductions may be maintained instead of original records and documents.

29.4 PUBLIC RECORDS ACT

29.4.1 Acknowledgement

The DB Entity acknowledges and agrees that all records, documents, drawings, plans, specifications and other materials in MassDOT's possession, including materials submitted by the DB Entity, are subject to the provisions of the Massachusetts Public Records Law (Mass. Gen. L. c. 66, § 10). The DB Entity shall be solely responsible for all determinations made by it under such Law, and for clearly and prominently marking each and every page or sheet of materials with Trade Secret or Confidential as it determines to be appropriate. The DB Entity is advised to contact legal counsel concerning such Law and its application to the DB Entity.

29.4.2 Disclosure of Trade Secret or Confidential Record

If any of the materials submitted by the DB Entity to MassDOT are clearly and prominently labeled Trade Secret or Confidential by the DB Entity, MassDOT will endeavor to advise the DB Entity of any request for the disclosure of such materials prior to making any such disclosure. Under no circumstances, however, will MassDOT be responsible or liable to the DB Entity or any other Person for the disclosure of any such labeled materials, whether the disclosure is required by Law, or court order, or occurs through inadvertence, mistake or negligence on the part of MassDOT, except for any disclosure of trade secrets or proprietary information in violation of Section 29.4 1.

To the extent that either party deems any records, documents, drawings, plans, specifications and other materials generated, received or stored in connection with this DB Contract to be Sensitive Security Information (SSI) and exempt from public disclosure under federal or state law, including but not limited to 49 CFR 1520 et seq. and M.G.L. c. 4, §7 (26)(n), then the party asserting the designation shall mark such information as SSI and both parties shall protect such SSI from public disclosure.

29.4.3 Litigation

In the event of litigation concerning the disclosure of any material submitted by the DB Entity to MassDOT, MassDOT's sole involvement will be as a stakeholder retaining the material

until otherwise ordered by a court, and the DB Entity shall be fully responsible for otherwise prosecuting or defending any action concerning the materials at its sole cost and risk.

29.5 ACCOUNTING RECORDS

The DB Entity shall maintain accounting records and other verifiable evidence pertaining to the costs it incurs on this Project. The DB Entity shall also require its subcontractors to maintain accounting records and other verifiable evidence pertaining to the costs they incur on this Project. These data will be made available for inspection by MassDOT and the Federal Representative, if appropriate, or any authorized representative, at all reasonable times at the office of the DB Entity and any subcontractor during the Contract period and for seven (7) years following the date of the final payment to the DB Entity and copies thereof shall be furnished as requested.

SECTION 30 GOVERNING LAW; COMPLIANCE WITH LAW AND REFERENCE STANDARDS

30.1 MASSACHUSETTS LAW

This Contract shall be governed and construed in accordance with the laws of The Commonwealth of Massachusetts.

30.2 COMPLIANCE WITH DESIGN BUILD STATUTE AND OTHER LAWS

The DB Entity shall comply with, and ensure that all Subcontractors comply with, all requirements of all applicable Laws, including:

- a. M.G.L. c. 149A §§ 14-21,
- b. Federal Requirements, and
- c. All applicable Environmental Laws.

30.3 COMPLIANCE WITH REFERENCED STANDARDS

The DB Entity shall ensure that the Project meets the Massachusetts Highway Department Standard Specifications as modified for the Project except to the extent that the Contract Documents specifically allow exceptions therefrom. The DB Entity shall also ensure that the Project meets all other applicable Referenced Standards.

SECTION 31 MISCELLANEOUS

31.1 AMENDMENTS TO CONTRACT DOCUMENTS

Any change to this Contract and cost and/or time as detailed in this Contract, the Proposal, the Proposal Addendum, if applicable, and the Project Requirements, shall be in writing, approved by endorsement of appropriate DB Entity and MassDOT representatives, and further approved by the Federal Representative, if federally funded. Upon such full execution, the letter shall become a supplement to this Contract.

If any provisions of the Contract Documents are rendered obsolete or ineffective in serving their purpose by Change in Law, passage of time, financing requirements or other future events or circumstances, MassDOT and the DB Entity agree to negotiate in good faith appropriate amendments to or replacements of such provisions in order to restore and carry out the original purposes thereof to the extent practicable; provided, however, that neither party is obligated to agree to any amendment or replacement which would reduce its rights or enlarge its responsibilities under the Contract Documents in any material respect.

31.2 WAIVER

No waiver by any party of any right or remedy under any Contract Document shall be deemed to be a waiver of any other or subsequent right or remedy under the other Contract Documents. The consent by one party to any act by the other party requiring such consent shall not be deemed to render unnecessary the obtaining of consent to any subsequent act for which consent is required, regardless of whether similar to the act for which consent is given.

No act, delay or omission done, suffered or permitted by one party or its agents shall be deemed to waive, exhaust or impair any right, remedy or power of such party under any Contract Document, or to relieve the other party from the full performance of its obligations under the Contract Documents. No custom or practice between the Parties in the administration of the terms of the Contract Documents shall be construed to waive or lessen the right of a party to insist upon performance by the other party in strict compliance with the terms of the Contract Documents.

No waiver of any term, covenant or condition of the Contract Documents shall be valid unless in writing and signed by the obligee party.

31.3 RELATIONSHIP OF PARTIES

The relationship of the DB Entity to MassDOT shall be one of an independent contractor, not an agent, partner, joint venturer, or employee. Officials, employees and agents of the DB Entity shall in no event be considered employees, agents, partners or representatives of MassDOT.

31.4 ASSIGNMENT

Subject to the limitations of this Section 31.4 the Contract Documents shall be binding upon and shall inure to the benefit of the Parties hereto and their respective legal representatives,

successors and permitted assigns, and wherever a reference in any Contract Document to any of the parties thereto, such reference also shall be deemed to include, wherever applicable, a reference to the legal representatives, successors and permitted assigns of such party, as if in every case so expressed.

The DB Entity shall not, without the prior written consent of MassDOT, voluntarily or involuntarily assign, convey, transfer, pledge, mortgage or otherwise encumber its rights or interests under the Contract Documents.

MassDOT may transfer and assign its interests in the Project, this Contract and any other Contract Document to any other public agency or public entity as permitted by Law, provided that the successor or assignee has assumed all of MassDOT's obligations, duties and liabilities under the Contract Document then in effect, and has provided the DB Entity with reasonable assurance of its legal and financial authority to honor and perform the same.

31.5 DESIGNATION OF REPRESENTATIVES

MassDOT and the DB Entity shall each designate an Authorized Representative who shall be authorized to make decisions and bind MassDOT and the DB Entity on all matters relating to the Contract Documents except insofar as such authority may be limited by the particular provision or the delegation of such authority in accordance with this Section 31.5. Section 31.17, including Table 31.1 hereto provides the initial designations of Authorized Representatives. Such designations may be changed by a subsequent writing delivered to the other party in accordance with Section 31.17.

31.6 NO GIFT OR DEDICATION

Nothing contained in this Contract shall be deemed to be a gift or dedication of any portion of the Project, Right-of-Way or DB Work to MassDOT or the general public or for any public use or purpose whatsoever, or be deemed to create any rights in the Project, Right-of-Way or DB Work except as expressly set forth herein.

The DB Entity shall not, other than as provided by Law, directly or indirectly, give, offer or promise anything of value, as defined in Mass. Gen. L. c. 268A, to any present or former state employee, for or because of any official act performed or to be performed by such employee or person selected to be such employee.

The DB Entity acknowledges that certain of its employees may be deemed to be special state employees under the applicable provisions of Mass. Gen. L. c. 268A, and that such employees shall be subject to the standards of conduct and conflict of interest provisions which pertain to such employees as set forth therein.

31.7 CONFLICT OF INTEREST

Each prospective DB Entity team member is advised that its performance of work for MassDOT may, at any time, raise questions about real or perceived conflicts of interest because of prospective team member's relationship to other entities or individuals, including without limitation: (1) private and public owners of properties that abut or may be affected by the Project, and/or (2) other state-created entities with potentially conflicting interests and/or concerns. Accordingly, MassDOT reserves the right to:

- Disqualify any prospective DB Entity team member or reject any proposal at any time solely on the grounds that a real or perceived legal or policy conflict of interest is presented,
- Require any prospective DB Entity team member to take any action or supply any information necessary to remove the conflict, including without limitation, obtaining an opinion from the State Ethics Commission, or
- Terminate any contract arising out of this solicitation if, in the opinion of MassDOT, any such relationship would constitute or have the potential to create a real or perceived conflict of interest that cannot be resolved to the satisfaction of MassDOT.

In addition, representatives and/or employees of the successful prospective DB Entity shall be required to agree to certify from time to time, in a form approved by MassDOT, that in connection with work under this Contract, they are in full compliance with the provisions of Chapter 268A of the General Laws and any other applicable conflict of interest laws. The prospective DB Entity agrees to disclose in writing any facts MassDOT may seek in order to resolve questions about potential conflicts of interest occurring during the period of solicitation or performance hereunder and, upon request of MassDOT, supply a full and complete list of its relationships to other entities and individuals. In any such event, the prospective DB Entity shall consult with the Commonwealth's authorized representatives, to learn what action shall be taken to resolve such conflicts and comply with all applicable laws and policies.

31.8 USE OF POLICE AND OTHER POWERS

Nothing in this Contract limits the authority of MassDOT to exercise its regulatory, statutory and police powers granted by Law, including its powers of condemnation with respect to all or any part of the Project, the Right-of-Way and any of the DB Entity's rights hereunder.

31.9 SURVIVAL

All covenants, agreements, representations and warranties made in or pursuant to the Contract Documents shall be deemed continuing and made at and as of the date of each such document and at and as of all other applicable times during the course of the Project. All covenants, agreements, representations and warranties made in or pursuant to the Contract Documents shall survive the expiration or earlier termination thereof and shall not be waived by the execution and delivery of the Contract Documents, by completion of construction, by any investigation by MassDOT or by any other event except a specific written waiver by the party against whom waiver is asserted.

31.10 NO THIRD PARTY BENEFICIARIES

Nothing contained in the Contract Documents is intended or shall be construed as creating or conferring any rights, benefits or remedies upon, or creating any obligations of the Parties hereto toward, any person or entity not a party to the Contract Documents.

31.11 **REVIEW RIGHTS**

MassDOT and the Federal Representative, if appropriate, have the right to review and inspect all Project activities at any time. MassDOT retains the right to conduct security audits.

31.12 RECORD OF DB ENTITY'S PERFORMANCE

The DB Entity shall be rated on performance by MassDOT designated staff as per MassHighway Standard Special Provision 00439, attached hereto in Exhibit O.

31.13 MASSDOT CONTRACTING OFFICER

The person designated to act for MassDOT in administering and monitoring this Contract is designated as the MassDOT Highway Division's District 4 District Highway Director. The DB Entity will be notified by MassDOT in writing in the event a designee or replacement is appointed.

31.14 BENEFICIAL INTERESTS

No member or delegate to the Congress of the United States shall be admitted to any share or part of this Contract or to any benefit arising therefrom.

31.15 NOTICES

Notices under the Contract Documents shall be in writing and: (a) delivered personally; or (b) sent by certified mail, return receipt requested; or (c) sent by a recognized overnight mail or courier service, with delivery receipt requested; or (d) sent by facsimile communication followed by a hard copy and with receipt confirmed by telephone, postage paid to those persons designated by the DB Entity and MassDOT (or to such other persons as may from time to time be specified in writing by such Person).

As to MassDOT:

Patricia Leavenworth, P.E., District Highway Director Massachusetts Highway Department District 4 519 Appleton St. Arlington, MA 02476 Or ATTN: Project Manager

and

Boston Construction Section Massachusetts Highway Department 10 Park Plaza, Room 7520 Boston, MA 02116 ATTN: Mike McGrath

and

Linda Hager Maguire Group Inc. <u>Lhager@maguiregroup.com</u>

As to the DB Entity:

Kevin K. Egan, Executive Vice President J.F. White Contracting Co. 10 Burr Street Framingham, MA 01701

All communications to MassDOT shall be clearly marked on the outermost envelope/container in which the communications are delivered, to identify the Contract and the Project name and location.

These notices include, but are not limited to, notice of termination, provision of the certificate of insurance, issues requiring resolution of a dispute, modifications to this Contract and any general issues concerning the interpretation of this Contract. The DB Entity and MassDOT will notify each other in writing in the event of a change in the identity of either party's designated representative.

Notices shall be deemed received when actually received in the office of the addressee (or by the addressee if personally delivered) or when delivery is refused, as shown on the receipt of the U. S. Postal Service, private carrier or other Person making the delivery.

Notwithstanding the foregoing, notices sent by telefacsimile after 4:00 p.m. Eastern Standard or Daylight Time (as applicable) and all other notices received after 5:00 p.m. shall be deemed received on the first Business Day following delivery (that is, in order for a fax to be deemed received on the same Day, at least the first page of the fax must have been received before 4:00 p.m.). The DB Entity's representatives shall be available at all reasonable times for consultation with MassDOT.

Other points of contact which are necessary to complete the work conducted under the terms of this Contract and not concerning the items listed in the above paragraph, shall be identified by the Parties immediately after the Notice to Proceed given by MassDOT.

31.16 FURTHER ASSURANCES

Each party hereto shall promptly execute and deliver to the other party all such instruments and other documents and assurances as are reasonably requested by the other party to further evidence the obligations of the Parties hereunder.

31.17 SEVERABILITY

If any term or provision of the Contract Documents, the deletion of which would not adversely affect the receipt of any material benefit by either party hereunder, shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of the Contract Documents shall not be affected thereby and each other term and provision of the Contract Documents shall be valid and enforceable to the fullest extent permitted by Law. It is the intention of the Parties to this DB Contract, and the Parties hereto agree, that in lieu of each clause or provision of the Contract Documents that is illegal, invalid or unenforceable, the Parties in good faith shall: (a) promptly meet and negotiate a substitute therefor which shall,

to the greatest extent legally permissible, effect the original intent of the Parties; and (b) if necessary or desirable, apply to the court which declared such invalidity for a judicial construction of the invalidated portion to guide the negotiations.

31.18 HEADINGS

The captions of the sections of the Contract Documents identified therein are inserted solely for convenience. Under no circumstances is any heading to be treated or construed as part of each such instrument, except to the extent that the provision cannot be understood without the caption.

31.19 INTERPRETATION OF CONTRACT DOCUMENTS

In the Contract Documents, where appropriate and unless otherwise specified: the singular includes the plural and vice versa; references to statutes or regulations include all statutory or regulatory provisions consolidating, amending or replacing the statute or regulation referred to; the words "including," "includes" and "include" shall be deemed to be followed by the words "without limitation"; references to sections, appendices or schedules are to the document in which they are contained; words such as "herein," "hereof" and "hereunder" shall refer to the entire document in which they are contained and not to any particular provision or section; words not otherwise defined which have well-known technical or construction industry meanings, are used in accordance with such recognized meanings; references to Persons include their respective permitted successors and assigns and, in the case of Governmental Persons, Persons succeeding to their respective functions and capacities: and words of either gender used herein shall include each other gender where appropriate. Unless otherwise specified, lists contained in the Contract Documents defining the Project or the DB Work shall not be deemed all-inclusive. Furthermore, notwithstanding the rule of law to the effect that specific provisions contained in a contract shall govern over general provisions, the scope of the DB Work shall be as set forth in Section 4, and specific provisions in the Contract Documents which describe tasks included in the DB Work shall not constitute a limit on the scope of the DB Work, unless specifically so stated.

The DB Entity acknowledges and agrees that it had the opportunity and obligation, prior to submission of its Proposal, and during the negotiation process prior to award of this Contract, to review the terms and conditions of the Contract Documents and to bring to the attention of MassDOT any conflicts or ambiguities contained therein. The DB Entity further acknowledges and agrees that it has independently reviewed the Contract Documents with legal counsel, and that it and each of its Participants has the requisite experience and sophistication to understand, interpret and agree to the particular language of the provisions of the Contract Documents. Accordingly, in the event of an ambiguity in or dispute regarding the interpretation of the Contract Documents, they shall not be interpreted or construed against the party which prepared them, and instead other rules of interpretation and construction shall be utilized.

31.20 COUNTERPARTS

This instrument may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

31.21 ENTIRE CONTRACT

The Contract Documents constitute the entire and exclusive contract between the Parties relating to the specific matters covered herein and therein. All prior or contemporaneous verbal or written agreements, understandings, representations and/or practices relative to the foregoing are hereby superseded, revoked and rendered ineffective for any purpose.

[END OF CONTRACT]

IN WITNESS WHEREOF, the Parties have caused their duly authorized representatives to execute this Contract, which is intended to take effect as a sealed contract, as of the date and year first set forth above.

J.F. WHITE CONTRACTING CO.

Name: KEVIN K.EGAN

Title: EXECUTIVE VICE PRESIDENT

THE MASSACHUSETTS DEPARTMENT OF m Km 9/29/2010

Luisa Paiewonsky, Highway Administrator

I/We certify under the penalties of perjury that all the applicable provisions of General Laws (Ter. Ed.) Chapter 149 Section 44J have been complied with

Saryer of. Barros

EXHIBIT A: TERMS AND DEFINITIONS

APPENDIX A TERMS AND DEFINITIONS

A.2 Definitions

A.1 TERMS

AA/EEO	Affirmative Action / Equal Employment Opportunity
AASHTO	American Association of State Highway and Transportation Officials
ACEC	Area of Critical Environmental Concern
АСНР	Advisory Council on Historic Preservation
ADT	Average Daily Traffic
A&E	Architect and Engineer
AMOA	Amended Memorandum of Agreement
ANSI	American National Standards Institute
BTC	Base Technical Concept
BVDB	Best Value Design-Build Procurement
CADD	Computer Assisted Drafting Design
CD	Compact Disk
CEI	Construction Engineering and Inspection
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CGP	Construction General Permit
Comm-PASS	Commonwealth Procurement Access and Solicitation System
СРМ	Critical Path Method
CQE	Contract Quantity Estimate
DBE	Disadvantaged Business Enterprise
DB	Design-Build
DB Entity	Design-Build Entity
DB Price	Design-Build Price
DB Work	Design-Build Work
DEP	Department of Environmental Protection
DPW	Department of Public Works
ЕОТ	Executive Office of Transportation
EPA	Environmental Protection Agency
EPD	Escrowed Proposal Documents
EWO	Extra Work Order

FHWA	Federal Highway Administration
GAO	U.S. Government Accountability Office
Hazmat	Hazardous Materials
HASP	Health and Safety Plan
IA	Independent Assurance
ITP	Instructions to Proposers
LOI	Letters of Interest
M/WBE	Minority/Women Owned Business Enterprise
MassHighway	Massachusetts Highway Department
MGL	Massachusetts General Law
MHD	Massachusetts Highway Department
MS Project	Microsoft Project
MOA	Memorandum of Agreement
MUTCD	Manual on Uniform Traffic Control Devices
NBIS	National Bridge Inspection Standards
NCHRP	National Cooperative Highway Research Program
NCR	Non-Conformance Report
NIOSH	National Institute for Occupational Safety and Health
NPS	National Park Service
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
OIG	U.S. Office of the Inspector General
OSHA	Occupational Safety and Health Administration
PDF	Portable Document Format
RCRA	Resource Conservation & Recovery Act
RFI	Request for Information
RFP	Request for Proposals
RFQ	Request for Qualifications

A-3 Appendix A

SHPO	State Historic Preservation Officer
SOQ	Statement of Qualifications
SWPPP	Storm Water Pollution Prevention Plan
3-D	Three Dimensional
TEA	Time Entitlement Analyses
TIFF	Tagged Image File Format
TMP	Traffic Management Plan
QA	Quality Assurance
QC	Quality Control
QSM	Quality System Manual
USCG	United States Coast Guard
USDOT	United States Department of Transportation

A.2 DEFINITIONS

Acceptance

Acceptance shall mean all factors used by MassDOT to evaluate the degree of compliance with contract requirements and to determine the corresponding value for a given product. Acceptance activities for Design include reviews of plans, specifications, and other documents prepared by the DB Entity. Construction Acceptance activities include sampling, testing, and inspection of DB Work.

Acceptance Limit

Acceptance Limit shall mean the limiting upper or lower value, placed on a Quality Measure that will permit acceptance of a Lot. [While the test values for material samples are evaluated with Specification Limits and Engineering Limits, the computed quality level for a specific Quality Measure is evaluated against the Acceptance Limit. For example, the minimum allowable PWL called out in a QA Specification might be 65PWL. This is the Acceptance Limit.]

Acceptance Sampling & Testing

Also called *Verification sampling and testing*. Acceptance Sampling & Testing shall mean sampling and testing performed by MassDOT, or its Designated Agent, to measure the quality of the final product. Acceptance Sampling & Testing is performed on material entering the DB Work, whether on-site or off-site, to determine compliance with the requirements of the Contract Documents. Such sampling and testing is a factor in MassDOT's acceptance or rejection of the DB Work.

Accredited Laboratories

Accredited Laboratories are laboratories, which are recognized by a formal accrediting body as meeting quality system requirements including demonstrated competence to perform standard test procedures.

Addenda

Addenda are revisions, substitutions, or clarifications to the RFP.

Advertisement

Advertisement shall mean the publishing of a Design-Build project similar to advertisement for professional services currently used by MDOT. The advertisement shall appear in the Central Register, Comm-PASS and shall be advertised in a newspaper of the general circulation in the area in which the project is located or to be located.

Amended Memorandum of Agreement

Amended Memorandum of Agreement represents the revised document that records the terms and conditions agreed upon to resolve the adverse effects of an undertaking upon historic properties, when an undertaking and its effects on historic properties have changed substantially after an MOA has been executed.

As-Built Documents

As-Built Documents shall mean the documents provided by the DB Entity to MDOT at the conclusion of the construction project.

Attribute

Attribute is a characteristic that, by its presence or absence, classifies an item as conforming or nonconforming. [Inspection Attributes should be selected that directly relate to one of the four inspection components (i.e. equipment, environmental conditions, materials, and product workmanship). Inspection Attributes used for QC should be directly related to maintaining control of production and placement processes to ensure conformance with the requirements for each item of work. Inspection Attributes for Acceptance should relate directly to long-term product performance.]

Best Value Design-Build

Best Value Design-Build is a two-phase selection process in which the first phase consists of creating a short list of qualified Design-Build Entities as determined by responses to a Request For Qualifications package. The second phase consists of the submission of technical and price proposals in response to the Request for Proposals.

Business Day

Business Day shall mean days on which MDOT is officially open for business.

Calendar Day

Day shall mean Calendar Day unless otherwise specified. If the date to perform any act or give any notice specified in the Contract Documents falls on a non-Business Day, such act or notice may be timely performed on the next succeeding Business Day. Notwithstanding the foregoing, requirements contained in the Contract Documents relating to actions to be taken in the event of an emergency and other requirements for which it is clear that performance is intended to occur on a non-Business Day, shall be required to be performed as specified, even though the date in question may be a non-Businesse Day.

Certified Personnel

Certified Personnel are personnel who are recognized by a formal certifying body as qualified to perform sampling, testing, inspection, or related procedures.

Change Order

Change Order shall mean a written order issued by MassDOT to the DB Entity delineating changes in the requirements of the Contract Documents.
Claim

Claim shall mean a separate demand by the DB Entity that is disputed by MassDOT for a time extension under the Agreement, or payment of money or damages arising from work done on behalf of the DB Entity in connection with the Agreement.

Chief Engineer

Chief Engineer shall mean the Chief Engineer of MDOT acting directly or through an authorized representative, such representative acting within the scope of the particular duties entrusted to him.

Commonwealth

Commonwealth shall mean the Commonwealth of Massachusetts.

Comm-PASS

Comm-PASS is the Commonwealth of Massachusetts Procurement Access and Solicitation System. Comm-PASS is available through the MassHighway website.

Conceptual Design

Conceptual Design shall mean the design provided in the reference documents with the RFQ and the RFP.

Conformance Measure

Conformance Measure is the method used to evaluate inspection findings to determine the degree of product conformance with quality requirements. [The Conformance Measure used can be very simple and qualitative or can utilize a numeric or quantitative approach. The typical Conformance Measures applied include; Pass/Fail, Percent Conforming, and Numeric Score.]

Construction Documents

Construction Documents shall mean all shop drawings, working drawings, and samples necessary for construction of the Project in accordance with the Contract Documents.

Construction Organization Chart

Construction Organization Chart is a chart that shows relationships between functions and the functional relationships with Subcontractors. This chart indicates how the Proposer intends to divide the Project into work segments to minimize impacts on the traveling public and enable optimum construction performance.

Contact Person

Contact Person for this procurement is the MassDOT employee shown in Section 1.3 of the RFP.

Contract

Contract shall mean the Design-Build Contract.

Contract Document

Contract Document shall mean the Agreement including any attached exhibits, amendments and addenda, excluding the Reference Documents.

Contract Milestones

Contract Milestones shall mean milestones as defined by Section 6.3 of the RFP.

Contract Time

Contract Time shall mean the number of days allowed for completion of the Project.

Contractor

Contractor shall mean all contracted parties who are involved with building a DB project, including; the Prime (General) Contractor, Subcontractors, and all Producers, Fabricators, and Manufacturers, who provide construction materials for the Project.

Control Chart

Also called *Statistical Control Chart*. A Control Chart is a graphical plot of Quality Control measurements or test values used to identify variation in a production or placement process due to either Chance Causes or Assignable Causes.

Critical Path Method

CPM is a technique used to develop a project schedule that specifies the time frame for interim events and the activities and durations associated with the longest path(s) through the Project Schedule.

Cultural Resources

Cultural Resources shall be defined as set forth in the governing federal and state legislation concerning cultural resources (Section 106 of the Historic Preservation Act, as amended, 36 CFR 800 and Mass. Gen. L. c. 9, §§ 26-27c, as amended by Chapter 254 of the Acts of 1988, and 950 CMR 70.00 and 71.00).

Day

Day shall mean calendar day unless otherwise specified

DB Price

DB Price shall mean the price set forth by the Design-Build Contract documents.

DB Work

Design-Build Work shall consists of the work required under the Agreement including all administrative, design, engineering, real property acquisition and occupant relocation, support services, Utility Relocation, procurement, professional, manufacturing, supply, installation, construction, supervision, management, testing, verification, labor, materials, equipment, maintenance, documentation, and other duties and services to be furnished and provided by the DB Entity as required by the Contract Documents, including all efforts necessary or appropriate to achieve Final Acceptance except for those efforts which such Contract Documents specify will be performed by Persons other than the DB Entity.

Department

Department shall mean the Massachusetts Department of Transportation or MassDOT.

Design

Design shall mean the design for the Project as evidenced by the Final Design Documents.

Designated Agent

Designated Agent shall mean a Consultant directly under contract to MassDOT to assist in performing Acceptance activities.

Design-Build

Design-Build is a construction delivery system that provides responsibility for the delivery of design service and construction services within a single contract.

Design-Build Entity

Design-Build Entity is an individual, sole proprietorship, firm, partnership, joint venture, corporation, or other entity that provides Design-Build services.

Design Documents

Design Documents shall mean all drawings (including plans, elevations, sections, details and diagrams), specifications, reports, calculations, records, and submittals necessary for design of the Project in accordance with the Contract Documents.

Design Exception

Design Exception shall be defined as set forth in MDOT's Project Development and Design Guide.

Differing Site Conditions

Differing Site Conditions shall mean: 1) any surface condition at the Right-of-Way that differs materially from the conditions in existence as of the Proposal Date; and 2) any subsurface conditions that differ from those anticipated by the DB Entity.

Dispute Resolution

Dispute Resolution shall mean the procedure used to resolve conflicts resulting from discrepancies between the Agency's or MassDOT's and DB Entity's results of sufficient magnitude to impact payment.

Early Start of Construction

Early Start of Construction shall mean any DB Work that is performed by the DB Entity prior to receiving MassHighway's approval of the Final Design Documents.

Earned Value Report

Earned Value Report shall mean a progress tracking report that provides a breakdown of schedule and budget that matches the setup of the timekeeping system where actual effort is recorded.

Engineer

The Chief Engineer of the Department acting directly or through an authorized representative, such representative acting within the scope of the particular duties entrusted to him.

Engineering Limits

Engineering Limits are the absolute limiting value(s) placed on a Quality Characteristic beyond which the test result for an individual sample is considered to be unacceptable. [Engineering Limits are established to identify material that does not provide the minimum required engineering properties. They usually have an Upper Engineering Limit (UEL), a Lower Engineering Limit (LEL), or both. The Engineering Limits may be the same as the Specification Limits.]

Environmental Approvals

Environmental Approvals shall mean any Governmental Approval and amendment or modification thereto, arising from or required by Environmental Law.

Environmental Clearances

Environmental Clearances means that an undertaking has been reviewed under Section 106, the undertaking's effects (if any) on historic properties have been taken into consideration, and the Section 106 review process for the undertaking has been completed.

Environmental Law

Environmental Law shall mean any Law that regulates or governs the use, storage, handling, treatment, recycling, transportation, or disposal of Hazardous Material or pollution or protection of human health, safety, and the environment, including, but not limited to: 1) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq.; 2) the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801 et seq.; 3) the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq.; 4) the Toxic Substances Control Act, 15 U.S.C. Section 2601 et seq.; 5) the Clean Water Act, 33 U.S.C. Section 1251 et seq.; 6) the Clean Air Act, 42 U.S.C. Section 7401 et seq.; and 7) any analogous state statutes including Mass. Gen. L. c. 21 C and 21 E, all as amended or as they may be amended from time to time. The term "Environmental Law" shall not include the Occupational Safety and Health Act, 29 U.S.C. Section 651 et seq.

Escrowed Proposal Documents

An EPD shall contain information regarding the Proposer's assumptions made in calculating the Proposal prices. EPDs are submitted by the Proposer in both hard copy and electronic data format.

Fabricator

Fabricator shall mean a company that produces Fabricated Structural Materials (e.g. Precast/Prestressed Concrete Structural Elements, Fabricated Structural Steel) for either the Prime Contractor or a Subcontractor.

Fabricated Structural Materials

Fabricated Structural Materials are major structural items produced specifically for an individual construction project by a material Fabricator. [They are generally characterized by one or more of the following conditions: a) The production process for the material occurs under controlled conditions at an established Fabricator plant typically located within the State or in another State; b) The material properties are stable and have no potential for alteration under proper transportation from the Fabricator to the project site; and c) The materials arrive at the project site in a solid state and require little or no additional work after installation.]

Facility

Facility shall mean the entire limits of the Project

Final Acceptance

Final Acceptance shall be defined as set forth in Section 6.12.3 of this Design-Build Procurement and the date on which MassDOT certifies to the DB Entity in writing that the DB Work has been completed to its satisfaction in accordance with the terms of the Contract Documents.

Final Design Documents

Final Design Documents shall mean the Design Documents as approved following the 100% Submittal, as required pursuant to the Contract Documents

Force Majeure

Force Majeure shall mean any of the following events (provided such events are beyond the control of the DB Entity, its employees, agents, officers or Subcontractors or any other persons performing any of the work for whom the DB Entity may be contractually or legally responsible) which materially and adversely affects the DB Entity's obligations and which event (or the effects of which event) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by the DB Entity:

- a. Any earthquake, hurricane or other natural disaster;
- b. Any man-made disaster, such as fires and explosions;
- c. Any epidemic, blockade, rebellion, war, riot, act of sabotage or civil commotion, or any national strikes;
- d. Any Change in law that modifies the scope of the DB Work or specifically targets the Project or DB Entity;
- e. Any release of Hazardous Material by a third party for whom the DB Entity has no responsibility and with whom the DB Entity has no relationship, which is required to be reported to the DEP, and which renders use of the roadway or construction unsafe absent assessment, containment, and/or remediation;
- f. Issuance of a temporary restraining order or other form of injunction by a court, except if arising out of the act, omission or breach of obligation of the DB Entity or its Subcontractors, agents or employees; and

g. Any highway accident causing catastrophic damage to the Facility.

The Term "Force Majeure" shall be limited to the matters listed above and specifically excludes from its definition the following matters which might otherwise be considered force majeure:

- i. any fire or other physical destruction or damage, or delays to the Project which occur by action of the elements, including lightning, explosion, drought, rain, flood, snow, storm, except as specified in (a) above;
- ii. any strike, labor dispute, work slowdown, work stoppage, secondary boycott, walkout, or other similar occurrence;
- iii. the suspension, termination, interruption, denial or failure to obtain or nonrenewal of any Governmental Approval, except as described in (e) and (f) above;
- iv. any Change in Law (such as increases in tax rates) which does not result in a change in the scope of the DB Work or DB Entity services (i.e. the Change in Law would not require a change in the design of the Project);
- v. any delay related to any Utility Work or failure to obtain approval from a Utility Owner;
- vi. any delay or cost risk for which coverage is to be provided through insurance required hereunder; and
- vii. all other matters not caused by the Owner or beyond the control of the Owner and not listed in (a) through (g) above.

Governmental Approval

Governmental Approval shall mean any permit, license, authorization or other approval, and any amendment or modification of any of them, required by any law applicable to the Project or by a federal, state or local governmental entity for the execution of any aspect of the Project.

Hazardous Materials

Hazardous Materials shall mean: 1) any substance, product, waste or other material of any nature whatsoever which is or becomes listed, regulated, or addressed pursuant to any Environmental Law as now or at any time hereafter in effect; 2) any substance, product, waste or other material of any nature whatsoever which may give rise to liability, investigation, remediation or corrective action requirements under any Environmental Law; 3) oil and petroleum derivatives; 4) asbestos; 5) lead and lead paint; and 6) radioactive wastes and substances.

Hazardous Materials Management

Hazardous Materials Management shall mean sampling, stock-piling, storage, backfilling in place, asphalt batching, recycling, treatment, and/or off-site disposal of Hazardous Materials, whichever is the most cost-effective approach authorized under applicable federal, state, and local laws.

Health and Safety Plan

A Health & Safety Plan (HASP) shall be defined as a plan prepared by a Certified Industrial Hygienist or other experienced individual with the appropriate training required by OSHA.

Independent Assurance

Independent Assurance shall mean activities that are an unbiased and independent evaluation of all the sampling and testing (or inspection) procedures used in the Quality Assurance program. [IA provides an independent verification of the reliability of the Acceptance (or Verification) data obtained by the Agency and the QC data obtained by the Contractor. The results of IA testing or inspection are not to be used as a basis of material acceptance. IA provides information for Quality System management.]

Inspection

Inspection shall mean the process of visual examination or physical measurement of an item for comparison against applicable requirements. [Inspection activities are primarily visual in nature. The characteristics (i.e. Attributes) of a product or item are assessed using both <u>visual observations</u> (i.e. *examination*) and <u>check measurements</u> (i.e. *physical measurement*) of equipment, environmental conditions, materials, and product workmanship.]

Letter of Interest

Letter of Interest is the information provided by the interested DB Entities in response to a project advertisement. A DB Entity desiring to be considered for a Design-Build project shall submit a Letter of Interest and provide the information required in the advertisement of the project.

Letter of Transmittal

Refer to Section 3.3.2 and Appendix D for the requirements and format of Letters of Transmittal.

Lot

Lot shall mean a specific quantity of material from a single source, which is assumed to be produced or placed by the same controlled process.

Major Participants

Major Participant shall mean any of the following entities:

- a. All general partners or joint venture members of the DB Entity.
- b. All Persons holding (directly or indirectly) a 15% or greater interest in the DB Entity
- c. The lead engineering / design firm(s) (i.e., individual firms, partnerships, or joint ventures) as well as each engineering/design subconsultant (i.e., individual firms, partnerships, or joint ventures) that will perform 20% or more of the engineering/design DB Work.
- d. The Person with primary responsibility for Quality Control for the DB Work;

Manufacturer

Manufacturer shall mean a company which manufactures and supplies Standard Manufactured Materials for either the Prime Contractor, a Subcontractor, or a Fabricator.

MassDOT

MassDOT shall mean the same as MHD.

MassDOT-Directed Changes

MassDOT-Directed Changes shall mean any changes in the DB Work, which MassDOT has directed the DB Entity to perform, not in accordance with the Contract Documents.

MassDOT-Supplied Design

MassDOT-Supplied Design shall mean the design as depicted in the reference plans accompanying the RFQ or the RFP.

Memorandum of Agreement

Memorandum of Agreement shall represent the document that records the terms and conditions agreed upon to resolve the adverse effects of an undertaking upon historic properties.

MDOT

MDOT shall mean the Massachusetts Department of Transportation, a department of the Commonwealth, and any agency of the Commonwealth succeeding to the powers, authorities and responsibilities of MassDOT invoked by or under the Contract Documents.

MDOT Standards

MDOT Standards shall mean any manual, standards, standard operating procedures or policies of MDOT, as such documents are revised, amended or supplemented from time to time.

Non Responsive

Non Responsive refers to any submission that does not meet the criteria identified in the RFQ or any Technical Proposal that does not comply with the criteria defined in the RFP.

Notice To Proceed

Notice To Proceed shall mean a written communication issued by MassDOT to the DB Entity authorizing it to proceed with the DB Work and establishing the date of commencement of the DB Work.

Partnering

Partnering is an organized process to establish positive working relationships between the Contractor and MassDOT. It uses a mutually-developed, formal strategy of teamwork, commitment and improved communication to prevent disputes on a project.

Percent Within Limits

Percent Within Limits is the cumulative area under a standard curve which represents the estimated percentage of a Lot that falls above the Lower Specification Limit (LSL), beneath the Upper Specification Limit (USL), or between the Upper and Lower Specification Limits.

Person

Person shall mean any individual, corporation, company, voluntary association, partnership, trust, unincorporated organization, or Governmental Person.

Plans

Plans shall mean approved contract drawings, MDOT standards, working drawings, supplemental drawings, detail sheets or exact reproductions thereof, which show the location, character, dimensions and details of the work to be done.

Prequalification

Prequalification is the process used to identify DB Entities that meet certain criteria necessary to advance to the RFP stage of the selection process. The Architects and Engineers Review Board and the Construction Prequalification Committee shall be jointly responsible for determining the prequalification status of each DB Entity using information provided in LOIs, SOQs, and on file from other MDOT prequalification procedures, or from other appropriate sources as necessary.

Price Proposal

The DB Entity's cost for all design, construction, construction engineering, and Quality Control inspection, sampling and testing, as required, and any warranties required. See Appendix D for the Price Proposal Form.

Producer

Producer shall mean a company, which produces and supplies Project Produced materials (e.g. Aggregates, HMA, PCC) for either the Prime Contractor or a Subcontractor.

Project

The word "Project" shall mean the full scope of work for the design and construction of Bridge No. W-13-015, Cedar Street over Route 9, Wellesley, Massachusetts completed in conjunction with all terms and conditions of the Contract Documents.

Project Produced Materials

Project Produced Materials are major items produced directly for an individual construction project either by a Contractor or by a material Producer. [They are generally characterized by one or more of the following conditions: a) The production process for the material occurs either at the project site or at a Producer plant located in close proximity to the project site; b) The material properties are subject to potential contamination or segregation during transportation from the plant to the project site; and c) The materials arrive and are placed at the project site in a nonsolid or loose mixture state requiring subsequent mixing, compaction, finishing, or curing.]

Project Schedule

Submission requiring approval that divides the DB Work into activities with appropriate logic ties to show the DB Entity's overall approach to the planning, scheduling and execution of the DB Work.

Proposal

Proposal shall mean the proposal, submitted by the DB Entity to the Commonwealth in response to the RFP, including any Supplement to Proposal.

Proposal Date

Proposal Date shall mean the deadline for proposals, as specified in Section 2.6.1 of the Instructions to Proposer, subject to any extensions.

Proposer

Proposer shall mean the same as DB Entity.

Punch List

Punch List shall mean the list of DB Work that remains to be completed after Substantial Completion has been achieved, and shall be limited to minor incidental items of the DB Work that are necessary to correct imperfections, but which have no adverse effect on the safety or operability of the Facility.

Qualified Laboratories

Qualified Laboratories are laboratories that are capable as defined by appropriate programs established or recognized by MassDOT. [Accredited Laboratories are considered Qualified. However, a Qualified Laboratory need not be Accredited.]

Qualified Personnel

Qualified Personnel are personnel who are capable as defined by appropriate programs established or recognized by MassDOT.

Quality

Quality is (1) The degree of excellence of a product or service; (2) The degree to which a product or service satisfies the needs of a specific customer; (3) The degree to which a product or service conforms to a given requirement; or (4) Conformance to requirements.

Quality Assurance

Quality Assurance (QA) shall mean (1) All those planned and systematic actions necessary to provide confidence that a product or facility will perform satisfactorily in service; or (2) Making sure the quality of a product is what it should be. QA includes Quality Control performed by the DB Entity, Acceptance activities performed by MassDOT (or their Designated Agent), Independent Assurance, Dispute Resolution, Laboratory Accreditation and Qualification, and Personnel Qualification/Certification.

Quality Assurance Program

Quality Assurance Program shall mean the core programmatic elements required for Design Quality Assurance implementation and Construction Quality Assurance implementation.

Quality Characteristic

Quality Characteristic is a product characteristic that is measured through testing, either for Quality Control (QC) purposes or for conformance with Acceptance requirements. [Quality Characteristics are specific material properties or product requirements which are evaluated by QC and Acceptance testing. Quality Characteristics which are specified are normally selected because they: a) Relate to initial and long-term performance; b) Are quantifiable or measurable; and c) Can be measured with good repeatability.]

Quality Control

Quality Control (QC) shall mean the system used by the DB Entity to monitor, assess and adjust their production or placement processes to ensure that the final product will meet the specified level of quality. [Quality Control includes review and checking of design and construction documents, sampling, testing, inspection, evaluation, and corrective action (where required) to maintain continuous control of a production or placement process.]

Quality Control Plan

Quality Control (QC) Plan shall mean a project specific document prepared by the DB Entity which identifies all Construction QC personnel and procedures that will be used to maintain all production and placement processes "in control" and meet the specification requirements for an individual Work Item in the DB Price Proposal.

Quality Limits

Quality Limits are the upper or lower limiting values provided in the specifications that are used to evaluate the acceptability of materials produced or placed. [There are three types of Quality Limits that are typically included in QA Specifications. They include: Specification Limits, Engineering Limits, and Acceptance Limits. Each type of Quality Limit serves a different specific function in assessing the Quality of a product or work item. Quality Limits are used together to determine the quality of an individual Quality Characteristic.]

Quality Measure

Quality Measure is any one of several mathematical tools that are used to quantify the level of quality of an individual Quality Characteristic. [Application of a Quality Measure to a set of testing data provides an overall numeric representation of Quality for a specific Quality Characteristic. Typical Quality Measures used in Quality Assurance are selected because they quantify the average quality, the variability, or both. Examples of Quality Measures that may be used include; Mean, Standard Deviation, Percent Defective (PD), Percent Within Limits (PWL), Average Absolute Deviation (AAD), Moving Average, and Conformal Index (CI). PWL and PD are the Quality Measures that are recommended for use in Quality Assurance Specifications.]

Quality System Manual

Quality System Manual (QSM) shall mean a written document that describes the overall Quality Control operating procedures of the DB Entity and any DB Contractor party (e.g. Prime Contractor, Subcontractor, Producer, Fabricator, and Manufacturer). [A QSM documents the internal policies for achieving Quality and the assignment of responsibility and accountability for Quality Control within the DB Entity organization and by its Contractors. It may also describe the minimum QC requirements expected of upper or lower tier Contractor parties who supply constituent materials or who are involved in handling or processing of the Contractor's products.]

Relocation

Relocation shall mean each removal, relocation, abandonment, accommodation and/or protection in place (including provision of temporary services as necessary) of any and all Utilities that is necessary in order to accommodate or permit construction of the Project.

Request For Proposal

Request for Proposal (RFP) is the document issued by MDOT to solicit proposals from pre-qualified Design-Build entities for the purpose of entering into a Design-Build contract and includes all attachments hereto and subsequent addenda.

Request For Qualifications

Request for Qualifications (RFQ) is the document issued by MDOT for the purpose of creating a short list of qualified Design-Build Entities to respond to RFP issued by MDOT.

Right-of-Way

Right-of-Way shall consist of any real property (which term is inclusive of all estates and interests in real property), which is necessary for ownership and operation of the Facility. The term specifically includes all air space, surface rights, and subsurface rights within the established Right-of-Way limits of the Facility which are owned by the Commonwealth of Massachusetts and are under the control of MDOT or which will be acquired in connection with the Project, and includes any Mitigation Area. The term specifically excludes any temporary easements or other real property interests outside of the State Highway Layout, which the DB Entity may deem necessary or advisable in connection with construction of the Project, Utility Relocations, and/or Work.

Sampling

Sampling is the process of selecting one or more samples from a population. [Sampling is an integral part of Contractor Quality Control, as well as Agency Acceptance. Sampling procedures should be established and applied for both inspection and testing activities. An effective sampling system delineates a Population according to measurable segments. The key elements of a sampling system include; Lots, Statistical Samples, Sublots, and samples.]

Selection Committee

The Selection Committee is established by MDOT and reviews Proposals and recommends selection of best-value Proposals. The Selection Committee may also receive assistance from any sub-committees that evaluate the technical and/or Price Proposals as needed.

Specification Limits

Specification Limits are the statistically based limiting values(s) placed on a Quality Characteristic, which are applied with a particular Quality Measure (such as PWL) to evaluate the quality of a Lot. [Specification Limits are usually comprised of an Upper Specification Limit (USL), a Lower Specification Limit (LSL), or both. It is important to recognize that since Specification Limits are statistical limits, individual sample test results may fall beyond the USL or LSL and still be included in the Acceptance determination. The Specification Limits will ultimately be used for computation of Quality Levels (e.g. PWL), which will be used in calculating pay factors for a Lot.]

Standard Manufactured Materials

Standard Manufactured Materials are standard items that are produced routinely (i.e. not for a specific project) by a Manufacturer. [They are generally characterized by one or more of the following conditions: a) The materials are normally mass-produced under highly controlled and largely automated manufacturing conditions; b) The material properties are stable and have no potential for alteration under proper transportation from the Manufacturer to the project site; and c) The materials arrive at the project site in a solid, finished state* and require only installation (*Note: Exceptions to this condition include materials, such as PG binder, cements, and paints/coatings that are incorporated into either Project Produced Materials or Fabricated Structural Materials).]

Standard Specifications

Standard Specifications shall mean the Massachusetts Highway Department 1988 Standard Specifications for Highways and Bridges, for purposes of the Contract Documents.

Subcontract

Subcontract shall mean any agreement by the DB Entity with any other Person to perform any part of the DB Work or provide any materials, equipment, or supplies for any part of the DB Work, or any such agreement at a lower tier, between a Subcontractor and its lower tier Subcontractor.

Subcontractor

Subcontractor shall mean any Person with whom the DB Entity has entered into any Subcontract to perform any part of the DB Work or provide any materials, equipment, or supplies for the Project on behalf of the DB Entity (and any other Person with whom any Subcontractor has further subcontracted any part of the DB Work).

Sublot

Sublot shall mean a subdivision of a Lot. [A Sublot is an equal (usually) division or part of a Lot from which a sample of material is obtained in order to assess the Inspection Attributes or Quality Characteristics of the Lot. Sublots are established to ensure that samples of material obtained from the Lot are not all concentrated in one location. Sublots allow samples to be taken from within different segments (beginning, middle, end) of the Lot.]

Substantial Completion

Substantial Completion shall mean the date on which the DB Entity notifies the Owner that substantially all of the DB Work has been completed and opened to public use except for minor incomplete or unsatisfactory DB Work items that do not materially impair the usefulness of the DB Work required by the Agreement.

Supplier

Supplier shall mean any person not performing work at the Facility or Right-of-Way which supplies machinery, equipment, materials, or systems to the Contractor or to any Subcontractor in connection with the performance of the DB Work. Persons who merely transport pick up, deliver or carry materials, personnel, parts or equipment, or any other items or persons to or from the Right-of-Way, shall not be deemed to be performing work at the Right-of-Way.

Technical Proposal

Technical Proposals contain three major sections: a management summary, comprehensive technical approach, and a project summary schedule using Primavera, MS Project, or equivalent. The package shall clearly indicate that it is the Technical Proposal and shall clearly identify the DB Entity name, project description, or any other information required. Refer to Section 3.3 of this Design-Build Procurement for procedures on Technical Proposal format and organization.

Testing

Testing is the application of prescribed apparatus and procedures to characterize a specified property of a material or product. [Testing is used to determine whether the physical or chemical characteristics of either a finished product or its constituent materials meet the established requirements. Testing differs from inspection (by examination) as it provides an *objective* and *quantitative* measurement tool. It provides numerical magnitude for a specified property (i.e. Quality Characteristic).

Time Entitlement Analyses

Time Entitlement Analyses shall mean a schedule extension associated with an Extra Work Order.

Traffic Management Plan

Traffic Management Plan is a plan developed by the DB Entity showing the traffic control throughout the duration of the project.

Transmittal Letter

(See definition for Letter of Transmittal)

Utility

Utility or utilities shall mean a public, private, cooperative, municipal, and/or government line, facility or system used for the carriage, transmission and/or distribution of cable television, electric power, telephone, telegraph, water, gas, oil, petroleum products, stream, chemicals, sewage, storm water not connected with the highway drainage and similar substances that directly or indirectly serve the public. The term Utility is also sometimes used to refer to the owner or operator of any such line, facility and/or system. The term Utility specifically excludes storm water lines connected with the highway drainage, and traffic signals, street lights, and electrical systems for roadways.

Utility Owner

Utility Owner shall mean the owner or operator of any Utility (including both privately held and publicly held entities, cooperative utilities, and municipalities and other governmental agencies).

Utility Owner Approval

Written approval from the Utility owner for the proposed Utility work.

Utility Providers

(See definition for Utility Owner)

Utility Work

Utility Work shall mean any Relocation or installation of any Utility as may be necessary for the Project.

Validation

Validation is the mathematical comparison of two independently obtained sets of data (e.g. Agency Acceptance data vs. Contractor QC data) to determine whether it can be assumed they came from the same Population.

Work Days

Work Days shall mean days MassDOT is open for business.

EXHIBIT B: PROJECT SCHEDULE

	Activity	Activity	Early	Early	Orig	
	ID General Ren	Description	Start	Finish	Dur	9 26 2 9 16 23 30 6 13 20 27 4 11 18 25 1 8 15 22 29 6 13 20 27 3 10 17 24 31 7 14 21 28 7 14 21 28 4 11 18 25 2
		Drangesel Due (July 24, 2040)	04 8 8 40	04 11 11 4 0		
1	G100	Proposal Due (July 21, 2010)	21JUL10	21JUL10	1	Contract Award (Salastian
(GT02	Contract Award/Selection	22JUL10	31AUG10	29	
	G104	Notice to Proceed	01SEP10	01SEP10	1	
	Contract Des	iign				
	D100	Submit: 25% Design	02SEP10	22SEP10	15	Submit: 25% Design
	D102	Review: 25% Design	23SEP10	22OCT10	30	Review: 25% Design
	D104	Submit: 75% Design	25OCT10	05NOV10	10	Submit: 75% Design
	D106	Review: 75% Design	06NOV10	05DEC10	30	Review: 75% Design
	D108	Submit: 100% Design	06DEC10	17DEC10	10	Submit: 100% Design
	D110	Review: 100% Design	18DEC10	16JAN11	- 30	Review: 100% Design
	D200	Field Survey	02SEP10	15SEP10	10	Field Survey
	D202	Geotechnical Investigation/Study	09SEP10	22SEP10	10	Geotechnical Investigation/Study
	D204	Permitting	23OCT10	21DEC10	60	
	Primary Subn	nittals/Procurement				
	P100	Submit: Precast Beams - Abutment	25OCT10	19NO\/10	20	Submit: Precast Beams - Abutment
	P102	Review/Approve: Precast Beams -	20NOV10	19DEC10	20	Review/Approve: Precast Beams - Abutment
	P104	Fabricate/deliver: Precast Beams	2005010	28 JANI11	30	V Fabricate/deliver: Precast Beams
			2002010	200/111	50	
	P200	Submit: Structural Steel	25OCT10	12NOV10	15	Submit: Structural Steel
	P202	Review/Approve: Structural Steel	13NOV10	12DEC10	30	Review/Approve: Structural Steel
1	P204	Fabricate/Deliver: Structural Steel	13DEC10	11MAR11	65	Fabricate/Deliver: Structu
	Mobilize/Layd	own/Assembly				
-	M100	Mobilize site/clear infield/laydown	03JAN11	28JAN11	20	Mobilize site/clear infield/laydown area
	M102	Construct shoring - bridge frame	31JAN11	11MAR11	30	Construct shoring - bridge
	M104	Construct Bridge Frame	14MAR11	17JUN11	70	
	M900	Incentive Milestone #1 (June 20,		17JUN11	0	
	Pre-Closure C	Sivil Work				
	N100	Excavate/prep roadways	06JUN11	15JUN11	8	
	N106	Excavate/FRP Wingwalls & Cap	06JUN11	27JUN11	16	
	N102	Subgrade preparations	16JUN11	24JUN11	7	
	N104	Bituminous paving (base/binder)	27JUN11	30JUN11	4	
			04.00.44			
	N200	WEEKEND CLOSURE/DETOUR	01JUL11	04JUL11	4	WEEKEND CLC
	N201	Incentive iviliestone #2 (July 4,		U4JUL11	0	
	N300	Complete paving & traffic signal	05JUL11	20JUL11	12	
	N301	Incentive Milestone #3 (July 20,		20JUL11	0	
	N400	Contract	21.11.11.11	1941/611	30	
	N401	Incentive Milestone #4 (August 20	ZIVULII	10411011	- JU 	
		August 20,		ISAUGII		

1	Start Date		21JUL10	A The second sec	RUT9		Sheet 1 of 1		
i	Finish Date		19AUG11			J.F. White Contracting Co.	[Date	
	Data Date		21JUL10	Progress Bar					
	Run Date		21JUL10 09:38	Critical Activity	У	Wellesley Route 9 & Cedar St.			
						Ohn in Only d he have a	-		
						Classic Schedule Layout	[
		© Primavera Systems, Inc.					[



EXHIBIT C: DB ENTITY PAYMENT SCHEDULE

Item No.	Description	Unit	Amount	Written Amount
100.01	Schedule of Operations	Fixed Price	\$ 100.000.00	
101.01	Clearing and Grubbing	Lump sum	\$ 85.000.00	
115.1	Bridge Demolition	Lump sum	\$ 160.000.00	
120.2	Earthwork	Lump sum	\$ 100.000.00	
149.2	Public Outreach	Lump sum	\$ 10,000.00	
184.1	Disposal of Treated Wood Products	Lump sum	\$ 1.00	
220.202	Drainage	Lump sum	\$ 15,000.00	
472.11	Roadway & Pavement Work	Lump sum	\$ 350,000.00	
748.2	Mobilization	Lump sum	\$ 100,000.00	
756.01	Environmental Protection Measures	Lump sum	\$ 10,000.00	
771	Landscaping	Lump Sum	\$ 45,000.00	
850.11	Roadway Flaggers	Lump sum	\$ 25,000.00	
851.21	Maintenance of Traffic (TMP)	Lump sum	\$ 220,000.00	
874.8	Traffic Signing/Safety Items	Lump sum	\$ 155,000.00	
900.14	Excavation and Backfill for Bridge	Lump sum	\$ 50,000.00	
900.9	Punch List/As-Built Requirements	Lump sum	\$ 4,999.00	
995.05	Bridge Structure - Substructure	Lump sum	\$ 525,000.00	
995.06	Bridge Structure - Superstructure	Lump sum	\$ 1,000,000.00	
996.003	Precast Bridge Components (Precasting	Lump sum	\$ 157,000.00	
998.1	Self Propelled Modular Transporter	Lump sum	\$ 338,000.00	
	(SPMT) / Heavy Lift / Crane / Other			
	bridge moving technology			
Total	Price	Lump sum	\$ 3,450,000.00	
999.001	Police Details (allowance item)**		\$ 8,500.00	
	Project contingency (established post-		TBD	
	Proposal)			
	Pay Adjustment – HMA Pavement		\$ 5,000.00	
	Quality			
Total	COST OF PROJECT		TBD	
	Design (Preliminary, Final, and all		\$ 400,000.00	
	Permits/Environmental Approvals)***			· · · · · · · · · · · · · · · · · · ·
	Incentives	maximum	\$ 300,000.00	

Price Proposal - Cedar Street over Route 9, Wellesley

*To be determined during negotiations

******To be estimated by Proposers based on anticipated need for traffic services. This item will be funded as an allowance item. The value of this will be used to determine the best value.

***This item is to be provided for information only. The cost of Preliminary Design, Final Design, and all Project Permits/Amendments/Environmental Approvals should be included in each Bid Items according to the RFP Payment Schedule.

Table 2: Payment Schedule

	Payment item	 Preliminary Design	F	Final Design & Permitting	Ma	terial Delivery	 Phase 1 Construction	1	Final Construction	Acceptance	 Totals
Pay item	Payment Schedule (%)	10		5		5	 30		40	 10	
100.01	Schedule of Operations	\$ 10,000.00	\$	5,000.00	\$	5,000.00	\$ 30,000.00	\$	40,000.00	\$ 10,000.00	\$ 100,000.00
1 01.01	Clearing and Grubbing	\$ 8,500.00	\$	4,250.00	\$	4,250.00	\$ 25,500.00	\$	34,000.00	\$ 8,500.00	\$ 85,000.00
115.1	Bridge Demolition	\$ 16,000.00	\$	8,000.00	\$	8,000.00	\$ 48,000.00	\$	64,000.00	\$ 16,000.00	\$ 160,000.00
120.2	Earthwork	\$ 10,000.00	\$	5,000.00	\$	5,000.00	\$ 30,000.00	\$	40,000.00	\$ 10,000.00	\$ 100,000.00
149.2	Public Outreach	\$ 1,000.00	\$	500.00	\$	500.00	\$ 3,000.00	\$	4,000.00	\$ 1,000.00	\$ 10,000.00
184.1	Disposal of Treated Wood Products	\$ 0.10	\$	0.05	\$	0.05	\$ 0.30	\$	0.40	\$ 0.10	\$ 1.00
220.202	Drainage	\$ 1,500.00	\$	750.00	\$	750.00	\$ 4,500.00	\$	6,000.00	\$ 1,500.00	\$ 15,000.00
472.11	Roadway and Pavement Work	\$ 35,000.00	\$	17,500.00	\$	17,500.00	\$ 105,000.00	\$	140,000.00	\$ 35,000.00	\$ 350,000.00
748.2	Mobilization	\$ 10,000.00	\$	5,000.00	\$	5,000.00	\$ 30,000.00	\$	40,000.00	\$ 10,000.00	\$ 100,000.00
756.01	Environmental Protection Measures	\$ 1,000.00	\$	500.00	\$	500.00	\$ 3,000.00	\$	4,000.00	\$ 1,000.00	\$ 10,000.00
771.	Landscaping	\$ 4,500.00	\$	2,250.00	\$	2,250.00	\$ 13,500.00	\$	18,000.00	\$ 4,500.00	\$ 45,000.00
850.11	Roadway Traffic Flaggers	\$ 2,500.00	\$	1,250.00	\$	1,250.00	\$ 7,500.00	\$	10,000.00	\$ 2,500.00	\$ 25,000.00
851.21	Maintenance of Traffic (TMP)	\$ 22,000.00	\$	11,000.00	\$	11,000.00	\$ 66,000.00	\$	88,000.00	\$ 22,000.00	\$ 220,000.00
874.8	Traffic Signing/Safety Items	\$ 15,500.00	\$	7,750.00	\$	7,750.00	\$ 46,500.00	\$	62,000.00	\$ 15,500.00	\$ 155,000.00
900.14	Excavation and Backfill for Bridge	\$ 5,000.00	\$	2,500.00	\$	2,500.00	\$ 15,000.00	\$	20,000.00	\$ 5,000.00	\$ 50,000.00
900.9	Punchlist/As-Built Requirements	\$ 499.90	\$	249.95	\$	249.95	\$ 1,499.70	\$	1,999.60	\$ 499.90	\$ 4,999.00
995.05	Bridge Structure - Substructure	\$ 52,500.00	\$	26,250.00	\$	26,250.00	\$ 157,500.00	\$	210,000.00	\$ 52,500.00	\$ 525,000.00
995.06	Bridge Structure - Superstructure	\$ 100,000.00	\$	50,000.00	\$	50,000.00	\$ 300,000.00	\$	400,000.00	\$ 100,000.00	\$ 1,000,000.00
996.003	Precast Bridge Components	\$ 15,700.00	\$	7,850.00	\$	7,850.00	\$ 47,100.00	\$	62,800.00	\$ 15,700.00	\$ 157,000.00
	Self Propelled Modular Transporter (SPMT) / heavy lift/ crane/ other bridge										
998.1	moving technique	\$ 33,800.00	\$	16,900.00	\$	16,900.00	\$ 101,400.00	\$	135,200.00	\$ 33,800.00	\$ 338,000.00

Table 2 Notes:

1. Preliminary Design shall be considered complete upon approval by MassDOT of the 75% submission.

2. Final Design and Permits shall be considered complete upon approval by MassDOT of the PS & E submission and receipt

of required permits.

3. Material Delivery shall include all temporary shoring materials as well as permanent structure materials.

4. Phase 1 work shall include all Construction Activities required to construct the bridge superstructure at the off site location

and miscellaneous roadway work required no later then 10:00 PM on July 1, 2011.

5. Final Construction shall include all Construction Activities required to obtain substantial completion.

6. Acceptance shall include all work, punch list completion, As-builts, and miscellaneous work as required to obtain Final Acceptance.

EXHIBIT D: KEY PROJECT PERSONNEL

White-Gill-Finley-Rizzo Design Build Team Organizational Chart for Wellesley – Cedar Street over Route 9



- J. F. White Contracting Company will be responsible for overall project management.
- **Gill Engineering Associates, Inc.** will lead the bridge engineering effort. They will be the primary contributors to the preparation of final design documents for the bridge replacement. GEA will draw on expertise from FINLEY and Lamson, as needed.
- Finley Engineering Group, Inc. will focus on conceptual design and in the development of innovative construction techniques to cost effectively construct this bridge replacement within the project's challenging access constraints.
- Lamson Engineering Corporation will provide geotechnical and structural engineering assistance during the final phase of the project.
- **Tetra Tech Rizzo** will provide highway engineering, traffic management, permitting and public participation.
- Green International Affiliates, Inc. is responsible for surveying and base mapping.

William J. Shea **Project Manager** EDUCATION **Tufts University** Bachelor of Science in Civil Engineering EMPLOYMENT J.F. WHITE CONTRACTING COMPANY 1985 - Present Project Manager Responsible for all personnel on site and oversight of all construction activities. MTA Prudential Tunnel Safety Upgrade \$9 million Turner/Genzyme Genzyme Allston Facility Foundation \$7 million 0 **MWRA** SCADA Implementation - System wide \$7 milion 0 South Pump Station, Deer Island, VFD Replacement • \$5 million **MBTA** Automated Fare Collection Power Panel Upgrade \$3 million 0 Automated Fare Collection Revenue Facility Modifications \$5 million 0 **Delta Terminal A Redevelopment Project** Landside Civil and Roadways \$ 33 million 0 **Early Pedestrian Tunnel** \$15 million Coordination of contracting the arrivals roadways and departure ramps for the new terminal and also the tunnel connecting the main terminal and satellite terminal at Logan. Central Artery/Tunnel Project Mass. Ave. Interchange (C12A3) MHD \$180 million Project includes construction of one mile of inner-city multiple lane highway and parallel access roads and HOV lanes. The project received the 1997 Excellence in Building Award. **Project Engineer** Responsible for preparing estimates, engineering, project cost control, purchasing,

monitoring subcontractors, project coordination and client relations. Supervision of all onsite office engineering and support staff.

• Central Artery/Tunnel Project

	Mass Ave. Interchange (C12A3)	MHD	\$180 million
•	Charlestown Wastewater Pump Station	MWRA	\$ 19 million
	I-93 CANA Advanced Viaduct	MHD	\$ 24 million
Office /	/ Field Engineer		
0	Reactor Batteries A & B, Deer Island	MWRA	\$110 million
	South Station Transportation Facility	MBTA	\$ 49 million

TRAINING & CERTIFICATION

OSHA Competent Person Status - Excavation; OSHA Basic Safety Course; OSHA 30 Hour Safety & Health

LICENSES & REGISTRATIONS

Commonwealth of Massachusetts Construction Supervisor, License No. 056584

PROFESSIONAL REFERENCES

John McInerney

Division Engineer Massachusetts Department of Transportation 128 North Street Boston, MA 02109 Tel. 617-561-6159 Fax. 617-561-6152 Email: John.McInerney@masspike.com

Richard Provost

Project Manager Turner Construction Two Seaport Lane 2nd floor Boston, MA 02210 Tel. 617-562-4432 Fax. 617-787-1156 Email: <u>rprovost@tcco.com</u>

Eleanor Duffy

Construction Coordinator Massachusetts Water Resource Authority 100 First Avenue Charlestown, MA 02129 Tel. 617-570-5458 Fax. 617-371-1606 Email: <u>Eleanor.Duffy@MWRA.STATE.MA.US</u>

Nicholas Bruno III Project Superintendent



EDUCATION

Clarkson University – Potsdam, New York 1988

Bachelors Degree Civil and Environmental Engineering

EMPLOYMENT

2002 – Present

J.F. White Contracting company

Project Superintendent

Massachusetts Highway Department District 5 – Water Street Drawbridge William A Berry Construction - MIT Koch CRF Sitework City of Cambridge Consigli/JFW Joint Venture - Cambridge Public Library MBTA Contract T90CN01 Huntington Ave. Track Rehab E - Line Mass Highway CA/T Project Lovejoy Wharf Improvements MBTA Contract B22CN01 Lechmere Viaduct Rehabilitation Dover Water Company - Centre Street & Springdale Avenue Water Main Massport Contract L-276-C1 North Cargo Hangars HTHW Upgrade Skanska USA Terminal A Landside Bridges, Pedestrian Tunnel, Satellite Node

1988 – 2002

Project Engineer

MBTA Contract A30CN01 Chinatown Station Improvements MBTA Contract E02CN14 South Boston Piers & Courthouse Station Silver Line City of Quincy Swingles Quarry MDC Contract P98-1930-C1A Dewatering Granite Rail Quarry MWRA Contract 6368 Mill Cove Relief Siphon MBTA Contract C4CN2 Old Colony Railroad – Mainline

TRAINING AND CERTIFICATIONS

OSHA 30-Hour Safety & Health 8-Hour Hazardous Waste Refresher Training 40-Hour Hazardous Waste Training 40-Hour AGC Safety Training Course

JFW Crane and Rigging Seminar

Amtrak Right-of-Way Training

Crane Pre Lift Planning

DOT Training Seminar

Defensive Driving Course

Formwork Training Seminar

MBCR RWP Trained Contractor Safety Culture Retraining Program Superintendent Development Training Trenching & Excavation Training Underground Utilities Working over Water Training CPR and AED Training

REFERENCE:

Kevin Cassidy Construction Engineer MHD – District 5 1000 County Street Taunton, MA 02780 508-884-4282 Email: <u>Kevin.Cassidy@state.ma.us</u>

Kevin Egan, P.E. Executive Vice President, Chief Engineer



EDUCATION:

EMPLOYMENT:

1997-Present

Worcester Polytechnic Institute, B.S.C.E

J.F. White Contracting Company Executive Vice President, Chief Engineer Estimating & Engineering Oversight

A member of the executive team that is responsible for the overall management and direction of the c ompany.

Responsible for estimating and cost for J.F. White's Heavy Civil and the divisions that include Electrical, Dockbuilder, Specialty Dive and Mechanical. The projects include self performed excavation, support of excavation, pile driving, sitework, utilities, track work, electrical, transit signal and catenary, HVAC and specialty diving.

J.F. White's projects range from small, time and material jobs to projects worth over one billion dollars. These projects include design build contracts and multiple Joint Ventures done for public agencies, private companies and universities.

Project Manager

1996	South Bay Track, Electric	MBTA	C3CN06
1995	Old Colony RR - Plymouth	MBTA	C4CN11
	Old Colony Mainline	MBTA	C4CN12
1994	Green Line Grade Crossing	MBTA	T7CN01
	Sumner Tunnel	MTA	651005
1993	Newburyport Commuter Rail Restoration	MBTA	E9CN01
	Boston College Parking Garage	Boston Coll	ege
	NESI Relocation II	MHD	C14A2
1992	Track Relocation, Quincy Shipyard	MWRA	9108
	Track Rehabilitation Haverhill Line	MBTA	C9CN44
	New East Side Sewer Intercept, Boston	MHD	C14A1
	Outfall Improvement, Lynn	General Ele	ectric
1991	S & I Storage & Access Facility	MBTA	C3CN10
1990	Green Line Beacon Street Track	MBTA	T1CN09
	Needham-Franklin Track	MBTA	C1CN26

Project Engineer

1981-1989

Heavy Construction for various public agencies: concrete, support of excavation and track sitework, repair facilities.

1976-1981 <u>Allen & Demurjian, Inc. Consulting Engineers</u> Structural Engineer

PROFESSIONAL AFFILIATIONS

Registered Professional Engineer - Massachusetts #30624 Construction Supervisor Commonwealth of Massachusetts Construction Supervisor City of Lynn, MA #2747

American Society of Civil Engineers member American Railway Engineering Association member New England Railroad Club member

James K. Theodos Project Engineer



EDUCATION

Wentworth Institute – Boston, MA

BS Civil Engineering Technology Associates Degree Building Construction

EMPLOYMENT

1999 - Present

J.F. White Contracting company Project Engineer

MASSPORT L100-C2 Logan Airport Centerfield Taxiway MASSPORT L582-C1 Logan Airport Rehibitation of R/W 9-27 MASSPORT L806-C1 Logan Airport Hold Baggage Screening Modifications MASSPORT L427-C1 Logan Airport Upgrade High Mast and Apron Lighting MASSPORT L431-C2 Logan Airport Roadway Resurfacing MASSPORT L174-C1 Logan Airport Logan Facilities 2 Expansion 1 MASSPORT L745-C2 Logan Airport Access Control System Project MassDOT – Transit Division - South Station Finishes Town of Franklin - Horace Mann School NNT Level 3 - Congress Street Deep Jacking NNT Level 3 - Squire Bridge Segment E3 Exelon Mystic Power Station CA/T C08A5 - Advanced Detour Roadway

1996 – 1999Modern Continental
Assistant SuperintendentCA/T 96410-S0CN02-C17A9/B1 - State St. to High St./Aquarium Station

TRAINING AND CERTIFICATIONS

Massachusetts Construction Supervisors License-unrestricted Thirty (30) Hour OSHA Training Mobile Crane Safety Course Certified Rigging Gear Inspection OSHA Forty (40) Hour Haz Mat Eight (8) hour Hazwoper Refresher Course MBTA Contractor ROW Safety Competent Person/Scaffold Builder Course



Education

Northeastern University, Boston, Massachusetts-B.E.T. in Mechanical Engineering, 1983 Northeastern University, Boston, Massachusetts-A.S in Mechanical Engineering, 1981 University of Massachusetts, Amherst, Massachusetts-B.A. 1974

Employment

<u> 1994- Presen</u> t	J. F. White Contracting
Company,	
	Framingham, MA

<u>2002-Present</u> QA/QC Director responsible for developing and overseeing the implementation of J. F. White's Quality Control Program on all projects.

1997-2002 Ms. Burke served as Director/Inspector, QAQC, Central Artery project C15A1. Her duties involve complete oversight and maintenance of records for all work-in-progress on a project of \$380 million in value. Steel and concrete placement will be critical in that the elevated expressway must be maintained to traffic at all times during a 7 year, multi-phased construction process. Bechtel/Parsons Brinkerhoff apply the most rigid standards known to the heavy construction industry to this critical work, and Ms. Burke is an approved and beneficial advisor in her capacity as manager.

1994-1997 For the MWRA, Ms. Burke performed her QAQC duties on both the Thermal Power Plant and the Reactor Batteries A & B on Deer Island. Here she was responsible for both the implementation and monitoring of J.F. White Contracting Co's. Quality Control program, as well as all Subcontractors on both projects. She was the inspector on all the required mechanical, civil, structural and welding work. Her records were audited regularly, and her follow-through was never less than ambitious.

1976-1993 Stone & Webster Engineering Corporation, Boston, MA

Prior to her Heavy Construction experience with J.F. White Contracting, Ms. Burke served as a Welding Specialist for Stone & Webster Engineering Corporation on several nuclear and fossil fuel power plants. There she developed welding procedure specifications, qualifications and testing methods to assure a competent product at all times. She reviewed fabrication drawings for completeness and correctness of details, and performed random reinspection of plant components prior to licensing.

License:

Certified Welding Inspector, CWI #95100441

Reference:

Raymond Perry Project Manager Quality Assurance MBTA QA Lab 170 Freeport St. Dorchester, MA 02122 617-222-2631 Email: rperry@mbta.com

Martin E. Golden Jr. Project Safety Manager



Education: Assumption College, Worcester, MA Bachelor of Arts in Accounting Western New England College, Associate in Law Enforcement Massachusetts Criminal Justice Training Council Police Officer Basic Training

Experience:

J.F. White Contracting Company, Framingham, MA

7/01 – Present Project Safety Manager

Advise Project Managers, Project Superintendents and Engineering staff regarding safe work practices for employees, corrective actions necessary and/or implemented, and preplanning of work to ensure safe completion of all projects. Create and implement of site specific inspection and auditing methods. Complete and compile reports used to disseminate findings of all inspections and audits.

10/98 – 7/01 **Safety Officer**

Responsible for implementation and enforcement of company wide safety program and policies. Safety program and policies include, but are not limited to, Job Hazard Analysis, Employee Orientation, Site Safety Inspections, Personnel Training, and Personal Protective Equipment issue, training, and use. Monitor and maintain compliance with all Local, State, and Federal laws and ordinances including all applicable reports, reviews and audits.

Investigate all project related accidents, injuries, and near-miss incidents in order to determine cause, develop prevention strategies and, when necessary, revise safety policy and procedures. Investigate all insurance claims including personal injury and property loss. Determine cause and suitability of claim and communicate all findings to appropriate company management.

Project Experience

01/03 to Present- Job# 0219, Client: Central Artery/Tunnel Project I-93 Demolition of Viaduct, Ramp Construction SA-CN (Contract # C19BA)

Work includes construction of cast-in-place post-tensioned backspans for Ramp SA-CN (Zakim Bridge), post-tensioned concrete segmental viaduct north of Ramp SA-CN, and demolition of existing I-93 viaduct including truss bridge spanning Charles River. Work also includes installation of Integrated Project Control System and supporting utility, signage, lighting, drainage and wetland mitigation. Contract value \$55 million.

09/02 to Present- Job# 0121/0209, Client: MBTA Greenline Relocation (Contract #'s S08CN03 & S08CN04)

Work includes cut and cover tunnel construction, boat wall and viaduct construction, demolition of existing elevated MBTA structure, utility relocation, track installation and electrical installation in order to relocate MBTA Greenline from Causeway Street under the Fleet Center in the North Station area of downtown Boston. Contract value \$64 million.

11/99 to 04/03- Job# 9704, Client: Central Artery/ Tunnel Project <u>I-93 North Street to New Chardon Street (Contract # C15A1)</u>

Work included underpinning of existing Central Artery, relocation of numerous utilities, installation of 330,000 square feet of slurry walls, 800,000 cubic yards of excavation, and construction of 1,400 feet of the depressed Central Artery including Mainline, Northbound and Southbound, tunnels and associated ramps to Callahan and Sumner tunnels. Oversight of 350+ trades people and subcontractor personnel. Contract value \$480 million.

6/00 to 11/00 - Job# 0011, Client: MBTA Greenline Grade Crossings, Phase II (Contract # M20CN02)

Work included removal, replacement and improvement of existing intersection grade crossings on the MBTA Greenline. Oversight of 30+ trades people. Contract value \$11 million.

10/98 to 11/99 Job# 8404 Swingles Quarry Swingles Quarry - Granite Rail Quarry Dewatering

Work included dewatering and filling of Swingles Quarry and dewatering of Granite Rail Quarry. Oversight of 25+ trades people and subcontractors.

Professional Membership:

- American Society of Safety Engineers, Construction/Management Division
- Association of Crane and Rigging Professionals
- Association of Diving Contractors International
- Labor-Management Construction Safety Alliance

Professional Development:

- Basic Instructor in Occupational Safety and Health (OSHA 500)
- Scaffold Training Institute -Instructor; Competent Person; Scaffold Builder
- Bechtel Environmental Safety & Health Management Leadership Training
- Massachusetts Safety Council- Accident Investigation
- National Safety Council- Root Cause Analysis in Accident Investigation
- Wire Rope & Rigging Consultants Certified Rigging Gear Inspector
- Wire Rope & Rigging Consultants Crane & Rigging Management
- MBTA Contractor Safety Awareness
- Amtrak On Track Safety Program
- The St. Paul Companies Trenching & Excavation Safety
- Labor-Management Construction Safety Alliance Safety Conferences
- Excellence in Safety- OSHA HAZWOPER (40 hour & 8 hour Refreshers)
- First Aid / CPR Training

Joseph P. Gill, PE Design Manager

Gill Engineering Associates

EDUCATION University of Massachusetts - Amherst, BSCE

EMPLOYMENT

2000 - Present Gill Engineering Associates, Inc., Needham, MA

President and CEO – Overall responsibility for strategic direction of the company and financial oversight of all operations. As Project Manager, responsible for As Project Manager, responsible for scope, schedule, budget and quality performance on bridge projects.

- MDOT Bridge No. G-05-017, Route 128 over the Annisquam River, Gloucester, MA Bridge Rehabilitation
- MDOT Bridge No. H-13-007 Route 8A (West Hawley Road) over the Chickley River, Hawley, MA – Bridge Rehabilitation
- MDOT Bridge No. C-05-012, Route 2 (Mohawk Trail) over the Deerfield River, Charlemont, MA

 Bridge Rehabilitation
- MDOT Bridge No. C-08-003 Route 3A (Princeton Street) over the B&M RR and Moore's Canal, Chelmsford, MA - Superstructure Replacement
- MDOT Bridge No. N-19-038 Route 66 (Westhampton Road) over Bassett Brook, Northampton, MA – Bridge Replacement
- MDOT Bridge No. S-16-003=S-35-003, Route 103 (Wilbur Avenue) over Lees River, Somerset-Swansea, MA – Bridge Replacement
- MDOT Bridge No. B-08-001=D-08-011 Center (Elm) Street over the Taunton River, Berkley-Dighton, MA – New Temporary Bridge
- MDOT Bridge No. F05005=S06010, Route 2 over Cold River, Florida-Savoy, MA Bridge Rehabilitation
- MDOT Bridge No. D-07-009 Route 134 over Route 6 (EB & WB), Dennis, MA Bridge Rehabilitation
- MDOT Bridge No. M-03-033 South Main Street over Route I-495 and Bridge No. M-03-031 Route 140 over Route I-495, Mansfield, MA – Bridge Rehabilitation

1996 – 2000 Massachusetts Turnpike Authority, Weston, MA

Chief Engineer – Responsible for all engineering and construction, exclusive of Central Artery/Tunnel (CAT) Project, and for maintenance and operation of entire Turnpike, including completed portions of the CAT. Responsible for staff engineering; management of engineering consultants; management and inspection of all construction projects; roadway, bridge, building, tunnel mechanical and electrical maintenance; communications and electronics, including the Turnpike-wide radio system and the fiber optic network; implementation of an electronic toll collection system; fleet administration and repair; MHS Operation and Control Center; and environmental engineering.

Massachusetts Highway Department, Boston, MA

1994 – 1996 **Dep Chief Highway Operations** – Responsible for coordinating and managing the operations and maintenance of the State Highway System. Responsibilities of this division include Roadside Maintenance, Snow and Ice Removal, Fleet Administration, Warehouse Operations, Accident Recovery, Fuel Management, Highway and Bridge Repair, Heavy Equipment Repair, Statewide Radio Communications, Traffic Design and Operations, Intelligent Transportation Systems, and operation of the Southeast Expressway High Occupancy Vehicle Lane.

- 1991 1994 State Bridge Engineer Responsible for the design of all new bridges, the rehabilitation and repair of all State-owned bridges and for the inspection and evaluation of all state and municipally owned structures. Represented Massachusetts Highway Department on the AASHTO Subcommittee on Bridges and Structures
- 1990 1991 Assistant State Bridge Engineer Assistant to the Bridge Engineer in both technical and administrative matters.
- 1983 1990 **Structural Engineer** Involved in all phases of bridge design, repair, rehabilitation, inspection, and evaluation.

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Member Boston Society of Civil Engineers, Member American Concrete Institute, Member American Council of Engineering Companies, Member American Institute of Steel Construction, Member Construction Industries of Massachusetts, Member Town of Franklin Planning Board, Member

PROFESSIONAL REFERENCES

Alexander K. Bardow, PE MassDOT State Bridge Engineer	(617-973-7574)
Hemendra Bhatt MassDOT Project Manager	(617-973-7572)
Paul Nardone	(617-973-8119)

Paul D. Moyer, PE, SECB QA/QC Design

EDUCATION Northeastern University, MSCE University of Massachusetts-Amherst, BSCE

EMPLOYMENT

2009 - Present Gill Engineering Associates, Needham, MA

Vice President and COO – Office operations, monitoring of financial performance, business development, development of project budgets, project controls and project QA/QC reviews. As Project Manager, responsible for scope, schedule, budget and quality performance.

- MDOT Bridge No. H-13-007 Route 8A (West Hawley Road) over the Chickley River, Hawley, MA – Bridge Rehabilitation
- MDOT Bridge No. B-08-001=D-08-011 Center (Elm) Street over the Taunton River, Berkley-Dighton, MA – New Temporary Bridge
- MDOT Bridge No. F05005=S06010, Route 2 over Cold River, Florida-Savoy, MA Bridge Rehabilitation

2006 – 2009 Jacobs-Carter Burgess, Boston, MA & Baltimore, MD

Vice President, Office Manager – Responsible for office operation and financial performance of Boston & Baltimore offices. Supervision of 110 architects, civil, structural and MEP engineers. Provided full-service design of retail, mixed use and industrial buildings.

2000 – 2006 Dewberry-Goodkind, Inc., Boston, MA

Vice President, Office Manager – Responsible for office operation and financial performance of multi-discipline office. Supervision of over 70 architects, civil, structural, MEP and water/wastewater engineers. Projects included the design of bridge and highway systems, water and wastewater facilities, telecommunications towers and retail, transportation and industrial buildings. As Project Manager, responsible for scope, schedule, budget and quality performance

- MDOT Bridge Nos. N-25-022 and N-25-023, Pendergast Circle over Route 1, Norwood, MA Bridge Replacement
- MBTA Southampton Street Bridge Replacement, Dorchester, MA Superstructure Replacement
- MDC Route 3A Morrissey Boulevard Bridge over Neponset River, Boston and Quincy, MA Bridge Rehabilitation
- MTA General Engineering Consultant On-call engineering contract for miscellaneous services on I-90 Highway and Tunnel facilities

1990 – 2000 Parsons Brinckerhoff, Boston, MA

Structural Department Head, Deputy Manager of Engineering – As Structural Engineering Department Head, managed 15 project managers, engineers and CAD operators. As Deputy Manager of Engineering, assisted in the supervision of department heads, project administrators and project managers. As Project Manager, responsible for scope, schedule, budget and quality performance of transportation, tunnel and water/wastewater projects.

MDC Alewife Brook Parkway Bridge, Cambridge, MA – Bridge Replacement

Gill Engineering Associates

- NHDOT Rehabilitation of the Route 25 Bridge over the Connecticut River, Piermont, NH/ Bradford, VT – Bridge Rehabilitation
- Route 146 Interchange Project, Worcester and Millbury, MA
- RIDOT James A. Russo Memorial Bridge, Cumberland/Lincoln, RI.

1984 – 2000 Pare Engineering Corporation, Lincoln, RI

Vice President, Structural Division Manager – Supervised 10 structural engineers, drafters and clerical staff. Managed bridge, highway and railroad projects.

- RIDOT AMTRAK Bridge over Wolf Rocks Trail, Exeter, RI New Bridge
- Providence & Worcester Railroad Company Poquetanuck Cove Railroad Bridge Replacement, Ledyard, CT – Bridge Replacement

1990 – 2000 <u>Stone & Webster Engineering Corporation, Boston, MA</u> Structural Engineer – Performed analysis and design of steel and reinforced concrete power plant structures.

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Member, past New England District Director Boston Society of Civil Engineers, Member, past President The Engineering Center, past member Board of Directors The Engineering Center Education Trust, past member Board of Trustees American Council of Engineering Companies, Member Structural Engineering Certification Board, Certified

PROFESSIONAL REFERENCES

Alexander K. Bardow, PE MassDOT State Bridge Engineer (617-97

(617-973-7574)

John C. Schwarz MBTA Dep Director of Design & Constr (617-222-3420)

Thomas Donald, PE

MassDOT ABP Director of Program Dev (617-973-7494)
Preston A. Huckabee, PE **Project Engineer – Structural Design**

Gill Engineering Associates GIVELASTRUCTURAL ENGINEERS

EDUCATION University of Massachusetts-Lowell, MSCE University of Massachusetts-Amherst, BSCE

EMPLOYMENT

2001-Present Gill Engineering Associates, Needham, MA

Chief Engineer - responsible for technical oversight of bridge design projects, including preparation of plans, specifications and estimates for bidding. Other work responsibilities include: bridge inspection; structural ratings for load carrying capacity; designing emergency repairs to bridges and other structural highway elements; preparation of type studies for bridge alternatives; review of shop drawings and other designs and procedures proposed by contractors; preparation of sketch plans; and establishing and maintenance of office CADD Standards.

- MDOT Bridge No. G-05-017, Route 128 over the Annisquam River, Gloucester, MA Bridge Rehabilitation
- MDOT Bridge No. H-13-007 Route 8A (West Hawley Road) over the Chickley River, Hawley, MA - Bridge Rehabilitation
- MDOT Bridge No. C-05-012, Route 2 (Mohawk Trail) over the Deerfield River, Charlemont, MA - Bridge Rehabilitation
- MDOT Bridge No. C-08-003 Route 3A (Princeton Street) over the B&M RR and Moore's Canal, Chelmsford, MA - Superstructure Replacement
- MDOT Bridge No. N-19-038 Route 66 (Westhampton Road) over Bassett Brook, Northampton, MA - Bridge Replacement
- MDOT Bridge No. S-16-003=S-35-003, Route 103 (Wilbur Avenue) over Lees River, Somerset-Swansea, MA – Bridge Replacement
- MDOT Bridge No. B-08-001=D-08-011 Center (Elm) Street over the Taunton River, Berkley-Dighton, MA – New Temporary Bridge
- MDOT Bridge No. F05005=S06010, Route 2 over Cold River, Florida-Savoy, MA --Superstructure Replacement
- MDOT Bridge No. D-07-009 Route 134 over Route 6 (EB & WB), Dennis, MA Bridge Rehabilitation
- MDOT Bridge No. M-03-033 South Main Street over Route I-495 and Bridge No. M-03-031 Route 140 over Route I-495, Mansfield, MA – Bridge Rehabilitation
- MDOT Bridge No.B-16-172 Sprague Street over MBTA Emergency Bridge Repair
- MBTA Bridge Inspection and Rating Contract B92PS01 and B92PS10
- MDOT Bridge Rating Contract 41993

Massachusetts Highway Department, Boston, MA

1992 - 2001

Structural Engineer - Bridge Section - Preparing calculations and designs of proposed bridge replacement projects of substantial complexity; preparing complete plans, specifications and estimates for contract bid; preparing structural ratings of elements of bridges of substantial complexity; designing emergency repairs to bridges and other structural highway elements under strict time constraints; performing field investigations; preparing type studies for bridge type alternatives; coordinating designs with other sections such as district offices, geotechnical and highway design; reviewing shop drawings for proposed contractor work; preparing sketch plans for bridge type studies; assisting in the establishment of new CADD standards for AutoCAD; assisting in the training of junior personnel in the use of AutoCAD; assisting squad members in any miscellaneous tasks

such as plan preparation, design calculations, etc.; performing any work required in the maintenance of the MHD bridge manual.

2000 – 2010 <u>University of Massachusetts, Lowell, MA</u> Adjunct Professor – Teaches graduate level bridge design course

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Member Boston Society of Civil Engineers, Member Old Colony Planning Council, City of Brockton Alternate Delegate UMass Lowell Civil Engineering Industrial Advisor Board, Member

PROFESSIONAL REFERENCES

Alexander K. Bardow, PE MassDOT State Bridge Engineer

(617-973-7574)

Hemendra Bhatt MassDOT Project Manager

(617-973-7572)

Paul Nardone MassDOT Project Manager

(617-973-8119)





EDUCATION

Bachelor of Science, Civil Engineering, University of Kansas

Graduate Studies, Business Administration University of Missouri

Graduate, Executive Program University of Michigan Business School

REGISTRATIONS/ CERTIFICATIONS

NCEES Certification

Registered Professional Engineer Massachusetts -#39635 Alabama Arizona California Colorado Connecticut Delaware Florida Georgia Hawaii Indiana lowa Kansas Kentucky Louisiana Maine Maryland Michigan Minnesota Missouri Nevada New Hampshire New Jersey New Mexico New York North Carolina Oklahoma Ohio Pennsylvania Rhode Island South Carolina Tennessee Texas Utah Virginia Washington Washington, D.C. West Virginia

EXPERIENCE PROFILE

Craig has 30 years as an consulting engineer, involved in the design, management, construction engineering and inspection of a wide range of complex steel, prestressed concrete, cable-stayed, suspension and moveable bridges with spans from 40 feet to over 5,000 feet. He has had extensive experience in directing the preparation of the design, construction engineering and management of over eighty segmental bridges designed and/or constructed in the United States and around the world.

Relevant Professional Experience

2004 - PresentManaging Principal, Finley Engineering Group, Inc,2001 - 2004Senior Vice President/Bridge & Tunnel Division
Manager - Parsons1989 - 2001President - Finley McNary Engineers, Inc.1981 - 1989Vice President - Figg & Muller Engineers, Inc.

RELEVANT PROJECT EXPERIENCE

The following projects are representative of Craig Finley's experience as Principal, Project Director, Project Manager and/or Bridge Engineer:



Project: Chelsea Street Bridge Replacement, Boston, MA 2008-Present

Project Role: Project Principal

Performed conceptual design and design oversight for the launching and construction engineering of this 450 ft. vertical lift bridge truss bridge. FINLEY developed a construction scheme to launch this truss in phased construction

and launch configuration; and analyzed the truss for all phases of the launch sequence to include truss chord members, connections, etc. and assessed their adequacy for the final design. Provided construction engineering, erection method selection, erection method key features, erection method details and the design of specialized launching equipment, temporary supports and launching geometry.



Project: DCR Access road over Route 24 Bridge, Randolph, MA. 2009-Present **Project Role:** Project Principal

This 4-span, steel girder structure will be replaced with a 2-span segmental Channel Bridge. The replacement bridge will have a length of 248 ft., a width of 29 ft. 8 in., and a total depth (including barriers) of only 5 ft. 4 in. The channel

cross-section is a precast-concrete superstructure system that uses posttensioned segmental construction. Provided construction analysis and construction manuals, integrated segment shop drawings, erection beams and temporary supports, post-tensioning calculations, casting and erection geometry control manuals.

FINLEY ENGINEERING GROUP, INC. Resume - Finley

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PROFESSIONAL AFFILIATIONS

American Segmental Bridge Institute, Executive Committee & Past President

Post-Tensioning Institute, Cable-Stayed Bridge Committee

Prestress Concrete Institute

International Association of Bridge and Structural Engineering

National Society of Professional Engineers

Florida Engineering Society

National Steel Bridge Alliance

Project: Storrow Drive Connector Bridge, Boston, MA. 2001-2002 **Project Role:** Principal Engineer

The Storrow Drive Connector Bridge, having one of the largest steel box girders in North America, forms a crucial link in Boston's Central Artery/Tunnel project. Craig developed the concept modifying the construction scheme to erect the box girder in several large tub sections and eliminating the construction of the large box girders in place. Craig assisted with the development of the redesign of the box girder superstructure and erection scheme for this bridge structure and the development of the temporary bracing and support details. Craig provided design review and overall quality assurance for the project.



Project: I-95 Over the James River, Superstructure Replacement, Richmond, VA. 2000-2002

Project Role: Project Principal Construction of this superstructure replaced all 102 conventional steel spans and the complete redecking of 10 truss spans crossing the James River. Provided a full construction engineering

package; developed and designed erection equipment and falsework; erection procedures, construction analysis of the Super- and Substructure; casting and erection geometry.



Project: Clifford Hollow Bridge – Hardy County, WV. 1999-2000

Project Role: Project Principal

Performed а redesian of the superstructure to accommodate erection means and methods on this 1700' continuous span plate girder structure with four span lengths of 84m and 2 spans of 64m. Access to the jobsite was very poor and did not lend itself well to conventional erection with cranes. Craig served as the project's Principal Engineer and directed the design and construction enaineerina efforts. including the development and design scheme and equipment used for incremental launching.

Project: Boston, Project The proj structure A conve gantry w

Project: Boston Central Artery C09A4, Boston, MA. 1997–2001

Project Role: Project Principal

The project featured several complicated structures and construction operations. A conventional crane and an overhead gantry were utilized for the construction of the viaducts. Pier segments were erected in advance of the gantry. The

gantry, with a symmetrical design, allowed erection in either direction. Span lengths ranged from 105 ft. to 216 ft. 1,062 segments were cast utilizing four forms. Provided integrated segment drawings; geometry controls for casting, erection and procedural manuals; casting curves, integrated segment drawings, analysis of construction loading, design of erection equipment and falsework, erection procedures, post-tensioning calculations and technical assistance.





EDUCATION

BS – Civil Engineering Northeastern University

Graduate Studies Structural Engineering, Northeastern University

REGISTRATIONS/ CERTIFICATIONS

NCEES Certified

Registered Professional Engineer Massachusetts - #41827 Maine New Hampshire Vermont Connecticut Rhode Island New York New Jersey Pennsylvania Ohio Maryland Delaware Washington, D.C. Virginia West Virginia North Carolina South Carolina Georgia Florida

Ocean Corp Diver Certification – Inspection SCUBA Certified

PROFESSIONAL AFFILIATIONS

PCI New England Technical Committee

ASCE

BSCE

EXPERIENCE PROFILE

Michael has over 16 years of engineering experience with large and complex bridge projects. He has had extensive experience in concrete forming and shoring systems for new construction and experience in concrete repair of Bridge superstructures and substructures as well as underwater pile repair techniques utilizing Portland cement and epoxy resin technologies. He has performed design, construction engineering, field engineering and general consultant roles. He also has participated in projects requiring the launching of steel bridges and heavy duty propping of structures.

RELEVANT PROFESSIONAL EXPERIENCE

Present	Project Manager – Finley Engineering Group, Inc.
2008 - 2009	President – M.W. Kane Engineering
2003 - 2007	National Sales Manager – Mabey Bridge & Shore, Inc.
1998 - 2003	Engineer – J.F. White Contracting
1994 - 1998	Michael W. Kane, Inc.
1976 - 1994	A.H. Harris & Sons, Inc.

RELEVANT PROJECT EXPERIENCE

Project: New Via Town Bridge, Monrovia, Liberia (03/10 to present) **Project Role:** Bridge Engineer Responsible for design of falsework systems for this 240m long cast-inplace segmental bridge with a width of 13m and a main span of 100m. The foundation system utilizes drilled shafts and an innovative approach to

produce fixed interior piers directly from four cased drilled shafts. This simplified substructure construction and reduced the schedule substantially by eliminating the need for cofferdam construction



Project: DCR Access road over Route 24 Bridge, Randolph, MA. (05/10) **Project Role:** Bridge Engineer

This 4-span, steel girder structure will be replaced with a 2-span segmental Channel Bridge. The replacement bridge will have a length of 248 ft., a width of 29 ft. 8 in., and a total depth (including barriers) of only 5 ft. 4 in.

The channel cross-section is a precast-concrete superstructure system that uses post-tensioned segmental construction. Conducted bridge inspection.

SUMMARY OF EXPERIENCE

Provided engineering design services for the following construction applications:

- Concrete forming and shoring systems for bridges, water storage structures, buildings, dams and tunnels.
- Launching of bridge structures.
- Support of bridge decks, girders and beams utilizing heavy duty propping.
- Support of excavation and shoring systems utilizing sheet piling, hydraulic braces and struts.

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- Underwater pile repair, concrete repair of bridges, tunnels, dams and foundations.
- Design of temporary bridges and abutments.
- Design of reinforced concrete retaining walls, design of precast concrete retaining walls.
- Provided technical investigations, analysis, reports and testimony towards the resolution of commercial and personal injury litigation involving concrete construction and failure analysis.

As national sales manager interfaced with contractors, DOT's designers and owners regarding the rental and or sales of temporary bridges for industrial and construction worksites, as well as:

- Tracked bridge projects bidding on a monthly basis, identified potential projects, initiated contact with the contractor, provided preliminary proposals, negotiated the contract and provided field support during erection and launching.
- Worked closely with contractors and supervised the design, installation and removal of bridges.
- Designed multiple lane, multiple span vehicle bridges, utility bridges, pedestrian bridges, shoring and propping applications.

As an engineer with J.F. White Contracting:

- Assisted Chief Structural Engineer with bid schedules for MHD, MWRA, MBTA, MTA, MASSPORT, NHDOT, CTDOT and private bids.
- Managed all bid proposals and related documents.
- Managed DBE, MBE & WBE proposals.
- Managed Design-Build proposals for Norumbega and Rt 3 and supported the project managers/engineers.
- Provided technical support to Project Managers and field personnel regarding repair / restoration.
- Interfaced with owners/engineers regarding the repair of identified defective work on buildings, bridges and tunnels.
- Selected repair materials including epoxies and grouts and supervised repair installation and grouting operations.
- Supported estimating department as needed.
- Prepared bid documents for all projects.
- Worked extensively with concrete repair, bridge & tunnel construction, forming systems, and underwater repair.
- Assigned to JF White Dive Division as a technical resource

Representative projects include:

- Design Build: 100-million-gallon concrete storage tank for Norumbega developed the concrete mix design, waterstop design, waterproofing design, precast storage tank. Interfaced with the project consultant and the owner's representative.
- MBTA Silverline Tunnel Chemical grouting of slurry walls.
- MBTA Commuter Rail- bridge repair to damaged track membrane below ballast.
- Deer Island WTP assigned punch list items on various contracts to be repaired/resolved.
- CA/T projects: Massachusetts Avenue Interchange, and North End tunnels. Involved in the water intrusion problems associated with the walls and roof. Met with CA/T representatives to establish the proposed repair techniques to be used. Researched repair options of CIP concrete barrier on CA/T project.
- Amtrak Northeast Corridor repair and waterproofing of precast concrete foundations.



EDUCATION

BS Civil Engineering University of Florida 1992

Masters of Engineering, University of Florida 1993

REGISTRATIONS/ CERTIFICATIONS

NCEES Certification

Registered Professional Engineer MA - 48636 NC IN FL - 52063

PROFESSIONAL AFFILIATIONS American Segmental Bridge Institute

Florida Engineering Society

AWARDS

Florida Engineering Society Young Engineer of the Year – 1999

PUBLICATIONS

"Closing the Gap", Jerry Pfuntner, P.E., *Civil Engineering*, November 2001.

"Design of Deviators and Diaphragms," Jerry Pfuntner, P.E., *ASBI Design Seminar Proceedings*, 2000.

"Innovative Methods of Concrete Bridge Design: Using Finite Element Analysis to Optimize the Benefits of Concrete Materials on Large Bridge Projects," Greg Shafer, P.E. and Jerry Pfuntner, P.E., *CE News*, January 1999.

"Analysis of Discontinuity Regions Using Strut-and-Tie Models Combined with Finite Elements," Jerry Pfuntner, *Proceedings of the XIIIth FIP Congress, A.A.* Balkema / Rotterdam / Brookfield, 1998.

EXPERIENCE PROFILE

Uniquely diverse background in the field of bridge engineering, Jerry has performed design, construction engineering, field engineering, bridge inspection and general consultant roles. Bridge structure types designed include flat slab, prestressed I-girder, steel girder, precast segmental balanced cantilever, cast-in-place segmental, precast span-by-span and cable stayed bridges. Notable design experience includes ship impact analysis, finite element analysis, seismic analysis, strut-and-tie modeling and time dependent analysis.

RELEVANT PROFESSIONAL EXPERIENCE

Present	Principal – Sr. Bridge Engineer - Finley Engineering
	Group
2004 - 2005	Area Structures Engineer – Districts 1 & 6
1999 - 2004	Senior Bridge Engineer – Parsons (Formerly Finley
	McNary Engineers)
1994 - 1999	Bridge Engineer – JMI Engineers

RELEVANT PROJECT EXPERIENCE



Project: Chelsea Street Bridge Replacement, Boston, MA 10/08-Present

Project Role: Senior Bridge Engineer Performed conceptual design and design oversight for the launching and construction engineering of this 450ft vertical lift bridge truss bridge.

Developed a construction scheme to launch this truss in phased construction and launch configuration. Analyzed the truss for all phases of the launch sequence to include truss chord members, connections, etc. and assessed their adequacy for the final design.



Project: DCR Access road over Route 24 Bridge, Randolph, MA. 2009-Present **Project Role:** Senior Bridge Engineer This 4-span, steel girder structure will be replaced with a 2-span segmental Channel Bridge. The replacement bridge will have a length of 248 ft., a width of 29 ft. 8 in., and a total depth (including barriers) of only 5 ft. 4 in. The

channel cross-section is a precast-concrete superstructure system that uses post-tensioned segmental construction. Provided construction analysis and construction manuals, integrated segment shop drawings, erection beams and temporary supports, posttensioning calculations, casting and erection geometry control manuals.



Project: Conoco-Phillips Docks, Trainer, PA (1/06 to 3/06) **Project Role:** Design Engineer Performed calculations for this steel thru-girder bridge (approx. 60ft span) for the l-girder to include stability calculations of the plate truss thru girders under construction and live

loading. Performed refined analysis of the lateral bracing system and designed end diaphragms and stiffeners capable of transferring torsion through this unique application of a thru-truss girder system.



Project: MIC/MTAR, Miami, FL (1/07 to 6/07) (FDOT)

Project Role: Design Engineer

Performed calculations for this curved steel box girder bridge alternative design (approx. 140ft span) with a rolled section sub-girder system. Performed construction stage

calculations to include stability during erection of the steel tub sections. Designed structural box section, cross bracing, lateral, end diaphragms and stiffeners in accordance with the AASHTO curved girder guide specifications. Designed a drilled shaft and column substructure system.

Project: Bangkok Skytrain, Bangkok , Thailand (8/95 to 11/96) **Project Role:** Bridge Designer

Performed typical segment and pier segment design, longitudinal post-tensioning design as well as post-tensioned substructure design of cantilever piers and straddle bents. Project consisted of precast segmental span-by-span design with span lengths varying from 100 to 120 ft.



Project: Estero Parkway Overpass, Ft. Myers, FL (9/07 to 5/08)

Project Role: Design Engineer

Performed design calculations for this two span curved steel box girder bridge VECP design over I-75 (approx. 320 ft span). Performed construction stage calculations to include stability during erection of the

steel tub sections. Designed structural box section, cross bracing, lateral, end diaphragms and stiffeners in accordance with the AASHTO LRFD Specifications.

Mark Fobert Environmental Lead

EDUCATION Salem State College, B.S., Geography/Urban and Regional Planning, 1990

EMPLOYMENT

2002 - Present Tetra Tech Rizzo, Framingham, MA

Senior Project Manager

- MassDOT Transit Division, Design/Build of the Greenbush Commuter Rail Line. Project Manager responsible for coordinating environmental permitting, wetlands mitigation and hazardous materials management for this \$450-million design/build project. Analyzed project impacts, quantified wetlands and endangered species impacts, developed design options and analyzed alternatives. Provided permitting support to the MassDOT to acquire federal, state and local wetlands approvals. Designed and oversaw construction of 6.5 acres of coastal wetland and 4.6 acres of inland wetland mitigation areas to offset impacts. Obtained all DEP Chapter 91 approvals, including six railroad bridges, culvert replacements and wetland mitigation areas. Obtained U.S. Coast Guard approvals for bridge crossings over navigable waterways and prepared NPDES stormwater pollution prevention plans for entire site.
- MassDOT Highway Division, Whittier Bridge/ I-95 Improvement Project, Newburyport, Amesbury, and Salisbury, MA. As part of the Parsons Brinckerhoff team, providing environmental permitting for the reconstruction of a four-mile segment of I-95 and the replacement of the Whittier Bridge over the Merrimack River. This project is one of the most complex and challenging assignments under the \$3 billion Accelerated Bridge Program.
- MassDOT Highway Division, Methuen Rotary Reconstruction and I-93/Route 110/113 Interchange Improvements, Methuen, MA. Assisted in preparation of a joint NEPA Environmental Assessment and MEPA Environmental Impact Report for the reconstruction of the Methuen Rotary and improvements to the Route 110/113 interchange with I-93. This was the first highway project in Massachusetts to be scope by MEPA for a greenhouse gas (GHG) analysis.
- Department of Conservation and Recreation, Memorial Drive Rehabilitation, Cambridge, MA. Provided environmental permitting and natural resource preservation services for the construction of a two-mile segment of Memorial Drive. This fast-track project was completely designed and under construction within five months from Notice to Proceed. It included permitting for superstructure replacement for the Massachusetts Avenue Overpass Bridge to carry four travel lanes, a turning lane and two 12-foot-wide sidewalks.
- MassDOT Transit Division, Fairmount Commuter Rail Line Improvements, Boston, MA. Assisted with environmental permitting evaluation of the Fairmount Commuter Rail line improvements project. The project includes improvements of two existing stations, track and signal work (interlocking system) and the reconstruction of three bridges. Collaborated on the Needs Assessment document that identified and proactively addressed permitting issues along the corridor.

- Yarmouth Marina Project, Town of Yarmouth, MA. Project Manager for the proposed development of the Parker's River Marine Park on the former Yarmouth Drive-In theater site. Responsible for securing all local, state and federal environmental permitting approvals. Coordinating the design of all elements of this multidisciplinary project including landscaping, marine and land-based design.
- Preotle Lane & Associates, Ltd, River's Edge Mixed Use Development, Medford, Malden and Everett, MA. Project Manager for permitting of Phase 1 of the River's Edge Project, which consists of 220 units of residential housing and 441,600 square feet of new office/research and development space on 30 acres. Project included the creation of 7.6 acres of public parkland and the restoration of 1.7 acres of wetlands along the Malden River. Secured state approvals from the MA DEP Wetlands and Waterways Divisions, MEPA and MWRA. Secured Chapter 91 Waterways License and obtained an Individual Water Quality Certification. Also prepared and filed MEPA documentation including the Environmental Notification Form Environmental Impact Report (EIR) and numerous Notices of Project Change.
- Redevelopment of Former South Weymouth Naval Air Station, Weymouth, MA. Supported the EIR and permitting for infrastructure improvements along a five-mile section of Route 18. Performed baseline development constraints analyses, including delineation and certification of over 375 acres of wetlands. Tetra Tech Rizzo's phased approach to the EIR was accepted by the MA Secretary of Environmental Affairs, leading to the expedited approval of a Phase I MEPA environmental impact document.

PROFESSIONAL REFERENCES (REQUESTED FROM MARK)

Ms. Holly Palmgren

MassDOT – Transit Division

(617) 222-1580

Mr. Harry Bovee III Preotle, Lane & Associates

(781) 321-7840

Mr. Karl Von Hone

Town of Yarmouth, MA Director of Natural Resource

(508) 760-4800

Erik R. Maki, PE, PTOE Traffic Lead

EDUCATION Worcester Polytechnic Institute, B.S., Civil Engineering, 1990

EMPLOYMENT

1995-Present <u>Tetra Tech Rizzo, Framingham, MA</u> Senior Project Manager

- MassDOT Transit Division, Design/Build of the Greenbush Commuter Rail Line. Traffic Engineering Manager for the final design of traffic signal improvements and maintenance of traffic plans for this 18.5-mile project, which spans the South Shore communities of Braintree, Weymouth, Hingham, Cohasset and Scituate. Designed traffic controls for 25 grade crossings, 19 signalized intersections and a modern roundabout. Also maintained traffic plans for all construction efforts over a six-year period – a total of 75 separate Traffic Management Plan packages were developed for the project.
- MassDOT Highway Division, Statewide Traffic Engineering Contract. Task Manager for three consecutive Statewide Traffic Engineering Contracts involving the improvement and replacement of overhead and ground-mounted guide sign panels and regulatory, warning, and route marker panels along various state routes and intersecting secondary roadways throughout the state.
- MA Department of Conservation and Recreation, Rehabilitation of Memorial Drive/Historic Parkways Initiative, Cambridge, MA. Task Manager for traffic engineering components including alterations to traffic signals, pavement markings and signing, and traffic management plans. The project includes reconstruction of a two-mile segment including pedestrian, bicycle and parkway improvements, superstructure replacement for the Massachusetts Avenue Overpass Bridge, as well as environmental permitting and natural resource preservation.
- MassDOT Highway Division, Route 3/Burgin Parkway/Centre Street Interchange Improvements Project, Quincy. Provided traffic management during construction of a new eight-span viaduct, highway and right-of-way alterations and two at-grade ramps leading to Route 3, Route 128 and I-93. Also designed intersection and signal improvements.
- MassDOT Highway Division, Alpine Drive over Lebanon Brook, Southbridge.
 Provided traffic management plans for this accelerated bridge replacement project.
 Work included developing staging plans with temporary traffic control signals to manage vehicles through the one-lane work zone.
- City of Quincy, MA, Quincy Center Concourse Roadway and Traffic Improvements. Project Manager for the interconnection of six intersections along a four-lane urban boulevard, in support of downtown revitalization. Designed safety improvements in a heavy pedestrian area. Upgraded roadways, sidewalks, medians and bike provisions.

- MA Department of Conservation and Recreation, Rehabilitation of Quincy Shore Drive, Quincy, MA. Project Manager for the \$1.3M design of roadway, traffic signal, pedestrian and bicycle facilities on a two-mile portion of Quincy Shore Drive at Wollaston Beach. The design includes interconnecting and coordinating 10 signalized intersections along the corridor with a full reconstruction of all traffic signals, signs and pavement markings.
- Boston Transportation Department, Rutherford Avenue/Sullivan Square Design Project, Charlestown, MA. Design Manager for the first phase of the city's high-profile reconstruction of Rutherford Avenue from Sullivan Square to City Square. The approximate 1.5-mile corridor includes several key connections to the regional highway system. Developed a design to reduce the width of the corridor; enhance pedestrian, bicycle and bus operations; create transit-oriented redevelopment opportunities and expand public open space. Used Synchro traffic modeling software to evaluate existing conditions and potential roadway and network alternatives for the reconfiguration of Sullivan Square, including modeling approximately 30 intersections.
- City of Nashua, NH, Daniel Webster Highway/Spit Brook Road Improvements Project. Traffic Engineering Manager for traffic systems analysis and design at 19 intersections on Daniel Webster Highway and Spit Brook Road. These two highway corridors are critical to the region and serve as a southern gateway to New Hampshire. Responsible for the design of new signal controllers, conflict monitors, and the generation of new timing patterns for weekday, weekend and holiday peak periods. The project included reconfiguration of the traffic signal at the Daniel Webster Highway/Mall intersection and new turning lanes, shoulders and sidewalks.

PROFESSIONAL AFFILIATIONS

Institute of Transportation Engineers (ITE) New England ITE, Technical Committee Chi Epsilon, National Civil Engineering Honor Society Town of Holliston, MA Planning Board Member 2000-2005

PROFESSIONAL REFERENCES

Mr. Steve Timmons

Highway Signing Engineer MassDOT Highway Division

(617) 973-7380

Mr. Neil Boudreau

State Traffic Engineer MassDOT Highway Division

(617) 973-8211

Mr. Don Burgess

ITS Program Manager Boston Transportation Department

(617) 635-4688

EDUCATION North Carolina State University, B.S., Civil Engineering, 1979

EMPLOYMENT

2001-Present Tetra Tech Rizzo, Framingham, MA

Senior Project Manager

- MassDOT Highway Division, Route 3/Burgin Parkway/Centre Street Interchange Improvements Project, Quincy, MA. Highway Engineering Lead for the design, permitting and construction oversight of a new eight-span viaduct and two at-grade ramps leading to Route 3, Route 128 and I-93. Also responsible for preparing state highway layout and right-of-way alteration plans.
- MassDOT Highway Division, Winter Street Bridge/I-95 Interchange Improvements, Waltham, MA. Project Manager for bridge replacement and interchange reconstruction project at one of the busiest interchanges on I-95. Project involves removal, replacement and widening of the Winter Street Bridge over I-95 from four to seven lanes; reconstruction of six interchange ramps on new alignments; design of local roadway approach widening and a new collector-distributor road; environmental permitting, as well as traffic signal system upgrades and TMPs. Prepared final construction contract plans, specifications and estimates. Project is under construction.
- MassDOT Transit Division, Design/Build of the Greenbush Commuter Rail Line. Responsible for construction staging and traffic management plans for the final design of traffic signal improvements, including traffic diversion plans for the construction of two bridges. This work minimized travel disruptions and impacts upon the community during multiple construction phases in some of the most complex project locations.
- MassDOT Highway Division, I-93/Route 113/Route 110 Methuen Rotary Interchange, Methuen, MA. Highway Engineering Manager for environmental assessment/EIR and design for the reconstruction of the Methuen Rotary. The new interchange will include six ramp connections with I-93, realignment of Routes 110 and 113, five new signalized intersections, stormwater management, wetland impact mitigation and bridge removal, reconstruction and replacement.
- MassDOT Highway Division, Bridge Replacement, Alpine Drive over Lebanon Brook, Southbridge, MA. Provided highway engineering management for staged construction design for the replacement of this bridge on a local roadway, currently under construction. The project includes traffic management with temporary signalization for three construction stages, roadway alignment and profile reconstruction, right of way plans and environmental permitting.
- Department of Conservation and Recreation, Memorial Drive Rehabilitation, Cambridge, MA. Provided technical support for parkway design alterations and pedestrian and vehicular traffic management during construction of a two-mile

segment of Memorial Drive. This fast-track project was completely designed and under construction within five months from Notice to Proceed.

- Department of Conservation and Recreation, Quincy Shore Drive Rehabilitation, Quincy, MA. Provided technical support for parkway improvements, including roadway and parking alternatives, traffic signals, and pedestrian/bicycle facilities along a twomile portion of Quincy Shore Drive. The design included interconnecting and coordinating 10 new or reconstructed signalized intersections, full pavement reconstruction, drainage system improvements, and signs and pavement markings.
- New England Patriots, Transportation Services for Gillette Stadium. Provided design and management support for highway and interchange improvements associated with stadium development. The project included four new ramps connecting the complex to Route 1, (including two direct-connection flyover ramps) 7 new bridges and Event Traffic Management Plans.
- Bridge Street Reconstruction, City of Salem, MA. Project Manager on this municipally administered project to design the reconstruction of Bridge Street under Chapter 90. Conducted neighborhood coordination meetings and designed provisions for full-depth construction of a narrower roadway, on-street parking, updated traffic signals, new and wider sidewalks with plantings and handicap accessibility.
- Route 18 Widening, Abington Weymouth, MA. Project Manager for Environmental Assessment and 25 percent design documents for major improvements to a five-mile section of Route 18, a north-south corridor from Route 3 in Weymouth to Route 139 in Abington. Project includes widening Route 18 from two travel lanes to four, intersection improvements and traffic signal upgrades, access management and pedestrian/bicycle accommodation.
- Prior to joining Tetra Tech Rizzo, supported the MassDOT's Statewide Bridge R&R
 Program for various municipalities. Responsible for management and lead technical highway design. Highlights included staged construction, falsework studies, maintenance of traffic designs for staged construction, and utility coordination.

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

PROFESSIONAL REFERENCES

Mr. Steve McLaughlin MassDOT – Highway Division	(617) 973-7245
Mr. Shawn Holland MassDOT, Highway Division	(617) 973-7242
Mr. Charles Sawanson Town of Marshfield, MA	(978) 834-5561

Edward W. Ionata Public Participation

EDUCATION Yale University, M.S., Forest Science, 1982 University of Rhode Island, B.S., Natural Resources, 1980

EMPLOYMENT

1998-Present Tetra Tech Rizzo, Framingham, MA

Senior Vice President

- MassDOT Transit Division, Design/Build of the Greenbush Commuter Rail Line. Principal-in-Charge of Tetra Tech Rizzo's multidisciplinary services in support of this \$450-million design/build project. The firm's scope of services includes transportation design, traffic management, environmental permitting and hazardous materials management along an 18.5-mile corridor.
- MWRA, Design/Build of the Blue Hills Covered Storage Project. Since 1998, Principalin-Charge of Tetra Tech Rizzo's multidisciplinary services in support of the Blue Hills Covered Storage Project. Managed the completion of conceptual design, MEPA documentation and environmental permitting for the placement of two 12.5 milliongallon, potable water storage tanks within the existing Blue Hills Reservoir. The project involved replacing eight acres of existing reservoir with a meadow/forest habitat covering the new storage tanks, and creating an 8-acre pond and wetland habitat in the remaining reservoir footprint. Tetra Tech Rizzo now serves as Owner's Representative for the design/build construction of the facilities.
- MassDOT Highway Division, North-Central Berkshire Regional Transportation Access Study. Managed a regional transportation access study in Berkshire County that examined transportation problems along a major, multi-town corridor. Oversaw development of transportation solutions strongly influenced by environmental impacts, tourism, scenic value, economic development and diverse public viewpoints. Participated in numerous public meetings with members of the BRPC and the Berkshire communities.
- Proposed Mashpee Wampanoag Casino, Environmental Impact Analysis Middleborough, MA. Principal-in-Charge of Tetra Tech Rizzo's environmental impact review, siting analysis and engineering services for the development of a resort casino. Key issues include net usable land area, highway access and utilities. Moderated NEPA scoping sessions to solicit input from stakeholders. Potential environmental impact issues, such as wetlands, drainage, endangered and threatened species and cultural resources are being studied in relation to their effect on the resort casino and supporting infrastructure.

1990 – 1998 <u>Central Artery/Tunnel Project, Parsons Brinckerhoff, Boston, MA</u> Environmental Services and Permitting Manager

 As part of the Core Management Team, oversaw a 45-person environmental services group to provide environmental analyses required for the highway/tunnel/bridge project. Acquired all environmental permits, monitored environmental compliance during construction and facilitated regulatory agency relations. Managed the budget, scope and schedule for environmental tasks and specialty subcontractors while developing strategies for materials disposal and construction mitigation. Provided NEPA and state environmental impact documentation necessary to gain approval for project changes. Prepared a major supplemental impact statement examining tunnel/bridge design options for a river crossing. Supported an aggressive permit acquisition schedule, provided litigation assistance and directed technical studies in multiple disciplines including air quality, odor control, water quality, landfill revegetation, marsh restoration, and noise control. In addition, managed production of a major Supplemental Environmental Impact Statement and numerous Environmental Assessments, and supervised acquisition of more than 350 state, local, and federal permits, with extensive public participation.

1988 – 1989 <u>MWRA, Boston Harbor Clean-up – Deer Island, Nut Island, Fore River Shipyard, and</u> <u>Ocean Outfall Facilities</u>

Construction Manager

Developed strategies and led the permitting team to acquire NEPA reviews and environmental permits for the construction of the \$3.28-billion Boston Harbor wastewater treatment facility and the barge and ferry facilities required to support its construction. Operating under court-ordered deadline pressure, managed \$3 million of consultant resources to gain all required coastal, wetlands, solid waste, hazardous waste and water pollution regulatory approval. Designed a permit grouping and tracking system to streamline regulatory reviews, implemented an environmental compliance assurance program, developed consultant contracts and managed selection committees.

PROFESSIONAL AFFILIATIONS

Environmental Business Council of New England Town of Barrington, RI Conservation Commission, Vice Chair Rhode Island Consulting Engineers (RICE)

PROFESSIONAL REFERENCES

Mr. Andrew Brennan MassDOT – Transit Division	(617) 222-3126
Mr. James Rooney MA Convention Center Authority	(617) 954-2100
Mr. Frederick Brandon	(617) 570 5447

EDUCATION University of Lowell, Civil Engineering courses 1986-1992

EMPLOYMENT

Mr. Arsenault has twenty-three (23) years of professional experience. His project experience at Green includes the following:

July 07-Present Green International Affiliates, Inc., Westford, MA

Survey Department Manager – duties include supervising all activities in Green's Survey Department

 MassDOT, I-93/I-95 (Route 128) Transportation Improvements Project, Needham & Wellesley, MA

Mr. Arsenault is currently managing Green's surveying services for this Route 128 widening project. Mr. Arsenault supervised field survey crews and updated base map to reflect existing utility structures which were missing on the original base map. He has also compiled and established existing Layout Lines on the base map. He performed deed research and developed ROW plans to assist MassDOT in advanced takings. He is currently performing additional survey and mapping to accommodate extended project limits.

River/Great Plain Avenue Bridges, Needham and Dedham, MA

As a subconsultant to Louis Berger Group, Green is providing a variety of civil support engineering services including surveying services. Initially, Green provided a supplemental survey to incorporate the wetland flagging. Mr. Arsenault supervised the boring stakeouts which are being utilized with the stormwater management facility design.

Two (2) MBTA Twelve Bridge Contracts, Various Locations in MA

As a subconsultant, Mr. Arsenault is the survey manager for nine different MBTA bridges on two different contracts. Services include property research and surveying services for property lines and bridge approaches.

MassDOT, Route 1A (Main Street) Reconstruction, Walpole, MA

This project includes the reconstruction of 1.9 miles of Route 1A. Mr. Arsenault is responsible for supervising all surveying services provided for the project. Minor land acquisitions may also be required to accommodate geometric and safety improvements.

<u>MassDOT, Roadway Reconstruction and Safety Improvements, Route 2 Farley</u> <u>Section, Erving, MA</u>

Mr. Arsenault is the survey manager for the topographical and boundary surveys; ROW layout and takings plans for the project.

PROFESSIONAL AFFILIATIONS

Massachusetts Association of Land Surveyors and Civil Engineers (MALSCE) - member

PROFESSIONAL REFERENCES

Roma J. McKenzie-Campbell Senior Project Manager MBTA

(617) 222-4428

Joseph a. Gushue, P. E. Engineer-Track MBTA

(617) 222-2426

Vernon J. Leblanc, P.L.S.. Owner Leblanc Survey

(978) 774-6012

L:\MassDOT.- Highway\Wellesley - Cedar Street Over Route 9 DB\Gill\ka__Professional Res.doc

Scott Ridder, ASLA, LEED AP Landscape Architecture



EDUCATION Louisiana State University, 1984 B.L.A., Landscape Architecture,

EMPLOYMENT

2006 – Present <u>Tetra Tech Rizzo, Braintree, MA</u> Landscape Architect

- MassDOT Highway Division, I-93/Route 113/Route 110 Methuen Rotary Interchange, Methuen, MA. Preparing 25% landscape design plans for the Methuen Rotary project. Prepared initial concept plans showing possible areas for saving and enhancing existing tree canopy and also areas of new planting. Coordinating plant location with major dr ainage and utility upgrades. Preparing plans for relocating existing monuments to fallen soldiers.
- City of Quincy, Center Concourse, Quincy, Massachusetts, 2009. Prepared final edits to the design plans for Phase II of this major new roadway design. Coordinated special provisions with MassHighway.
- City of Salem and MassDOT Highway Division Salem, MA. Prepared street tree and shrub planting plans along a 3,900 I.f. portion of Bridge Street as part of a major roadway renovation. Coordinated tree selection and planting details with the City's DPW.
- South Shore Tri-Town and MassDOT Highway Division East/West Parkway, Weymouth Massachusetts, 2008. Provided conceptual landscape planting along a new 2 mile long parkway in Weymouth for LNR as part of the reuse plan at the former South Weymouth Naval Air Station. The goal was to create an enjoyable roadway experience for both users and residents by the use of layers of various deciduous and evergreen plant materials. The project is currently undergoing MassHighway review.

1984 – 2006 <u>Earth Tech, Concord, MA</u> Landscape Architect

- MassPort, Seaport Avenue, Boston, Massachusetts. Prepared design and construction plans for a raised median along Seaport Avenue. Site improvements include decorative granite planters, granite cobbles and curbing and steel fencing with cantilever slide gates. Plantings, including trees, shrubs, ornamental grasses, and perennials, for two raised medians along Congress Street were also designed.
- MassDOT HighwayDivision Visitor Center, Bourne, Massachusetts. Prepared contract documents for the development of a visitor center as part of the ongoing work at the Sagamore Bridge. Coordinated site design work with the project architect. Plantings are tolerant of urban and seashore conditions and include; Hawthorn, Green Ash, Juniper, Potentilla, Yucca, and assorted ornamental grasses and perennials. Site improvements included a plaza area, bus shelters, bike storage lockers and racks, and decorative fencing.
- Maine Department of Transportation Height-of-Land, Rangeley, Maine. Completed the concept plans for the redesign of 2,500 linear feet of scenic byway in Rangeley Maine. The Height-of-Land is a historic overlook hundreds of feet above Lake Mooselookmeguntic, at a high point along Route 17. The majority of the road is to be completely rebuilt and new alignment will be constructed to ease some difficult turns. A new overlook will be designed so that visitors will still get the feeling of "being on the edge". The Appalachian Trail cuts across this road and a new crossing will be included.

- Maine Department of Transportation Route 4 Turnout, Rangeley, Maine, 2004-2005. Designed a turnout and parking area overlooking Doctor's Island along Route 4 in Rangeley, Maine. A portion of property was purchased by the MDOT from the Rangeley Lakes Heritage Trust for this facility. Preliminary approvals were granted by the Historic Preservation Commission with the caveat that on-site excavations be limited. Public Workshops were held to review site opportunities and constraints and to finalize program elements. The constructed site features include: parking for automobiles and tour busses and an accessible viewing area with a handcrafted stonewall.
- City of Quincy Center Concourse, Quincy, Massachusetts, 2001. Served as landscape architect for Phase I of the new Center Concourse roadway. The roadway will eventually link the Hancock Street commercial district to Burgin Parkway via a bridge structure over the MBTA's Rail Corridor. Incorporation of pedestrian amenities such as wide tree-lined walks, brick and granite paving at platooning areas, seating areas, lighting, and signage are included along the entire roadway. The project had a high level of community involvement including a Citizens Advisory Committee, which met monthly.
- Vermont Agency of Transportation Traffic Calming Devices, 2001. Developed standard drawing sheets for 12 traffic-calming devices that will be included in the state's Design Guidelines. The focus of this project was to provide a consistent set of standards that local and state engineers and planners could use to apply to locations where traffic-calming devices are needed. Provided design drawings for landscape planting for traffic calming projects. Specific planting guidelines and details were developed for mid-block, intersection and median treatments, and gateways. Recommendations for plant species selection and planting mixtures and amendments were also presented.
 - New Hampshire Department of Transportation Interstate 93 Rest Area, Salem, New Hampshire, 1998. Served as landscape architect for the reconstruction of the existing facility which included a small building with 12 bathroom fixtures, and parking facilities for 86 cars and 23 trucks. The new facility was designed for traffic demands for the year 2020, with 32 bathroom fixtures, a large public area, a stone fireplace, and parking spaces for 193 cars and 32 trucks. Site improvements included wide walk ways throughout the rest area to facilitate ease of pedestrian movements, a common area including a concession building, a shelter for public telephones and newspapers, stone seat walls and plantings reminiscent of the New England countryside. Provided conceptual site sketches and designs through contract documents including plans, specifications, and estimates.

PROFESSIONAL AFFILIATIONS

Council of Landscape Architectural Registration Boards American Society of Landscape Architects Boston Society of Landscape Architects

PROFESSIONAL REFERENCES

Mr. Kent Cooper, Senior Landscape Architect (project was done for Brett Poi) Maine DOT Highway Program 207-624-3480

Mr. Richard Kleiman (Chris Calnan may have Richard's complete info.) LNR 617-249-1106

Ms. Nhuy Hoang MassPort

617-586-5976

Kin C. Lam, P.E. Principal

Lamson Engineering Corporation

EDUCATION

U. of Wisconsin-Madison, M.S., Civil National Taiwan University, B.S., Civil

EMPLOYMENT

1989 – PresentLamson Engineering Corporation, Newton, MA Principal – in charge of company wide projects

Mr. Lam has over 25 years of experience in a wide range of geotechnical, structural and civil engineering projects. He has managed and designed many foot-print bridge projects for Massachusetts Department of Transportation (MassDOT) from the preliminary design through final design to construction. Preparation of the bridge and civil plans, bridge type study reports, <u>geotechnical reports</u>, environmental permits, specifications and estimates were part of the design effort. Part of the MassDOT projects he was responsible for in the areas of geotechnical program development and reports preparation with foundation recommendation included the following:

- MassDOT Rte 128 Add-A-Lane Project, Bridges IV for 7 bridges (via Louis Berger)

Route 2A Reconstruction Project, Town of Arlington (via Fay, Spofford, & Thorndike)
 MassDOT I-495 Bridges over Concord River, B&M, and Woburn Street, Lowell (via AECOM)

- MBTA Fairmont Stations Project for Columbia Road Bridge and Quincy Street Bridge in performing temporary earth support structures and retaining walls design.

PROFESSIONAL REGISTRATION

P.E. in Connecticut, Massachusetts, & Rhode Island

PROFESSIONAL AFFILIATIONS

Members of ASCE/ BSCE and ACEC

PROFESSIONAL REFERENCES

- Mr. Al-Khatib, Louis Berger Group, Needham, Mass., Phone 781-707-7437
- Mr. John Hendrickson, FST Inc., Burlington, Mass., Phone 781-221-1133.
- Mr. Richard Devanna, AECOM, Concord, Mass., Phone: 978-371-4094.

EXHIBIT E: PERFORMANCE BOND

Know all men by these presents, that <u>J. F. WHITE CONTRACTING COMPANY</u>, a Corporation duly organized under the laws of Commonwealth of Massachusetts Island and having a usual place of business in Framingham,

Massachusetts as principal, and	Travelers Casualty and Surety Company of America	
	350 Granite Street, Suite 1201	
	Braintree, MA 02184	
as surety, are held and firmly bou	nd upon the Massachusetts Department of Transportation in the sum of	
	three million four hundred fifty thousand dollars	
	(\$3,450,000.00)	
	(A) is the solution that the statement of the solution of the	

lawful money of the United States of America, to be paid to the Massachusetts Department of Transportation, for which payments, well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly be these presents.

 Whereas, the said principal has made contract with the Massachusetts Department of Transportation, bearing date

 of
 September
 21
 2010, for the construction of Contract Number
 65281 for Bridge Replacement

 (W-13-015)
 Cedar Street over Route 9 in Wellesley (Design/Build) (Accelerated Bridge Program).

Now the condition of this obligation is such that if the principal shall well and truly keep and perform all the undertakings, covenants, agreements, terms and conditions of said contract on its part to be kept and performed during the original term of said contract and any extensions thereof that may be granted by the Massachusetts Department of Transportation, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly keep and perform all the undertakings, covenants, agreements, terms and conditions of any and all duly authorized modifications, alterations, changes or additions to said contract that may hereafter be made, notice to the surety of such modifications, alterations, changes or additions being hereby waived, then this obligation shall become null and void; otherwise it shall remain in full force and virtue.

In the event that the contract is abandoned by the Contractor, or is terminated by the Massachusetts Department of Transportation, under the provisions of Sec. 8.12 of the Standard Specifications for Highways and Bridges, said surety hereby further agrees that, if required in writing by the Massachusetts Department of Transportation, said surety shall take such action as is necessary to complete said contract.

In witness whereof we hereunto set our hands and seals this ______ 21 st day of September, 2010

J. F. WHITE CONTRACTING COMP	PANY	
NNS		Principal
X ~ Ce	14 - 14	Corporate Seal
KEVIN K. EGAN	EXEC. VICE PRES.	

Travelers Casualty and Surety Company of A	America Surety
a de la de la companya de la company	Corporate Seal
Sudninklille	

Susan M. Kedian, Attorney-in-Fact

EXHIBIT F: PAYMENT BOND

Know all men by these presents, that J. F. WHITE CONTRACTING COMPANY, a Corporation duly organized under the laws of the Commonwealth of Massachusetts Island and having a usual place of business in Framingham,

Massachusetts as principal, and	Travelers Casualty and Surety Company of America	
	350 Granite Street, Suite 1201	· · ·
	Braintree, MA 02184	

as surety, are held and firmly bound unto the Massachusetts Department of Transportation in the sum of three million four hundred fifty thousand dollars

(\$3,450,000.00)

money of the United States of America, to be paid to the Massachusetts Department of Transportation, for which payments, well and truly to be made, we bind ourselves, our respective heirs, executor administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the said principal has made a contract with the Massachusetts Department of Transportation bearing date 2010, for the construction of Contract Number 65281 for Bridge Replacement September 21 of (W-13-015) - Cedar Street over Route 9 in Wellesley (Design/Build) (Accelerated Bridge Program).

Now the condition of this obligation is such that if the principal shall pay for all labor performed or furnished and for all materials used or employed in said contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said contract that may hereafter be made, notice to the surety of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, the provisions of Massachusetts General Laws, (Ter. Ed.), Chapter 30, Section 39A as amended and Chapter 149, Section 29 as amended, then this obligation shall become null and void; otherwise it shall remain in full force and virtue.

In witness whereof we hereunto set our hands and seals this _21st day of September, A.D. 2010

J. F. WHITE CONTRACTING COMPA	Principal	
BY		Corporate Seal
KEVIN K. EGAN	EXEC VICE PRES	

Surety Travelers Casualty and Surety Company of America **Corporate Seal** Susan M. Kedian, Attorney-in-Fact ΒY

1. Name and Address of Agent or Agency receiving commission on this Performance and Payment Bond.

Aon Risk Services Northeast, Inc.

0ne	Federal	Street,	Boston,	MA	02110

2.	Name and Address of Resident Agent, if any, of Surety, or other Agent appointed by Surety to Whom Notice should
	be sent (Must be completed by Attorney-in-Fact of Surety.

N/A

Surety **Corporate Seal**

EXHIBIT G: CERTIFICATE OF INSURANCE

CERTIFICATE OF INSURANCE

NOTE: THIS CERTIFICATE MUST BE FILLED OUT BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY ONLY.

This is to certify that (INSURED) _____ J. F. White Contracting Company

(ADDRESS) 10 Burr Street, Framingham, MA 01701

is at the date of this certificate, insured by the Insurance Company (ies) listed below

with respect to the types of Insurance required under Contract No._____65281____

dated _____between the Commonwealth of Massachusetts by its MassDOT - Highway Division and

the above named insured for work in (LOCATION) Wellesley

NAME & ADDRESS OF	POLICY NO.	<u>TYPE OF POLICY</u>	LIMITS OF LIABILITY	INCLUSIVE DATES
Zurich Insurance 60 State St., Boston MA	WC2978683-10	MASS. WORKERS COMPENSATION X	Statutory	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	GLO2978684-10	PUBLIC LIABILITY PER PERSON/PER ACCIDENT X	<u>1,000,000 - 2,000,000</u>	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	GLO2978684-10	PROPERTY DAMAGE LIABILITY PER ACCIDENT PER POLICY PERIOD X	<u>1,000,000 – 2,000,000</u>	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	GLO2978684-10	PROTECTIVE PUBLIC LIABILITY PER PERSON PER ACCIDENT X	1,000,000 - 2,000,000	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	GLO2978684-10	PROTECTIVE PROPERTY DAMAGE LIABILITY PER ACCIDENT PER POLICY PERIOD X	<u>1,000,000 - 2,000,000</u>	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	EOC591659504	PROFESSIONAL LIABILITY PER CLAIM PER AGGREGATE X	1,000,000	12/31/09 - 12/31/10
Hartford, 31 St. James Ave, Boston MA	08UUMFC1786	VALUABLE PAPERS LIABILITY EACH LOSS X	<u>100,000</u>	12/31/09 - 12/31/10
Zurich Insurance 60 State St., Boston MA	EOC591659504	ASBESTOS	\$2,000,000	12/31/09 - 12/31/10

Before the above stated expiration date the Company will not cancel or reduce the insurance afforded under the above numbered policies prior to Ten (10) days after notice of such cancellation has been mailed to the MassDOT – Highway Division, 10 Park Plaza, Room 6260, Boston, MA 02116.

Attention is directed to Amendment Sec. 7.05 of the Standard Specifications for Highways, Bridges wherein it stipulates that the Insurance shall cover all damages to property whether above or below ground.

List Name, Address and Title of person or persons in Massachusetts authorized to accept service or notice on behalf of above insurance company(ies).

Phillip E. MacHug	n, Account Execu	tive, Aon Righ	Services,	Northeast, Inc	
DATED 9/21/10	AT Boston	x	5	MA	. 11
		AUTHORIZEI	DREPRESEN	TATIVE OF IN	SURANCE COMPANY
		M			0

EXHIBIT H: STATEMENT OF STATE TAX COMPLIANCE

STATEMENT OF STATE TAX COMPLIANCE

PROJECT - WELLESLEY - CONTRACT #65281

Pursuant to Section 36 of Chapter 233 of the Acts of 1983, Amending Section of 49A (b), of Chapter 62C, General Laws, I,

KEVIN K. EGAN

authorized signatory for

J.F. WHITE CONTRACTING CO.

do hereby certify under the pains and penalties of perjury that J.F. WHITE CONTRACTING CO.

has complied with all laws of the Commonwealth relating to taxes.

Authorized Signature

September 21,2010

Date

EXHIBIT I: CERTIFICATE OF COMPLIANCE WITH MASSACHUSETTS EMPLOYMENT SECURITY LAW

CERTIFICATE OF COMPLIANCE WITH MASSACHUSETTS EMPLOYMENT SECURITY LAW

KEVIN K EGAN	EXEC. VICE PRES.
KEVIN N. LOAN (N	ame & Title)
signing on behalf of J.	F. WHITE CONTRACTING CO.
(Nam	e of Employer)
nereby certify that the aforeme:	ntioned employer has complied with all
employment security laws of the	Commonwealth relating to contributions
and payments in lieu of contrib	utions.
Figned under the penalties of p	erium this 21 day of September 2016
signed under the penalties of p	erfury this vary of september, the
	(Signature)
	Prost of Duranda
	Notary Public
	CYNTHIA F. DURB
	Notory Public
	My Commission Expires Only Commission Expires
	March 3, 2011

EXHIBIT J: CORPORATE AUTHORIZATION VOTE

J. F. WHITE CONTRACTING COMPANY

At a meeting of the Board of Directors of the J.F. White Contracting Company held on September 22, 2009 at 10 Burr Street, Framingham, Massachusetts, at which all the Directors were present or waived notice,

It was VOTED that Kevin Egan, Vice President/Chief Engineer of this corporation, be and is hereby authorized to execute contracts, releases and bonds in the name and behalf of said company, and affix its corporate seal thereto; and such execution of any contract or obligation in this company's name on its behalf under the seal of the company, shall be valid and binding upon this company.

A True Copy,

Attest: Jerk Robert E Hø

Framingham, Massachusetts September 24, 2009

I hereby certify that I am the Clerk of the J.F. White Contracting Company, that Kevin Egan is the duly elected Vice President/Chief Engineer of said company, and that the above vote has not been amended or rescinded and remains in full force and effect as of this date.

Høffman, Clerk Robert E

EXHIBIT K: INSURER'S AFFIDAVIT AS TO WORKER'S COMPENSATION INSURANCE

INSURER'S AFFIDAVIT AS TO WORKERS' COMPENSATION INSURANCE HELENE PALMER, AON RISK SERVICES NORTHEAST, INC. an authorized representative of ZUAICH AMGRIC Insurance Company М [Company Name] (a producer^{*} in the voluntary market)[†] , Insurance Company (an agent □ an authorized agent of [Company Name] in the voluntary market, authorized to sign on behalf of a producer)[†] , the Prime Contractor an authorized signatory of the . 🗆 [Company Name] (an insured of a producer in the involuntary market pool)[‡] , the Sub-Contractor (an insured of □ an authorized signatory of ____ [Company Name] a producer in the involuntary market pool, group, or otherwise insured)[‡] [Date], J.F. WHITE CONTRACTING and do hereby aver that effective 9/2/2010 COMPANY, the Prime or Sub-Contractor, is insured for Workers' Compensation insurance with ZURICH AMERIANInsurance Company under Policy No[s]. WC2978483 pursuant to the attached Certificate of Insurance, and in accordance with Massachusetts General Laws, Chapter 152 and Subsection 7.05A of the Standard Specifications for Highways and Bridges of the Highway Division of the Massachusetts Department of Transportation. ignature Title COMMONWEALTH OF MASSACHUSETTS 11 day of <u>September</u>, 2010, before me, the undersigned notary public, personally this Helene Palmer [document signer], proved to me through satisfactory evidence of identification, which was/were Oriders license/lighto be the person who signed the preceding or attached document in my presence, and who swore or affirmed to me that the contents of the document are truthfukant BERURAPHIA Denest of their knowledge and belief. Notary Public COMMONWEALTH OF MASSACHUSETT My Commission Expires [Printed Name] November 25. 2016 mmidsion Cypires A producer is an insurance company that provides insurance policies directly, not an insurance agent. [†] For Prime or Sub-Contractor companies insured through the voluntary market, this Affidavit must be completed by the insurer or an authorized agent of the insurer.

[‡] If the Prime or Sub-Contractor is insured through the involuntary insurance market, a pool, such as the Worker's Compensation Inspection and Rating Bureau, or is otherwise insured they may provide a Certificate of Insurance and this Affidavit which may be signed by an authorized signatory (company officer) of the Prime or the Sub-Contractor.

Effective 10-May-10

EXHIBIT L: CERTIFICATION OF CONSTRUCTION EQUIPMENT STANDARD COMPLIANCE
State Contract No. 65281

CERTIFICATION OF CONSTRUCTION EQUIPMENT STANDARD COMPLIANCE

I,	KEVIN K. EGAN	authorized signatory for
	J.F. WHITE CONTRACTING CO.	whose principal place of
business is at	10 BURR STRE	ET
	FRAMINGHAM, MA 01	701
do hereby certify equipment (DCE) oxidation catalyst equipment.	that any and all large non-road (greater that to be used in this contract has emission co s or particulate filters, on the exhaust syste	n 50 horsepower) diesel construction ontrol devices installed, such as em side of the diesel combustion engine

I acknowledge that this certificate is being furnished as a requirement under this contract, and is subject to applicable, State and Federal Laws, both criminal and civil.

Date	9 /21 /10	Signature

EXHIBIT M: DIESEL RETROFIT DATA

9/21/2010

Diesel Retrofit-02

 \langle

MassDOT - Wellesley 101023

DIESEL CONSTRUCTION EQUIPMENT DATA SHEET

JF White Contracting Co. Contractor Name:

Contract Number: 65281

MassDOT 65281 Cedar St. Bridge over Route 9, Wellesley Description:

Location (City/Town): Wellesley, MA

Type	Own?	Manuf	Model	ModelYr	FType	VINNumber	dH	ECD Type	ECD Manuf	ECD Make	ECD Model	ECD Cert	ECD Install
Crane	0	GRV	RT750E	2000	٥	221842	215	DOC -	DCL INTERNATIONAL	MINE-X	5318-MX-1R10-21	<u>}</u>	9/14/07
Excavator	0	CAT	M322C	2007	٥	H2E00412	164	DOC	DCL	MINE-X	3743	>	2/7/07
Excavator	0	CAT	M322D	2007	٥	W2S00192	165	Sol	DCL INTERNATIONAL	MINEX	BO3B-MD-IRO8-21	Y	10/29/07
Excavator	0	GDL	XL4300 SERIES	2006	٥	0210017899	166	DOC	DCL INTERNATIONAL	MINE-X	8106-MX-1R10-21	7	10/4/07
Excavator	0	GDL	XL2300	2000	۵	0238416	110	DOC	CATALYTIC EXHAUST	DIESELYTIC SX	6SX	7	7/6/07
Loader	0	CAT	938G	2001		6WS02667	145	DOC	CATALYTIC EXHAUST PRO	CATALYTIC EXH	10SX1376995	Y	3/28/09
Excavator	0	9	450C LC	2004	۵	FF450CX091523	316	DOC	DCL INT'L	MINEX	37A1-MD	Y	4/13/05
Excavator	0	9	330C LC	2004	۵	FF330CX082754	246	DOC	DCL INT'L	MINEX	MX-3790-MD-1R1021	≻	1/4/06
Loader	0	٩ ٩	744H	2001	٥	DW744HX580748	275	So	DCL INTERNATIONAL	MINEX	37B7-MD-1R12-21	≻	1/10/06
Vibratory Roller	0	IR	SD116DXTF	2003	٥	6413174474	155	So	CATALYTIC EXHAUST	DIESELYTIC SX	85X-15169537	7	3/11/05
Air Compressor	0	R	P185WJD	1996	D	265061UEG327	80		DCL INTERNATIONAL	MINEX	2500-DP-1R06-21	7	8/8/08
Boom Lift	0	JLG	460SJ	2001	D	300059732	48	DOC	DCL INT'L	MINEX	7433-MD-1R05-21	7	5/22/07
Boom Lift	0	JLG	460SJ	2001	۵	0300061642	48	Soc	DCL INTERNATIONAL	MINEX	7433-MD-1R05-21	7	5/22/07
	_												

FuelType D = ULSD

EXHIBIT N: EXECUTIVE ORDER 481 – DB ENTITY'S CERTIFICATION PROHIBITING THE USE OF UNDOCUMENTED WORKERS ON STATE CONTRACTS

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE ORDER 481 - CONTRACTOR CERTIFICATION

PROHIBITING THE USE OF UNDOCUMENTED WORKERS ON STATE CONTRACTS

J.F. WHITE CONTRACTING CO. **CONTRACTOR LEGAL NAME:** CONTRACTOR VENDOR/CUSTOMER CODE: 6000 156415

INSTRUCTIONS:

Executive Order 481 applies to all state agencies in the Executive Branch, including all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus, and offices, now existing and hereafter established. As it is the policy of the Executive Branch to prohibit the use of undocumented workers in connection with the performance of state contracts, all contracts entered into after February 23, 2007 require that contractors, as a condition of receiving Commonwealth funds under any Executive Branch contract, make the following certification:

CONTRACTOR CERTIFICATION:

As evidenced by the signature of the Contractor's Authorized Signatory below, the Contractor certifies under the pains and penalties of perjury that the Contractor shall not knowingly use undocumented workers in connection with the performance of all Executive Branch contracts; that pursuant to federal requirements, the Contractor shall verify the immigration status of all workers assigned to such contracts without engaging in unlawful discrimination; and that the Contractor shall not knowingly or recklessly alter, falsify, or accept altered or falsified documents from any such worker(s). The Contractor understands and agrees that breach of any of these terms during the period of each contract may be regarded as a material breach, subjecting the Contractor to sanctions, including but not limited to monetary penalties, withholding of payments, contract suspension or termination.

Contractor Authorizing Signature

KEVIN K. EGAN Print Name

Title: EXEC. VICE PRES

617-558-0460 Fax:

Telephone:	508-879-4700
Email:	Kegan@jfwhite.com

Date: 9 21 10

Issued March 2007

The Contractor is required to sign this Certification only once and may provide a copy of the signed Certification for any contract executed with an Executive Branch Department. A copy of this signed Certification must be attached to the "record copy" of all contracts with this Contractor that are filed with the contracting Department.

EXHIBIT O: MASSDOT PROVISIONS FOR NON-FEDERAL AID CONTRACTS

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CERTIFICATION OF CONTRACTOR PARTICIPATION

DOCUMENT 00210R: (REVISED) REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS CHAPTER 30, SECTION 39R



Highway Division

DOCUMENT 00210

REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS CHAPTER 30, SECTION 39R July 1, 1981

- A.
- (1) The Contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor.
- (2) Until the expiration of six years after final payment, the Awarding Authority, Office of Inspector General, and the Deputy Commissioner of Capital Planning and Operations shall have the right to examine any books, documents, papers or records of the Contractor or his/her Subcontractors that directly pertain to, and involve transactions relating to, the Contractor or his/her Subcontractors.
- (3) If the agreement is a contract as defined herein, the Contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the Awarding Authority, including in his/her description the date of the change and reasons therefor, and shall accompany said description with a letter from the Contractor's independent certified public accountant approving or otherwise commenting on the changes.
- (4) If the agreement is a contract as defined herein, the Contractor shall file a statement of management on internal accounting controls as set forth in paragraph (B) below prior to the execution of the contract.
- (5) If the agreement is a contract as defined herein, the Contractor shall file prior to the execution of the contract, and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (C) below.
- B. Every Contractor awarded a contract shall file with the Awarding Authority a statement of management as to whether the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:
 - (1) transactions are executed in accordance with management's general and specific authorization;
 - (2) transactions are recorded as necessary (a) to permit preparation of financial statements in conformity with generally accepted accounting principles, and (b) to maintain accountability for assets;
 - (3) access to assets is permitted only in accordance with management's general or specific authorization; and
 - (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every Contractor awarded a contract shall also file with the Awarding Authority a statement prepared and signed by an independent certified public accountant, stating that s/he has examined the statement of management on internal accounting controls, and expressing an opinion as to (a) whether the representations of management in response to this paragraph and paragraph (A) above are consistent with the result of management's evaluation of the system of internal accounting controls, and (b) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to applicant's financial statement.

C. Every Contractor awarded a contract by the Commonwealth or by any political subdivision thereof shall annually file with the Awarding Authority during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report.



Highway Division

- D. The Office of Inspector General, the Deputy Commissioner for Capital Planning and Operations and any other Awarding Authority shall enforce the provisions of this section. The Deputy Commissioner of Capital Planning and Operations may after providing an opportunity for the Inspector General and other interested parties to comment, promulgate pursuant to the provisions of Chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A Contractor's failure to satisfy any of the requirements of this section may be grounds for disqualification pursuant to Section forty-four C of Chapter one hundred and forty-nine.
- E. Records and statements required to be made, kept or filled under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, to the provisions of clause (2) of paragraph (A).

NOTE:

"Contract" means any contract award or executed pursuant to Sections thirty B through thirty P, inclusive of Chapter seven and any contract awarded or executed pursuant to Section thirty-nine M of Chapter thirty, or Sections forty-four A through H, inclusive of Chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.

*** END OF DOCUMENT ***

DOCUMENT 00439: RECORD OF CONTRACTOR'S PERFORMANCE



Highway Division



Final Report □ Interim Report □

CONTRACTOR PROJECT EVALUATION FORM

For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010

				Date:				
City/Town:				Contracto	r:			
Project:				Address:				
F.A. No				Contract 1	Number:			
Bid Price:				Notice to	Proceed:			
Funds: State:	I	Fed Aid:		Current C	ontract C	ompletio	n Date:	
Date Work Started:				Date Wor	k Comple	eted*:		
Contractor's Superinter	ndent:							
Division: (indicates cla	uss of work) H	ighway:		Bridge:		Maintena	ince:	
*If work was NOT con	npleted within	specified tim	ne (including e	extensions) giv	ve reason	s on follo	wing pag	e.
	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1=
5. Subcontractors Performance					·			x 1=
6. Field Supervision/ Superintendent			-					x 1=
7. Contract Compliance								x 0.5=
8. Equipment								x 0.5=
9. Payment of Accounts								x 0.5=
(use back for additional comments)						Overal	l Rating:	

(Give explanation of items 1 through 9 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)

District Construction Engineer's Signature/Date

Resident Engineer's Signature/Date

Contractor's Signature Acknowledging Report/Date

Contractor Requests Meeting with the District: Yes \Box

Contractor's Comments:_____

00439 - 156A

No 🗌



Highway Division

CONTRACTOR PROJECT EVALUATION FORM (Continued)

Date:

Contract Number:

INFORMATION FOR DISTRICT HIGHWAY DIRECTORS RELATING TO PREQUALIFICATION

A deduction shall be recommended for unsatisfactory performance if computed overall rating is under 80%. A deduction may be recommended for this project being completed late due to the Contractor's fault.

RECOMMENDATIONS FOR DEDUCTIONS FROM CONTRACTORS' ASSIGNED FACTOR (*Write Yes or No in space provided*)

I recommend a deduction for Contractor's unsatisfactory performance:

I recommend a deduction for project completed late:

Signed:

District Highway Director

.

EXPLANATION OF RATINGS 1 – 9:_____

WORK NOT COMPLETED WITHIN SPECIFIED TIME:

*** END OF DOCUMENT ***

00439 - 156B

DOCUMENT 00718: SPECIAL PROVISIONS FOR PARTICIPATION BY MINORITY AND WOMEN BUSINESS ENTERPRISES



Highway Division

DOCUMENT 00718

SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN'S BUSINESS ENTERPRISES (Implementing Chapter 102, Section 24 and Chapter 273, Section 124, of the Acts of 1994 and subsequent Acts)

Revised: November 1, 2009

I. M/WBE PARTICIPATION GOAL

On this contract, the Massachusetts Department Of Transportation (MassDOT) has established a goal for participation by Minority or Women Business Enterprise(s). One half of the goal shall be met in the form of contractor activity. This goal shall remain in effect throughout the life of the contract.

Minority or Women Business Enterprises ____%

II. POLICY

It is the policy of the MassDOT that Minority and Women Business Enterprises (M/WBEs) have equal opportunity to receive and participate in the performance of its state funded contracts.

III. M/WBE OBLIGATION

The contractor agrees to take all necessary and reasonable steps to ensure that MBE and WBEs have the maximum opportunity to compete for, and to perform, Department contracts.

IV. FAILURE TO COMPLY WITH M/WBE REQUIREMENTS

All contractors and subcontractors are hereby advised that failure to carry out the requirements of these provisions constitutes a breach of contract which may result in termination of the contract, a determination that the contractor or subcontractor be barred from bidding on Department contracts for up to three (3) years, or any other remedy as the Department may impose under section XI of these special provisions.

V. REQUIRED SUBCONTRACT PROVISIONS

The Prime Contractor shall include the provisions of sections II, III, and IV above in every subcontract making those provisions binding on each subcontractor, supplier, manufacturer, consultant or service provider.

VI. DEFINITIONS

For the purpose of these special provisions, the terms listed below are defined as follows:

"Minority Business Enterprise or MBE means any individual, business organization, or non-profit corporation certified as an MBE or as a Portuguese owned firm by the State Office of Minority and Women Business Assistance (SOMWBA), or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

Women Business Enterprise or WBE means any individual, business or organization, or non-profit corporation certified as a WBE by SOMWBA, or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

"Contractor activity" means any work, including but not limited to, construction, demolition, renovation, survey, test boring services, or maintenance work performed under the contract.

"Approved Joint Venture" means a joint venture between a M/WBE(s) and a non-M/WBE(s), which has been established for the purpose of participation on a particular contract, where:

1. The M/WBE partner(s) shares in the ownership, control, management responsibilities, risks and profits of the joint venture; and



2. The joint venture has been approved by the Department for M/WBE participation on the particular contract.

"Equipment Rental Firm" means a firm that owns equipment and assumes actual and contractual responsibility to rent said equipment to perform a useful function of the work of the contract consistent with normal industry practice.

"Material Supplier" means a vendor engaged in sales to the highway construction industry from an established place of business or source of supply, which:

- 1. Manufactures goods from raw materials or substantially alters them before resale, or
- 2. Provides and maintains a storage facility for materials used in the work, consistent with normal industry practice.

"Department" means the Massachusetts Department of Transportation (MassDOT).

"SOMWBA" means the Massachusetts State Office of Minority and Women Business Assistance.

VII. ELIGIBILITY of M/WBEs

Only firms, *OTHER THAN THE PRIME CONTRACTOR*, which have been certified by SOMWBA and/or the Department as eligible to participate on state funded contracts as MBEs, Portuguese owned businesses or WBEs may be used on this contract for credit toward the M/WBE participation goal.

- 1. SOMWBA Directory of Certified M/WBEs: The State Office of Minority and Women Business Assistance publishes a Directory of certified MBE and WBEs. This Directory can be obtained from SOMWBA. It lists those firms which have been certified as minority or Portuguese owned (MBEs) or women owned (WBEs) in accordance with the criteria of 425 CMR 2.00 et seq to participate as M/WBEs on state funded contracts. It also lists the kinds of work in which each firm engages but does not constitute an endorsement of the quality or performance of any business and does not represent Department subcontractor approval.
- 2. Application for Certification by the Department for a Particular Project: A firm which has (1) submitted a fully completed M/WBE application to SOMWBA at least 30 days previously, (2) has provided in a timely manner, any additional information which may have been requested by SOMWBA, and (3) can provide evidence, satisfactory to the Department, of a bidder's conditional commitment to subcontract with the firm, if certified, may apply directly to the MHD Office of Civil Rights to be certified for participation on the particular contract.
- 3. Joint Venture Approval: To obtain recognition as an approved joint venture between a M/WBE(s) and a non-/M/WBE(s), the joint venture must provide to the MHD Office of Civil Rights, at least 14 business days before the bid opening date, an application for joint venture participation approval, and a copy of the joint venture agreement, which shall include a detailed breakdown of the following:
 - (a) Capital participation by the M/WBE,
 - (b) Specific equipment to be provided to the joint venture by the M/WBE,
 - (c) Specific responsibilities of the M/WBE in the management of the joint venture,
 - (d) Workforce and specific skills to be provided to the joint venture by the M/WBE, and
 - (e) Percentage distribution to the M/WBE of the projected profit or loss incurred by the joint venture.

(f) The joint venture shall provide all such additional information as may be requested by the Department for the purpose of determining joint venture eligibility.



Highway Division

VIII. COUNTING M/WBE PARTICIPATION TOWARDS M/WBE GOALS

In order for M/WBE participation to count toward the contract goal, the M/WBE must have independently managed, supervised and performed the contract work with its own workforce, equipment and resources. M/WBE participation which fulfills these requirements shall be counted toward meeting the M/WBE goal in accordance with the following rules:

- 1 If a firm has been determined to be an eligible MBE or WBE, the total dollar value of the contract performed by the M/WBE is counted toward the applicable goal as follows:
 - a. Except as provided below, in section VIII (1)(g), work performed by a M/WBE prime contractor shall not be counted toward the M/WBE goal, and all prime contractors, including M/WBE prime contractors, must comply with the M/WBE requirements of this contract.
 - b. For a M/WBE material supplier, sixty percent (60%) of the amount to be paid for materials and supplies required under this contract shall be credited toward the goal.
 - c. For a M/WBE who provides a bonafide service such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the contract, reasonable fees or commissions charged for the service shall be listed, but the cost of items themselves shall not be credited.
 - d. For a M/WBE hauler, trucker, or delivery service, which is not also the manufacturer of or a regular dealer in the materials and supplies, reasonable fees charged for delivery of materials and supplies required on the job site shall be credited; the cost of the materials and supplies themselves shall not be credited.
 - e. For a M/WBE who provides any bonds or insurance specifically required for the performance of the contract, reasonable fees or commissions charged for such service shall be listed, but the face amount or actual premium paid for the bond or insurance shall not be credited.
 - f. The Department shall determine if the fees or commissions listed in accordance with paragraphs (c), (d), and (e) are not excessive as compared with fees or commissions customarily allowed for similar services.
 - g. That portion of the contract total dollar value equal to the percentage of ownership and control of the M/WBE partner(s) in an approved joint venture shall be counted toward the contract goal, except that credit for M/WBE participation in an approved prime joint venture shall not exceed one half of the contract goal.

IX. AWARD DOCUMENTATION AND PROCEDURES

- 1. The two lowest bidders, including any M/WBE bidder, shall submit, by the close of business on the third business day after the bid opening, a completed Schedule of M/WBE participation, in the form attached, which shall list:
 - a. The full company name, address and telephone number of each M/WBE with whom the bidder intends to make a commitment;
 - b. The contract item(s), by number(s) and quantity(ies), if applicable, or specific description of other business activity to be performed by each M/WBE as set forth in the Letters of Intent. The bidder shall list only firms which have the capacity to perform, manage and supervise the work proposed in accordance with the requirements of section X of these special provisions.
 - c. The total dollar amount to be paid to each M/WBE. (Bidders are cautioned that at least one half of the participation goal must be met with contract work.)
 - d. The total dollar amount to be paid to each M/WBE which is eligible for credit toward the M/WBE goal under the crediting rules set out in section VIII.
 - e. The total creditable M/WBE participation as a percentage of the total bid price.

Highway Division

Massachusetts Department Of Transportation

Project No. 604007

- 2. All firms listed on the Schedule must be currently certified.
- 3. The two lowest bidders shall submit with their Schedules of Participation, fully completed, signed Letters of Intent from each of the M/WBEs listed on the Schedule. The Letters of Intent shall be in the form attached and shall identify specifically the contract activity the M/WBE proposes to perform, expressed as contract item number, if applicable, description of the activity, quantity, unit price and total price. In the event of discrepancy between the Schedule and the Letter of Intent, the Letter of Intent shall govern.
- 4. Evidence of good faith efforts will be evaluated by the Department in the selection of the lowest responsible bidder. All information requested by the Department for the purpose of evaluating the bidder's efforts to achieve the goal must be provided within three calendar days and must be accurate and complete in every detail. The apparent low bidder's attainment of the M/WBE goal or a satisfactory demonstration of good faith efforts is a prerequisite for award of the contract.
- 5. Failure to meet, or to demonstrate good faith efforts to meet, the requirements of these special provisions shall render a bid non-responsive. Therefore, in order to be eligible for award, the bidder (1) must list on the Schedule of Participation, and provide the required Letters of Intent for, M/WBE participation which meets or exceeds the contract goal in accordance with the terms of these special provisions or (2) must demonstrate, to the satisfaction of the Department, that good faith efforts were made to achieve the goal.
- 6. If the Department finds that the percentage of M/WBE participation submitted by the bidder on its Schedule does not meet the contract goal, or that the Letters of Intent were not timely filed, and that the bidder has not demonstrated good faith efforts to comply with these requirements, it shall propose that the bidder be declared ineligible for award. In that case, the bidder may request administrative reconsideration. Such requests must be sent in writing within three calendar days of receiving notice of proposed ineligibility to: The Office of the General Counsel, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA, 02116.
- 7. If, after administrative reconsideration, the Department finds that the bidder has not shown that sufficient good faith efforts were made to comply with the requirements of these Special Provisions it shall reject the bidder's proposal and may retain the proposal guaranty.
- 8. Actions which constitute evidence of good faith efforts to meet a M/WBE goal include, but are not limited to, all of the following examples:
 - a. Efforts made to select portions of the work proposed to be performed by M/WBE's in order to increase the likelihood of achieving the stated goal, including, where appropriate, but not limited to, breaking down contracts into economically feasible units to facilitate M/WBE participation. The value of such work is required to at least equal the M/WBE goal.
 - b. Reasonable written notification prior to the opening of bids soliciting individual M/WBEs interested in participation in the contract as subcontractors, regular dealers, manufacturers, consultants, or service providers and identifying the specific items or type of work being solicited.
 - c. Written notification to M/WBE economic development assistance agencies and organizations which provide assistance in recruitment and placement of M/WBEs, describing the type of work, supplies or services being considered for M/WBE subcontracting on this contract.
 - d. Efforts made to negotiate with M/WBEs for specific items of work including evidence of:
 - (1) The names, addresses, telephone numbers of M/WBEs who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacts with M/WBEs to determine with certainty whether the M/WBEs were interested. Personal or phone contacts are expected.
 - (2) A description of the information provided the M/WBEs regarding the plans and specifications and estimated quantities for portions of the work to be performed.
 - (3) A statement of why additional agreements with M/WBEs were not reached.
 - (4) Documentation of each M/WBE contacted but rejected and the reasons for the rejection.

- e. Absence of any agreements between the contractor and the M/WBE in which M/WBE promises not to provide subcontracting quotations to other bidders.
- f. Efforts made to assist the M/WBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the contractor.
- g. Documentation that qualified M/WBEs are not available, or are not interested.
- h. Attendance at any meeting scheduled by the Department to encourage better contractor-M/WBE relationships and/or to inform M/WBEs of forthcoming M/WBE utilization opportunities.
- i. Advertisement, in general circulation media, in trade association publications and in disadvantaged business enterprise-focused media, of interest in utilizing M/WBEs and the area of interest.
- j. Efforts to effectively use the services of available minority community organizations; women organizations, minority, women and disadvantaged contractor's groups; local, state and federal disadvantaged business assistance offices; and other organizations that provide assistance in recruitment and placement of M/WBEs.
- 6 The demonstration of good faith efforts must establish that the contractor has actively and aggressively sought out M/WBEs to participate in the project and has taken all actions which could be reasonably expected to achieve the goal. Examples of circumstances or actions not acceptable as reasons for failure to meet the M/WBE goal, include, but are not limited to:
 - a. The M/WBE was unable to provide performance and/or payment bonds.
 - b. The M/WBE's commercially reasonable bid was rejected based on price.
 - c. The M/WBE would not agree to perform items of work at the unit bid price.
 - d The Contractor does not want to subcontract a percentage of the work sufficient to meet the goal.
 - e. Solicitation by mail or fax only.

X. COMPLIANCE

- 1. All activity performed by a M/WBE for credit toward the contract goal must be performed, managed and supervised by the M/WBE. Prime Contractor shall not enter into, or condone, any other arrangement.
- 2. The Prime Contractor shall not perform with its own organization, or assign to any other business, any activity designated for the M/WBE(s) named on the Schedule submitted by the Prime Contractor under section IX, or under section X(6), without the approval of the Department in accordance with the requirements of sections X(6) and (10).
- 3. The Department may (1) suspend payment for any activity which was not performed by the M/WBE to whom the activity was committed on the approved Schedule of Participation, or which was not performed in accordance with the requirements of subsection X(1).
- 4. The Department retains the right to approve or disapprove all subcontractors. Requests by the Prime Contractor for approval of participation by a M/WBE subcontractor for credit toward the contract goal must include, in addition to any other requirements for subcontractor approval, the following:

Highway Division

- a. A copy of the proposed subcontract. The subcontract must be for at least the dollar amount, and for the work described, in the Prime Contractor's Schedule of Participation.
- b. A resume stating the qualifications and experience of the M/WBE superintendent and/or foreperson who will supervise the on-site work. A new resume will be required for any change in supervisory personnel during the progress of the work.
- c. A Schedule of Operations indicating when the M/WBE is expected to perform the work.
- d. A list of (1) equipment owned by the M/WBE to be used on the project, and (2) equipment to be leased by the M/WBE for use on the project.
- e. A list of: (1) all projects (public and private) which the M/WBE is currently performing, (2) all projects (public and private) to which the M/WBE is committed, (3) all projects (public and private) to which the M/WBE intends to make a commitment. For each contract, list the contracting organization, the name and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and the M/WBE's work schedule for each project.
- 5. If, pursuant to the subcontractor approval process, the Department finds that a M/WBE subcontractor does not have sufficient experience or resources to perform, manage and supervise work of the kind proposed in accordance with the requirements of section X(1), approval of the M/WBE subcontractor may be denied. In the event of such denial, the Prime Contractor shall proceed in accordance with the requirements of sections X(6) and (10).
- 6. If, for reasons beyond its control, the Prime Contractor cannot comply with its M/WBE commitment in accordance with the Schedule of participation submitted under section IX and the terms of these special provisions, the Prime Contractor shall submit to the Department the reasons for its inability to comply with its obligations under section I and shall submit, and request approval for, a revised Schedule of Participation. If approved by the Department, the revised Schedule shall govern the Prime Contractor's performance in meeting its obligations under these special provisions.
- 7. A Prime Contractor's compliance with the participation goal in section I shall be determined by reference to the required percentage of the total contract price, including any additions and modifications thereto, provided, however, that no decrease in the dollar amount of a bidder's commitment to any M/WBE shall be allowed without the approval of the Department.
- 8. If the contract amount is increased, the Prime Contractor shall submit a revised Schedule of Participation in accordance with sections X(6) and (10).
- 9. In the event of the decertification of a M/WBE participating or scheduled to participate on the contract for credit toward the goal, the Contractor shall proceed in accordance with sections X(6) and (10).
- 10. The Prime Contractor shall notify the Department immediately of any facts which come to its attention indicating that it may or will be unable to comply with any aspect of its M/WBE obligation under this contract.
- 11. Any notice required by these special provisions shall be given in writing to the Resident Engineer and the district designated Compliance Officer with a copy to the Director of Compliance, Office of Civil Rights, 10 Park Plaza, Room 6620, Boston MA 02116.
- 12. The Prime Contractor and its subcontractors shall comply with the Department's Electronic Reporting System Requirements (Contract Document 00821) and submit all information required by the Department related to the M/WBE Special Provisions through the Equitable Business Opportunity Solution (EBO). The Department reserves the right to request reports in the format it deems necessary anytime during the performance of the contract.

Highway Division

- 13. The Contractor shall pay each M/WBE for satisfactory performance of its contract no later than 10 days from receipt of payment for the work from the Department. Any delay or postponement of payment to the M/WBE(s) must be for good cause and only with the prior approval of the Department.
- 14. The Department may withhold the Contractor's next periodic payment if each M/WBE is not paid in accordance with subsection X(13).
- 15. The Department may require specific performance of the Prime Contractor's commitment under the contract by requiring the Prime Contractor to subcontract with a M/WBE for any contract or specialty item.

XI. SANCTIONS

If the Prime Contractor does not comply with the terms of these special provisions and cannot demonstrate to the satisfaction of the Department that good faith efforts were made to achieve such compliance, the Department may, in addition to any other remedy provided for in the contract, and notwithstanding any other provision in the contract:

- 1. Retain, in connection with final acceptance and final payment, an amount determined by multiplying the total contract amount by the percentage in section I, less the amount paid to approved M/WBE(s) for work performed under the contract in accordance with the provisions of section X. The Prime Contractor shall have the right to appeal such retention of funds in accordance with the provisions of M.G.L. c.30A.
- 2. Suspend, terminate or cancel this contract, in whole or in part, and call upon the Prime Contractor's surety to perform all terms and conditions in the contract.
- 3. In accordance with 720 CMR 5.05(1)(f), modify or revoke the Prime Contractor's Prequalification status or recommend that the Prime Contractor not receive award of a pending contract. The Prime Contractor may appeal the determination of the Prequalification Committee in accordance with the provisions of 720 CMR 5.06.
- 4. Initiate debarment proceedings under M.G.L. c.29 §29F.

XII. FURTHER INFORMATION

Any proposed M/WBE, bidder, contractor or subcontractor shall provide such information as is necessary in the judgement of the Department to ascertain its compliance with the terms of this special provision.

*** END OF DOCUMENT ***

DOCUMENT 00820: COMMONWEALTH OF MASSACHUSETTS SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTIDISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM



Highway Division

DOCUMENT 00820

THE COMMONWEALTH OF MASSACHUSETTS SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM

I. Definitions

For purposes of this contract,

"Minority" means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but Not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
- (d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
- (e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

"State construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility, or a contract for the construction, reconstruction, alteration, remodeling or repair of a public work undertaken by a department, agency, board, or commission of the commonwealth.

"State assisted construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility undertaken by a political subdivision of the commonwealth, or two or more political subdivisions thereof, an authority, or other instrumentality and whose costs of the contract are paid for, reimbursed, grant funded, or otherwise supported, in whole or in part, by the commonwealth.

II. Equal Opportunity, Non-Discrimination and Affirmative Action

During the performance of this Contract, the Contractor and all subcontractors (hereinafter collectively referred to as "the Contractor") for a state construction contract or a state assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability, shall not discriminate in the selection or retention of subcontractors, and shall not discriminate in the procurement of materials and rentals of equipment.



Highway Division

The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship or on-the-job training opportunity. The Contractor shall comply with the provisions of chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this Contract.

The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Massachusetts Commission Against Discrimination setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151 B).

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. Such affirmative action measures shall entail positive and aggressive measures to ensure nondiscrimination and to promote equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, apprenticeship and on-the-job training programs. A list of positive and aggressive measures shall include, but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority, women and other community-based organizations of employment opportunities; validating all job specifications, selection requirements, and tests; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying the administering agency in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker. These and other affirmative action measures shall include all actions required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. One purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. Minority and Women Workforce Participation

Pursuant to his/her obligations under the preceding section, the Contractor shall strive to achieve on this project the labor participation goals contained herein. Said participation goals shall apply in each job category on this project including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program. Additionally, the participation goals contained herein should not be seen or treated as a floor or as a ceiling for the employment of particular individuals.



Highway Division

IV. Liaison Committee

At the discretion of the agency that administers the contract for the construction project there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering the contract for the construction project, hereinafter called the administering agency, a representative from the Office of Affirmative action, and such other representatives as may be designated by the administering agency. The Contractor (or his/her agent, if any, designated by him/her as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body, and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

V. Reports and Records

The Contractor shall prepare projected workforce tables on a quarterly basis when required by the administering agency. These shall be broken down into projections, by week, of workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also, when updated, to the administering agency and the Liaison Committee when required.

The Contractor shall prepare weekly reports in a form approved by the administering agency, unless information required is required to be reported electronically by the administering agency, the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority. Copies of these shall be provided at the end of each such week to the administering agency and the Liaison Committee.

Records of employment referral orders, prepared by the Contractor, shall be made available to the administering agency on request.

The Contractor will provide all information and reports required by the administering agency on instructions issued by the administering agency and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the administering agency to effect the employment of personnel. This provision shall apply only to information pertinent to the Commonwealth's supplementary non-discrimination, equal opportunity and access and opportunity contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the administering agency and shall set forth what efforts he has made to obtain the information.

VI. Access to Work Site

A designee of the administering agency and a designee of the Liaison Committee shall each have a right to access the work site.

VII. Solicitations for Subcontracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discrimination and equal opportunity.



Highway Division

VIII. Sanctions

Whenever the administering agency believes the General or Prime Contractor or any subcontractor may not be operating in compliance with the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B), the administering agency may refer the matter to the Massachusetts Commission Against Discrimination ("Commission") for investigation.

Following the referral of a matter by the administering agency to the Massachusetts Commission Against Discrimination, and while the matter is pending before the MCAD, the administering agency may withhold payments from contractors and subcontractors when it has documentation that the contractor or subcontractor has violated the Fair Employment Practices Law with respect to its activities on the Project, or if the administering agency determines that the contractor has materially failed to comply with its obligations and the requirements of this Section. The amount withheld shall not exceed a withhold of payment to the General or Prime Contractor of 1/100 or 1% of the contract award price or \$5,000, whichever sum is greater, or, if a subcontractor is in non-compliance, a withhold by the administering agency from the General Contractor, to be assessed by the General Contractor as a charge against the subcontractor, of 1/100 or 1% of the subcontractor price, or \$1,000 whichever sum is greater, for each violation of the applicable law or contract requirements. The total withheld from anyone General or Prime Contractor or a Project shall not exceed \$20,000 overall. No withhold of payments or investigation by the Commission or its agent shall be initiated without the administering agency providing prior notice to the Contractor.

If, after investigation, the Massachusetts Commission Against Discrimination finds that a General or Prime Contractor or subcontractor, in commission of a state construction contract or state-assisted construction contract, violated the provisions of the Fair Employment Practices Law, the administering agency may convert the amount withheld as set forth above into a permanent sanction, as a permanent deduct from payments to the General or Prime Contractor or subcontractor, which sanction will be in addition to any such sanctions, fines or penalties imposed by the Massachusetts Commission Against Discrimination.

No sanction enumerated under this Section shall be imposed by the administering agency except after notice to the General or Prime Contractor or subcontractor and an adjudicatory proceeding, as that term is used, under Massachusetts General Laws Chapter 30A, has been conducted.

IX. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.



Highway Division

X. Contractor's Certification

A bidder for a state construction contract or state assisted construction contract will not be eligible for award of the contract unless such bidder has submitted to the administering agency the following certification, which will be incorporated into the resulting contract:

CONTRACTOR'S CERTIFICATION
SAMPLE certifies that they:
Contractor Name)
. Will not discriminate in their employment practices; 2. Intend to use the following listed construction trades in the work under the contract ; and
 Will make good faith efforts to comply with the minority employee and women employee workford participation ratio goals and specific affirmative action steps contained herein; and Are in compliance with all applicable federal and state laws, rules, and regulations governing fa labor and employment practices; and Will provide the provisions of the "Supplemental Equal Employment Opportunity, Not Discrimination and Affirmative Action Program" to each and every subcontractor employed on the Project and will incorporate the terms of this Section into all subcontracts and work orders entered into on the Project. Agree to comply with all provisions contained herein.
Signature of authorized representative of Contractor) Date
Printed name of authorized representative of Contractor)

XI. Subcontractor Requirements

Prior to the award of any subcontract for a state construction contract or a state assisted construction contract, regardless of their, the Prime or General Contractor shall provide all prospective subcontractors with a complete copy of this Section entitled "Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program" and will incorporate the provisions of this Section by reference into any and all contracts or work orders for all subcontractors providing work on the Project. In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the prime contract, the Prime or General Contractor shall certify in writing to the administering agency that it has complied with the requirements as set forth in the proceeding paragraph.

*** END OF DOCUMENT ***

DOCUMENT 00821: ELECTRONIC REPORTING REQUIREMENTS – CIVIL RIGHTS PROGRAMS AND CERTIFIED PAYROLL – MARCH 2, 2009



Project No. 604007

Highway Division

DOCUMENT 00821

Electronic Reporting Requirements Civil Rights Programs and Certified Payroll

Implemented on March 2, 2009

Revised November 1, 2009

The Massachusetts Department Of Transportation (MassDOT) has replaced the CHAMP reporting system with Equitable Business Opportunity Solution (EBO), a new web-based civil rights reporting software system. This system is capable of handling both civil rights reporting requirements and certified payrolls. The program's functions include the administration of Equal Employment Opportunity (EEO) requirements, On-The-Job Training requirements (OJT), Disadvantage Business Enterprise (DBE) and/or Minority / Women's Business Enterprise (M/WBE) subcontracting requirements, and the electronic collection of certified payrolls associated with MassDOT projects. In addition, this system is used to generate various data required as part of the American Recovery and Reinvestment Act (ARRA). Contractors are responsible for all coordination with all sub-contractors to ensure timely and accurate electronic submission of all required data.

Contractor and Sub-Contractor EBO User Certification

All contractors and sub-contractors must use the EBO software system. The software vendor, Internet Government Solutions (IGS), has developed an online EBO Training Module that is available to contractors and sub-contractors. This module is a self-tutorial which allows all users in the company to access the training, complete the tutorial, and become certified as EBO users for a one time fee of \$75.00. This is the only cost to contractors and sub-contractors associated with the EBO software system. The online EBO Training Module can be accessed at www.ebotraining.com. Click the "Register My Company" button on the login page to begin your training registration. Questions regarding EBO online training should be directed to Gerry Anguilano, IGS at (866) 528-4381.

MassDOT will track contractors and sub-contractors who have successfully completed the on-line training module. All persons performing civil rights program and/or certified payroll functions should be EBO certified.

Vetting of Firms and Designated Firm Individuals

Contractors must authorize a Primary Log-In ID Holder who has completed EBO on-line training to have access to the EBO system by completing and submitting the "Request For EBO System Log-In/Password Form" located on the MassDOT website at: http://www.massdot.state.ma.us/Highway/doingbusiness.aspx. Contractors must also agree to comply with the EBO system user agreement located on the MassDOT website.

All subcontracts entered into on a project must include language that identifies the submission and training requirements that the sub-contractor must perform. Sub-contractors will be approved by the respective District Office of MassDOT through the existing approval process. When new sub-contractors, who have not previously worked for MassDOT, are initially selected by a general contractor, the new sub-contractor must be approved by the District before taking the EBO on-line training module.

Interim Reporting Requirements

Until MassDOT is satisfied that the EBO system is fully operational and functioning as designed, contractors and sub-contractors will be required to submit certified payrolls manually. There will be a transition period where dual reporting, through manual and electronic submission, will be required. MassDOT, however, will notify contractors and sub-contractors when they may cease manual submission of certified payrolls.

*** END OF DOCUMENT ***

DOCUMENT B00842: DESIGN-BUILD SCHEDULE OF PARTICIPATION BY MINORITY OR WOMEN BUSINESS ENTERPRISES (M/WBE)

DOCUMENT B00843: DESIGN-BUILD

MINORITY AND WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT



Massachusetts Department of Transportation

Project No. 604007

		DOCUMENT B00842 - DES	SIGN BUILD		
	BY MIN	SCHEDULE OF PARTIC	IPATION ENTERPRISES (M	(CONSTRUCT 1/WBE)	ION CONTRACTS
	MHD PROJECT NUMBER:	604007			10200
	PROJECT LOCATION:	Wellesley			
	DATE OF BID OPENING:	<u>7/21/10</u> - 8/10/10			
com API	NAME OF GENERAL BIDDE	R: J.F.White Contracting Co.			
PROVED: OCR by Date Date Share with paragraphs 1 through 5 of Page 1 of the Letters of the lette	Name Address and Phone Number of M/WBE	Name of Activity	(a) M/WBE Contractor Activity Amount	(b) M/WBE Other Business Amount	(c) Total amount eligible for credit under rules in Section VIII of the Special Provisions
	Mamson Engineering Corp. 437 Cherry St, #109 Newton, MA 02465 617-558-0101	Geotechnical	25,000.00		25,000.00
	Green International Associates 239 Littleton Road, Suite 3 Westford, MA 01886 978-923-040	³ Survey and Base Mapping	25,000.00		25,000.00
	Regis Steel Corp. 14 Wood Road, Unit 7 Braintree, MA 02184 781-356-88	F & I Reinforcing Steel	60,000.00		60,000.00
	McCoy Fence Inc. 14 Baird Street Dorchester, MA 02124 617-288	Guardrail and Fencing	35,000.00		35,000.00
	Pow Company Inc. 1112 Broadway Road Dragut, MA 01826 978-682-1414	Utilities and Excavation	100,000.00		100,000.00
	Sougus Construction One Farm Lane Georgetown, MA 01833 978-352-	F & I Structural Steel	180,000.00		180,000.00
ing fuli Inten,	Total Bid Amount	TOTALS:	\$ 425,000.00		\$ 425,000.00
	\$ 3,450,000.00	M/WBE Percentage of Total bid:	% 12.3		% 12.3

Golumn (a) must be at least one-half of the M/WBE percentage goal.

SIGNATURE 508-879-4700 Tel No: Ş NAME AND TITLE (PRINT): Kevin K. Egan, Executive Vice President

BIDDERS ARE CAUTIONED TO READ THE SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN BUSINESS ENTERPRISES.

END OF DOCUMENT

B00842 - 1

TO:



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 - DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007	· .
PROJECT LOCATION:	Wellesley	
DATE OF BID OPENING:	8/10 /2010	
FROM LAMSON	ENGINEERING CORP. (Minority or Women's Business Enterprise)	

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE-by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

Vhim	6	Lain	7/20/2010
M/WBE Signa	ture		Date



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION - Page 2

MHD Project Number:

604007

Project Location:

Wellesley

Date of Bid Opening:

8/10/2010

Name of General Bidder:

J.F.White Contracting Co.

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit</u> Price	<u>Amount</u>
	Geotechnical / Bridge Engineerin	ğ		25,000.00

			9 e 7	

TOTAL AMOUNT:

25,000.00

M/WBE COMPANY NAME:	LAMSON ENGINEERING CORP.
M/WBE SIGNATURE:	- thin L. Lan
NAME AND TITLE (PRINT):	KIN C. LAM, Prysident
TELEPHONE NUMBER:	617-5580101 FAX NUMBER 617-558-0007

END OF DOCUMENT

B00843 - 2



DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR June 15, 2010

Mr. Kin C. Lam Lamson Engineering Corporation 437 Cherry Street, #109 Newton, MA 02465

Dear Mr. Lam:

COMMONWEALTH OF MASSACHUSETTS ADMINISTRATION AND FINANCE

SUPPLIER DIVERSITY OFFICE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 http://www.somwba.state.ma.us

> Telephone (617) 973-8692

Facsimile (617) 973-8637

The Massachusetts Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Lamson Engineering Corporation and the required certification renewal information and documentation. Accordingly, SDO (f/k/a: SOMWBA) has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Lamson Engineering Corporation as a minority-owned business enterprise (MBE) with the business description of STRUCTURAL, CIVIL, GEOTECHNICAL AND HYDRAULICS ENGINEERING has been renewed effective the date of this letter. The company will remain listed in the SDO (f/k/a: SOMWBA) Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of May 15, 2012, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SDO (f/k/a: SOMWBA) no later than 30 business days prior to May 15, 2012.

- 1) All company financial statements since the date of the company's then most recent SDO (f/k/a: SDO (f/k/a: SOMWBA) certification;
- A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SDO (f/k/a: SOMWBA) renewal;
- 3) Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

4) A notarized statement that indicates:

"I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the

company's then most recent date of SDO (f/k/a: SOMWBA) certification as defined in State regulations 425 CMR 2.00 The Massachusetts Supplier Diversity Office."

5) A notarized statement that indicates either "A or B" as referenced below.

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SDO (f/k/a: SOMWBA) certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SDO (f/k/a: SOMWBA) certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SDO (f/k/a: SOMWBA) renewal."

6) <u>A notarized statement that indicates:</u>

"I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s):"

Furthermore, you have a continuing duty to notify SDO (f/k/a: SOMWBA) of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SDO (f/k/a: SOMWBA) to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SDO (f/k/a: SOMWBA) in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SDO (f/k/a: SOMWBA) certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SDO (f/k/a: SOMWBA) no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SDO (f/k/a: SOMWBA) of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (617) 973-8648.

Verv truly you

Reginald A. Nunnally Executive Director



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007	
PROJECT LOCATION:	Wellesley	
DATE OF BID OPENING: <u>8/</u>	10/2010	
FROM Green Internation	al Affiliates, Inc.	
	(Minority or Women's Business Enterprise)	

TO:

J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

Hilun 7/20/10 Date M/WBE Signaturé


Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -- Page 2

MHD Project Number:

604007

Project Location:

Date of Bid Opening:

Name of General Bidder: J.F. White Contracting Co.

Wellesley

8/10/2010

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	Amount
	Surbey, Base mapping			25,000.00
			6	
	· · · · · · · · · · · · · · · · · · ·			

TOTAL AMOUNT: 25,000.00

M/WBE COMPANY NAME:

Green	International	Affiliates.	Inc.

M/WBE SIGNATURE:

The Jalutans

NAME AND TITLE (PRINT): President

TELEPHONE NUMBER:

978-923-0400 FAX NUMBER 978-923-0404

END OF DOCUMENT

G:Vudy\FORMS\Form Wellesley MWBE Letter of Intent.doc

B00843 - 2



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE

Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 Internet: www.somwba.state.ma.us

> TELEPHONE-(617) 973-8692

FACSIMILE (617) 973-8637

September 25, 2008

EXECUTIVE DIRECTOR

DEVAL L, PATRICK

TIMOTHY P. MURRAY

EDITH A SILVA

Mr. Dipak Khaund Green International Affiliates, Inc. 239 Littleton Road, Suite 3 Westford, MA 01886

Dear Mr. Khaund:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Green International Affiliates, Inc. and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Green International Affiliates, Inc. as a minority business enterprise (MBE) with the business description of CONSULTING CIVIL ENGINEERS SPECIALIZING IN TRANSPORTATION, STRUCTURAL, WATER RESOURCES AND ENVIRONMENTAL AND CIVIL AND SITE ENGINEERING has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of October 1, 2010, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to **October 1, 2010**.

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal;
- 3) Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

- 4) A notarized statement that indicates:
 - A. "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Woman/Woman/Portuguese business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."
- 5) A notarized statement that indicates either "A or B" as referenced below.

2

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) <u>A notarized statement that indicates:</u>

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firms certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms Nedra D. White, Certification Specialist, (617)973-8648.

Very truly yours,

Mark Waterbury Deputy Director, Certification

TO:



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007			
PROJECT LOCATION:	Wellesley		- -	
DATE OF BID OPENING:	7/21/2010			·
FROM	RELIS (STEEL	CORP.	
		Al S Dusiness Enter	prise)	

J.F. White Contracting Co. (Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

010	7/19/10	
M/WBE Signature	Date /	

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Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

MHD Project Number:

604007

Project Location:

Date of Bid Opening:

7/21/10

Wellesley

Name of General Bidder: J.F.White Contracting Co.

Item number if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	Amount
	F & I Reinforcing Steel			60,000.00
· · · · · · · · · · · · · · · · · · ·				
			<i>6</i> .	
		, ,		
		TOTAL AMC	DUNT:	60,000.00
M/WBE COMPAN	IY NAME: MEGGE STEL			
M/WBE SIGNATI	JRE:			

NAME AND TITLE (PRINT):

TELEPHONE NUMBER:

END OF DOCUMENT

(

781-356-9884

12HEAD

FAX NUMBER

781-356-0945



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building

Ten Park Plaza, Suite 3740, Boston, MA 02116 www.mass.gov/somwba

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR TELEPHONE: (617) 973-8692

FACSIMILE: (617) 973-8637

March 1, 2010

Mr. Jamesy Regis Regis Steel Corporation 14 Wood Road, Unit #7 Braintree, MA 02184

Dear Mr. Regis:

Congratulations on your recertification! The State Office of Minority and Women Business Assistance (SOMWBA) is pleased to notify you that your firm was recertified as a minority-owned business enterprise (MBE) with the certified business description, IRON CONTRACTORS: STEEL ERECTION, REINFORCING.

Your company will be listed in both the SOMWBA Directory and in the Massachusetts Central Register which are published at regular intervals. The SOMWBA Directory is sent to other state agencies and private organizations that seek to fulfill MBE utilization requirements.

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to ablde by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Certification is not a fixed designation and SOMWBA reserves the right to monitor your company, do random spot checks, site visits and to conduct periodic reviews of your company's books, contracts, company structure, facilities, job locations; to seek other relevant information and documentation; and to revoke certification of your firm should this become necessary.

Your company's certification automatically will expire two years from the date of certification. If your company continues to meet all applicable certification criteria, no later than thirty (30) business days before your firm's certification renewal date of January 7, 2011, and every two years thereafter, please send SOMWBA the following documents to renew your certification:

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- 2) All U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA certification;

3) Corporations must submit all Annual Certificates of Condition since the date of the company's then most recent certification; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED

4) <u>A notarized statement that indicates:</u>

A. "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

A. "I certify under the pains and penalties of perjury that (insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."

B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) <u>A notarized statement that indicates:</u>

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

Very truly yours,

Reginald A. Nunnally

Executive Director

masspor

Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PR	OJECT NUMBER:	604007
PROJECT LOCATION:		Wellesley
DATE OF	BID OPENING:	August 10, 2010
FROM _	McCoy Fence,	lnc.
		(Minority or Women's Business Enterprise)
TO:		J.F. White Contracting Co.

(Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

A adal in	~ A		
Kach II	Cloy	7/20/10	
M/WBE Signature	ð	Date	

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Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION - Page 2

MHD Project Number:

Project Location:

Wellesley

604007

Date of Bid Opening:

August 10, 2010

Name of General Bidder: J.F.White Contracting Co.

Item number	Description of Activity	Quantity	Unit	Amount
if applicable	with notations such as Labor Only, Material Only, or Complete		Price	
	Fence and Guardrail			
				35,000.00
			÷	
			*	
	· · · · · · · · · · · · · · · · · · ·			
		TOTAL AMO	UNT:	35,000.00

M/WBE COMPANY NAME:	McCoy Fence, Inc			
M/WBE SIGNATURE:	Ralph "	McCo	y-	
NAME AND TITLE (PRINT):	Ralph McCoy, President		<i>v</i>	
TELEPHONE NUMBER:	617-288-7811	FAX NUMBER	617-288-7512	

END OF DOCUMENT

B00843 - 2

lpr 15 10 09:36a Mccoy Fence



DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIELITENANT GOVERNOR

EDITH & SILVA EXECUTIVE DIRECTOR

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE

Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 Internet: www.somwba.state.ma.us

TELEPHONE: (617)973-8692

FACSIMILE: (617)973-8637

December 31,2009

Mr. Ralph McCoy McCoy Fence, Inc. 14 Baird Street Dorchester, MA 02124

Dear Mr. McCoy:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of McCoy Fence, Inc. and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of McCoy Fence, Inc. as a minority business enterprise (MBE) with the business description of FENCING AND GUARDRAIL INSTALLATION has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked Unless revoked, this certification will last for a period of two years and will automatically expire as of October 1, 2009, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to October 1, 2010.

- All company financial statements since the date of the company's then most recent SOMWBA certification;
- A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent 1} 2) SOMWBA renewal:
- Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) 3) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

- A notarized statement that indicates: 4)
 - "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Woman/Woman/Portuguese business enterprise have occurred since the date Α. of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."
- A notarized statement that indicates either "A or B" as referenced below. 5)

- A. ""I certify under the pains and penalties of perjury that (insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) A notarized statement that indicates:

A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firms certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not fimitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, (617)973-8648.

Very truly yours,

Mark Waterbury Deputy Director, Certification

TO:



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PRC	JECT NUI	MBER:	604007		
PROJECT LOCATION:		N:	Wellesley		
DATE OF	BID OPEN	JING:	8/10/2010		
FROM	THE	Dow	Company The		
			(Minority or Women's Business Ente	rprise)	

J.F. White Contracting Co. (Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

V vp M/WBE Signature



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION -Page 2

MHD Project Number:

604007

Project Location:

Wellesley

8/10/10

Date of Bid Opening:

Name of General Bidder: J.F.White Contracting Co.

,000.00
) - -

TOTAL AMOUNT:

100,000.00

THE Dow Company En. M/WBE COMPANY NAME: M/WBE SIGNATURE: NAME AND TITLE (PRINT): MICHAEL S. DOW V.P.

TELEPHONE NUMBER:

978-682-1414 FAX NUMBER 978-654-5150

END OF DOCUMENT

B00843 - 2



DEVALL PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT BOVERNOR

REGINALD A. NUNNALLY EXECUTIVE DIRECTOR

March 29, 2010

Ms. Mary H. Dow Dow Company, Inc., The 1112 Broadway Road Dracut, MA 01826

Dear Ms. Dow:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Dow Company, Inc., The and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Dow Company, Inc., The as a woman-owned business enterprise (WBE) with the business description of SITE WORK; EXCAVATION; INTERIOR DEMOLITION; UNDERGROUND PIPING (DBE ONLY) has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of April 1, 2012, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to April 1, 2012.

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification:
- 2) A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal:
- Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) 3) State since the date of the company's then most recent renewal; and

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED . • . . .

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STATEMENT

4) <u>A notarized statement that indicates:</u>

nnen of af all a second of the second of Second of the second of the second of the A STATE OF "I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman business enterprise have occurred since the date of the

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COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE

Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116

www.mass.gov/somwba

TELEPHONE: (617) 973-8692

MAR & O RECT

FACSIMH E: (617) 973-8637 company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."
- 6) <u>A notarized statement that indicates:</u>

"I certify under the pains and penaltles of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (617) 973-8648.

Reginald A. Nunnally Executive Director

TO:



Massachusetts Department of Transportation

Project No. 604007

DOCUMENT B00843 – DESIGN BUILD

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION LETTER OF INTENT

MHD PROJECT NUMBER:	604007	
PROJECT LOCATION:	Wellesley	
DATE OF BID OPENING:	8/10/10	
FROMSaugus	Construction Corp.	
	(Minority or Women's Business Enterprise)	

J.F. White Contracting Co. (Name of Design Build Entity/Contractor)

1. My company is currently certified as an MBE or WBE by the State Office of Minority and Women Business Assistance. There have been no changes affecting the ownership, control or independence of my company since my last certification review.

2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation.

3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the project.

4. If you are awarded the contract, my company intents to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.

5. My firm has the ability to manage, supervise and perform the activity described on the following page.

allow 7/16/10 M/WBE Signature



Massachusetts Department of Transportation

Project No. 604007

MINORITY OR WOMEN BUSINESS ENTERPRISES PARTICIPATION - Page 2

MHD Project Number:

604007

Project Location:

Wellesley 8\$10/10

Date of Bid Opening:

Name of General Bidder: J.F.White Contracting Co.

<u>Item number</u> if applicable	Description of Activity with notations such as Labor Only, Material Only, or Complete	Quantity	<u>Unit</u> Price	<u>Amount</u>
	F & I Sfructural Steel			180,000.00
	· · · · · · · · · · · · · · · · · · ·			

TOTAL AMOUNT:

180,000.00

M/WBE COMPANY NAME:	Saugus Cons	struction Corp	
M/WBE SIGNATURE:	Usha	Mood	
NAME AND TITLE (PRINT):	Usha Wood,	President	
TELEPHONE NUMBER:	978-352-7171	FAX NUMBER	978-352-7998

END OF DOCUMENT

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF BUSINESS AND TECHNOLOGY STATE OFFICE OF MINORITY AND WOMEN BUSINESS ASSISTANCE Massachusetts Transportation Building Ten Park Plaza, Suite 3740, Boston, MA 02116 www.somwba.state.ma.us

DEVAL L. PATRICK

TIMOTHY P. MURRAY

EDITH A. SILVA EXECUTIVE DIRECTOR Telephone (617) 973-8692

Facsimile (617) 973-8637

January 16, 2009

Ms. Usha N. Wood Saugus Construction Corporation One Farm Lane Georgetown, MA 01833

Dear Ms. Wood:

The State Office of Minority and Women Business Assistance (SOMWBA) is in receipt of your certification renewal information (application). This consists of your request to renew the certification of Saugus Construction Corporation and the required certification renewal information and documentation. Accordingly, SOMWBA has updated your file with this information and documentation. No substantive review of your company was done at this time.

Based on your certification renewal information (application), the certification of Saugus Construction Corporation as a Minority and woman business enterprise (MBE and WBE) with the business description of INSTALLER OF STEEL ERECTION AND REINFORCING has been renewed effective the date of this letter. The company will remain listed in the SOMWBA Directory of certified businesses and The Central Register, which is published by the Office of the Secretary of State unless its certification is revoked. Unless revoked, this certification will last for a period of two years and will automatically expire as of January 13, 2011, unless by that date, the certification of the company is renewed again or the company is recertified.

To renew the company's certification at that time, you will need to submit the following information to SOMWBA no later than 30 business days prior to January 13, 2011.

- 1) All company financial statements since the date of the company's then most recent SOMWBA certification;
- 2) A signed copy of all U.S. Tax Returns and Schedules since the date of the company's then most recent SOMWBA renewal;
- Corporations must submit all Annual Reports/Letters of Good Standing filed with the Secretary of (YOUR) State since the date of the company's then most recent renewal; and

P.02/05

55:41 2005-12-NAL

\$2100J

PLEASE NOTE THAT THE FOLLOWING ITEMS 4-6 CAN BE COMBINED ON ONE NOTARIZED STATEMENT

4) <u>A notarized statement that indicates:</u>

"I certify under the pains and penalties of perjury that no significant changes affecting eligibility as a certified Minority/Minority-Women/Woman/ Portuguese business enterprise have occurred since the date of the company's then most recent date of SOMWBA certification as defined in State regulations 425 CMR 2.00 State Office of Minority and Women Business Assistance."

5) A notarized statement that indicates either "A or B" as referenced below.

- A. "I certify under the pains and penalties of perjury that (Insert your Company Name) has not received any contract(s) as a result of having been SOMWBA certified."
- B. "I certify under the pains and penalties of perjury that: (Insert your Company Name) has received a contract(s) as a result of having been SOMWBA certified." List all contract names, contract amounts and the names of the agencies with which you have contracted from the date of your last SOMWBA renewal."

6) A notarized statement that indicates:

"I certify under the pains and penalties of perjury that (Insert your Company Name) has (number) of employees for each year end given; include owner(s)."

Furthermore, you have a continuing duty to notify SOMWBA of a change in any information that is relevant to the firm's certification eligibility and to ensure that the information and documentation relied upon by SOMWBA to certify or to maintain the certification of the business enterprise is accurate, complete and not misleading. You are required to notify SOMWBA in writing of any change of such information or documentation within thirty calendar days. By way of example and not limitation, any change in ownership, control, investment, ongoing or independence may be considered material. Failure to abide by the continuing duty requirements shall constitute grounds for the business entity's decertification.

Additionally, every six years, certified companies that wish to remain certified must undergo a substantive review of their certification status with a SOMWBA certification specialist who will re-evaluate the company to determine whether it continues to meet the applicable certification criteria. If you wish to recertify your company when it becomes due for substantive review, you will need to submit the applicable recertification application and all required information and documentation to SOMWBA no later than forty-five (45) business days prior to the date of certification expiration (i.e., the recertification date). At that time, a certification specialist will be assigned to evaluate your company and will make a report and recommendation to the Certification Committee (CC) on whether or not the company continues to meet the applicable certification criteria.

As provided above in 425 CMR 2.00, if your company has a change of address or telephone number, please send a signed letter within thirty days of the change on company letterhead to notify SOMWBA of the new address or telephone number.

During the period of your certification, if you have any further questions regarding your certification renewal, please direct them to Ms. Nedra D. White, Certification Specialist, at (517) 973-8648.

Very truly yours,

Edith A. Silva

Executive Director

DOCUMENT 00860: COMMONWEALTH OF MASSACHUSETTS PUBLIC EMPLOYMENT LAWS

Massachusetts Department Of Transportation



Highway Division

DOCUMENT 00860

COMMONWEALTH OF MASSACHUSE TTS PUBLIC EMPLOYMENT LAWS Revised August 21, 2009

The Contractor's attention is directed to Massachusetts General Laws, Chapter 149, Sections 25 through 27H, and 150A. This contract is considered to fall within the ambit of that law, which provides that in general, the Prevailing Rate or Total Rate must be paid to employees working on projects funded by the Commonwealth of Massachusetts or any political subdivision including Massachusetts Department Of Transportation (MassDOT).

A Federal Aid project is also subject to the Federal Minimum Wage Rate law for construction. When comparing a state minimum wage rate, monitored by the Massachusetts' Attorney General, versus federal minimum wage rate, monitored by the U.S. Department of Labor's Wage and Hour Division, for a particular job classification the higher wage is at all times to be paid to the affected employee.

Every contractor or subcontractor engaged in this contract to which sections twenty-seven and twenty-seven A apply will keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on this contract, and the hours worked by, and the wages paid to, each such employee, and shall furnish to the MassDOT's Resident Engineer, on a weekly basis, a copy of said record, in a form approved by MassDOT and in accordance with M.G.L. c. 149, § 27B, signed by the employer or his/her authorized agent under the penalties of perjury.

Each such contractor or subcontractor shall preserve its payroll records for a period of three years from the date of completion of the contract.

The Prevailing Wage Rate generally includes the following:

Minimum Hourly Wage + Employer Contributions to Benefit Plans = Prevailing Wage Rate or Total Rate

Any employer who does not make contributions to Benefit Plans must pay the total Prevailing Wage Rate directly to the employee.

Any deduction from the Prevailing Wage Rate or Total Rate for contributions to benefit plans can only be for a Health & Welfare, Pension, or Supplementary Unemployment plan meeting the requirements of the Employee Retirement Income Security Act (ERISA) of 1974. The maximum allowable deduction for these benefits from the prevailing wage rate cannot be greater than the amount allowed by Executive Office of Labor (EOL) for the specified benefits. Any additional expense of providing benefits to the employees is to be borne by the employer and cannot be deducted from the Minimum Hourly Wage. If the employer's benefit expense is less than that so provided by EOL the difference will be paid directly to the employee. The rate established must be paid to all employees who perform work on the project.

When an employer makes deductions from the Minimum Hourly Wage for an employee's contribution to social security, state taxes, federal taxes, and/or other contribution programs, allowed by law, the employer shall furnish each employee a suitable pay slip, check stub or envelope notifying the employee of the amount of the deductions.

No contractor or subcontractor contracting for any part of the contract week shall require or permit any laborer or mechanic to be employed on such work in excess of eight hours in any calendar day or in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

Apprentice Rates are permitted only when there is an Apprentice Agreement registered with the Massachusetts Division of Apprentice Training in accordance with M.G.L. c. 23, § 11E-11L.

Massachusetts Department Of Transportation



Highway Division

The Prevailing Wage Rates issued for each project shall be the rates paid for the entire project. The Prevailing Wage Rates must be posted on the job site at all times and be visible from a public way.

In addition, each such contractor and subcontractor shall furnish to the MassDOT's Resident Engineer, within fifteen days after completion of its portion of the work, a statement, executed by the contractor or subcontractor or by any authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

Date: _____

Ι,_

do hereby state:

(Name of signatory party) (Title)

That I pay or supervise the payment of the persons employed by:

(Contractor or Subcontractor)

on the

(MassDOT Project Location and Contract Number)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Law.

Signature

Title

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the MassDOT's Resident Engineer for such inspection.

Massachusetts General Laws c. 149, §27, requires annual updates to prevailing wage schedules for all public construction contracts lasting longer than one year. MassDOT will request the required updates and furnish them to the Contractor. The Contractor is required to pay no less than the wage rates indicated on the annual updated wage schedules.

MassDOT will request the updates no later that two week before the anniversary of the Notice to Proceed date of the contract to allow for adequate processing by the Division of Occupational Safety (DOS). The effective date for the new rates will be the anniversary date of the contract (i.e. the notice to proceed date), regardless of the date of issuance on the schedule from DOS.

All bidders are cautioned that the aforementioned laws require that employers pay to covered employees no less than the applicable minimum wages. In addition, the same laws require that the applicable prevailing wages become incorporated as part of this contract. The prevailing minimum wage law establishes serious civil and criminal penalties for violations, including imprisonment and exclusion from future public contracts. Bidders are cautioned to carefully read the relevant sections of the Massachusetts General Laws (most recently amended August, 2008).

*** END OF DOCUMENT ***

DOCUMENT 00861: STATE WAGE RATES



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H U

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Developmen

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classific	ation			117.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		Effective Da	ites and Tota	al Rates			
truction											
(2 AXLE) DR	UVER - E	QUIPMENT				12/01/2009	\$43.230	06/01/2010	\$43,830	12/01/2010	\$44.430
						06/01/2011	\$45.180	12/01/2011	\$45.840	06/01/2012	\$46.490
			1			12/01/2012	\$47.520				
(3 AXLE) DR	IVER - E	QUIPMENT				12/01/2009	\$43.300	06/01/2010	\$43.900	12/01/2010	\$44.500
						06/01/2011	\$45.250	12/01/2011	\$45.910	06/01/2012	\$46.560
						12/01/2012	\$47.590				
(4 & 5 AXLE) DRIVEF	R - EQUIPMEN	T			12/01/2009	\$43.420	06/01/2010	\$44.020	12/01/2010	\$44.620
						06/01/2011	\$45.370	12/01/2011	\$46.030	06/01/2012	\$46.680
						12/01/2012	\$47.710				
ADS/SUBME	RSIBLE	PILOT				08/01/2009	\$101.110	08/01/2010	\$104.640	08/01/2011	\$108,760
AIR TRACK	OPERAT	OR				12/01/2009	\$44,500	06/01/2010	\$45,500	12/01/2010	\$46,750
						06/01/2011	\$47.750	12/01/2011	\$49.000		
ASBESTOS F	REMOVE	R - PIPE / MEC	CH. EQUIPT.			12/01/2009	\$40.250				
ASPHALT R.	AKER					12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250
						06/01/2011	\$47.250	12/01/2011	\$48.500		
ASPHALT/CO	ONCRETI	E/CRUSHER P	LANT-ON SITE	3		12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030
BACKHOE/F	RONT-EI	ND LOADER				12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030
BARCO-TYP	e jumpii	NG TAMPER				12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250
						06/01/2011	\$47.250	12/01/2011	\$48.500		
BLOCK PAV	ER, RAM	MER / CURB	SETTER			12/01/2009	\$44.500	06/01/2010	\$45.500	12/01/2010	\$46.750
						06/01/2011	\$47.750	12/01/2011	\$49.000		
BOILER MAI	KER					01/01/2010	\$55.850				
APPREI	NTICE:	BOILERMAKER	- Local 29								
Ratio	Step	1	2	3	4	5	6	7	8		
1:5	%	65.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00		
Apprent	ice wages s	hall be no less tha	n the following:								
Step 1\$3	8.75/2\$38.	75/3\$41.19/4\$43.	64/5\$46.08/6\$48.5	3/7\$50.97/8\$53.42							
BRICK/STON	E/ARTIF	ICIAL MASO	NRY (INCL. MA	SONRY		02/01/2010	\$68.010	08/01/2010	\$69.910	02/01/2011	\$70.900
WATERPROG	JFING)					08/01/2011	\$73.000	02/01/2012	\$73.990		
APPRE	NTICE: 1	BRICK/PLASTE	R/CEMENT MAS	ON - Local 3 Newton	1						
Ratio	Step	1	2	3	4	5					
1:5	%	50.00	60.00	70.00	80.00	90.00					
Apprent	ice wages sl	hall be no less tha	n the following:								
Step 1\$4	5.71/2\$50.1	[7/3\$54.63/4\$59.0	09/5\$63.55								
BULLDOZER	/GRADE	R/SCRAPER				12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680
CAISSON & I	UNDERPI	NNING BOTT	OM MAN			12/01/2009	\$48.250	06/01/2010	\$49.250	12/01/2010	\$50.500
						06/01/2011	\$51,500	12/01/2011	\$52.750		
CAISSON & I	UNDERPI	NNING LABC	ORER			12/01/2009	\$47.100	06/01/2010	\$48,100	12/01/2010	\$49.350
						06/01/2011	\$50,350	12/01/2011	\$51,600		

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H



JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classification		Effective Dat	tes and Tota	l Rates			
CAISSON & UNDERPINNING TOP MAN		12/01/2009	\$47.100	06/01/2010	\$48,100	12/01/2010	\$49.350
		06/01/2011	\$50.350	12/01/2011	\$51.600		
CARBIDE CORE DRILL OPERATOR		12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250
		06/01/2011	\$47.250	12/01/2011	\$48.500		
CARPENTER		03/01/2010	\$54,500	09/01/2010	\$55.380	03/01/2011	\$56.250
		09/01/2011	\$57.380	03/01/2012	\$58.500		
APPRENTICE: CARPENTER - Zone 2 Eastern MA							
Ratio Step 1 2 3	4	5	• 6	7	8		
1:5 % 50.00 60.00 70.00	75.00	80.00	80.00	90.00	90.00		
Apprentice wages shall be no less than the following:							
Step 1\$25.26/2\$28.43/3\$40.29/4\$41.87/5\$45.03/6\$45.03/7\$51.35/8\$51.35					÷		
CEMENT MASONRY/PLASTERING		02/01/2010	\$66.200	08/01/2010	\$67.670	02/01/2011	\$68.440
		08/01/2011	\$70.060	02/01/2012	\$70.830		
CHAIN SAW OPERATOR		12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250
		06/01/2011	\$47,250	12/01/2011	\$48,500		
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES		12/01/2009	\$59.530	06/01/2010	\$60.780	12/01/2010	\$62.030
COMPRESSOR OPERATOR		12/01/2009	\$47.890	06/01/2010	\$48.810	12/01/2010	\$49.740
DELEADER (BRIDGE)		01/01/2010	\$63.410				
DEMO: ADZEMAN		12/01/2009	\$47.100	06/01/2010	\$48.100	12/01/2010	\$49.350
		06/01/2011	\$50.350	12/01/2011	\$51.600		
DEMO: BACKHOE/LOADER/HAMMER OPERATOR		12/01/2009	\$48.100	06/01/2010	\$49.100	12/01/2010	\$50.350
		06/01/2011	\$51.350	12/01/2011	\$52.600		
DEMO: BURNERS		12/01/2009	\$47.850	06/01/2010	\$48.850	12/01/2010	\$50.100
		06/01/2011	\$51,100	12/01/2011	\$52.350		
DEMO: CONCRETE CUTTER/SAWYER		12/01/2009	\$48.100	06/01/2010	\$49.100	12/01/2010	\$50.350
		06/01/2011	\$51.350	12/01/2011	\$52.600		
DEMO: JACKHAMMER OPERATOR		12/01/2009	\$47.850	06/01/2010	\$48.850	12/01/2010	\$50,100
		06/01/2011	\$51.100	12/01/2011	\$52.350		
DEMO: WRECKING LABORER	•	12/01/2009	\$47.100	06/01/2010	\$48,100	12/01/2010	\$49.350
		06/01/2011	\$50.350	12/01/2011	\$51.600		
DIRECTIONAL DRILL MACHINE OPERATOR		12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60,680
DIVER		08/01/2009	\$75.090	08/01/2010	\$77.440	08/01/2011	\$80.190
DIVER TENDER		08/01/2009	\$60.220	08/01/2010	\$62.570	08/01/2011	\$65.320
DIVER TENDER (EFFLUENT)		08/01/2009	\$78.810	08/01/2010	\$82.330	08/01/2011	\$86.460
DIVER/SLURRY (EFFLUENT)		08/01/2009	\$101.110	08/01/2010	\$104.640	08/01/2011	\$108.760
ELECTRICIAN		03/01/2010	\$65.790	09/01/2010	\$67.030	03/01/2011	\$68.270

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.

20100430-025



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classific	ation		-			Effective Da	tes and Tota	l Rates				
APPRE	INTICE:	ELECTRICIAN	- Local 103									
Ratio	Step	1	2	3	4	5	6	7	8	9	10	
2:3***	%	40.00	40.00	45.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	
Appren	tice wages	shall be no less tha	an the following Ste	eps:		App Pric	or 1/1/03; 30/35/40,	45/50/55/65/70/75	/80			
1\$34.88	8/2\$34.88/3	\$42.31/4\$42.31/55	\$44.45/6\$46.58/7\$4	48.72/8\$50.85/9\$52	2.99/10\$55.12							
ELEVATOR	CONSTR	UCTOR				01/01/2010	\$65.190	01/01/2011	\$66.690	01/01/2012	\$68.190	
APPRE	NTICE	ELEVATOR CO	NSTRUCTOR - Lo	ocal 4								
Ratio	Step	1	2	3	4	5						
1:1	%	50.00	55.00	65.00	70.00	80.00						
Appren	tice rates sh	all be no less than	the following:			Steps 1-2	are 6 mos.; Steps	3-5 are 1 year				
Step 1\$	44.47/2\$46	.89/3\$51.73/4\$54.	17/5\$58.99									
ELEVATOR	CONSTR	UCTOR HELP	ER			01/01/2010	\$51.330	01/01/2011	\$52.830	01/01/2012	\$54.330	
FENCE & GU	JARD RA	ALL ERECTOR				12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
						06/01/2011	\$47.250	12/01/2011	\$48,500			
FIELD ENG.	- INST. P	ERSON (BLDC	3, SITE, HVY C	ONST)		11/01/2009	\$55.850	05/01/2010	\$56.950	11/01/2010	\$58.190	(
						05/01/2011	\$59.430					
FIELD ENG.	- ROD PI	ERSON (BLDG	, SITE, HVY CC	NST)		11/01/2009	\$40.870	05/01/2010	\$41.520	11/01/2010	\$42.250	
						05/01/2011	\$42,980					
FIELD ENG.	-CHIEF C	OF PARTY (BLI	DG, SITE, HVY	CONST)		11/01/2009	\$57.210	05/01/2010	\$58.320	11/01/2010	\$59,570	
						05/01/2011	\$60.820					
FIRE ALARM	M INSTAI	LLER				03/01/2010	\$65,790	09/01/2010	\$67.030	03/01/2011	\$68.270	
FIRE ALARN	M REPAII	R / MAINTENA	NCE			03/01/2010	\$53.800	09/01/2010	\$54.730	03/01/2011	\$55.660	
FIREMAN (A	ASST. EN	GINEER)				12/01/2009	\$52.740	06/01/2010	\$53.810	12/01/2010	\$54.890	
FLAGGER &	SIGNAL	.ER				12/01/2009	\$34.900	06/01/2010	\$35.900	12/01/2010	\$35.900	
						06/01/2011	\$36.900	12/01/2011	\$36.900			
FLOORCOV	ERER					03/01/2010	\$59.630	09/01/2010	\$60.380	03/01/2011	\$61.130	
A PPR F	NTICE	FLOORCOVERE	R - Local 2168 Zor	ne I		09/01/2011	\$62.380	03/01/2012	\$63.630			
Davia	Et	1		,		e	,	7	0			
Kano 1-1	step 4/	50.00	55.00	5	4	70.00	75.00	/ 80.00	85.00			
Annren:	/0	all he no less than	the following:	00.00	05,00	Steps are	750 hrs	80.00	65.00			
Sten 1\$	27.35/2829	13/3\$39.93/4\$41	71/5\$45.32/6\$47.10	0/7\$50.69/8\$52.47		Steps are	/20 1115.					
FORK LIFT/	CHERRY	PICKER				12/01/2009	\$58,530	06/01/2010	\$59.780	12/01/2010	\$61.030	
GENERATO	R/LIGHTI	ING PLANT/HE	EATERS			12/01/2009	\$47,890	06/01/2010	\$48.810	12/01/2010	\$49.740	
GLAZIER (G	LASS PL	ANK/AIR BAR	RIER/INTERIO	R SYSTEMS)		01/01/2010	\$52.910					

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classification			Effective Da	tes and Tota	l Rates			
APPRENTICE: GLAZIER - Local 35 Zone 2								
Ratio Step 1 2	3	4	5	6	7	8		
1:1 % 50.00 55.00	60.00	65.00	70.00	75.00	80.00	90.00		
Apprentice wages shall be no less than the following			Steps are	e 750 hrs.				
Step 1\$23.86/2\$28.43/3\$30.31/4\$32.18/5\$41.26/6\$4	3.13/7\$45.01/8\$48.76							
HOISTING ENGINEER/CRANES/GRADALLS			12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030
APPRENTICE: HOIST/PORT. ENG Local 4								
Ratio Step 1 2	3	4	5	6	7	8		
1:6 % 55.00 60.00	65.00	70.00	75.00	80.00	85.00	90.00		
Apprentice wages shall be no less than the following	· ·							
Step 1\$29.83/2\$43.42/3\$45.31/4\$47.20/5\$49.09/6\$5	0.97/7\$52.86/8\$54.74							
HVAC (DUCTWORK)			02/01/2010	\$63.470	08/01/2010	\$64,720	02/01/2011	\$65.970
			08/01/2011	\$67.220	02/01/2012	\$68.470	08/01/2012	\$69,720
			02/01/2013	\$70.970				
HVAC (ELECTRICAL CONTROLS)			03/01/2010	\$65.790	09/01/2010	\$67.030	03/01/2011	\$68.270
HVAC (TESTING AND BALANCING - AIR)			02/01/2010	\$63.470	08/01/2010	\$64.720	02/01/2011	\$65.970
			08/01/2011	\$67.220	02/01/2012	\$68.470	08/01/2012	\$69.720
			02/01/2013	\$70.970				
HVAC (TESTING AND BALANCING -WATER)			03/01/2010	\$68.730				
HVAC MECHANIC			03/01/2010	\$68,730				
HYDRAULIC DRILLS			12/01/2009	\$44,500	06/01/2010	\$45.500	12/01/2010	\$46.750
			06/01/2011	\$47.750	12/01/2011	\$49.000		
INSULATOR (PIPES & TANKS)			09/01/2009	\$59.260	09/01/2010	\$61.660		
APPRENTICE: ASBESTOS INSULATOR (Pipes	& Tanks) - Local 6 Bo	oston						
Ratio Step 1 2	3	4						
1:4 % 50.00 60.00	70.00	80.00						
Apprentice wages shall be no less than the following:			Steps are	e l year				
Step 1\$36.64/2\$41.16/3\$45.69/4\$50.21								
IRONWORKER/WELDER			03/16/2010	\$60.940				
APPRENTICE: IRONWORKER - Local 7 Boston	l I							
Ratio Step 1 2	3	4	5	6				
** % 60.00 70.00	75.00	80.00	85.00	90,00				
Apprentice wages shall be no less than the following:			** Struct	tural 1:6; Ornament	al 1:4			
Step 1\$46.82/2\$50.35/3\$52.12/4\$53.88/5\$55.65/6\$5	7.41							
JACKHAMMER & PAVING BREAKER OPERATO	DR		12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250
			06/01/2011	\$47.250	12/01/2011	\$48.500		
LABORER			12/01/2009	\$43.750	06/01/2010	\$44.750	12/01/2010	\$46.000
			06/01/2011	\$47.000	12/01/2011	\$48.250		

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Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

JOANNE F. GOLDSTEIN ecretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN missioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Cl	assifica	tion				I	Effective Da	tes and To	tal Rates				
	APPREN	TICE:	LABORER - Zon	ie 2									
	Ratio	Step	1	2	3	4							
	1:5	%	60.00	70.00	80.00	90.00							
	Apprenti	ce wages	shall be no less that	in the following:									
	Step 1\$3	4.31/2\$3	7.05/3\$39.78/4\$42.	52									
LAB	ORER: C	ARPEN	TER TENDER				12/01/2009	\$43.750	06/01/2010	\$44:750	12/01/2010	\$46 000	
							06/01/2011	\$47,000	12/01/2011	\$48.250			
LAB	ORER: C	EMENT	FINISHER TE	NDER			12/01/2009	\$43,750	06/01/2010	\$44.750	12/01/2010	\$46.000	
							06/01/2011	\$47.000	12/01/2011	\$48,250			
LAB	ORER: H	AZARI	DOUS WASTE/	SBESTOS REM	IOVER		12/01/2009	\$43.750	06/01/2010	\$44.750	12/01/2010	\$46,000	
							06/01/2011	\$47.000	12/01/2011	\$48.250			
LAB	ORER: M	ASON	TENDER				12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
							06/01/2011	\$47.250	12/01/2011	\$48.500			
LABO	ORER: M	ULTI-1	RADE TENDE	ર			12/01/2009	\$43.750	06/01/2010	\$44.750	12/01/2010	\$46.000	
							06/01/2011	\$47.000	12/01/2011	\$48.250			
LAB	ORER: TI	REE RE	MOVER				12/01/2009	\$43.750	06/01/2010	\$44.750	12/01/2010	\$46.000	
							06/01/2011	\$47.000	12/01/2011	\$48.250	<i>,</i>		
This c	lassificat	ion app	lies to the wholes	ale removal									
of star	nding tree	es inclue	ling all associate	d trimming of bra	nches and limbs	, and applies	to the removal of	of branches at	locations not on or	around utility	lines.		
LASE	ER BEAN	I OPER	ATOR				12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
			Neurope				06/01/2011	\$47.250	12/01/2011	\$48.500			
MAK	BLE&I	ILEFI	NISHERS				02/01/2010	\$56,950	08/01/2010	\$58.470	02/01/2011	\$59.270	
	ADDEN	TICE	MADDIE & TH	E EINICHED Log	l 2 Marbla & Tila		08/01/2011	\$60.950	02/01/2012	\$61,740			
	APPKEN	TICE:	MARBLE & HL	E FINISHER - LOCA	u s Marole & The								
	Ratio	Step	I	2	3	4	5						
	1:3	%	50.00	60.00	70.00	80.00	90.00		v				
	Apprentic	ce wages	shall be no less tha	n the following:			Steps are	800 hrs.			,		
	Step 1\$39	9.66/2\$43	8.11/3\$46.57/4\$50.0	03/5\$53.49									
MARI	BLE MA	SONS,7	TILELAYERS &	TERRAZZO MI	ECH		02/01/2010	\$68.050	08/01/2010	\$69.950	02/01/2011	\$70.940	
							08/01/2011	\$73.040	02/01/2012	\$74.030			
	APPREN	TICE	MARBLE-TILE-	FERRAZZO MECH	IANIC - Local 3 N	farble & Tile							
	Ratio	Step	1	2	3	4	5						
	1:3	%	50.00	60.00	70.00	80.00	90.00						
	Apprentic	e wages	shall be no less tha	n the following:									
	Step 1\$45	5.73/2\$50	.19/3\$54.66/4\$59.1	2/5\$63,59									
MECH	H. SWEE	PER OI	PERATOR (NON	-CONSTRUCTI	ON)		07/01/2009	\$28.890	07/01/2010	\$29,590	07/01/2011	\$30,290	
MECH	H. SWEE	PER OI	PERATOR (ON (CONST. SITES)			12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
MECH	HANICS	MAINT	ENANCE	•			12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
MILL	WRIGHT	ſ (Zone	1)				04/01/2010	\$55.850					

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Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H Û

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Cla	ssifica	tion					Effective Da	tes and Tota	I Rates				
	APPREN	TICE:	MILLWRIGHT -	Local 1121 Zone I									
	Ratio	Step	I	2	3	4	5	6	7	8			
	1:5	%	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00			
	Apprentic	ce wages :	shall be no less tha	n the following:									
	Step 1\$34	1.63/2\$36	31/3\$39.44/4\$41.	12/5\$44.26/6\$45.9	4/7\$47.65/8\$49.32	2							
MORT	AR MIX	KER					12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
							06/01/2011	\$47.250	12/01/2011	\$48,500			
OILER	R (OTHE	R THAI	N TRUCK CRA	NES,GRADALI	LS)		12/01/2009	\$41.750	06/01/2010	\$42.480	12/01/2010	\$43.220	
OILER	R (TRUC	K CRAI	NES, GRADAL	LS)			12/01/2009	\$44.720	06/01/2010	\$45.550	12/01/2010	\$46.380	
OTHE	R POWE	ER DRIV	/EN EQUIPME	NT - CLASS II			12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
PAINT	ER (BR	IDGES/	TANKS)				01/01/2010	\$63.410					
	APPREN	TICE	PAINTER Local	35 - BRIDGES/TA	NKS ,								
	Ratio	Step	1	2	3	4	5	6	7	8			
	1:1	%	50.00	55,00	60.00	65.00	70,00	75.00	80.00	90.00			
	Apprentic	e wages s	hall be no less tha	n the following:			Steps are	750 hrs.					
	Step 1\$29	0.31/2\$34	43/3\$36.85/4\$39.3	27/5\$48.89/6\$51.3	1/7\$53.73/8\$58.57	,							
PAINT	ER (SPF	RAYOR	SANDBLAST	, NEW) *			01/01/2010	\$54.310					
* 1f 30	% or mo	ore of su	faces to be pain	ted are new cons	truction,								
NEW I	Daint rate	shall be	used.	5 7ano 2 Samuel	ondulant Nam								
	APPREN	TICE:	PAINTER LOCAL	55 Zone 2 - Spray/3	Sandolast - New								
	Ratio	Step	I	2	3	4	5	6	7	8			
	1:1	%	50.00	55.00	60.00	65,00	70,00	75.00	80.00	90.00			
	Apprentic	e wages s	hall be no less tha	n the following:									
	Step 1\$24	.76/2\$31.	85/3\$33.55/4\$32.3	24/5\$44.14/6\$45.83	3/7\$47.53/8\$50.92								
PAINT	ER (SPF	RAY OR	SANDBLAST.	, REPAINT)			01/01/2010	\$52.370					
	APPREN	TICE:	PAINTER Local 3	35 Zone 2 - Spray/S	andblast - Repain	t							
	Ratio	Step	I	2	3	4	5	6	7	. 8			
	1:1	%	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00			
	Apprentic	e wages s	hall be no less that	n the following:									
:	Step 1\$23	.79/2\$30.	78/3\$32.38/4\$33.9	98/5\$42.78/6\$44.38	3/7\$45.98/8\$49.17								
PAINT	ER (TR	AFFIC N	ARKINGS)				12/01/2009	\$43.750	06/01/2010	\$44.750	12/01/2010	\$46.000	
							06/01/2011	\$47.000	12/01/2011	\$48.250			
PAINT	ER/TA	PER (B	RUSH, NEW) *				01/01/2010	\$52.910					
* 11 309 naint re	% OF MOI ate shall l	re of sur: be used	laces to be paint	ed are new const	ruction, NEW								
paintre	APPREN'	TICE:	PAINTER - Local	35 Zone 2 - BRUS	SH NEW								
	Ratio	Step	1	2	3	4	5	6	7	8			
	É1	%	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00			
	Apprentic	e wages s	hall be no less tha	1 the following:			Steps are	750 hrs.					
	Step 1\$23	.86/2\$28.	43/3\$30.31/4\$32.1	8/5\$41.26/6\$43.13	/7\$45.01/8\$48.76								

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TIMOTHY P. MURRAY Lieutenant Governor

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT DIVISION OF OCCUPATIONAL SAFETY

Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H JOANNE F. GOLDSTEIN ceretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN ssioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classif	ication					Effective Da	tes and Tota	l Rates				
PAINTER	/ TAPER	(BRUSH, REP	AINT)			01/01/2010	\$50.970					
APP	RENTICE:	PAINTER Loo	cal 35 Zone 2 - BRUSH	I REPAINT								
Ratio	o Ster) 1	2	3	4	5	6	7	8			
1:1	%	50.00	55.00	60.00	65.00	70.00	75,00	80.00	90.00			
Appr	entice wag	es shall be no less	than the following:			Steps are	750 hrs.					
Step	1\$22.89/2\$	27.36/3\$29.14/4\$	30.92/5\$39.90/6\$41.68	8/7\$43.46/8\$47.01								
PANEL &	PICKUP	FRUCKS DRIV	/ER			12/01/2009	\$43.060	06/01/2010	\$43,660	12/01/2010	\$44.260	
						06/01/2011	\$45.010	12/01/2011	\$45.670	06/01/2012	\$46.320	
						12/01/2012	\$47.350					
PIER AND	DOCK C	ONSTRUCTO	R (UNDERPINNIN	G AND		08/01/2009	\$60.220	08/01/2010	\$62.570	08/01/2011	\$65.320	
DECK)	FP			÷		08/01/2009	\$60.220	08/01/2010	\$62 570	08/01/2011	\$65 220	
APPI	RENTICE	PH F DRIVER	R - Local 56 Zone I			08/01/2009	\$00,220	00/01/2010	302.370	08/01/2011	\$05.520	
		,	2	2		,	,	-				
Kauc	o Step	60.00	2 65.00	3 70.00	4	C 00.00	6 85.00	7	8			
1.5 Appr	70	e chall be no lece	than the following:	70.00	75.00	80.00	85.00	90.00	95.00			
Sten	1\$45 35/7\$	47 21/3849 07/48	50 93/5\$52 79/6\$54 64	17856 50/8858 36								
PIPEFITTE	R & STE	AMEITTER				03/01/2010	\$68.730					
APPI	RENTICE:	PIPEFITTER -	- Local 537			03/01/2010	000.100					
Ratic	. Stan	1	7	3	4	5						
**	% Step	40.00	45.00	60.00	70.00	80.00						
Appr	entice Rate	s-Step 1 \$33.94/2\$4	43.38/3\$50.29/4\$54.90	/5\$59.51	70,00	** 1:3: 3	:15: 1:10 thereafter	r / Steps are 1 vr				
Refri	g/AC Mech	anic **1:1:1:2:2:4	4;3:6;4:8;5:10;6:12;7:14	4;8:17;9:20;10:23(Max)	,-	,					
PIPELAYE	R					12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
						06/01/2011	\$47.250	12/01/2011	\$48.500			
PLUMBER	S & GAS	FITTERS				03/01/2010	\$67.500					
APPF	RENTICE	PLUMBER - L	ocal 12									
Ratio	Step	I	2	3	4	5						
**	%	35.00	40.00	55.00	65.00	75.00						
Appr	entice wage	s shall be no less	than the following:			** 1:2; 2	6, 3:10, 4:14, 5:19	/Steps are 1 yr				
Step	1\$30.03/2\$3	32.90/3\$41.57/4\$4	47.32/ 4w/lic\$50.20 /5\$	\$53.07/ 5w/lic\$55.9	98							
PNEUMAT	IC CONT	ROLS (TEMP.)			03/01/2010	\$68.730					
PNEUMAT	IC DRILI	/TOOL OPER	ATOR			12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
						06/01/2011	\$47.250	12/01/2011	\$48.500			
POWDERN	IAN & B	LASTER				12/01/2009	\$44.750	06/01/2010	\$45.750	12/01/2010	\$47.000	
						06/01/2011	\$48.000	12/01/2011	\$49.250			
POWER SH	iovel/d	ERRICK/TREN	NCHING MACHINI	E		12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030	
PUMP OPE	RATOR	CONCRETE)				12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030	
PUMP OPE	RATOR (DEWATERIN	G, OTHER)			12/01/2009	\$47.890	06/01/2010	\$48.810	12/01/2010	\$49.740	
READY-M	IX CONC	RETE DRIVER	र			05/01/2009	\$40.520	05/01/2010	\$41.080	05/01/2011	\$41.690	

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay

"prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN ommissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classif	ication]	Effective Da	tes and Tota	l Rates				
RECLAIM	ERS					12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
RESIDENT ** The Res to the const four stories As of 9/1/0 APPF	FIAL WO sidential V ruction of including 9 Carpent RENTICE:	OD FRAME CAR Wood Frame Carpo f new, wood frame t the basement. ry work on wood- CARPENTER (R	RPENTER ** enter classification e residences that of frame residential Residential Wood Fr	n applies only lo not exceed WEATHERIZA ame) - Zone 2	TION projec	04/01/2009 ts shall be paid t	\$35.620 he RESIDENTI	AL WOOD FRA	ME CARPENTI	ER rate.		
Ratic) Ster		2	3	4	5	6	7	8			
1:5	%	60.00	60.00	65,00	70.00	75.00	80.00	85.00	90.00			
Appr	entice wag	es shall be no less tha	an the following:									
Step	1\$20.13/2\$	26,04/3\$27.23/4\$28.	43/5\$29.63/6\$30.8	3/7\$32.03/8\$33.22								
RIDE-ON M	MOTORI	ZED BUGGY OP	ERATOR			12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
						06/01/2011	\$47.250	12/01/2011	\$48.500			
ROLLER/S	PREADE	R/MULCHING N	ACHINE			12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
ROOFER (I	Inc.Roofe	r Waterproofng &	Roofer Damproo	fg)		02/01/2009	\$53.860					
APPF	RENTICE:	ROOFER - Local	33									
Ratio	5 Step	. 1	2	3	4	5						
**	%	50,00	60.00	65.00	75.00	85.00						
** 1::	5, 2:6-10, tl	he 1:10; Reroofing: 1	:4, then 1:1			Step 1 is	2000 hrs.; Steps 2-	-5 are 1000 hrs.				
Appro	entice rates	no less than: Step 15	\$34.48/2\$40.86/3\$4	2.58/4\$46.02/5\$49	.50							
SHEETME	TAL WO	RKER				02/01/2010	\$63.470	08/01/2010	\$64.720	02/01/2011	\$65.970	
						08/01/2011	\$67.220	02/01/2012	\$68.470	08/01/2012	\$69.720	
						02/01/2013	\$70.970					
APPF	RENTICE	SHEET METAL	WORKER - Local	17-A								
Ratio	Step	1	2	3	4	5	6	7				
1:4	%	40.00	45.00	50.00	60.00	65.00	75.00	85.00				
Appre	entice wage	es shall be no less tha	in the following:			Steps 1-3	are I year; Steps -	4-7 are 6 mos.				
Step	\$15.75/2\$	26.51/3\$35.36/4\$37.	38/5\$46.40/6\$55.63									
SIGN EREC	CTOR					06/01/2009	\$37.780					
APPR	ENTICE:	SIGN ERECTOR	- Local 35 Zone 2									
Ratio	Step	1	2	3	4	5	6	7	8	9		
1:1	%	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90,00		
						Steps are	4 mos.	*				
SLATE / TI	LE / PRE	CAST CONCRET	TE ROOFER			02/01/2009	\$54.110					
SPECIALIZ	ED EAR	TH MOVING EQ	UIP < 35 TONS			12/01/2009	\$43.520	06/01/2010	\$44.120	12/01/2010	\$44.720	
						06/01/2011	\$45.470	12/01/2011	\$46.130	06/01/2012	\$46.780	
•						12/01/2012	\$47.810					

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H Ŵ

JOANNE F. GOLDSTEIN cretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN Commissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Class	ificatio	n					Effective Da	tes and Tota	I Rates				
SPEC1AI	JIZED EA	ARTH N	MOVING EQ	UIP > 35 TONS			12/01/2009 06/01/2011	\$43.810 \$45.760	06/01/2010 12/01/2011	\$44.410 \$46.420	12/01/2010 06/01/2012	\$45.010 \$47.070	
SPRINKI Ap	LER FITT	TER E: SP	RINKLER FIT	TER - Local 550			12/01/2012 04/01/2010	\$48.100 \$69.550					
Ra	utio S	ten	4	2	3	4	5	6	7	8	0	10	
1:1	%	P	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	
An	nrentice w	, ages sha	Il he no less tha	n the following ster	20.00	55.00	00.00	05.00	70.00	15.00	80.00	85.00	
15	35 04/2837	87/3840	60/4\$43 38/5\$	46 16/6\$48 94/7\$5	1 72/8\$54 50/9\$5	7 28/10\$60.06							
STEAM	BOILER	OPERA	TOR	10,10,00,10,51,105	1.72,000 1.90,909	7.20/10000.00	12/01/2009	\$58 190	06/01/2010	\$59.430	12/01/2010	\$60.680	
TAMPER	S SELF		FLLED OR T	RACTOR DRAY	WN		12/01/2009	\$58 190	06/01/2010	\$59,430	12/01/2010	\$60.680	
TELECO	MMUNI		N TECHNIC				03/01/2010	\$53,800	09/01/2010	\$57.720	02/01/2011	\$55.660	
AP	PRENTIC	E TE	LECOMMUN	ICATION TECHNI	CIAN - Local 10	3	05/01/2010	\$55.800	09/01/2010	\$34.730	03/01/2011	355.000	
			1	2	2		,	,	-	,			
Ka 1.1	110 51	ep	1	45.00	50.00	4	C 0.00	6	75.00	8			(
1.1	~		40,00 The ne less the	45.00	30.00	55.00	60,00	65.00	75.00	80.00			(
Ap	= 1624 60/		1 De no less mai	n me fonowing:	17646 90/0647 40								
TEPD A7	p 1334.39/	2330.19/	3337.80/4339.3	99/3340.99/0342.00	// /\$43.60/8\$47.40	1	02/01/2010	\$44.050	08/01/2010	\$60.0Z0	02/01/2011	5/0.040	
TERRAL	ZO FINI.	SHEKS	4				02/01/2010	\$00.950	03/01/2010	\$08.830 £72.020	02/01/2011	\$69,840	
AP	PRENTICI	E TE	RRAZZO FINI	SHER - Local 3 M	arble & Tile		08/01/2011	\$71.940	02/01/2012	\$12.930			
Pa			1	ייים ביינגע יי	2	4							
. 1.2	uo 31	ep	50.00	60.00	70.00	* 80.00	00.00						
Ani	orentice wa	ues shal	I be no less that	the followine:	70.00	30,00	Stens are	800 hrs					
Sta	n 1845 18/	55 55 51 LL	3\$53 89/4\$58 7	24/5\$62.60	•		Steps are	. 000 ms.					
TEST BO		2111 56)				12/01/2009	\$48 500	06/01/2010	\$40.500	12/01/2010	550 750	
ILSI DO		GEEE	•				06/01/2011	\$51.750	12/01/2011	\$53.000	12/01/2010	\$50.750	
TEST BO	RING DI	ULLER	HELPER				12/01/2009	\$47,220	06/01/2010	\$48,220	12/01/2010	\$49.470	
							06/01/2011	\$50.470	12/01/2011	\$51.720	12/01/2010	\$15.170	
TEST BO	RING LA	BORE	R				12/01/2009	\$47,100	06/01/2010	\$48,100	12/01/2010	\$49 350	
							06/01/2011	\$50,350	12/01/2011	\$51.600			
TRACTO	RS/PORT	ABLE	STEAM GE	NERATORS			12/01/2009	\$58.190	06/01/2010	\$59.430	12/01/2010	\$60.680	
TRAILER	S FOR E	ARTH	MOVING EC	QUIPMENT			12/01/2009	\$44,100	06/01/2010	\$44,700	12/01/2010	\$45.300	
							06/01/2011	\$46.050	12/01/2011	\$46.710	06/01/2012	\$47.360	
							12/01/2012	\$48.390					
TUNNEL	WORK -	COMI	PRESSED AI	R -≻			12/01/2009	\$59.430	06/01/2010	\$60.680	12/01/2010	\$61.930	
							06/01/2011	\$63.180	12/01/2011	\$64.430			
TUNNEL	WORK -	COMI	PRESSED AI	R (HAZ. WASTI	E)		12/01/2009	\$61.430	06/01/2010	\$62.680	12/01/2010	\$63,930	
							06/01/2011	\$65.180	12/01/2011	\$66.430			
TUNNEL	WORK -	FREE	AIR				12/01/2009	\$51.500	06/01/2010	\$52.750	12/01/2010	\$54.000	
							06/01/2011	\$55.250	12/01/2011	\$56.500			

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.

er: 20100430-025



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

JOANNE F. GOLDSTEIN Secretary of Labor and Workforce Development

> GEORGE E. NOEL Director of Labor

LAURA M. MARLIN summissioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

0

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

	Classification		Effective Dat	tes and Tota	I Kates				
	TUNNEL WORK - FREE AIR (HAZ. WASTE)		12/01/2009	\$53.500	06/01/2010	\$54.750	12/01/2010	\$56.000	
			06/01/2011	\$57.250	12/01/2011	\$58,500			
	VAC-HAUL		12/01/2009	\$43.520	06/01/2010	\$44.120	12/01/2010	\$44.720	
			06/01/2011	\$45.470	12/01/2011	\$46.130	06/01/2012	\$46.780	
			12/01/2012	\$47.810					
	WAGON DRILL OPERATOR		12/01/2009	\$44.000	06/01/2010	\$45.000	12/01/2010	\$46.250	
			06/01/2011	\$47.250	12/01/2011	\$48.500			
	WASTE WATER PUMP OPERATOR		12/01/2009	\$58.530	06/01/2010	\$59.780	12/01/2010	\$61.030	
	WATER METER INSTALLER		03/01/2010	\$67.500					
utsi	de Electrical - East								
	CABLE TECHNICIAN (Power Zone)		08/31/2008	\$32.380					
	CABLEMAN (Underground Ducts & Cables)		08/31/2008	\$42,160					
	DRIVER / GROUNDMAN CDL		08/31/2008	\$37,490					
	DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)		08/31/2008	\$30.320					
	EQUIPMENT OPERATOR (Class A CDL)		08/31/2008	\$46.160					
	EQUIPMENT OPERATOR (Class B CDL)		08/31/2008	\$39.800					
	GROUNDMAN		08/31/2008	\$29.820					
	GROUNDMAN -Inexperienced (<2000 Hrs.)		08/31/2008	\$25,460					
	JOURNEYMAN LINEMAN		08/31/2008	\$53.830					
	APPRENTICE: LINEMAN (Outside Electrical) - East Local 104								
	Ratio Step 1 2 3	4	5	6.	7				
	1:2 % 60.00 65.00 70.00	75.00	80.00	85.00	90.00				
	Apprentice wages shall be no less than the following:								
	Step 1\$39.86/2\$39.85/3\$41.85/4\$43.85/5\$45.84/6\$47.85/7\$49.84								
	TELEDATA CABLE SPLICER		03/01/2007	\$27.330					
	TELEDATA LINEMAN/EQUIPMENT OPERATOR		03/01/2007	\$27.330					
	TELEDATA WIREMAN/INSTALLER/TECHNICIAN		03/01/2007	\$27.330					
	TREE TRIMMER		02/01/2009	\$19.010					
	This classification applies only to the trimming of branches on								
	and around utility lines.		02/01/2009	\$17.060					
	This classification annlies only to the trimming of branches on		-2,0,,2007	217,000					
	and around utility lines.								

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952.



Prevailing Wage Rates

As determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H JOANNE F. GOLDSTEIN

y of Labor and Workforce Develops

GEORGE E. NOEL Director of Labor

LAURA M. MARLIN missioner of Division of Occupational Safety

Awarding Authority: Massachusetts Department of Transportation

Contract Number:

City/Town: WELLESLEY

Description of Work: Replacement of the Cedar Street Bridge over Route 9 in Wellesley

Job Location: Cedar Street over Route 9

Classification

Effective Dates and Total Rates

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours) unless otherwise specified.

- * Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof.
- ** Multiple ratios are listed in the comment field.
- *** The job site ratio of 2 apprentices (APP) for every 3 journeymen (JM) is allowed as follows:
- 1 JM: 1 APP; 2-3 JM: 2 APP; 4-6 JM: 4 APP; 7-9 JM: 6 APP; 10-12 JM: 8 APP; 13-15 JM: 10 APP; etc. **** The job site ratio of 2 apprentices (APP) for every 3 journeymen (JM) is allowed as follows:

1-2 JM: 1 APP; 3-4 JM: 2 APP; 5 JM: 3 APP; 6-7 JM: 4 APP; 8 JM: 5 APP; etc.

This wage schedule must be posted at the work site in accordance with M.G.L. c. 149, § 27. Failure of the employer to pay "prevailing wage rates," which are the minimum wage rates listed above, on public works projects is a violation of M.G.L. c. 149, § 27. Employees not receiving such rates should report the violation to the Office of Fair Labor and Business Practices, 100 Cambridge Street, Boston, MA 02108; Tel: 617-727-3465. For any questions about the wage rates or classifications included on the wage schedule, please call DOS at 617-626-6952. DOCUMENT 00811: SPECIAL PROVISIONS -MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES -DESIGN-BUILD PROJECTS 03/09/2009
Massachusetts Department Of Transportation



Highway Division

DOCUMENT 00811

SPECIAL PROVISIONS MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES

Revised: 02/18/2009

This provision applies to all projects using greater than 100 tons (91 megagrams) of hot mix asphalt (HMA) mixtures containing liquid asphalt cement as stipulated in the Notice to Contractors section of the bid documents.

The Price Adjustment will be based on the variance in price for the liquid asphalt component only from the Base Price to the Period Price. It shall not include transportation or other charges. This Price Adjustment will occur on a monthly basis.

Base Price

The Base Price of liquid asphalt on a project as listed in the Notice to Contractors section of the bid documents is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price detailed below.

Period Price

Please note that, starting December 15, 2008, two sets of period prices will be posted each month on the MassDOT website at <u>http://www.MassDOT.state.ma.us/</u>. They will be labeled "New Asphalt Period Price Method" and "Old Asphalt Period Price Method".

New Asphalt Period Price Method

The "New Asphalt Period Price Method" is for contracts bid after December 15, 2008 and will show the Period Price of liquid asphalt for each monthly period as determined by MassDOT using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. MassDOT will post this Period Price on this website within two (2) business days following their receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted MassDOT the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

Old Asphalt Period Price Method

The "Old Asphalt Period Price Method" Period Price will be for contracts bid on or before December 15, 2008 and will contain liquid asphalt prices as determined by the old or previous method. These prices will continue to be posted on MassDOT's website until all contracts using the "Old Asphalt Period Price Method" Period Price have been closed.

New and Old Asphalt Period Price Methods

The paragraphs below apply to both the New and the Old Asphalt Period Price Methods.

The Contract Price of the hot mix asphalt mixture will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M3.11.03.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of tons of hot mix asphalt mixtures placed during each monthly period times the liquid asphalt content percentage times the variance in price between Base Price and Period Price of liquid asphalt. This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Departmentapproved extension of time.

*** END OF DOCUMENT ***

DOCUMENT 00812: SPECIAL PROVISIONS -MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE – ENGLISH UNITS DESIGN-BUILD PROJECTS March 9, 2009 Massachusetts Department Of Transportation



Highway Division

DOCUMENT 00812

SPECIAL PROVISIONS MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE – ENGLISH UNITS

Revised: 01/26/2009

This monthly fuel price adjustment is inserted in this contract because the national and worldwide energy situation has made the future cost of fuel unpredictable. This adjustment will provide for either additional compensation to the Contractor or repayment to the Commonwealth, depending on an increase or decrease in the average price of diesel fuel or gasoline.

This adjustment will be based on fuel usage factors for various items of work developed by the Highway Research Board in Circular 158, dated July 1974. These factors will be multiplied by the quantities of work done in each item during each monthly period and further multiplied by the variance in price from the Base Price to the Period Price.

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site (<u>www.MassDOT.state.ma.us</u>) for the month in which the contract was bid, which includes State Tax.

The Period Price will be the average of prices charged to the State, including State Tax for the bulk purchases made during each month.

This adjustment will be effected only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No adjustment will be paid for work done beyond the extended completion date of any contract.

Any adjustment (increase or decrease) to estimated quantities made to each item at the time of final payment will have the fuel price adjustment figured at the average period price for the entire term of the project for the difference of quantity.

The fuel price adjustment will apply <u>only</u> to the following items of work at the fuel factors shown:

ITEMS COVERED	FUEL FACTORS	
	Diesel	Gasoline
Excavation: and Borrow Work: Items 120, 120.1, 121, 123, 124, 125, 127, 129.3, 140, 140.1, 141, 142, 143, 144., 150, 150.1, 151 and 151.1 (Both Factors used)	0.29 Gallons / CY.	0.15 Gallons / CY
Surfacing Work: All Items containing Hot Mix Asphalt	2.90 Gallons / Ton	Does Not Apply

*** END OF DOCUMENT ***

DOCUMENT 00813: SPECIAL PROVISIONS PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL ENGLISH UNITS DESIGN-BUILD PROJECTS

December 1, 2008

Massachusetts Department Of Transportation



Highway Division

DOCUMENT 00813

SPECIAL PROVISIONS PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL

December 1, 2008

This provision only applies to those projects that contain Price Adjustments for all structural steel and reinforcing steel as stipulated in the Notice to Contractors. When used, this provision applies to all structural steel and reinforcing steel. This provision does not apply to sole, masonry, and shim plates, bolts, pins, welds, or other miscellaneous steel. Price Adjustments will occur after submittal by the Contractor to the Department of certified paid mill invoices for the Contractor's purchase of unfabricated structural steel material, including, but not limited to, rolled shapes, plate steel, sheet piling, pipe piles, steel castings, steel forgings, guardrail, and unfabricated reinforcing steel bars.

Base Prices and Mill Prices shall be defined as follows:

Base Prices of unfabricated structural steel material and unfabricated reinforcing steel bars on a project are fixed prices determined by the Department and found in the Notice to Contractors.

Base Mill Prices of unfabricated structural steel material and unfabricated reinforcing steel bars on a project are the actual prices paid by the Contractor to a steel mill for this material and contained in certified paid invoices submitted to the Department by the Contractor.

Price Adjustments will be variances between Base Prices and Mill Prices.

Price Adjustments will <u>not</u> include the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel surcharges, or other such charges not related to the cost of the unfabricated structural or reinforcing steel itself. The invoiced weight of steel shall not exceed the final shipping weight of the fabricated part by more than 10%.

The Contractor will be paid for fabricated structural steel or fabricated reinforcing steel under the respective contract pay items for all components constructed of either structural steel or reinforced portland cement concrete.

Price Adjustments, as herein provided for and adjusted either upwards or downwards, will be paid separately. Price Adjustments will be determined by multiplying the number of pounds of structural steel material or unfabricated reinforcing steel bars contained in the Contractor's certified paid invoice by the variance between the Base Price and the Mill Price of the structural steel material or unfabricated reinforcing steel bars.

The Base Mill Price shall be contained in a certified paid invoice submitted by the Contractor to the Department as part of a notarized affidavit clearly stating the weight of material and the price paid to the steel mill for the structural steel material or unfabricated reinforcing steel bar.

Price Adjustments will be made only if variances between Base Prices and Base Mill Prices are 5% or more. Once the 5% threshold has been achieved, the adjustment will apply to the full variance from the Base Price.

No Price Adjustment will be made after the contract completion date, unless the Department has approved an extension of contract time for that contract.

*** END OF DOCUMENT ***

DOCUMENT 00813A: STEEL PRICE ADJUSTMENT FOR PROJECT

3/30/2010

February 2010 Structural Steel & Rebar Base Prices (Note: These prices replace the list dated 01-28-2010.)

ITEM		FEB 2010 PRICE PER	FEB 2010 PRICE PER
<u>NO.</u>	DESCRIPTION	POUND	KILOGRAM
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 420) Reinforcing Steel	\$0.30	\$0.67
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes	\$0.30	\$0.67
3	ASTM A668 (AASHTO M102) Steel Forgings	\$0.30	\$0.67
	ASTM A283M (AASHTO M180, Type I or II, Class A) Grade D, 12 gage, cold-rolled, hot-dipped galvanized,	\$0.39	\$0.85
4	carbon-steel plate guardrail		
5	ASTM A709 (AASHTO M270) Grade 36 Structural Steel Plate	\$0.88	\$1.95
6	ASTM A709 (AASHTO M270) Grade 36 Structural Steel Shapes	\$0.62	\$1.38
7	ASTM A709 (AASHTO M270) Grade 50 Structural Steel Plate	\$0.90	\$1.99
8	ASTM A709 (AASHTO M270) Grade 50 Structural Steel Shapes	\$0.61	\$1.35
9	ASTM A709 (AASHTO M270) Grade 50W Structural Steel Plate	\$0.94	\$2.06
10	ASTM A709 (AASHTO M270) Grade 50W Structural Steel Shapes	\$0.66	\$1.45
11	ASTM A709 (AASHTO M270) Grade HPS 50W Structural Steel Plate	\$1.08	\$2.37
12	ASTM A709 (AASHTO M270) Grade HPS 70W Structural Steel Plate	\$1.15	\$2.54
13	ASTM A514 / A514M - 05 (AASHTO M270) Grade HPS 100W Structural Steel Plate	\$1.06	\$2.34
14	ASTM A276 Type 316 Stainless Steel	\$3.17	\$6.98
15	ASTM A240 Type 316 Stainless Steel	\$3.17	\$6.98
16	ASTM A148 Grade 80/50 Steel Castings	\$1.10	\$2.42
17	ASTM A709M (AASHTO M270) Grade 345W (same as 50W)	\$0.94	\$2.06
18	ASTM A709M (AASHTO M270) Grade HPS 345W (same as 50W)	\$1.08	\$2.37
19	ASTM A709M (AASHTO M270) Grade 250 (same as A36)	\$0.88	\$1.95
20	ASTM A53 Grade B Structural Steel Pipe	\$0.55	\$1.21
21	ASTM A500 Grades A & B Structural Steel Pipe	\$0.55	\$1.21
22	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.4 4	\$0.96
23	ASTM 252, Grade 2 Permanent Steel Casing	\$0.44	\$0.96
24	AASHTO M183 H-pile and Fender System	\$0.66	\$1.46
25	ASTM A570, Grade 50	\$0.50	\$1.10
26	ASTM A572, Grade 50 Sheet Pile	\$0.66	\$1.46
27	ASTM A36 / 36M, Grade 50	\$0.85	\$1.87

DOCUMENT 00814: SPECIAL PROVISIONS PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES DESIGN-BUILD PROJECTS March 9, 2009 Massachusetts Department Of Transportation



Highway Division

DOCUMENT 00814

SPECIAL PROVISIONS PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES

January 12, 2009

This provision applies to all projects using greater than 100 Cubic Yards (76 Cubic Meters) of Portland cement concrete containing Portland cement as stipulated in the Notice to Contractors section of the Bid Documents. This Price Adjustment will occur on a monthly basis.

The Price Adjustment will be based on the variance in price for the Portland cement component only from the Base Price to the Period Price. It shall not include transportation or other charges.

The Base Price of Portland cement on a project is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price (see below) and found in the Notice to Contractors.

The Period Price of Portland cement will be determined by using the latest published price, in dollars per ton (U.S.), for Portland cement (Type I) quoted for Boston, U.S.A. in the <u>Construction Economics</u> section of *ENR Engineering News-Record* magazine or at the ENR website http://www.enr.com under <u>Construction Economics</u>. The Period Price will be posted on the MassDOT website the Wednesday immediately following the publishing of the monthly price in ENR, which is normally the first week of the month.

The Contract Price of the Portland cement concrete mix will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The price adjustment applies only to the actual Portland cement content in the mix placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M4.02.01. No adjustments will be made for any cement replacement materials such as fly ash or ground granulated blast furnace slag.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of cubic yards of Portland cement concrete placed during each monthly period times the Portland cement content percentage times the variance in price between the Base Price and Period Price of Portland cement.

This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Departmentapproved extension of time.

*** END OF DOCUMENT ***

CERTIFICATION OF CONTRACTOR/MASSDOT

Massachusetts Department Of Transportation



Highway Division

Contractor/MassDOT Certification is not applicable for this project.

EXHIBIT P: ITEM 183.11 – TREATMENT OF CONTAMINATED GROUNDWATER; ITEM 183.21, DISPOSAL OF GRANULAR-ACTIVATED CARBON

Massachusetts Department Of Transportation



Highway Division

ITEM 183.1 TREATMENT OF CONTAMINATED GROUNDWATER

GALLON

The Contractor is advised that contaminated groundwater may be encountered during trench excavations. It is likely that treatment of the contaminated groundwater using liquid-phase granular-activated carbon will be required to complete the work under this Contract. The methods described under Item 183.1 provides for the identification, testing, management and treatment or disposal of contaminated groundwater and shall be implemented, at a minimum and as necessary by the Contractor via methods under Item 183.1.

It is not the intent herein for the Department to design for or specify to the Contractor which particular treatment is to be used, if necessary. Rather, it is the Department's intent to provide guidance to the Contractor for informational and bidding purposes only. It is, therefore, the Contractor's responsibility to use a treatment method which allows him/her to meet any and all laws, regulations, policies, guidelines and permit requirements.

The overall handling and management of contaminated groundwater is regulated by DEP under the provisions of 310 CMR 40.000. The unpermitted discharge of contaminated dewatering effluent into the environment (storm drain, surface water body, onto the ground) is a violation of several federal and state laws and regulations.

Should dewatering of contaminated groundwater be necessary, approvals must be sought from the appropriate regulatory jurisdiction.

There are basically four options available:

- 1) Pump to a tight tank or "vacuum truck", with subsequent treatment/disposal at an off-site approved facility;
- 2) Discharge to a sanitary sewer with appropriate permit from local and regional sewerage authorities and DEP;
- 3) Discharge to a storm drain or surface water body with permit or approval from DEP and/or the US EPA; or
- 4) Discharge to the ground with the approval from D EP.

Generally, the utilization of options (2) through (4) involves treating the contaminated groundwater prior to discharge. Treatment of contaminated groundwater for dewatering operations is generally performed using a mobile treatment trailer equipped with one or more granular-activated carbon (GAC) canisters, although other techniques are also used.

For short-term operations, treatment and discharge to a surface water body/storm drain may be the most cost-effective and expedient alternative. In such cases, a short-term exemption from the permitting provisions of the National Pollutant Discharge Elimination System (NPDES) may be approved by the US EPA, via the Regional Office in Lexington, Massachusetts.

The US EPA will not specify a treatment system or method, but normally requires that the treated discharge water meets Massachusetts Drinking Water Standards. The discharge standards are normally met by treating the dewatered groundwater through granular-activated carbon canisters, or similar techniques.

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ITEM 183.1 Cont.

The Contractor shall be responsible for determining compliance with the requirements of the obtained Permit and for any sampling, testing, and disposal required in connection with said Permit. The Contractor is also advised that additional requirements may be administered by the local sewer authority. The Department and the City/Town reserve the right to collect additional samples of dewatered groundwater to determine the Contractor's compliance with the Permit's requirements.

Longer term discharges to surface waters or storm drains, and any discharge to the ground, requires approval and/or issuance of a permit from DEP, Division of Water Pollution Control, under the provisions of 314 CMR 3.00 and 5.00, respectively. In such cases, contact: DEP, Division of Water Pollution Control, One Winter Street, Boston, MA 02108.

For the purpose of these specifications and to establish a basis for the bid, it is anticipated that liquid-phase granular-activated carbon will be the treatment medium for dewatered contaminated groundwater. The bidder shall factor into the payment item all costs associated with the testing and analyses that may be required by the permitting agency. In addition, any laboratory testing of groundwater is to be performed by a DEP certified laboratory for the parameters being tested. Copies of all field and laboratory testing results will be supplied to the Engineer. Bid price shall also include full compensation for labor, materials, maintenance, mobilization, rental and other related costs. Item 183.2 will be used for disposal of used granular-activated carbon canisters.

METHOD OF MEASUREMENT

Work under Item 183.1 is based upon the number of gallons of contaminated groundwater pumped through the liquid-phase granular-activated carbon (Item 183.2) as the medium for the treatment of contaminated groundwater that is found in pipe trenches, manhole excavations, catch basin excavations, that need to be dewatered.

BASIS OF PAYMENT

Payment shall be made at the unit price bid per gallon of groundwater pumped, which price shall be full compensation for all necessary labor and materials, mobilization, maintenance, demobilization of the appropriate unit(s), freight, rental costs, field and laboratory testing costs and permits. Costs associated with the disposal of liquid-phase granular-activated carbon shall be covered under Item 183.2.

ITEM 183.2 DISPOSAL OF LIQUID-PHASE GRANULAR-ACTIVATED CARBON POUND

Work under Item 183.2 is based upon the disposal of used liquid-phase granular-activated carbon as the treatment medium for contaminated groundwater (Item 183.1) that is found during excavations in which contaminated groundwater is encountered.

Payment shall be made at the unit price bid per pound of carbon used. Providing the necessary quantities of carbon will be considered incidental to this item. All other costs associated with treatment of contaminated groundwater will be covered under Item 183.1 Treatment of Contaminated Groundwater.

EXHIBIT Q: HAZARDOUS MATERIALS SPECIFICATIONS 181.2 – 181.9

ITEM 115.1

DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. W-13-015

The work to be done under this Item shall conform to the following:

The work to be done under this Item shall consist of the demolition and satisfactory removal of the entire existing superstructure of Bridge No. W-13-015.

The work shall include but not be limited to the following:

- Removal of the reinforced concrete railings;
- Removal of the reinforced concrete copings;
- Removal of the roadway wearing surface;
- Removal of the reinforced concrete deck;
- Removal of the steel beams and diaphragms.

The Contractor shall be responsible for providing a temporary shielding system to prevent any debris from falling onto Route 9 as a result of the operations. The cost of providing, installing, and removing the temporary shielding system shall be considered incidental to this Item. All work shall be performed in the dry.

The Contractor shall submit his/her proposed method of demolition including equipment, tools, devices, etc. to the Engineer for approval. The demolition procedure and any necessary calculations and drawings shall bear the stamp of a Professional Engineer registered in the Commonwealth of Massachusetts certifying that all existing structural members are suitably braced and supported throughout the demolition process. Work shall not commence until the Engineer has given written approval of the method of demolition.

The Contractor shall make adequate provisions for the protection of traffic, private property, and pedestrians from damage and injury during all phases of the demolition process.

The Contractor shall be responsible for adequately protecting any existing utility lines during his operations. If any utilities are damaged due to the Contractor's negligence, he/she shall make repairs at his/her own expense.

All materials removed under Item 115.1 shall become the property of the Contractor and shall be removed from the job site.

The existing structural steel are suspected to have been coated with lead paint. Some of the paint has flaked off leaving bare rusted metal. In areas where lead paint is found within 300 mm of a cut line or area of disassembly, the requirements stated under the heading DISPOSAL OF HAZARDOUS MATERIALS (LEAD PAINT) shall be strictly adhered to.

DISPOSAL OF HAZARDOUS MATERIALS (LEAD PAINT)

GENERAL REQUIREMENTS

To ensure worker and public safety, hazardous materials shall be removed in the immediate area of any intended cutting or burning. Removal of hazardous material is not required for mechanical disassembly, i.e. bolt and rivet removal. Hazardous material removal is required to allow the demolition of the structural steel.

The hazardous materials shall be removed and disposed in accordance with all the standards and criteria contained herein.

All workers involved in the cutting of the steel shall receive blood tests as outlined in "CRITERIA FOR CONTROLS OVER WORKER HEALTH AND SAFETY".

During mechanical disassembly, i.e. bolt and rivet removal, the Contractor shall be required to adhere to the following sections: "REQUIREMENTS FOR PROTECTION OF WORKERS AND THE ENVIRONMENT", "CRITERIA FOR CONTROLS OVER WORKER HEALTH AND SAFETY", "CRITERIA FOR HANDLING OF HAZARDOUS WASTE AND REPORTING RELEASE", "SUBMITTALS" parts 3 and 4 only, and "CLEANING/REMOVAL".

The existing structure and appurtenances are believed to have been coated with lead paint. Lead-based paint and residue from deleading is regulated by the Department of Environmental Protection (DEP) and the Federal Environmental Protection Agency (EPA) as a hazardous waste. The Department of Labor and Industries (DLI) and the Federal Occupational Safety and Health Administration (OSHA) also regulate deleading activities. The lead removed from highway structures is a hazardous substance. It has been shown to have serious health effects on workers if caution and attention to details are not followed.

REQUIREMENTS FOR PROTECTION OF WORKERS AND THE ENVIRONMENT

The Contractor shall protect the public and workers from unacceptable exposures to lead, caused by deleading and cleaning operations etc. The Contractor shall follow procedures to prevent lead emissions to the environment. Lead removed from structures is known to be an air, soil and water pollutant. Improper lead containment and disposal has resulted in large fines by regulatory agencies. Whereas the containment and disposal of lead contaminated material is expensive, all Contractors prior to bidding shall physically view the structure to be bid upon. This will allow a more accurate bid by Contractors. Arrangements with the Department's District Office shall be made to inspect the structure in the company of Department personnel.

The Contractor shall comply with the following laws and regulations and follow guidelines as appropriate (supplementing subsection 7.01):

310 CMR 7.00	Air Pollution Control
310 CMR 30.00	Hazardous Waste Regulations
310 CMR 40.00	Massachusetts Contingency Plan
310 CMR 19.00	Solid Waste Management Regulations
314 CMR 1.00	30.00 Water Pollution Control Regulations
454 CMR 11.00	Structural Painting Safety Code
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 50	National Primary and Secondary Ambient Air Quality
	Standards

OSHA Booklet 3126 "Working with Lead in the Construction Industry" and OSHA's "Lead Exposure in Construction" printed May 4, 1993 Federal Register

NIOSH Publication No. 91-116 "Preventing Lead Poisoning in Construction Workers" Steel Structures Painting Council (SSPC) Guide for Containing Debris Generated During Paint Removal Operations

SSPC Guide for the Disposal of Surface Preparation Debris

The Contractor is obligated to comply with each and every requirement that is mandated by law, regulation or executive order by the federal and state governments and their administrative agencies empowered to seek enforcement thereof. In the event that the requirements of either federal or state law, regulation or executive order are more stringent than the other, the Contractor shall be obligated to comply with the more stringent requirements. In the event of an obvious conflict or ambiguity, the federal requirements shall supersede and prevail over state requirements.

The Contractor is further obligated to be familiar with the various bulletins, guidelines and publications listed herein. These documents offer valuable health and safety and environmental protection suggestions to the Contractor. Many of these suggestions are under serious consideration by the Federal and State agencies and may soon be implemented as mandatory measures under the respective regulatory authority. Contractors are expected to be familiar with these measures and prepared to implement them if and when regulations are amended. Contractors are encouraged but not required, to implement these measures before being mandated by regulation.

The Contractor shall provide the Massachusetts Executive Office of Labor and Industries, Lead (Pb) and Asbestos Program - at least 10 days prior to beginning work - a written notification of the project, its location, the start date, and the anticipated duration of the project. Also, the Contractor shall comply with all registration and license requirements. Additionally, the Contractor shall have either someone on-site, or accessible within one hour, who is authorized to make decisions requiring extra equipment.

During demolition and lead (Pb) paint removal operations, signs warning that lead paint removal and demolition operations are being conducted shall be posted at all approaches to the work area. At a minimum, such signs shall include the words, "WARNING: LEAD PAINT REMOVAL HAZARD, NO SMOKING OR EATING, RESPIRATOR REQUIRED", in bold lettering not smaller than two inches tall, with additional language prohibiting entrance to the work area by unauthorized personnel, and in accordance with 29 CFR 1910.145 and 1926.62.

A daily sign in/out log which identifies persons by name, address, and affiliation, or work classification for all employees with the project, and the times of arrival and departure must be maintained at the work site, and submitted to the Engineer on a weekly basis when lead (Pb) paint removal and demolition is being performed.

CRITERIA FOR CONTAINMENT SYSTEMS

Containment and recovery of paint and debris generated is required during cleaning and deleading operations. Enclosures shall be provided and designed to protect traffic, pedestrians, waterways and the surrounding environment. The Contractor shall design a containment system that meets the requirements of 454 CMR 11.00 and of SSPC Class 5 for power tools with vacuum attachments or vacuum blasting or SSPC Class 3 for power tools without vacuum attachments, or wet abrasive blasting as defined in the SSPC "Guide for Containing Debris Generated During Paint Removal Operations", with one exception - the use of permeable materials for containment walls shall not be allowed. The containment shall be designed to control environmental emissions and meet the worker health and safety criteria described in the subheadings which follow.

For projects over water, the containment system must control and capture all cleaning water and debris to ensure that it does not enter the water during deleading operations.

The Contractor shall thoroughly examine the structure and verify its ability to support the containment system as well as the traffic and Contractor's vehicles. Drawings and a plan for containment shall be submitted to the Engineer in accordance with the subheading entitled "Submittals".

So as not to distribute contaminated debris during any clean-up procedures, the Contractor shall use a HEPA vacuum (or approved equal) for use in removing debris, paint chips, dust, tarp, containment material etc. from the work zone daily. Blowing down the steel, vehicles or equipment is not acceptable.

CRITERIA FOR CONTROLS OVER ENVIRONMENTAL EMISSIONS

AMBIENT AIR QUALITY FOR PARTICULATE MATTER: shall be monitored and controlled in accordance with 40 CFR 50 and 310 CMR 7.00. Where hazardous atmospheres may exist, appropriate testing shall be performed in accordance with 454 CMR 11.00.

Air Quality shall be monitored for a minimum of four (4) days out of the first eight (8) days at each bridge site when paint removal operations begin. However, if the containment is set up in a different area, samples shall be taken a minimum of two (2) days at each containment location when paint removal operations begin. The monitors shall be placed at the edge of the right-of-way at the point of maximum environmental impact (usually downwind of the cleaning operation). Monitors may be moved to maintain this condition due to shifting wind patterns. Emissions in excess of 400 μ g/m³ of PM₁₀ over an 8-hour period or exceeding background levels by 150% shall be cause for shut down of the project until corrections to the containment are made to comply with this level. Monitoring for this level shall be accomplished using high volume air samplers.

AMBIENT AIR QUALITY FOR LEAD EMISSIONS: shall be monitored for a minimum of four (4) days out of the first eight (8) days at each bridge site when paint removal operations begin. However, if the containment is set up in a different area, samples shall be taken a minimum of two (2) days at each containment location when paint removal operations begin. The monitors shall be placed at the edge of the right-of-way at the point of maximum environmental impact (usually downwind of the cleaning operation). Monitors may be moved to maintain this condition due to shifting wind patterns. Emissions in excess of the value attained by the following formula or exceeding 150% of background levels shall be cause to shut down the project until improvements are made to containment.

Allowable 8-hour Emission in $\mu g/m^3 = AE$

Project Duration in Days = PD

 $AE = 90/PD \times 1.5 \mu g/m^3 \times 3$

The maximum value for PD is 90. The minimum value for PD is 30.

Background level for particulate matter AND lead (Pb) emissions shall be checked either by monitoring the air during non-production days at the beginning of the project or by placing a monitor upwind of the project. All air monitoring levels shall be submitted directly to the Engineer from the lab within 24 hours from sample collection.

So as not to distribute contaminated debris during any clean-up procedures, the Contractor shall use a HEPA vacuum (or approved equal) for use in removing debris, paint chips, dust, tarp, containment material etc. from the work zone daily. Blowing down the steel, vehicles or equipment is not acceptable.

Ambient air monitoring is not required with chemical stripping.

SOIL QUALITY: The Contractor shall not contaminate the soil with lead. A suitable impervious covering must be placed on the ground under the work and decontamination areas and under waste containers. In the event that it is not practical to place tarp directly on the ground, shielding devices must be supported by suitable frame works to prevent falling contaminants from escaping. Any clean-up procedures that are required and the associated costs that are a result of lead contamination of the soil will be the responsibility of the Contractor. The Contractor shall perform a pre-job and post-job soil analysis as set forth in Section 5.5.5 Method E, Soils Analysis for Hazardous Elements, "*SSPC-Guide 61 (CON) Guide for Containing Debris Generated During Paint Removal Operations*", and shall be submitted to the Engineer within 10 days after the close out of each location.

WATER QUALITY: The Contractor shall take all necessary precautions to prevent debris from entering the water. Any clean-up procedures required to abate lead contamination in sediments shall be the responsibility of the Contractor. The Contractor shall protect all drains. Debris shall not be allowed to enter the storm sewer system.

CRITERIA FOR CONTROLS OVER WORKER HEALTH AND SAFETY

The Contractor shall also supply the following to not more than three (3) Department employees as directed by the Engineer.

OSHA requirements as outlined in 29 CFR 1926.62 Occupational Safety and Health Standards for Lead (Pb) in Construction and 454 CMR 11.00 shall be followed. Worker blood lead (Pb) and zinc protoporphyrin results shall be received by the Massachusetts Blood Lead (Pb) Registry (MBLR) and the Engineer prior to commencement of work. These tests must be performed for each employee and Department within one month prior to the start of work. Subsequent blood lead (Pb) results shall be performed on a monthly basis. These tests shall be supplied to the MBLR and the Engineer within 10 days for the date of testing. Only certified laboratory copies of test results may be submitted from OSHA - CDC approved labs. More frequent testing shall be in accordance with 29 CFR 1926.62 depending on worker blood lead (Pb) levels. All workers shall be tested within five days of the completion of the project or after the employees last day employed on the project.

Workers shall be taken off the job at the Contractor's expense if the blood lead (Pb) level reaches or exceeds 40 μ g/dl. Employees removed for medical protection may return to their former job status when two consecutive test results indicate a blood lead level at or below 30 μ g/dl.

The Contractor shall prepare and follow a written Worker Health and Safety Program for lead (Pb) demonstrating compliance with 29 CFR 1926.62 and 454 CMR 11.00. A copy of the Health and Safety Program shall be submitted to the Engineer in accordance with the subheading entitled "submittals".

Where workers are exposed to airborne lead (Pb), at any level, all appropriate engineering controls shall be instituted until actual job site lead (Pb) levels have been calculated in accordance with 29 CFR 1926.62. The Contractor must provide employees who are required to wear respiratory protection or work in confined spaces pre-placement medical examinations. Full face piece respirators are to be used when there is a significant potential for eye irritation. A respiratory protection program conforming to the requirements of 29 CFR 1910.134 shall be in effect at the work site. The minimum respiratory protective equipment to be provided by the Contractor for use by employees of the Contractor and the Department, for particular work tasks and inspections, shall be at least as required in accordance with 29 CFR 1926.62 Table 1. Respiratory Protection for Lead (Pb) Aerosols and 1926.55 for paint aerosols.

At a minimum the protective clothing to be provided by the Contractor for use by employees of the Contractor and the Department shall be hooded coveralls, impermeable to lead (Pb) dust, dedicated work boots or disposable outer boots, safety goggles and a hard hat. Two sets of clean clothes must be provided weekly (daily if exposure is above 200 μ g/m³). All contaminated clothing must be removed in the decontamination facility at the end of the shift and not worn home by the workers. All lead (Pb) contaminated clothing shall be securely containerized in leak proof labeled containers prior to removal from the work site and properly laundered or disposed of, all in accordance with the regulations.

The Contractor is directed to 29 CFR 1926.56 for safe work place illumination.

Lights on helmets alone are not acceptable for safe inspection by the Engineer during night work. Therefore, the Contractor shall provide lamps inside the containment zone sufficient to illuminate the structure for inspection.

Eating, drinking or smoking while in a lead contaminated work area is strictly prohibited. A decontamination/changing facility must be provided and used along with hot water washing and respirator cleaning facilities during lead (Pb) paint removal operations except for chemical stripping operations. A hand washing facility must be provided and used along with hot water washing and respirator cleaning facility during chemical stripping and mechanical disassembly i.e. bolt and rivet removal. Sanitary toilets and hot water shall be provided. All persons leaving the contaminated work area must wash down in accordance with 29 CFR 1926.62. The Contractor is directed to pay strict attention to fire and explosion dangers relating to cleaning solvents, and dust in and around the work area.

CRITERIA FOR HANDLING OF HAZARDOUS WASTE AND REPORTING RELEASE

Prior to starting deleading and cleaning operations, the Contractor must submit a plan to the Engineer outlining lead (Pb) paint, paint related debris, and solvents collection and disposal procedures. This plan is listed under the subheading "submittal" for Handling, Disposal and Analysis of Debris. All hazardous waste must be managed and disposed of in accordance with 310 CMR 30.00.

All waste is presumed to be hazardous until it is clearly demonstrated to be nonhazardous. Waste known to be non-hazardous such as paper, litter etc. shall not be mixed with hazardous waste such as lead paint chips or dust. The DEP requires that a mixture of non-hazardous waste with hazardous waste must be treated as hazardous, thus increasing disposal and handling costs.

Lead paint and paint related debris must be tested to determine the degree of lead hazard for disposal at a licensed Treatment/Storage/Disposal Facility. Four samples, representative of the material gathered for disposal, must be collected and tested for TCLP-lead according to procedures outlined in 310 CMR 30.155B (EPA SW846 Method 1311). Sampling and testing shall be performed by a DEP Certified Laboratory. The Engineer must be notified of the date and time of sample collection prior to sampling activities. Chain of custody must be adhered to for sample removal. Certified TCLP test results shall be provided to the Engineer upon receipt by the Contractor.

Paint and debris must be collected daily and placed in Department approved containers of good integrity. Containers shall be closed and labeled to identify the waste content. Wastes which are hazardous must be labeled with the words "HAZARDOUS WASTE", the name of the waste, the hazards associated with the waste and the date when accumulation began in the container. Paint and debris shall not be allowed to be placed or accumulate on unprotected ground and shall be adequately shielded to prevent dispersion by wind or rain during collection. Any evidence of improper storage and handling shall be cause for immediate shut-down until corrective action is taken.

Containers must be stored in a safe manner and suitable location at the job site. Storage must be in a manner, which protects the public and the environment (e.g. on an impervious base, away from waterways, etc.). Storage areas must be labeled with the words "HAZARDOUS WASTE". Appropriate security must be maintained at the site to avoid injury, theft or vandalism with regards to hazardous waste. If a suitable location for hazardous waste storage does not exist on-site, then the Contractor shall find an alternate storage site. The alternate storage may only be allowed with documented permission of the Engineer and the DEP.

Hazardous wastes are limited to an on-site storage time of 90 days based on the date of initial accumulation in each container. The Engineer is to be informed of date(s) when hazardous waste is planned to be removed from the job site, at least one week in advance. This will allow the Engineer time to obtain the temporary EPA identification number. Temporary EPA identification numbers are site specific and must be placed on all shipping labels and manifests.

Hazardous waste may only be removed from the site by DEP licensed haulers, in the presence of the Engineer. Only EPA licensed Treatment/Storage/Disposal Facilities (TSDF) in good compliance may accept the hazardous waste. Copies of hazardous waste shipping manifests must be provided to the Engineer. The Contractor and the Department are considered to be the generators. Note: the Engineer must receive a signed manifest copy directly from the TSDF. All on-site and off-site handling, storage, and disposal of the hazardous waste must be in accordance with 310 CMR 30.00.

The Contractor is advised that a discharge of one or more pounds of lead with a particle size of 4 mils or less to the atmosphere, water or soil, within a 24 hour period, is considered to be a reportable release in accordance with 310 CMR 40.00 (40 CFR 300 and 40 CFR 302).

SUBMITTALS

The Contractor shall provide written programs for each of the Items listed below within thirty (30) days of notice to proceed. No work shall commence until all submittals have been reviewed and approved by the Engineer.

1. Paint Removal, Containment and Ventilation Plan: The Contractor shall provide a written plan for the method employed for surface preparation, containment and ventilation. This submittal shall include drawings, load-bearing capacity calculations, and wind load calculations. The plan shall meet the criteria for containment systems and shall include the following:

1. A construction plan and drawings detailing proposed coating removal operations, as well as removal and transport of waste to a secure storage site.

2. A plan and drawings detailing the proposed containment enclosure, including details of the following:

- A. Rigid, solid floor or platform. Trucks may be used for a working platform with prior approval by the Engineer.
- B. Containment walls with rigid and flexible materials.
- C. Rigid supports and bracing for the floor and wall panels, rigid or flexible supports and bracing for flexible walls.
- D. Calculations including localized over stress conditions, member stresses, H, Type 3, and Type 3S2 load rating and maximum dead and live load imposed on the bridge by the containment enclosures, only if the containment system is a suspended platform.
- E. Maximum allowable load for the floor/platform, if a suspended platform is used.
- F. Wind load and wind stresses imposed on the bridge by the containment enclosures shall be calculated and submitted, only if the containment system is a suspended platform or if the vertical clearance on the bridge is greater than 30 feet.
- G. Connections to the bridge i.e., clamps, rollers. (Note: Welding and bolting is not allowed). If a suspended platform is used, each connection to the bridge shall have a tension load cell attached. A multi-channel digital load indicator shall be connected to all the bridge connection load cells and located in an area accessible to the Engineer. The load indicator shall be capable of storing peak load readings.
- H. Auxiliary stationary source lighting.
- I. Location of equipment and impact on traffic.
- J. Elevation view of the containment enclosure with indications of any encroachments on the surroundings. The bridge vertical clearance shall be maintained above the active travel lanes.

NOTE: The structure loading for containment design and load rating shall be in accordance with AASHTO using H, Type 3 and Type 3S2 loads. The allowable overstress for all conditions shall not exceed 20%.

The Contractor shall have the drawings approved and stamped by a Professional Engineer registered in the Commonwealth of Massachusetts. For projects over water and railroad the Contractor shall also comply with additional regulatory requirements.

2. Programs for the Protection of Ambient Air, Soil and Water: The Contractor shall submit testing and evaluation programs that will be used to confirm that work does not violate Federal, State and Local regulations. The Contractor shall also submit a written program for monitoring ambient air quality for particulate and air borne lead emissions to confirm that fugitive dust emissions does not exceed the criteria for controls over environmental emission at the project site previously outlined under this Item. The monitoring shall be done with PM_{10} monitors in accordance with 40 CFR 50. The monitoring plan shall detail who will perform the measurements, the planned number of measurements, the type and number of monitors to be used and provisions for background monitoring, and analytical methodology.

3. Worker Health and Safety Program: The Contractor shall provide and submit a Health and Safety Program which meets or exceeds 29 CFR 1926. and 454 CMR 11.00. It shall include the following:

- A. Compliance Program. A written program to describe the engineering, administrative, housekeeping and protective equipment that will be used to reduce the exposure of the employees to a level less than the PEL (50 μ g/m³).
- B. Respiratory Protection Program. A copy of the respiratory protection program as required by 454 CMR 11.00, 29 CFR 1926.62 and 29 CFR 1910.134. Copies of the pulmonary capacity test results shall also be submitted.
- C. Personal Hygiene. A written description of the hygiene facilities and practices to be used, and protective clothing controls shall be submitting. Protective clothing shall be provided as required by 29 CFR 1926.62.
- D. Medical Surveillance Program. A written medical surveillance program shall be submitted, including a mechanism for submitted blood lead level testing results directly from the laboratory to MBLR and the Engineer. The program shall include the frequency of testing, the company policy at various action levels, the company policy regarding employee removal, and medical exams. For this Special Provision, the frequency of blood lead (Pb) testing shall be every four weeks, and the removal requirement is 40 μg/dl as previously outlined.
- E. Employee Training. A copy of the employee training program in accordance with 29 CFR 1926.62 shall be submitted, as well as copies of employee certificates of completion of the course. In addition, the training program must also include the Hazard Communication training (29 CFR 1926.59) and include training for proper hazardous waste handling and management procedures in accordance with 310 CMR 30.00.
- F. Employee Access to Records. Submit a statement that the employee has been informed of the hazards on the project and of their right of access to exposure and medical records as required by 29 CFR 1910.20.

G. Signs. Submit a statement confirming the wording and placement of signs that will be posted in and around the work area in accordance with 29 CFR 1926.62 and 29 CFR 1910.145.

4. Handling, Disposal and Analysis of Debris: The Contractor shall submit the following:

- A. A written plan that addresses the collection, handling, sampling, testing and site storage of lead (Pb) paint and related debris including the testing of soil quality. The Contractor shall detail how he will comply with the Hazardous Waste Management rules, including testing, labeling, storage and accumulation requirements of 310 CMR 30.00. See also CRITERIA FOR HANDLING OF HAZARDOUS WASTE AND REPORTING RELEASE.
- B. The Contractor shall submit the name and address of the certified testing laboratory to perform the sampling and analysis for TCLP.
- C. The Contractor shall submit the name, address and EPA identification number of the DEP licensed hauler who will remove hazardous waste.
- D. The Contractor shall submit the name, address, and EPA identification number of the Treatment/Storage/Disposal facility who will receive the hazardous waste.
- E. The Contractor shall submit a copy of the on-site contingency plan which outlines steps to take in the event of a hazardous waste spill or release including procedures for notification to DEP in the event of a reportable quantity release in accordance with 310 CMR 30.00 and 310 CMR 40.00.
- F. The Contractor shall assume that the coatings on the steel contain lead (Pb), unless otherwise determined by testing. The Contractor shall certify in writing to the Engineer the results of all testing, and shall also certify that any lead (Pb) coated steel removed from the project was not reused or buried, but was sent to a scrap metal recycling facility.

CLEANING/REMOVAL

Cutting or Burning of Steel:

All surfaces to be cut or burned shall be cleaned so as to remove all contaminants and/or hazardous materials, which could be discharged to the environment as a function of the subsequent operations.

The Contractor shall lay out areas to be cleaned, limiting his/her activities to one location and confine this operation only to a point where the demolition procedures are intended. A cleaned area must be inspected and approved before the demolition operations are started.

Lead paint shall be removed in its entirety in an area prescribed by a 300 mm minimum offset from the required work. Lead paint shall be removed by power tools with vacuum attachments, or vacuum blasting within a level SSPC Class 5 containment system, power tools without vacuum attachments or wet abrasive blasting may be used within a level SSPC Class 3 containment system, or chemical striping without full containment, however, the Contractor shall install proper shielding and/or tarpaulins under the lead removal operations to catch all debris generated during this procedure. An open abrasive blasting system shall not be allowed.

Full containment is not required during chemical stripping operation however, the Contractor shall install proper shielding and/or tarpaulins under the lead (Pb) removal operations in order to catch all debris generated during this procedure.

During cleaning operations, the Contractor shall be required to furnish and erect temporary flood lights not less than 150 watts each. This lighting (in the opinion of the Engineer) shall be used in areas where there is insufficient lighting for proper cleaning operations. Electrical power shall be supplied by the Contractor.

At the option of the Engineer, the Contractor shall provide support for interim and final inspection of the bridge during cleaning operations. This support shall include the necessary traffic controls, scaffolding and 9 volt lantern. The traffic controls shall be paid for under their respective Items and the scaffolding and lantern shall be incidental to this Item.

Mechanical Disassembly of Steel:

All surfaces to be mechanically disassembled, i.e. bolt or rivet removal shall not require deleading. Hazardous material shall be collected during the disassembly and shall be disposed of as outlined in "CRITERIA FOR HANDLING OF HAZARDOUS WASTE AND REPORTING RELEASE".

When removing bolts or rivets, the Contractor shall not use any method that will cause dust and/or particles to be emitted and/or dispersed into the environment to an extent that would expose the workers above the P.E.L. levels of 50 μ g/cm.

For purposes of limiting the lead (Pb) dust, the Contractor will be required to dampen the lead paint work areas.

The Contractor shall install a proper shielding and/or tarpaulins under all lead-paintcoated bolts or rivets ordered removed in order to catch any loose lead paint chips, dust or particles.

Cleaning Abutments and Pier Caps:

The horizontal surfaces of the abutments and pier caps shall be swept clean of all debris, which may include but is not limited to, sand, gravel, bituminous material and bird droppings. This material shall be removed and disposed of as construction waste unless otherwise determined by the required testing as outlined in "CRITERIA FOR HANDLING OF HAZARDOUS WASTE AND REPORTING RELEASE". When the bridge is over water the Contractor shall take all precautions necessary so as not to have any bird droppings or other debris fall into the water below.

After the debris has been removed the Contractor shall wash down the horizontal surfaces of the abutments and pier caps with fresh water under pressure.

PAYMENT

Unless otherwise covered under other Contract Items, full payment for this work shall be included under the lump sum price for ITEM 115.1, DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. W-13-015 and shall include all labor, equipment and materials necessary to complete the work.

ITEM 184.1 DISPOSAL OF TREATED WOOD PRODUCTS TON

Work under this item shall include the removal and disposal of all treated existing wood product as directed by the Engineer.

The timber components of the existing structure are suspected to be treated with creosote, pentachlorophenol and/or CCA. This item shall include all costs for sampling, laboratory testing, loading, transportation and disposal of the treated wood. The Contractor is required to submit disposal manifests to the Engineer prior to the completion of the project. All aspects of this Item are to be completed in accordance with state and federal regulations.

Measurement and payment shall be by the weight, in TON, of treated timber removed from the structure and subsequently accepted at a licensed facility. The work shall be considered full compensation for all labor, tools, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

ITEM 191 2	DISDOGAL OF DECILLATED SOLL	TON
111 /11 101.2	DISPUSAL OF REGULATED SOIL -	<u>10N</u>
	<u>UNLINED LANDFILL: IN-STATE FACILITY</u>	
<u>ITEM 181.3</u>	DISPOSAL OF REGULATED SOIL -	TON
	LINED LANDFILL: IN-STATE FACILITY	
ITEM 181.4	DISPOSAL OF REGULATED SOIL -	TON
	UNLINED LANDFILL: OUT-OF-STATE FACILITY	
<u>ITEM 181.5</u>	DISPOSAL OF REGULATED SOIL -	TON
	LINED LANDFILL: OUT-OF-STATE FACILITY	
ITEM 181.6	DISPOSAL OF REGULATED SOIL -	TON
	ASPHALT BATCHING FACILITY	
ITEM 181.7	DISPOSAL OF HAZARDOUS WASTE -	TON
	HAZARDOUS WASTE LANDFILL	
<u>ITEM 181.8</u>	DISPOSAL OF HAZARDOUS WASTE -	TON
	TSCA FACILITY	
<u>ITEM 181.9</u>	DISPOSAL OF HAZARDOUS WASTE -	<u>T0N</u>
	HAZARDOUS WASTE INCINERATOR	

GENERAL:

The work under these Items shall include the removal, transportation and disposal of contaminated material excavated, and excavated and stockpiled.

Excavation of existing subsurface materials may include the excavation of contaminated soils. The Contractor shall be responsible for the proper coordination of characterization, transport and disposal, recycling or reuse of contaminated soils. Disposal, recycling or reuse will be referred to as "disposal" for the remainder of this specification unless otherwise stated. However, regardless of the use of the term herein, there will be no compensation under these Items for reuse within the project limits. The Contractor will be responsible for coordinating the activities necessary for characterization, transport and disposal of contaminated soils. Such coordination will include the Engineer and his/her designee overseeing management of contaminated materials. Contaminated soils must be disposed of in a manner appropriate for the soil classification as described below and in accordance with the applicable laws of local, state and federal authorities. The Contractor shall be responsible for identifying an in-state or out-of-state disposal facility(s) licensed to accept the class of contaminated soils to be managed and assure that the facility can accept the anticipated volume of soil contemplated by the project. The Contractor shall be responsible for hiring a Licensed Site Professional (LSP) and all ancillary professional services including laboratories as needed for this work. The Contractor will be responsible for obtaining all permits, approvals, manifests, waste profiles, Bills of Lading, etc. subject to the approval of the Engineer prior to the removal of the contaminated soil from the site. The Contractor and LSP shall prepare and submit to the Engineer for approval all documents required under the Massachusetts Contingency Plan (MCP) and related laws and environmental regulations to conduct characterization, transport, and disposal of contaminated materials.

CLASSES OF CONTAMINATED SOILS:

The Contractor and his LSP shall determine, in accordance with Items 180.1 through 180.5, 194.1 and 194.2, if soil excavated or soil to be excavated is unregulated soil or contaminated soil as defined in this section. Such materials shall be given a designation for purposes of reuse or disposal based on the criteria of the MCP and the project URAM. Soils and sediments which are not suitable for reuse will be given a designation for purposes of off-site disposal based on the characterization data and disposal facility license requirements.

The Classes of Contaminated Soils are defined as:

Unregulated Soil consists of soil, fill and dredged material with measured levels of Oil and Hazardous Material (OHM) contamination at concentrations below the applicable Reportable Concentrations (RCs) presented in the MCP. Unregulated soil consists of material which may be reused (or otherwise disposed) as fill within the Commonwealth of Massachusetts subject to the non-degradation criteria of the MCP (310 CMR 40.0032(3), in a restricted manner, such that they are sent to a location with equal or higher concentrations of similar contaminants. Disposal areas include approved industrial settings in areas which will be capped or covered with pavement or loamed and seeded and for purposes of this project should be reused as fill within the project site construction corridor whenever possible. Such reuse within the corridor will be in accordance with the approved URAM for this construction segment. The material cannot be placed in residential and/or environmentally sensitive (e.g. wetlands) areas. Under no circumstances shall contaminated soils be placed in an uncontaminated or less contaminated area (including the area above the groundwater table if this area shows no sign of contamination).

The Contractor shall submit to MassHighway, the proposed disposal area for unregulated soils for approval. To obtain such approval for off-site disposal of unregulated soil, the Contractor shall submit to the Engineer analytical data to characterize the disposal site sufficiently to verify that the unregulated material generated within the MassHighway construction project limits is equal to or less than the contaminant levels at the disposal site. In addition, the Contractor shall provide written confirmation from the owner of the proposed disposal site that s/he has been provided with the analytical data for both the materials to be disposed as well as the disposal site characterization and that s/he agrees to accept this material. In cases where the Contractor chooses to dispose of unregulated soil at a Licensed Disposal Facility, no payment will be made for this disposal option. Disposal of unregulated soil is considered incidental to the cost of the excavation Item. A Material Shipping Record shall be used to track the off-site disposal of such soil and a copy, signed by the disposal facility or property owner, shall be provided to the Engineer in order to document legal disposal of the unregulated material.

No separate measurement or payment will be made for the disposal of unregulated soil on-site or costs associated with obtaining approval for off-site disposal. The cost of onsite disposal of unregulated soil within the project area will be considered incidental to the item of work to which it pertains.

<u>Regulated Soil</u> consists of materials containing measurable levels of oil or hazardous materials (OHM) that are equal to or exceed the applicable Reportable Concentrations for

the site as defined by the MCP, 310 CMR 40.0000. Regulated soil which meets the reuse criteria stipulated in the approved URAM for the Brosnihan Square construction segment may be reused on site provided that it meets the appropriate geotechnical criteria established by the Engineer. Regulated Soil may be reused (as daily or intermediate cover or pre-cap contouring material) or disposed (as buried waste) at lined landfills within the Commonwealth of Massachusetts or at an unlined landfill that is approved by DEP for accepting such material, in accordance with DEP Policy #COMM-97-001, or at a similar out-of-state facility. It should be noted that soils which exceed the levels and criteria for disposal at in-state landfills, as outlined in COMM-97-001, may be shipped to an in-state landfill, but require approval from the DEP Division of Solid Waste Management and receiving facility. An additional management alternative for this material is recycling into asphalt. Regulated Soils may also be recycled at a DEP approved recycling facility possessing a Class A recycling permit subject to acceptance by the facility and compliance with DEP Policy #BWSC-94-400. Regulated Soil must be removed from the site for disposal or treatment via an LSP approved Bill of lading, Manifest or applicable material tracking form. This type of facility shall be approved/permitted by the State in which it operates to accept the class of contaminated soil in accordance with all applicable local, state and federal regulations.

Hazardous Waste consists of materials which must be disposed of at a facility permitted and operated in full compliance with Federal Regulation 40 CFR 260-265, Massachusetts Regulation 310 CMR 30.00, Toxic Substances Control Act (TSCA) regulations, or the equivalent regulations of other states, and all other applicable local, state, and federal regulations. All excavated materials classified as hazardous waste shall be disposed of at an out-of-state permitted facility. This facility shall be a RCRA hazardous waste or TSCA facility, or RCRA hazardous waste incinerator. This type of facility shall be approved/permitted by the State in which it operates to accept hazardous waste in accordance with all applicable local, state and federal regulations and shall be permitted to accept all contamination which may be present in the soil excavate. The Contractor shall ensure that, when needed, the facility can accept TSCA waste materials i.e. polychlorinated biphenyls (PCBs).

MONITORING/SAMPLING/TESTING REQUIREMENTS:

The Contractor shall be responsible for monitoring, sampling and testing during and following excavation of contaminated soils to determine the specific class of contaminated material. Monitoring, sampling and testing frequency and techniques should be performed in accordance with Items 180.1 through 180.5, 194.1 and 194.2. Additional sampling and analysis may be necessary to meet the requirements of the disposal facility license. The cost of such additional sampling and analysis shall be included in the bid cost for the applicable disposal items. The Contractor shall obtain sufficient information to demonstrate that the contaminated soil meets the disposal criteria set by the receiving facility that will accept the material.

No excavated material will be permanently placed on-site or removed for off-site disposal until the results of chemical analyses have been received and the materials have been properly classified. The Contractor shall submit to MassHighway results of field and laboratory chemical analyses tests within seven days after their completion, accompanied by the classification of the material determined by the Contractor, and the intended disposition of the material. The Contractor shall submit to MassHighway for review all plans and documents relevant to LSP services, including but not limited to, all documents that must be submitted to the DEP.

Copies of the fully executed Weight Slips/Bills of Lading/Manifests/Material Shipping Records or other material tracking form received by the Contractor from each disposal facility and for each load disposed of at that facility, shall be submitted to MassHighway and the Contractor's LSP within three (3) days of receipt by the contractor. The Contractor is responsible for preparing and submitting such documents for review and signature by the LSP or other appropriate person with signatory authority, three (3) days in advance of transporting soil off-site. The Contractor shall furnish a form attached to each manifest or other material tracking form for all material removed off-site, certifying that the material was delivered to the site approved for the class of material. If the proposed disposition of the material is for reuse within the project construction corridor, the Contractor shall cooperate with MassHighway to obtain a suitable representative sample(s) of the material to establish its structural characteristics in order to meet the applicable structural requirements as fill for the project.

All material transported off-site shall be loaded by the Contractor into properly licensed and permitted vehicles and transported directly to the selected disposal or recycling facility. At a minimum, truck bodies must be structurally sound with sealed tail gates, and trucks shall be lined and loads covered with a liner, which shall be placed to form a continuous waterproof tarpaulin to protect the load from wind and rain.

DECONTAMINATION OF EQUIPMENT:

Tools and equipment which are to be taken and reused off site shall be decontaminated in accordance with applicable local, state and federal regulations. This requirement shall include, but not be limited to, all tools, heavy machinery and excavating and hauling equipment used during excavation, stockpiling and handling of contaminated material. Decontamination of equipment is considered incidental to the applicable excavation Item, Item 180.4 and this Item.

REGULATORY REQUIREMENTS:

The Contractor shall be responsible for adhering to regulations, specifications and recognized standard practices related to contaminated material handling during excavation and disposal activities. MassHighway shall not be responsible at any time for the Contractor's violation of pertinent State or Federal regulations or endangerment of laborers and others. The Contractor shall comply with all rules regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts Department of Environmental Protection (DEP), the U.S. Environmental Protection Agency (EPA), Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state and federal agencies governing the disposal of contaminated soils.

All labor, materials, equipment and services necessary to make the work comply with such regulations shall be provided by the Contractor without additional cost to MassHighway. Whenever there is a conflict or overlap within the regulations, the most stringent provisions are applicable. The Contractor shall reimburse MassHighway for all costs it incurs, including penalties and/or for fines, as a result of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation and disposal.

SUBMITTALS:

I. <u>Summary of Sampling Results, Classification of Material and Proposed</u> <u>Disposal Option.</u> The following information, presented in tabular format, must be submitted to the Engineer for review and approval prior to any reuse on-site or disposal off-site. This requirement is on-going throughout the project duration. At least two weeks prior to the start of any excavation activity, the Contractor shall submit a tracking template to be used to present the information as stipulated below. Excavation will not begin until the format is acceptable to MassHighway.

Characterization Reports will be submitted for all soil, sediment, debris and groundwater characterized through the sampling and analysis programs required under Items 180.4, 181.1 - 181.9, 194.1, and 194.2. Each report will include a site plan which identifies the sampling locations represented in the Report. The Construction Plan sheets may be used as a baseplan to record this information.

The Sampling Results will be presented in tabular format. Each sample will be identified by appropriate identification matching the sample identification shown on the Chain of Custody Record. The sample must also be identified by location (e.g. grid number or stockpile number). For each sample, the following information must be listed: the classification (unregulated, regulated, etc.), proposed disposal option for the stockpile or unit of material represented, and, all analytical results.

Each Characterization Report will include the laboratory analytical report and Chain of Custody Record for the samples included in the Report.

II. <u>Stockpiling, Transport, and Disposal.</u> At least two weeks prior to the start of any excavation activity, the Contractor shall submit, in writing, the following for review and shall not begin excavation activity until the entire submittal is acceptable to MassHighway.

A. Excavation and Stockpiling Protocol:

Provide a written description of the management protocols for performing excavation and stockpiling and/or direct loading for transport, referencing the locations and methods of excavating and stockpiling excavated material in accordance with Items 180.1 through 180.5.

B. Disposal and Recycling Facilities:

1. Provide the name, address, applicable licenses and approved waste profile for disposal and recycling location(s) where contaminated soil will be disposed. Present information substantiating the suitability of proposed sites to receive classifications of materials intended to be disposed there, including the ability of the facility to accept anticipated volumes of material.

2. Provide a summary of the history of compliance actions for each disposal/recycling facility proposed to be used by the Contractor. The compliance history shall include a comprehensive list of any state or federal citations, notices of non-compliance, consent decrees or violations relative to the management of waste (including remediation waste) at the facility. Material should not be sent to facilities which are actively considered by the DEP, USEPA or other responsible agency to be in violation of federal, state or local hazardous waste or hazardous material regulations. MassHighway reserves the right to reject any facility on the basis of poor compliance history.

C. Transportation:

The name, address, applicable license and insurance certificates of the licensed hauler(s) and equipment and handling methods to be used in excavation, segregation, transport, disposal or recycling.

III. Material Tracking and Analytical Documentation for Reuse/Disposal.

The following documents are required for all excavation, reuse and disposal operations and shall be in the format described. At least two weeks prior to the start of any excavation or demolition activity, the Contractor shall submit the tracking templates required to present the information as stipulated below. Excavation or demolition will not begin until the format is acceptable to MassHighway.

All soils, sediments and demolition debris must be tracked from the point of excavation to stockpiling to onsite treatment/processing operations to off-site disposal or onsite reuse as applicable.

- 1. Demolition Debris. Demolition debris must be tracked if the debris is stockpiled at a location other than the point of origin or if treatment or material processing is conducted. Identification of locations will be based on the station-offset of the location. The tracking table will identify date and point of generation, any field screening such as PID or dust monitoring, visual observations/comments, quantity, and stockpile ID/processing operation location. For each unit of material tracked, the table will also track reuse of the material on-site, providing reuse date, location of reuse as defined by start and end station, width of reuse location. For demolition debris which is not reused on site, the table will also track disposal of the material as defined by disposal date, quantity and disposal facility. The table must provide a reference to any analytical data generated for the material.
- 2. Soil/Sediment. Soil excavation will be identified based on the station-offset of the excavation location limits. The tracking table will identify date and point of generation, any field screening such as PID or dust monitoring, visual observations, quantity, and stockpile number/location. For each unit of material tracked, the table will also track reuse of the material on-site and disposal of the material offsite using the same categories identified for demolition debris above.

METHOD OF MEASUREMENT FOR ITEMS 181.2 THROUGH 181.9:

Disposal of contaminated soil shall be measured for payment by the Ton of actual and verified weight of contaminated materials removed and disposed of. The quantities will be determined only by weight slips issued by and signed by the disposal facility.

- Item 181.2 Measurement for Disposal of Regulated Soil Unlined Landfill In-State Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at an approved in-state unlined landfill, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.3 Measurement for Disposal of Regulated Soil Lined Landfill In-State Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at an approved in-state lined landfill, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.4 Measurement for Disposal of Regulated Soil Unlined Landfill Out-of-State Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at an approved out-of-state unlined landfill, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.5 Measurement for Disposal of Regulated Soil Lined Landfill Out-of-State Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at an approved out-of-state lined landfill, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.6 Measurement for Disposal of Regulated Soil Asphalt Batching Recycle Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of an asphalt-batch recycling facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.

- Item 181.7 Measurement for Disposal of Hazardous Waste Hazardous Waste Landfill shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at the hazardous waste landfill, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.8 Measurement for Disposal of Hazardous Waste TSCA Facility shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at the facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.
- Item 181.9 Measurement for Disposal of Hazardous Waste Hazardous Waste Incinerator shall be under the Contract Unit Price by the weight, in Tons (TN), of contaminated materials removed from the site and transported to and disposed of at the facility, and includes any and all costs for approvals, permits, fees and taxes, testing/characterization, decontamination procedures, transportation and disposal.

BASIS OF PAYMENT FOR ITEMS 181.2 THROUGH 181.9:

The work under the appropriate bid items shall be paid at the Contractor bid price, per Ton, as measured at the disposal facility by a certified scale and documented on the return manifest or certified weight slip and accompanied by the appropriate DEP BWSC. Bill of Lading Form, manifest or shipping form. The owner reserves the right to independently weigh the trucks. No payments shall be made for incomplete documentation of disposal. Payment shall be considered full compensation for all labor, materials, tools and equipment required to do the work as described above.
EXHIBIT R: PAVEMENT-RELATED QUALITY ASSURANCE SPECIFICATION (NOVEMBER 12, 2009 MASSACHUSETTS HIGHWAY DEPARTMENT INTEROFFICE MEMORANDUM FROM E. NARAS THROUGH S. ESLINGER, TO A. BARDOW RE: STANDARD BRIDGE DECK PAVEMENTS)

Commonwealth of Massachusetts Massachusetts Highway Department Interoffice Memorandum

TO:	Alex Bardow, P.E., Director of Bridges & Structures
THROUGH:	Shirley Eslinger, P.E., Deputy Chief of Bridges and Asset Management
FROM:	Edmund Naras, Acting Director of Asset Management
DATE:	November 12, 2009
RE:	Standard Bridge Deck Pavements

The Pavement Management Section recommends the following hot mix asphalt (HMA) pavements for bridge decks and bridge approaches.

The minimum HMA thickness is governed by the membrane manufacturer's specifications, requiring a minimum $1\frac{1}{2}$ " HMA overlay to activate the membrane's adhesives. For new bridges, the pavement layers shall be placed in two equal layers having a minimum thickness of 3" as follows:

1¹/₂" SUPERPAVE Bridge Surface Course – 12.5 (SSC-B-12.5)

1¹/₂" SUPERPAVE Bridge Protective Course - 12.5 (SPC-B-12.5)

For rehabilitated bridges having a total HMA thickness of 2½", the pavement shall be placed as follows:

1" SUPERPAVE Bridge Surface Course – 9.5 (SSC-B-9.5)

1¹/₂" SUPERPAVE Bridge Protective Course – 12.5 (SPC-B-12.5)

For reconstructed bridge approaches less than 350' in length, the following minimum designs should be used:

Where the AADT is less than 15,000, the following pavement design should be used:

Surface	1 1/2" SUPERPAVE Surface Course - 12.5 (SSC-12.5)
Intermediate	2" SUPERPAVE Intermediate Course – 12.5 (SIC-12.5)
Base	4" SUPERPAVE Base Course - 37.5 (SBC-37.5)
Subbase	4" Dense Graded Crushed Stone for Subbase placed over 8" Gravel
Subgrade	Special Borrow as required based on existing subgrade materials

Where the AADT is between 15,000 and 40,000, the following pavement design should be used:

	materials
Subgrade	Special Borrow as required based on switting sub-
Subbase	4" Dense Graded Crushed Stone for Subbase placed over 8" Gravel
Base	4 1/2" SUPERPAVE Base Course - 37.5 (SBC-37.5)
Intermediate	2 ¼" SUPERPAVE Intermediate Course – 19.0 (SIC-19.0)
Surface	1 1/2" SUPERPAVE Surface Course - 12.5 (SSC-12.5)

For highways with AADT greater than 40,000 or for pavement limits greater than 350', consult the Project Development Design Guide (Chapter 9) for pavement design instructions.

Any designer requesting a wearing surfacing other than those specified herein should refer questions to the Bridge or Pavement Sections. Should you require any additional information relative to these recommendations, please contact me at x8269.

EJN/KKF

EXHIBIT S: DB ENTITY TECHNICAL PROPOSAL

Design Build Proposal Transmittal Form

Firm Name:	J.F. White Contracting Company
X	10 D 0

Mailing Address: <u>10 Burr Street</u>

Framingham, MA 01701-9020

Street Address (if different from mailing address):

Telephone Number:	508-879-4700	Fax Number: <u>617-558-0460</u>
Contact Person:	William J. Shea	Title: Project Manager

Email: <u>BShea@jfwhite.com</u>

Firm acknowledges Addenda numbered <u>1, 2, 3</u>. (list all)

Failure to accurately and completely provide the information requested may result in the disqualification of a respondent.

Design Build Proposal Transmittal Form Page 2

This form **MUST** be signed by an officer of the Design Build Entity or an individual so authorized by an officer of the Design Build Respondent who has personal knowledge regarding the information contained herein and submitted with the Proposal.

The undersigned declares that he or she is authorized on behalf of the Design Build Entity to (1) respond to requests for additional information (2) negotiate and execute a contract with MassDOT for the Project and (3) has provided appropriate evidence that the individual signing the Letter of Transmittal and all other Proposal forms is authorized to sign the Proposal on behalf of Proposer and the evidence that such person has the authority to bind the various participants making up the Proposal, to all representation contained in the Proposal as well as to commit any additional binding commitments related to the Proposal.

The undersigned declares that he or she carefully examined all the documents contained and referenced in the Design Build Request for Proposals (RFP) solicitation for the Cedar Street over Route 9 Project No. 604007 and certifies to the best of his/her knowledge, that this Proposal fully complies with all of the requirements of the RFP and all addenda and clarifications issued in regard to the RFP.

The undersigned further certifies that no person acting for, or employed by, the Commonwealth of Massachusetts is directly or indirectly interested in this Proposal or any subsequent proposal, or in any contract which may be made under it, or in expected profits to arise therefrom; that the undersigned Respondent has not influenced or attempted to influence any person or corporation other than a member of the Design Build respondent to file a Proposal or subsequent proposal or to refrain from doing so or to influence the terms of the Proposal or any subsequent proposal of any other person or corporation; and that this submission is made in good faith without collusion or connection with any other person or entity applying for the same work not identified as a member of the DB Entity.

The undersigned agrees that if the Proposal is accepted by MassDOT, it shall execute the Contract and furnish a Performance Bond for the full amount of the Contract price.

The undersigned further certifies under pains and penalties of perjury that no member of the Design Build Entity is debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of section twenty nine F of chapter twenty nine, or any other applicable debarment provision of any other chapter of the General Laws or any rule or regulation promulgated thereunder, and further is not debarred from doing public construction work under any law, rule or regulation of the federal government. The undersigned states that this Proposal shall remain valid for a period of eight (8) calendar months from its submission date and thereafter until the prospective DB Entity withdraws it or a contract is executed or the procurement is terminated by MassDOT, whichever occurs first.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY:

Signature:	(Signature of Authorized Representative)
Name:	Kevin K. Egan
Title:	Executive Vice President
Firm Name:	J.F. White Contracting Company
Date:	7/21/10

J. F. WHITE CONTRACTING COMPANY

At a meeting of the Board of Directors of the J.F. White Contracting Company held on September 22, 2009 at 10 Burr Street, Framingham, Massachusetts, at which all the Directors were present or waived notice,

It was VOTED that Kevin Egan, Vice President/Chief Engineer of this corporation, be and is hereby authorized to execute contracts, releases and bonds in the name and behalf of said company, and affix its corporate seal thereto; and such execution of any contract or obligation in this company's name on its behalf under the seal of the company, shall be valid and binding upon this company.

A True Copy,

Attest: Robert E Clerk

Framingham, Massachusetts September 24, 2009

I hereby certify that I am the Clerk of the J.F. White Contracting Company, that Kevin Egan is the duly elected Vice President/Chief Engineer of said company, and that the above vote has not been amended or rescinded and remains in full force and effect as of this date.

*o*bert offman, Clerk

Technical Proposal Design/Build Procurement Cedar Street Over Route 9 – Wellesley, MA

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- Appendix I Presentation Graphics

Safety, quality, on budget and on time, are the building blocks upon which the **White-Gill-Finley-Rizzo Design-Build Team** will deliver the completed Cedar Street Bridge. This Bridge project presents challenges that our team has previously encountered and addressed with success for MassDOT.

The White Team has studied the plans and understands the need for innovative construction methods. Our Team will employ the latest technology in design and construction, utilizing innovative rapid construction techniques. The plan we have developed is efficient and sensitive to the target schedule requirements cited in the Request for Proposals. We have a plan that will include back up scenarios if issues develop due to inclement weather or equipment malfunctions. Contingencies include coverings for weather sensitive waterproofing, Self Propelled Modular Transporter (SPMT) spare parts and a standby crane available on site. We understand the commitment that MassDOT has made to the citizens and the town officials of Wellesley.

The White Team is designed to maximize the strengths of each organization. Bill Shea, J.F. White, will lead the Team as Project Manager. Bill has 25 years of experience managing numerous complex MassDOT Bridge and highway projects, many of which were similar to the challenges presented by the Cedar Street Bridge project in Wellesley. This experience will allow him to actively direct the best course of action for site, traffic, and bridge erection activities. Paul Moyer, P.E., Gill Engineering Associates, will serve as the QA/QC Administrator working in tandem with Safety Engineer, Martin Golden Jr., J.F. White, to ensure the safest and highest quality results during the design and construction phases of the project. Leading our design team is Joseph Gill, P.E., Gill Engineering Associates, whose career has focused on the management of complex bridge projects throughout Massachusetts. Jerry Pfuntner, P.E., Finley Engineering Group, Inc. specializes in accelerated bridge construction engineering and will play a key role in this very important aspect of the project. Brian Ackley, P.E. and Erik Maki, P.E., Tetra Tech Rizzo, will be responsible for highway engineering and traffic engineering / traffic management, respectively. General Bridge Superintendent, Nicholas Bruno, J.F. White, will have daily on-site responsibility for construction operations. A complete team organization chart is provided in *Section 2 – Project Management and Coordination*.

During the Route 9 shutdown phase of construction, the Cedar Street Bridge will be demolished and installed in under 72 hours while utilizing the newest Accelerated Bridge Construction techniques. The White Team will prefabricate the new bridge superstructure consisting of a composite high performance reinforced concrete deck on Grade 50W weathering steel beams supported by temporary shoring towers prior to the June 20, 2011 milestone. During the two weeks prior to the closure, we will bring Worcester Street to its binder grade and also install new wingwalls in all four corners of the bridge. On the designated shutdown weekend, we will detour all traffic from Route 9 and the Cedar Street Bridge, demolish the existing superstructure and prepare the existing abutments to receive the new precast concrete beam seats. Once all new elevated precast beam seats are grouted into place, we will maneuver the prefabricated bridge superstructure into place and lower it onto its new bearings. The White Team will move the bridge with SPMTs at four engineered lift locations thus minimizing stresses and deflections to the superstructure. Bridge work will be completed, road approaches will be raised and paved, and traffic will be returned to Route 9 and Cedar Street within the allotted three day schedule.

The White Team is rich with relevant past experience as detailed in Section 1 – Corporate Qualifications. However, we realize that past experience alone is not sufficient to achieve this accomplishment. To ensure success, the White Team will build on constant team communications and excellent chemistry fostering a collaborative environment, where all members have input resulting in astute management of complexities, risk and the integrity of the finished project. Section 2 – Project Management and Coordination details our approach to project controls, risk management, quality control and the team's organizational structure. Section 3 – Technical Approach presents our methodological proposal to delivering an innovative and successful project to MassDOT and the Town of Wellesley.

Section 1: Corporate Qualifications

The White-Gill-Finley-Rizzo team is comprised of industry leaders in their respective fields. J.F. White with 85 years of experience in construction management, design-build and specialty services will lead the Team in the areas of quality control systems, construction management, scheduling, cost control efforts and managing the overall organizational structure including the utilization of M/BWE firms in the design and construction of Cedar Street over Route 9. Reporting to J.F. White are the engineering firms of Gill Engineering Associates, FINLEY Engineering Group, Inc. and Tetra Tech Rizzo.

Working in tandem, the engineering firms of Gill Associates and FINLEY will focus their expertise on the design and construction engineering of the bridges and structures; while Tetra Tech Rizzo will direct their expertise to the highway design, traffic signal design, maintenance of traffic, construction staging, environmental issues and all utility related elements of the project.

Role	Firm	M/WBE
Prime Design-Build Contractor	J.F. White Contracting Company	
Design Manager /Bridge Engineering (Lead)	Gill Engineering Associates, Inc.	
Highway and Traffic Engineering, Traffic Management, Environmental Permitting	Tetra Tech Rizzo	
Bridge Construction Engineering	Finley Engineering Group, Inc.	
Geotechnical	Lamson Engineering Corporation	MBE
Survey and Base Mapping	Green International Affiliates, Inc.	MBE
Reinforcing Steel	Regis Steel	MBE
Fence and Barrier	McCoy Fence	MBE
Site Work and Utilities	The Dow Company	WBE
Structural Steel	Saugus Construction Corp.	MBE/WBE

Team Members and Responsibilities

J.F. White Contracting Company was established in 1924 as a heavy civil contractor concentrated in public works and has expanded to provide general contracting services, construction management, Design-Build, and specialty services. The firm has an annual volume of approximately \$200 million/year and currently employs over 500 people on its 50 active projects. J.F. White's current backlog is \$425 million, \$100 million for MassDOT. Project references are located in Appendix A.

Gill Engineering Associates, Inc. is a civil/structural engineering firm Gill Engineering Associates headquartered in Needham Heights, MA. Several members of GEA's staff have held significant leadership roles as employees of Mass state agencies. This 10 person firm has proven expertise in the design of bridge replacement, preservation and rehabilitation projects, bridge inspections and ratings, and structural investigations. Project references are located in Appendix A.



FINLEY Engineering Group, Inc. is a specialty engineering firm recognized nationally and internationally for its expertise in complex bridge projects. The company niche is supplying internationally for its expectate in comparing and construction on these projects. FINLEY thoroughly understands the relationship between design and construction. This 30 member firm was founded by R. Craig Finley, P.E. who has 30 years of experience as a consulting engineer, involved in the design, management, construction engineering and inspection of a wide range of complex bridges with spans from 40 feet to over 5,000 feet. Project references are located in Appendix A.

Tetra Tech Rizzo is a transportation, site/civil engineering and environmental consulting firm that has worked successfully with MassDOT for more than two decades. Tetra Tech Rizzo specializes in managing the entire lifecycle of infrastructure development; from planning, permitting and design through construction. Tetra Tech Rizzo is prequalified by MassDOT in 17 disciplines with specialties in highway design, traffic, environmental and permitting. They have a staff of 140 in their Framingham headquarters. *Project references are located in Appendix A*.

Massachusetts & Public Sector Experience

Our entire team brings a profound commitment to the public sector. J.F. White brings nearly nine decades of service to projects for Massachusetts state agencies and municipalities and the MassDOT. The largest segment of J. F. White and Gill's practice involves Massachusetts public sector projects. J.F. White's backlog of public sector work includes approximately \$425 million, including \$100 million for MassDOT. Gill's engineering services have always focused largely on public projects with approximately 90% of their current work performed for public sector clients, largely in Massachusetts. FINLEY's project list is 95% public sector projects.



CSX Bridge Bundle #3 Working together J.F. White/Gill Associates



Chelsea Street Bridge Working together J.F. White/FINLEY Engineering Group

Prior Experience Working Together

J.F. White has strong prior working relationships with both Gill and FINLEY. Currently, J.F. White is working with FINLEY on the **Chelsea Street Bridge** project for MassDOT and their prior experience includes the Boston Central Artery C09A4 (I-90/I-93 Interchange, I-93 Northbound). Most recently, J.F.White worked in collaboration with Gill on the **CSX Bridge Bundle #3**.

Project Bond

J.F. White Contracting Company will accept full responsibility under its current bonding capacity and will meet all bonding requirements set forth by MassDOT (see bid bond from AON Risk Services, Inc. included in the Price Proposal).

MBE/WBE Participation

A detailed explanation of the MBE/WBE participation appears in *Section 2 - Construction and Construction Management*.

White-Gill-Finley-Rizzo-Design Build Team Page 4 of 20

Section 2 – Project Management and Coordination

We believe the most effective strategy to ensure success of complex **Design-Build** projects is to integrate all key participants into one blended entity. To be successful, design and construction, construction management, schedule and cost control must work hand in hand. Every aspect of our team's approach to planning and executing the project is focused on achieving MassDOT's objectives for safety, quality and on-time delivery.

QUALITY CONTROL SYSTEM

Our team will develop and implement a comprehensive quality control (QC) system, in collaboration with MassDOT, to ensure our performance maintains a high standard of excellence, efficiency, reliability, and safety. Our QC system will achieve the following objectives:

- Provide a unified approach for achieving design and construction quality.
- Establish procedures for coordinating and ensuring consistency and high quality of work performed by all team members.
- Ensure that all design documents are prepared in accordance with all standards identified in the RFP and MassDOT's *Project Development and Design Guide*.
- Ensure that the quality of materials and workmanship of construction meets MassDOT requirements.

To achieve these objectives, we will develop a Quality System Manual (QSM) that addresses the QC organization and roles, document management, requirements for design quality control, and requirements for construction quality control.

Approach to Quality Control Organization and Roles. The following is a summary of key QC staff experience. The Organization Chart at the end of this section outlines the division of responsibility, including

reporting relationships for the Team and has been structured to provide the flexibility to address the multiple needs of this project in terms of engineering and construction disciplines as well as project-wide issues.

Paul Moyer, P.E., Gill Engineering Associates, Inc. will serve as the **Quality Control Administrator**. He will be responsible for managing the overall coordination of the Quality Control System. He will report directly to the Project Manager and will coordinate all project issues directly with MassDOT. As a Project Manager and Office Manager, Paul has developed and implemented numerous office-wide and project-specific QA/QC plans.

R. Craig Finley, Jr., P.E., FINLEY Engineering Group, Inc. will service as **Bridge Design Quality Control Manager.** He will be responsible for **i** implementation of the Design QA/QC System. As a consulting engineer, Craig has been involved in the design, management, construction engineering and inspection of a wide range of complex bridges. His expertise is in directing the preparation of the design, construction engineering and management of bridges. Craig will work directly with the QA/QC Administrator as it relates to bridge design.

MassDOT will be an integral member of our Team and will be fully involved in the project development process.

Andrea Burke is a certified NETTCP QA Technologist, and will be the Construction Quality Control Manager responsible for implementing all construction QC procedures. As J.F. White's QA/QC Director, Andrea is responsible for developing and overseeing the firm's QC program on all projects. She has a strong background overseeing QA/QC on major multi-million dollar infrastructure projects including several CA/T projects and the Deer Island Treatment Plant.



Our **Quality Control** organizational structure consists of independent **Design and Construction** "**Production Personnel**" as well as formal **Design and Construction QC teams**. The formal Design and Construction QC Teams will be comprised of representatives from respective engineering disciplines and independent testing agencies. Although "Production Personnel" will work independently from the respective Design and Construction QC teams, they will all have "up front" responsibility for ensuring the quality of their work. All **production personnel** will perform "self-checks" and "self-inspections" throughout the project's design and construction phases.

Approach to Document Management Procedures. All documents and data, including design plans, specifications, reports, calculations and other construction documents, will be organized by discipline and will be controlled in accordance with our QSM. QC procedures will be established and monitored by QC staff for the following:

6	Electronic project filing system.	•	Email standards, protocols, and filing	
0	File revisions & redline markup standards.		systems.	
		6	Collaborative web-based program.	

Approach to Design Quality Control Requirements. Project design production personnel and design quality team members have specific independent roles with respect to design quality control. Our QSM will include procedures for the following quality control activities to be carried out by design production personnel including **discipline coordination reviews**, independent technical reviews, and constructability reviews.

Additionally, the QSM will outline procedures for the following activities:

e 6	Review comment procedure forms. Validate and approve use of design software.	.	Detail checking report forms for calculations, plans, and specifications.
9	Review studies, reports and design documents.	٠	Verify reports, calculations, plans and specifications meet QSM quality standards.

The Design QC team will ensure coordination between design disciplines has been achieved. The Design QC team will ensure there are no design omissions, no utility conflicts. They will confirm the project is constructible. Our QSM will also detail specific activities and responsibilities for review of shop drawings, request for information, notice of design change, field design changes, and design dispute resolution procedures. To track progress and status of the aforementioned activities, electronic logs will be developed and maintained through the use of a web-based collaborative software system. This system will be available 24/7 to all team participants, including MassDOT.

Approach to Construction Quality Control Requirements. The QC team will have the authority to stop work that is deemed unacceptable. The QC team's first priority is to ensure that the project is built in accordance with the approved contract documents and meets MassDOT's quality standards. The QC team will not consider the potential impact to the project schedule or cost of their decision to stop or reject work.

J.F. White received two Outstanding Craftsmanship and Commitment to Quality Awards on the CA/T Project.

Our **quality control plans** will be prepared specifically for the Cedar Street over Route 9 project. These plans and any revisions will also require approval by MassDOT. The function of the quality control plan is to address specific facility and field placement processes for individual categories of work (e.g. Hot mix asphalt, Portland cement). The **quality control plan** will ensure that adequate personnel, qualified/ certified inspection and testing personnel, facilities, qualified/accredited laboratory/testing agencies, equipment and procedures are in place to achieve the specified product quality for each major work item.

Nonconformance Reports (NCRs) will be issued for any defective work. The NCR will identify the problem and recommend corrective action including identification of the root cause and methods to avoid a reoccurrence of the same problem. A sample NCR is included in *Appendix C*.

DESIGN SERVICES

Coordination of Design Disciplines. A successful design requires the coordination of the many disciplines that contribute to the project, including civil and structural engineering, utilities, historic and cultural resources, environmental resources, traffic maintenance, right-of-way, constructability and maintainability and hazardous materials management. This requires an understanding of the interrelationship between the work of these disciplines and the experience to anticipate the issues that are likely to arise. With the support of the design team, Joe Gill will pre-plan the design tasks of the project in detail. These tasks will be linked to reflect the input that is required from each discipline over the course of the project. Joe will hold regular design team meetings to review progress and identify issues to be resolved. Close coordination and open communication is critical to the successful integration of all disciplines.



Implementation of QC System during Design. Milestones will be developed for implementation of interim reviews as the design progresses, in accordance with the Project QC System. The timing of these reviews is critical. A senior level independent design professional completed the concept review of the proposed systems, methods and design approaches. Progress reviews of work products will be performed by independent reviewers at appropriate stages as the work progresses. At a minimum, reviews will be performed prior to all client submittals. Gill Engineering Associates, Inc. and FINLEY Engineering Group, Inc. will

perform independent reviews of each others' work during this process. Reviews will be performed on plans, specifications and other deliverables. All structural calculations will be reviewed, either through a check of the calculations or by performance of independent calculations, as appropriate.

Approach to Addressing Unique Challenges and/or Design Concerns. The nature of this project requires that the design team coordinate with J.F. White on all the challenging aspects for design and construction engineering. Our team's experience on complex projects brings not only the knowledge gained, but, the understanding of how to work together with multiple disciplines to solve unique problems. Due to the relationship between design and construction on this project, where the means and methods are just as important as the design issues, our team will use a collaborative approach to include both design and construction sequencing. This approach will ensure that design and construction work together throughout the design and construction phases of the project. This collaboration will include risk mitigation strategies to determine potential problems that could occur in the 72 hour window. The design and construction planning will also seek to mitigate potential problems and build flexibility into the overall concept.

From the very beginning of the project, our DB Constructability Team, augmented with other senior level J. F. White construction personnel, will meet as a "*What If Committee*". What if it rains? What if it is hot? What if a crane breaks down? What if there is a power failure? The goal of this group is to anticipate as many risks and challenges as possible. Prior to the critical 72 hour construction window, the team will compile this list of anticipated challenges and contingency plans for each challenge should any of them occur. To address any other unanticipated issues that may arise, the Team will establish a temporary committee of leaders from the Owner's representatives and the design and construction teams to be ready to quickly evaluate and resolve these issues so the project may move forward without delay. The committee and action plans will allow construction to continue seamlessly during this critical phase.

Approach for Limited Disturbance of Traffic. The Team understands the high priority that the Department places on minimizing impacts to the travelling public in this sensitive location. We can limit disturbance to traffic through careful staging of the construction project. Work areas and laydown areas will be confined to carefully configured zones that allow unimpeded traffic flow outside of the site. These areas will be detailed to provide access for delivery of materials and equipment that will minimize impacts to traffic. Wherever possible, deliveries will be scheduled for non-rush hour periods. Signage will be

provided to clearly indicate work areas and traffic detours for times where impacts cannot be avoided, such as the 72-hour shutdown.

Plan to Assure Consistency and Quality of the Design. This project blends design and execution of construction into a narrow timeframe. Consistency of the design is required to ensure coordination and compatibility of construction with the design. The White-Gill-Finley-Rizzo team will produce and disseminate the overall project concept to all members of the team. This project concept allows all team members to work towards a common goal. The Design Quality Manager will ensure that all designs meet the project requirements and all designs are consistent with the overall project concept. Detailed project reviews will be conducted to further ensure that there is consistency of materials, details and procedures throughout the project; this type of project review minimizes different work types and skill sets required on-site. The high level experience of the White-Gill-Finley-Rizzo team coupled with their prior work experience with each other allows this Team to understand the issues and provide solutions to ensure the design has the quality required and is consistent with the construction means and methods.

CONSTRUCTION AND CONSTRUCTION MANAGEMENT

Approach to Construction Management. The J.F. White approach to construction and construction management is to assemble a team of experienced professionals who will use their knowledge to ensure timely delivery of a top quality project. Each individual has certain responsibilities; however, the success of the project will be due to the ability of this group to function as a team.

It is the Management team's responsibility to establish project controls to ensure that **safety**, **schedule**, **quality** and **production** are delivered in the field. This is accomplished during daily/weekly job meetings that bring the **project plan** to the field level. At a minimum, there will be weekly **Our Management Approach**

- Pro-active safety plan
- Constant communication
- Maintain a single point of contact with MassDOT
- Seamless integration of design and construction activities
- Application of a formal and proven QA/QC program

meetings with the job team and a bi-weekly meeting with all active subcontractors. During these meetings, the schedule and requirements will be delivered to the field personnel.

Approach to Ensure Timely Delivery of Materials to Achieve Project Schedule. Delivery of long lead-time items, like structural steel and bearings, can greatly affect the schedule. To minimize impacts, we will identify long lead-time items early. For example, structural steel shop drawings will be submitted and approved as an early activity. Primavera scheduling will be used to track these items. Plant visits will occur periodically to inspect quality and monitor production of major permanent materials.

Approach to Quality Assurance during Construction. As discussed earlier, our QA/QC team maintains a critical role in design and construction. Protocols and procedures will be established with MassDOT's materials lab and inspectors to ensure proper documentation and quality of all work.



Resolution of Internal Disputes and Disputes between Proposer and MassDOT. A cohesive team with a single goal avoids most disputes. However, should an issue arise which cannot be readily and mutually resolved, we will submit the issue to the Design-Build Constructability Committee for their opinion. In the event that this group cannot come to a consensus, the matter will then be put before J.F. White's upper management team. The Design-Build Constructability Committee will be allowed three days for review and J.F. White's upper management team will be allowed seven days for review.

In our experience, weekly meetings among the contractor, designer and MassDOT will resolve most issues and mitigate potential disputes. If a dispute arises that the project personnel cannot resolve, J.F. White's upper management will assist. We will adhere to MassDOT standard dispute resolution protocols at all times and, in no case, will a dispute be allowed to affect the progress of the work.

Approach to Safety. J.F. White Contracting holds safety as its highest priority. A constant vigilance to the safety of its employees and the traveling public is maintained throughout the project. Each new employee will participate in a site-specific safety orientation training to address jobsite safety procedures. Subcontractors will have a pre-mobilization meeting to address site policies and safety procedures. All employees on the site will have completed an OSHA safety (10-hour) course prior to starting work.

SCHEDULE AND COST CONTROL

Management System to Control and Coordinate Cost and Schedule Including Design Schedule.

The J.F. White management team will use three proven software systems to assist in designing and constructing the project. Primavera CPM software will be used for scheduling, Viewpoint cost control system for tracking costs, and Expedition for document control.

The master schedule will be created with input from all team members. Each activity will be based on estimated quantities and proven historical production rates. The Designer's schedule will be incorporated into the master schedule. **Expedition** will be used to track correspondence and submittals. This web based system will allow the DB entity, including major subcontractors and MassDOT, to have real time updates. Design, shop drawings, letters, and minutes of meetings will be available to all stakeholders.

Tracking Progress and Expenditures; Roles and Responsibilities for Reporting of Results. J.F. White's Project Engineer and Field Engineers will be responsible for updating the schedule and production quantities on a weekly basis. Activities will be evaluated to determine if operations can be improved. Different methods and ideas will be discussed and reviewed for ways to expedite the project and to perform construction activities more efficiently. The Project Staff and upper management will monitor progress on a weekly, monthly and quarterly basis.

Methods for Meeting Completion Milestones and Payment Milestones. The project schedule will be created with final completion as priority. The most efficient way to control progress is with interim milestones. Achieving design milestones will enable us to commence work as planned. Our CPM will be developed during the design phase, analyzed to identify critical work, and provide sufficient float on potential problems.

Safety is the Team's highest priority.

The issues will be identified during the planning process to mitigate schedule delays during construction; and we will plan for potential setbacks of utility relocations and material deliveries. Construction methods will be re-evaluated if activity re-sequencing or acceleration is required. We will adjust our work force and work hours to maintain schedule to compensate for impacts and delays. J.F. White has extensive labor and equipment resources upon which to draw. Schedule activities will tie in with payment schedule so monthly pay estimates can be tracked and processed.

Approach to Integrating Subcontractor and Permitting Activities into Project Schedule. Many schedule challenges are not under our control. Our responsibility is to get them under our control, to the greatest extent possible, to enable us to maintain schedule. With respect to subcontractors, the actual subcontract

must include firm dates for subcontractor milestones. The subcontractor will be brought into schedule discussions early when planning durations and coordinating tasks.

Scheduling utility relocations/installations have the potential to impact construction projects. We have already contacted all affected utility companies and will include them in the design process to meet their needs and expedite construction. The utility companies will be included in our weekly meetings to coordinate construction activities. Environmental permits will be applied for at NTP to allow ample time for the public meeting process.





Plans for Initiating Early Work and Critical Path Items. Upon notice of selection, we will commence design, permit applications and secure steel fabrication and delivery dates. We will maintain a detailed schedule of critical path items highlighting design, shop drawing, fabrication and delivery times. The schedule will include delivery dates associated with all purchase

orders to ensure that all long lead items are properly tracked. For example, we have already checked the rolling schedule for the beams and have identified a fourth quarter rolling date in order to make schedule. Another typically long lead time is the delivery of the neoprene bearings. Therefore, we anticipate a submission requesting "Early Release" for the majority of the superstructure, steel beams, diaphragms, bearings and reinforcing steel. Of course, these submissions will be accompanied with the necessary calculations.

Innovative Techniques to Reduce Overall Construction Duration. In order to meet the target dates on the critical items of work, the team will utilize the following innovative methods of construction:

- Prefabricated bridge elements, to accelerate bridge construction.
- Rapid construction techniques (see the Bridge and Structures section for discussion).
- Work continuously to minimize disruption and avoid times of high traffic.
- Implement 12-hour supervision (with a six hour overlap) on rotating shifts for multiple work crews working during the 72-hour installation shutdown.
- Secured opening of asphalt plant on holiday weekend.

ORGANIZATIONAL STRUCTURE; MANAGEMENT PERSONNEL EXPERIENCE

Our organizational structure ensures a clear structure of reporting relationships and all key project elements are managed by highly experienced and qualified personnel. The team's *Organizational Chart* follows.

Staff Location. Our **Design-Build** team will have a field office established on-site within one month of the NTP. This office will provide workspace for J.F. White and Gill Engineering Associates' staff, as well as an adjacent facility for MassDOT. Providing this facility adjacent to the team's field office and involving MassDOT personnel in weekly meetings will foster and solidify a team effort among all parties. We will create a cooperative atmosphere to achieve success.

The early design phase is critically important to the management of potential project risks.

Starting at NTP, while the Team's field office is being set up, Gill Engineering Associates' design staff will be working from their Needham office. To streamline the design process, meetings will be held weekly with all team members to discuss and coordinate important and critical aspects of the project within each discipline. Through these meetings and the use of a collaborative web-based program, design progress will be monitored and overseen by J.F. White. J.F. White will provide input to the constructability during this critical period. As construction begins, J.F. White field personnel will work from the field office full time. In addition, a representative from Gill Engineering Associates will be available at all times to handle questions and clarifications.

Management Plan to Address Risk Issues. Risk is inherent in any project. We have conducted a risk analysis to identify potential risks and prudent management actions to preclude or reduce these events and circumstances. The potential risk items and actions to mitigate include:

- Weather this is the least controllable riskrelated item, however it is one for which we must plan and design around for all but the most extreme conditions.
- Utility Coordination start upon NTP to coordinate and cooperate with the utilities to expedite work.
 Delivery Structural Steel and Elastomeric
- Schedule plan and monitor work activities.
 - Bearings, early submission items.
 - **72-Hour Detour** utilize multiple crews.



Facilitate Communication between Organizations and Personnel, Participants and MassDOT.

The J.F. White team will use several methods for design/construction coordination. On-site design and construction personnel will be kept current with weekly meetings and daily Design/Construction/ MassDOT interaction. The key to a successful project is to have all project personnel on the same page. Subconsultants, subcontractors, and management will have real time information available through the use of a collaborative web based management program. This tracking system will be available 24/7 to all, including MassDOT, and will allow all participants access to project documents. Constant communication, collaboration, and monitoring of design and construction will achieve a successful project.

Experience of Management and Key Personnel. Personnel with proven management abilities, the highest level of technical skills, and a wealth of experience on MassDOT assignments will lead this project. Assigned to the key role of **Project Manager** is **Bill Shea**. During his 25 years of construction experience, he has managed many MassDOT bridge and highway projects. Bill will implement the same effective management approach by working with the owners, designers and the construction team, on a daily basis. His personal interaction and hands-on management style proved highly successful on the Terminal A Redevelopment and CA/T Massachusetts Ave. Interchange project.

Joe Gill, P.E., Gill Engineering Associates, Inc., Design Manager

Joe is the firm's founder and served as the State Bridge Engineer and Deputy Chief of Highway Operations at MassDOT, and as the Chief Engineer at the Turnpike Authority. His first hand knowledge of MassDOT policies, procedures and high quality standards coupled with 27 years of structural engineering and management experience in the design of bridge replacement, preservation and rehabilitation projects, bridge inspections and ratings, and structural investigations makes Joe a valuable asset to this team.

Jerry Pfuntner, P.E., FINLEY Engineering Group, Inc., Accelerated Bridge Construction

With a uniquely diverse background in the field of bridge engineering, Jerry has performed design, construction engineering, field engineering, bridge inspection and general consultant roles. Notable design experience includes accelerated bridge construction, ship impact analysis, finite element analysis, seismic analysis, strut-and-tie modeling and time dependent analysis.

Staff Availability. The key staff proposed has been selected because of their technical and management expertise. Bill Shea, Project Manager, Joe Gill, Design Manager, and Jerry Pfuntner, Accelerated Bridge Construction, are all available to commence work immediately upon NTP.

MBE/WBE PARTICIPATION

The J.F. White joint venture will comply with the 12% M/WBE participation goals established for this project. We propose to use Regis Steel to furnish and install reinforcing steel, and McCoy Fence for

guardrail and fencing, and the Dow Company for utility and excavation work. Saugus Construction will furnish and install structural steel. These firms are each SOMWBA-certified MBE and/or WBE firms. SOMWBA-certified M/WBE and MassDOT pre-qualified firms, Lamson Engineering Corporation Green International Affiliates, Inc. will be responsible for geotechnical engineering and survey services respectively.

All key staff is available to begin work immediately

COMMERCIAL PHOTOGRAPHY/VIDEO

The team will engage a qualified commercial photographer to take photographs/video during construction to document the projects progress and activities. The team will submit to MassDOT for approval the name and credentials of the photographer who will be responsible for taking the photographs during construction.

ORGANIZATIONAL CHART



Section 3 – Technical Approach

CIVIL/MAINTENANCE OF TRAFFIC/CONSTRUCTION STAGING

Approach to Maintenance of Traffic and Construction Staging. Our approach to successful maintenance of traffic and staging follows this strategy:

- *maintain all route connections* for pedestrians and vehicular traffic during all construction stages and improve traffic flow during detour events compared to the current plans
- *maximize work accomplished* during the two weeks prior to bridge closure and the two weeks after bridge closure by staging construction to minimize work required during the 72 hour bridge closure period
- *provide an alternative bridge construction staging location* that presents a less complicated and straightforward approach in moving the new superstructure in place
- *conduct extensive field checks* during the design phase to verify how the proposed construction fits and matches site conditions and to avoid unexpected delay during construction
- *rehearse construction period coordination* activities with utilities, emergency responders, and public officials
- *inform the public* about Route 9 and Cedar Street traffic disruptions during construction via electronic media, printed media, site and detour signing, public forums, and personal alerts to area businesses and residents

Maintain all Route Connections. During the two weeks prior to bridge closure, temporary HMA sidewalk will be constructed on Northerly sections of Cedar Street in order to temporarily relocate and maintain a pedestrian route along Route 9 outside of the bridge staging area during bridge closure. During bridge

closure, Cedar Street pedestrian traffic from North of Route 9 to South of Route 9, and vice-versa, will be maintained with a **pedestrian service van** (*see Appendix I for additional details*).

The Route 9 Westbound detour shown on the plans provides one travel lane. However, traffic count data from the FDR for Route 9 Westbound at the site indicates a high ADT of 28,321. Based on this data, the estimated maximum peak hourly volume of 2830 exceeds the capacity of one travel lane. We propose that in the two weeks preceding bridge closure we will construct a limited amount of temporary pavement on the **Route 9 Westbound detour route so that two travel lanes** (*see Appendix I*), each 14' wide with additional 1' offsets on each side of the travel lanes to curb or barrier, can carry this traffic.



Maximize Work Accomplished. Coordinating with MassDOT's Resident Engineer (during a less critical period) portions of the Route 9 median East and West of the Cedar Street Bridge will be removed at night during the two weeks preceding bridge closure to enable SPMT and other equipment access to the bridge from Route 9. A temporary precast concrete median barrier will be placed at the median until the median can be reconstructed during the two week period following bridge closure.

To minimize detoured Route 9 traffic disruption on Worcester Street (both East and West sections) no work will be conducted on these roadway segments during bridge closure. Instead, roadway work will be conducted during both the preceding and the succeeding two week periods. During the preceding two-week period, the proposed differential in pavement elevation between existing and proposed bridge/approach roadway pavement will be partially constructed to accommodate acceptable roadway grades during construction (*see Appendix I for additional details*).

Retaining wall reconstruction on the Southerly side of the bridge approach at both Worcester Street intersection corners will also be constructed in the two weeks prior to bridge closure as an additional measure to limit work during that critical period. One wall will be reconstructed at a time so as to maintain one pedestrian route across the intersection and bridge at all times. To address the grade differential between the existing bridge deck and the proposed pavement elevation on Worcester Street during the partial roadway construction previously described, a temporary pavement ramp will be built within the approximate 20' available from the end of the bridge to the Northerly Worcester Street curb line. Pedestrian traffic will be separated from roadway traffic with a temporary raised HMA curb installed on the pavement, further delineated with drums and pavement markings.



During the two week period preceding bridge closure, the detector loops at the existing Cedar Street/Worcester Street traffic signal will be disconnected and the signal will be modified to operate under temporary microwave detection. During bridge closure, the intersection will operate under 24-hour traffic police control. The proposed traffic signal is expected to be operable following the bridge closure period, but police will remain available as needed to continuously provide control to this intersection.

Alternative Bridge Construction Staging Locations. The preferred location to build the bridge on falsework is to the East of Cedar Street as shown on our staging plan. There are two reasons for this, the first being that less jacking is required on the SPMT when traveling downhill. The second is that it is a shorter move overall. We are aware this location may have more impact on pedestrian traffic so we have relocated sidewalks and safely secured our work zone with 6 foot fencing. If this location is not feasible to MassDOT, we can construct the bridge on the West side of Cedar Street. *Conduct Extensive Field Checking.* We have measured critical clearance locations to confirm that ADA criteria for clear pedestrian paths and accessibility can be met at utility pole locations. We have also checked proposed wheelchair ramp and mast arm placement and concluded that revisions to the design as currently proposed are required for all equipment and installations to fit properly. These types of field check measurements will be made throughout the design phase to ensure that the proposed construction can be built within the allotted time periods and to avoid unanticipated delays or surprises.

Rehearse Construction Period Coordination. Successful maintenance of traffic and construction staging will rely on having a well-conceived TMP that is endorsed by those most affected by it, including utilities, public officials, area businesses, and emergency responders. To achieve this result, dry-run scenarios to plan for contingencies will be conducted with these participants during the design phase.

Inform the Public. The team will provide all necessary information to MassDOT to support MassDOT efforts in their public information campaign about project activities. By working through MassDOT, the information provided will help reduce traffic traveling through the work zone, reduce traffic-related incidents that will need resources diverted during critical construction periods, and improve positive, local support for the project.

Approach to Public Communication. We will use a variety of methods to get the word out concerning traffic staging, closures and detours. Strategically located portable changeable message signs (PCMS) will provide immediate notification to drivers on the affected streets several days/weeks in advance of travel changes. Detour routes will be well marked with detour signing, barriers, and confirmation route signs. The team will prepare website content (e.g. up-to-date project data, travel routes and maps, and schedules) for the MassDOT website. The information provided will help local residents, area businesses, emergency responders, public agencies



and any potentially affected regional travelers determine their driving route. The project website address will be shown on mounted signs along Cedar Street and Route 9 as well as on existing ITS signing. We will provide project information for the 511 travel information hotline. Print notifications will be prepared for town agencies, including police & fire, as well as local newspapers. Radio transmitted messages will also be prepared. We will prepare a project informational display for exhibit at a local public building. One public information will be provided at a local public building in advance of construction, in addition to the 25% design public hearing that will be required.

Approach to Civil Design. The approach to civil design, which includes all project work that does not involve the bridge, is to adjust, refine, improve and advance the original 25% plans that MassDOT has already reviewed.

MassDOT 25% design submission review comments were provided for information. These review comments offer guidance for changes that will be required in order to obtain MassDOT approval for the re-submitted 25% design. Based on the document, the team is able to offer additional enhancements. The profile comments have been investigated. The Worcester Street (East and West) profiles and the Cedar Street profile can be enhanced to address a majority of the review comments without creating an additional adverse impact. A plan to maintain pedestrian routes during construction is provided in Appendix E.

Wheelchair ramp design drives the proposed intersection geometry and signal equipment placement at the Worcester Street/Cedar Street intersection. The review comments suggest design refinement to avoid utility pole placement that is shown within a ramp (NE quadrant), to provide the required distance between wheelchair ramps (6' min), to provide 3' clear to any obstruction, to provide space for signal equipment, and to provide the minimum sidewalk width of 5'-6" (curb included) (see Appendix I for additional details).

The existing asphalt parking area at approximately STA 29+00, RT, will need to be reconstructed and the slope limit revised to match the existing edge of parking. It appears that this work can be conducted within the easement area provided.

No additional right of way or easement areas other than those presented on the preliminary plans appear to be required to construct the project.

Approach to Traffic Signal Upgrades. We have reviewed the 25% plans included with the RFP and will provide enhancements to the current design. Most notable were the proposed locations of the mast arm foundations. The two foundations on the North side (bridge side) of the intersection were located either on the wing wall or behind the wall, making construction staging a challenge and also making future accessibility difficult for maintenance personnel. The mast arm on the Southeast corner has been relocated to avoid right-of-way impacts and the overhead tree canopy. The mast arm on the Southwest corner has been relocated to avoid right-of-way impacts and the underground drainage pipe. Our revised traffic signal layout is shown on the attached graphic in the appendix.



New signal foundations, conduits and handholes can be installed during the two week period prior to the closure. The installation of the permanent equipment can then be completed in the two week period after the bridge is installed. This includes setup of the video cameras and preemption detectors, as well as fine tuning and adjusting the detection zones and signal timing parameters.

Approach to Roadside Safety. A temporary precast concrete barrier with an approach attenuator will be placed alongside a portion of Route 9 Westbound detour to separate and protect a temporary pedestrian route from vehicular traffic during the bridge closure period. The temporary concrete barrier will be placed within the Route 9 median in lieu of guardrail when the median is removed during the two week period preceding bridge closure. In addition, the reconstruction of the retaining walls on the southerly side of the bridge will require a temporary barrier around the excavation on Cedar Street. In general, we anticipate that the total amount of roadside barrier needed on the project will not be significant. Route 9 approaches to the work zone during the 72-hour bridge closure will be protected in coordination and in accordance with police and emergency responder requirements. Pedestrian access to the work site during the 72-hour bridge closure period will be restricted and controlled by a 24-hour police presence, as well as portable barriers.

BRIDGES AND STRUCTURES

Approach to Incorporation of Accelerated Bridge Construction Technology into the Project. Our team understands that one of the most critical aspects of this project will be the utilization of Self Propelled Modular Transporters (SPMTs) to move and place the superstructure in its final position. The SPMTs which



will be utilized are capable of providing high mobility, reliability, and accurate controls to place the superstructure in position without causing any distress in the superstructure. The superstructure will be moved using four SPMT support locations beneath the bridge deck. Our analysis compared stress levels with two, three or four support locations and showed that the **four point support configuration produces a minimum of stress increase in the concrete deck and barriers with deflections of less than one inch** (*see chart provided in Appendix I*). In addition to the complexity of moving the completed superstructure into position, this task must be completed in a very limited time frame. Successfully moving and placing the superstructure will require a high degree of planning for the move and also contingency planning for any anticipated problems that could occur during this critical phase of the project. The team has even developed a back-up system should the SPMT system go down; J.F. White would still be able to complete the bridge with a minimum of delay.

Approach to Design and Construction of Bridges and Structures

Design – will conform to the applicable AASHTO Standard Specifications, along with the MassDOT's Bridge Manual supplemented by the manual for "Connection Detail for Prefabricated Bridge Elements and Systems" (FHWA – IF-09-010), the Utah DOT SPMT Manual, the "Manual on the Use of Self Propelled Modular Transporters to Remove and Replace Bridges – June 2007" (FHWA) and other pertinent publications.

The design of this structure is essential and there are a number of key issues which need to be addressed;

- 1. It needs to have sufficient strength, and more importantly adequate stiffness, to allow it to tolerate the stresses and deformations which will occur during the move in to place.
- 2. It needs to provide tolerances to allow it to be prefabricated and successfully placed; location and tolerance of drilled and grouted dowels, clearance between backwall and bridge, as examples.
- 3. The bearings need to be designed for a higher temperature range than normally anticipated such that they can be put into place regardless of the ambient temperature and do not need any re-adjustment.
- 4. Attention to details at the abutment (i.e. waterproofing, protective course) in order to minimize time in the field and risk due to weather.
- 5. Designed to transmit and accommodate almost all of the lateral and transverse loads to the abutments, thereby minimizing the effect of these loads on the unreinforced center pier.
- 6. Provide a safe and long term maintenance-free structure through the use of weathering steel, neoprene bearings, slab over details at the abutments to eliminate open roadway joints, epoxy coated reinforcing steel, membrane waterproofing and high performance concrete in the deck slab, sidewalks and barriers.



Materials – this very important issue is often not given adequate attention in routine bridge design. Materials are typically covered by standard specifications which do not have the resiliency to change and adopt cutting edge technologies that can best respond to the unique requirements of a project. The 72-hour bridge placement window makes appropriate use of materials; a critical element of a successful project. Materials that are installed during the 72-hour window must be guaranteed to meet performance requirements even within aggressive environmental conditions that could occur such as rain, heat, wind, high humidity, etc. The J.F. White team is fortunate to have Michael Kane, P.E., of Finley Engineering Group, Inc. He is a professional with extensive experience in materials technologies. Some examples of materials issues that Michael and the rest of the design team will address are as follows:

- Grouts must develop high strength quickly but be easily workable.
- Membrane waterproofing must be able to be installed in high temperatures and/or humid/wet conditions.
- Neoprene bearings require little if any maintenance.

Seismic Design Strategy – The existing un-reinforced concrete pier will have little seismic resistance, so the majority of the longitudinal and transverse seismic loads will need to be transferred to the abutments. These structures will be detailed so that the backwall and cheek walls will resist seismic loads. Teflon sliding bearings will be used at the pier to minimize load transfer there.

Foundations and Design Life Considerations – Foundation issues are addressed in the "Approach to Geotechnical Design Requirements for Stuctures" section. Design Life Considerations are addressed in the "Durability and Life Cycle Cost" section.

Aesthetics. Aesthetics will always be a consideration during the development of the structural design of the bridge. This will include the careful detailing of the precast pier caps, abutment caps, and pilasters. Our design will build on concepts developed by MassDOT. This visible surface of all **existing concrete structures will receive a surface treatment** so that it will be indistinguishable from the new concrete.

Approach to Design and Construction of Temporary Off Location Abutments and Piers. The design of the temporary bents for the bridge superstructure construction will focus on ensuring that the superstructure will be adequately supported so that steel girders and concrete deck and barriers will have a stress condition similar as if it were constructed in-place. The temporary bents will be located longitudinally at the same locations as the final structure. The bents will consist of temporary towers supported on rigid mats. Lamson will confirm soil support is adequate and minimize differential settlement between supports and FINLEY will ensure that the overall support system design accommodates any anticipated system differential settlements so that the final structures will satisfy all AASHTO design requirements. In summary, the primary goal of the temporary off location bents will be to ensure the integrity of the superstructure such that it will meet all design requirements in its final location.

Approach to Geotechnical Design Requirements for Structures. Although this project will not be constructing new substructure units, the analysis of the existing abutment and piers will require geotechnical engineering input to evaluate the existing structures for new loadings and for the design of temporary structures.



underlain by a layer of glacial till 6 to 10 feet thick, and finally, bedrock. This soil profile is considered to be firm, natural ground that provides a stable foundation material. The report recommends a bearing

The existing geotechnical data will be supplemented by three new soil borings, which will be located where the superstructure will be pre-fabricated. We will analyze the geotechnical data obtained from these soil boring logs and soil samples, along with data obtained for the May, 2006 report to determine parameters for design of the temporary foundations and analysis of the existing bridge substructures. Lamson Engineering will provide guidance to the structural engineers through development of a geotechnical report, based on existing data, supplemented by additional subsurface exploration. The report will be submitted to MassDOT for approval. Upon approval, this report will become the basis for the analysis and design of the bridge substructures.

capacity of 6 ksf at the pier and 4 ksf at the abutments, based on the previous design concept.

Geotechnical analyses will be performed to assess the stability of the modified abutments and wingwalls for sliding and overturning under the new superstructure loading conditions and structural geometry. We will include construction loadings as appropriate. A bearing analysis will be performed for the pier, abutments and wingwalls to determine the bearing pressure distribution under the footings. Adjustments will be made to the abutment caps as necessary to improve the loading conditions, such as relocating the centerline of bearings to decrease bearing pressures and improve overturning conditions.

Concept Plans

We have prepared a set of Concept Plans, based upon the sketch plans, and have included them in Appendix E. We have significantly advanced our concepts to the bridge placement and precast elements. This provides our team with a clear advantage in expediting early release submissions.

Durability and Life Cycle Cost

Providing a structure with a long service life that requires little maintenance is a matter of intelligent detailing and proper use of materials. Many projects are approached first with an emphasis on meeting strength requirements, and then incorporating service life and durability issues as a secondary consideration. Although strength requirements must be met, we believe that service life/durability should be given equal consideration. To that end, we will incorporate the following concepts into our design:

Eliminate roadway joints - leaking expansion joints are the primary cause of the most severe deterioration problems that occur on most bridges. We believe that expansion joints can be completely eliminated on this bridge. We will use slab-over details, whereby the deck slab extends



beyond the abutments and drains to the soil behind, well away from sensitive superstructure components. The continuous span superstructure will eliminate joints at the pier. The length of this bridge is well within acceptable limits to accommodate thermal expansion.

- Weathering steel will be used for the superstructure because of its corrosion resistance and elimination of the ongoing need for painting.
- End diaphragms, a common location for severe corrosion, will be encased in concrete.
- Neoprene bearings, made of inert, corrosion resistant material will require little or no maintenance and will have a long service life.
- All concrete cracks will be sealed with HWMA to prevent water intrusion and on-going corrosion.

ENVIRONMENTAL ISSUES

Proposed Measures for Ensuring Compliance with Requirements of the Environmental Laws/Approvals Clearances. Based on our review of the Proposed 25% design, it appears that the Project is either exempt from, or does not exceed, most common regulatory thresholds. As currently designed, no work is proposed within federal and state wetland resource areas and the Project Locus is not mapped within the Natural Heritage and Endangered Species Program's (NHESP) Estimated or Priority Habitat so no wetlands or NHESP approvals are required.

The Project has the potential to disturb more than one acre of land during construction and will require an Environmental Protection Agency (EPA) **National** *Pollutant Discharge Elimination System* (NPDES) Construction General Permit (CGP). The DB Team will prepare a Storm Water Pollution Prevention Plan (SWPPP) for the project in accordance with EPA's NPDES General Permit for Storm Water Discharges from Construction Activities. The SWPPP will include project specific plans establishing the approach for controlling storm water discharges during construction activities and listing structural and non-structural Best Management Practices (BMPs) that must be employed during construction to manage and control storm water runoff.





Potential Impacts of Environmental Approvals/Clearances on the Design Presented in the Proposal.

Based on a review of the design presented in the Proposal it appears that the only major environmental approval required for the Project will be the EPA NPDES Construction General Permit which should not extraordinarily impact the design or construction of the Project.

Approach for Coordinating with Federal, State and Local Agencies and MassDOT Secure Environmental Approvals/Clearances. The DB team has a strong working relationship with both the MassDOT and regulatory agencies and this will enable the team to efficiently work through any unforeseen occurrences that may arise during the Design Build Process.

Plans for Required Mitigation. No mitigation plans are required for the Project.

Plan for Managing Schedule Impacts Resulting from Environmental Approval/Clearance Delays.

The Environmental permitting requirements for the Project are limited and no environmental mitigation is required, so it is not anticipated that the environmental review process will have a negative effect on the Project Schedule.

Permanent Erosion and Sediment Control Measures. Construction term erosion and sediment control measures will be implemented in compliance with a Storm Water Pollution Prevention Plan that will be prepared during the NPDES permitting process. A qualified inspector will be assigned to the project and will be on-site as required during construction to ensure compliance with the NPDES Permit.

Approach of Hazardous Materials Management. Based on our current understanding of the bridge structure, we do not anticipate significant hazardous bridge materials handling issues. However, we will conduct a hazardous bridge material survey to assess for the presence of common bridge materials such as asbestos containing material (ACM) and lead based paint (LBP). In addition, we will review potential historical impacts to the site to evaluate whether testing of soil and groundwater is warranted. This investigative data will be used to inform construction sequencing and staging, soils management, re-use potential, and disposal options if warranted.

UTILITIES



Approach to Utility Relocation and Protection. Utility contacts for utilities located within the Town of Wellesley are listed on the MassDOT website. Our team will initiate a pre-25% design meeting with utility representatives to accomplish two objectives. First, it is required that they verify that the depiction of existing facilities shown on the project plans is complete and accurate. Second, the representatives will be asked to describe their requirements regarding the proposed construction, specifically notifications, schedule, and on-site representation,

and also to provide details for protection and adjustment of their facilities.

The project impacts several existing utilities, including water, sewer, gas, electric, and telephone. None of the impacts appear to be significant or problematic, as the proposed bridge, according to project plans, does not carry any utilities.

Two electrical manholes and one telephone manhole will be affected by the 9" to 12" rise in roadway profile grade at the Worcester Street/Cedar Street intersection. Adjustment of these castings will be conducted within either the two-week period preceding bridge closure or the two-week period after bridge closure (temporary steel plated).

Overhead wire protection across the bridge and intersection, and also across the staging area and crawl route, will be coordinated with Wellesley Municipal Light, the town's electrical utility. Temporary bracing at utility pole #37 and utility pole #36 may be required during excavation to construct portions of the project. The schedule of operations will be established with Don Newall of Wellesley Municipal Light during the design phase of the project. We will also install an empty conduit system under the bridge for future Wellesley Municipal Light Department plans.

National Grid maintains a 24" cast iron gas main on Worcester Street with approximately 30" cover and should not be impacted by the project. A gate valve will need to be adjusted. Coordination through Dennis Peri will be conducted during the design phase.

Approach to Utility Coordination and Communication. The approach for successful utility coordination and communication includes accomplishing two primary goals. First, by means of meetings and field visits with utilities during the design phase; establish clear lines of communication and responsibilities of specific individuals representing each utility, municipal office, and the construction contractor. Second, establish unambiguous requirements for activities to be completed by the utilities, the municipality, and the construction contractor at the site during each of the three construction periods – the two weeks preceding bridge closure, the 72 hour bridge closure, and the two weeks following bridge closure.

Contact with specific representatives of each of the utility companies will be maintained throughout the design phase to ensure that any changes in either the design or in the utility companies' plant are accounted for in the project. Combine this with participation by the District 4 DUCE and you have the ingredients for successful utility coordination and communication.



Section 4 – Project Schedule – CPM Schedule

MILESTONE	Anticipated Star	t/Completion Date
Contract Notice to Proceed	September 1, 2010	
Incentive Milestone #1 – (superstructure complete)	June 20, 2011	11:59pm
Incentive Milestone #2 – (Route 9/Cedar St. Re-Opened)	July 4, 2011	10:00pm
Incentive Milestone #3 – (substantial completion)	July 20, 2011	11:59pm
Incentive Milestone #4 – (final acceptance)	August 20, 2011	11:59pm

The major elements outlined within the baseline schedule include:

Contract Design – The design submittals shall include the plans and supporting documentation to support: 25%, 75% and 100% Design and Approval. Additional details to include environmental coordination checklist, final plans and specifications submittal, mylar and final design calculations submission.

Primary Submittals & Procurement – The major submittals, approvals and fabrication will extend to the Precast Abutment Beam and the Bridge Structural Steel. The early fabrication date of the Bridge Structural Steel (March 11, 2011) will enable crews to commence with the Bridge Frame construction by March 14, 2011.

Bridge Shoring & Frame – Equally critical will be the mobilization and site preparation for the bridge shoring and frame by early January, 2011. With only six weeks for the shoring construction and fourteen weeks for the bridge frame construction, JFW anticipates an early finish date for this work by June 19, 2011.

Weekend Closure – Route 9 & Cedar St. – Following all the preplanning and coordination of the Bridge Closure Weekend, JFW

will commence with the demolition and new construction as detailed in the hour-by-hour construction schedule. The demolition, installation of new abutments, new bridge installation, backwall and wingwall construction, as well as the roadway finishes, will allow for a bridge opening by July 4, 2011 at 10:00pm.



Our detailed project schedule (sample illustration shown here) demonstrates our team's ability to meet all required milestones. See Appendix B

RELEVANT EXPERIENCE SUMMARY

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J.F. White Contracting Company				
I-93 Demolition Viaduct and Construct Ramp MassDOT – Highway Division	Concord Street (Route 126) over Route 9 Bridge MassDOT – Highway Division	Norumbega Covered Storage Tank Design-Build - Weston, MA MWRA	Repartment of Conservation & Recreation	Falmouth Bridge Replacement (Bascule) Water Street over the Eel Pond Channel MassDOT – Highway Division
 Demolish a portion of the existing I-93 Northbound/Southbound structure. Construct a new on-ramp from Boston's North End to I-93 Northbound. Fourteen (14) spans of Precast Post- Tensioned Concrete Segmental Viaduct. Two (2) spans of Cast-in-Place Post- Tensioned Viaduct, placement of High Performance Concrete, installation of eleven (11) - 8' and 6' Diameter Drilled Shafts. Placement of ten (10) - 7'-3" Diameter Cast-in-Place Columns fifty (50') feet to seventy (70') feet high. 218 Precast Concrete Segments. 630 If of Drilled Shafts. 77, 000 sf High Performance Concrete. 6 Safety Share Awards. 	 Design-bid-build bridge replacement project MassDOT. Involved replacement of the superstructure and pier, modifications to the abutments and wing walls, installation of elastomeric bearings, concrete patching of the substructure elements, replacement of the existing approaches and approach sidewalks, placement of a latex modified concrete overlay and installation of bridge railing. Concrete Crack Repair – 300 lf; Demolition of Bridge - 5,000 sf; Crossing & Grouting dowels 1,500 ea; Latex Modified Concrete - 40 cy. Performed in 3-phases to allow for two travel lanes of traffic on the bridge. 	 Design-build project completed in 2005 for a new 115 million-gallon water storage tank. The tank covers 17.4 acres and is up to 70 feet higher than the ground. Involved 33 Acres of Clearing & Grubbing and 3 acres of wetland replications. 110,000 cy Rock drilling & blasting, 86,000 cy cast-in-place concrete, 200,000 cy of structural backfill, 1.6 million sf soffit & formwork, 250,000 cy common fill. DEP Construction Permit. Army Corps of Engineers' Wetland Construction Permit. NPDES Stormwater Permit. 	 \$18.6 million design-bid-build dollar project completed in October, 2009 for the DCR. Rte 3 North & South, Quincy/Dorchester ½ mile long by 110' wide bridge. Jacked and replace 55 hammerhead pier using 200 kip post shores. Replace 12 pier heads over the Neponse River. Pier 2 was located between the MBTA Red Line and the MBCR Commuter Rail tracks. Replace 516 bearings to meet seismic composition of bridge drainage system. Spall repair at hammerhead pier stems and minor deck repair. Project featured in <i>New England Construction Magazine</i> October 22, 2007. 	 Replacement of 40 foot Bascule Bridge on MassDOT's scheduled shut down. Temporary Pedestrian Bridge to meet community needs. Bascule Bridge opened ahead of schedule for marine traffic. Project worked four months of double shifts to maintain MassDOT's schedule. Large crane mobilized to expedite demolition portion of shut down. Lead removal from Structural Steel Bridge. Management and Disposal of Creosote Timbers (Fender System). Management and Disposal of Petroleum Products (Machinery Oil).
Proposed vs. Actual Cost: \$ 47,776,647/ \$ 56,332,660 Proposed vs. Actual Schedule: On schedule w/approved contract extensions. Fee as a % of Total Cost: N/A	Proposed vs. Actual Cost: \$1,350,090/\$1,929,613 Proposed vs. Actual Schedule: On schedule w/approved contract extensions. Fee as a % of Total Cost: N/A	Proposed vs. Actual Cost: \$90 million/\$95 million Proposed vs. Actual Schedule: On schedule w/approved contract extensions. Fee as a % of Total Cost: N/A	Proposed vs. Actual Cost: \$19.3 million/\$18.6 million Proposed vs. Actual Schedule: On schedule w/approved contract extensions. Fee as % of Total Cost: N/A	Proposed vs. Actual Cost: \$ 7,634,550/\$ 7,967,496 Proposed vs. Actual Schedule: On Schedule Fee as % of Total Cost: N/A
Client Reference: Jack Wright, Deputy Project Director MassDOT – Highway Division 10 Park Plaza Boston, MA 02116 Phone: 617-951-6268	Client Reference: Thomas Waruzila, District 3 Highway Director MassDOT – Highway Division 10 Park Plaza Boston, MA 02116 Phone: 508-754-7204	Client Reference: Frank DePaola, formerly MWRA Project Director MassDOT – Transit Division 10 Park Plaza Boston, MA 02116 Phone: 617-222-3118	Client Reference: John Gilmore, DCR Resident Engineer MassDOT – Highway Division 10 Park Plaza Boston, MA 02116 Phone: 617-799-2743	Client Reference: Kevin Cassidy, Project Manager MassDOT – Highway Division 10 Park Plaza Boston, MA 02116 Phone: 508-884-4282
J.F. White Personnel Martin Golden				J.F. White Personnel Nicholas Bruno, Superintendent

RELEVANT EXPERIENCE SUMMARY

FINLEY Engineering Group Conoco Phillips Ship Dock I-95 Richmond over the James River **Chelsea Street Bridge Replacement Boston Central Artery C09A4** Trainer, PA Superstructure Replacement 1-90/I-93 Interchange, I-93Northbound Boston and Chelsea, MA **Richmond**, VA **Boston**, MA Project Type: Design-Build Project Type: Design-Build Project Type: Design-Build Project Type: \$125M Design-Bid-Build with • \$43M replacement of all 102 conventional • Several complicated structures and • Provided the bridge concept studies, cost a Contractor proposed Construction steel spans. construction operations; intricate segmental Alternative scheduled to open in 2012. studies and designs for the 280' long Complete redecking of 10 truss spans structures; Span lengths 105' - 216'. • Replacement of a truss-type structure that Approachway bridge (typical spans 45') crossing the James River. • Equipped with 2 segment hoists for and the two up and down river Accessway spans 450 feet and will provide 175 feet of • Traffic was detoured to opposing lanes bridges (485' and 487' respectively, with simultaneous erection of two cantilever vertical clearance when raised. each night, equipment mobilized; an entire segments, the gantry is capable of supporting typical spans of 60') connecting the new • The launch sequence is particularly existing span was removed and replaced 2 simple spans during construction. Conoco Phillips ship dock to their refinery. challenging as the vertical lift span truss with 2 precast composite units (PCUs). • The bridge configurations are prestressed • Use of four hinge-spans occur in the viaducts must be in position and raised within 60 Concurrently, full width non-composite to separate the bridge units. concrete beams with a precast concrete hours to re-open this critical navigational deck sections are removed, replaced with • Erected in typical balanced cantilever. deck supported on pile bents with channel in the Chelsea River. precast deck panels, which are composite. composite steel pipe pile/HP pile • 1,062 segments cast utilizing four forms. foundations. • Full Construction Engineering Package -• Integrated Segment Drawings. • Performed calculations for steel thru-girder Construction Engineering. including PCU and Grid Deck Panel Shop Geometrical Control of Casting, Erection, bridge for the I-girder to include stability Erection Method Selection. Drawings. and Procedural Manuals. calculations of the plate truss thru-girders • Erection Method Key Features. • Development and Design of Erection • Casting Curves. under construction and live loading. • Erection Method Details. • Analysis of Construction Loading. Equipment and Falsework. • Performed refined analysis of lateral • Design of specialized launching equipment, • Design of Erection Equipment and • Erection Procedures. bracing system; designed end diaphragms temporary supports and launching Falsework; Erection Procedures. and stiffeners capable of transferring geometry. • Construction Analysis of the Super and • Post-Tensioning Calculations. torsion through this unique application of a Substructure thru-truss girder system. • Casting and Erection Geometry. This project required the complete deck This project utilized an innovative approach for This project was a reconstruction of an Accelerated bridge erection techniques replacement of the superstructure with the bridge caps and precast segments, along existing fuel unloading facility and required all include off-site erection, hydraulic launching minimal night time partial/restricted lane with the development of "specialized erection work to be sequenced from a maximum of 3-7 closures (9 hours) while maintaining 2 lanes systems" that accelerated the construction. Key day closures. The project design was launching and use of existing piers for of traffic. Finley proposed the "means and developed around "accelerated methods" features used for the "accelerated bridge temporary supports. To date, the accelerated methods" required to position the equipment, construction" were off-site precasting, which allowed for minimal down time. In construction methods have only been in the remove the existing deck unit, install the every case, the construction was accomplished specialized self-launching erection gantry with planning phase; however, everyone is replacement unit and reopen traffic. These heavy lift and roller positioning systems. within the allowable windows and without confident of their successful execution. accelerated "means and methods" utilized delay to the unloading of the weekly oil precast concrete, structural steel, deck tankers. removal and substructure repair, precision transport and lifting equipment. This project was highly successful and is being used by VDOT for the continual, urban reconstruction of I-95 through Richmond. Client Reference: Archer Western Client Reference: Slattery, Interbeton, Client Reference: Stephen G White, P.E., Client Reference: Robert Berry, Project Contractors; Bob Lofling, Granite, Project Project Manager, Hudson Construction J.F.White & Perini; Elie Homsi, P.E. (formerly Manager J.F. White Contracting Co. Executive (formerly Archer Western) 6215 E. Perini Proj.Mgr)Flatiron, 1380 Forest Park Consultants, 840 Cooper Street, 4th Floor, 10 Burr Street, Framingham, MA 01701 Sligh Avenue, Tampa, FL 33617; Phone: Circile, Suite 2020, Lafayette, CO 80026 Camden, NJ 08102; Phone: 856-966-8700 **Phone**: 508-879-4700 813-477-6711; Services provided prior to **Phone:** 720-494-8134;*Services provided prior* FINLEY Engineering Group, Inc. **FINLEY Engineering Group, Inc.** joining FINLEY. R. Craig Finley, Jr., P.E. to joining FINLEY. Jerry M. Pfuntner, Jr., P.E. R. Craig Finley, Jr., P.E. Jerry M. Pfuntner, Jr., P.E.



NONCONFORMANCE REPORT

NONCONFORMANCE REPORT				
(W) massi		Date:		
WGIN9		NCR No:		
Contract Name:	Cedar Street Over RTE 9, Wo	ellesley MA		
Contract #:60400	Contractor:			
Subject of NCR:		· · · · · · · · · · · · · · · · · · ·		
Nonconformance Date:	Location:			
Subcontractor Na	e:	•		
Drawings, Submit	ıls			
Poquiromonto				
Requirements:				
	· .			
Nonconformance:		·		
	Υ.			
Initiator:		Date:		
Disposition/Action				
Authorized By:		Date:		
Action	MHD Authorized Represen	tative Notified Date:		
Use As Is []	F			

Scrap []				
Rework []				
Repair []				
Corrective Action T	`aken:		-	
				,
Corrective Action	Inspection / Verification	Date:		
complete Date.				
·	Accept Reject	Signature:		

masspor

MATERIAL RECEIVING INSPECTION REPORT

CONTRACT	
NAME	Cedar Street Over RTE 9, Wellesley MA
CONTRACT #	CONTRACTOR:
604007	White-Gill-Finley-Rizzo Design Build Team
Date:	
Material	
Received	
Description	
Quantity	
Submittal No.	
Manufacturer,	
Supplier	

RECEIVING INSPECTION REQUIREMENTS

Requirements	Req'd	Rec'd	Sat	Unsat	Requirements	Sat	Unsat	Comments
Material					Physical			
Certification					Condition			
Certificate of					Deckaging			
Compliance					Packaging			
Special Test					Cleanliness			
Reports					Cleaniness			
Manuals					Identification,			
Manuals					Markings			
Owner's					Other:			
Release Form								

Storage &	
Maintenance	
Requirements	

Material Complies with Contractual Requirements	Yes		No
Comments:			
Contractor Representative	•	Date:	
Owner Representative		Date:	

J.F. White Contracting Company





Subcontractor Pre-Mobilization Meeting

Subcontractor:

Meeting Date:

Project Name/ Number:

Subcontractor Start Date:

Topics Covered

J.F. White Orientation (Site Specific & DVD)	Project Competent Person List	
Substance Abuse Policy & Testing	Work Over Water / Water Rescue Plan	
Accident & Incident Reporting requirements	Scaffolding Training & Use	
Pre-planning tasks / JHA / Work plans	Respiratory Protection Plan	
J.F. White Disciplinary policy	Emergency Contact Phone Numbers (employees)	
Hazard Communication "Right to Know"	Project Emergency Phone Numbers	
Fall Protection plan / Fall Rescue plan	Emergency Evacuation Plan	
Crane Program / Lifting & Rigging plans	Emergency Response Plan	
P.P.E. Requirements	Project Specific Topics	
OSHA 10 hour requirement (Cards)		
Excavation & Trenching		\Box
Electrical Safety	· · · · · · · · · · · · · · · · · · ·	
Lock Out / Tag Out		
Hot Work		\Box
Stairways & Ladders		
Confined Space Entry requirements		
Working Around Equipment		
Manlift (Articulating Boom) Training & Use		

Notes / Comments

Subcontractor Representative Signature:

J.F.W. Project Superintendent:

J.F.W. Project Safety Manager:

(Copy to Subcontractor Representative, Subcontractor file, Chief Safety Officer)

J.F. White Contracting Company





Foreman's Safety Review- Daily

Project Name: Wellesley- Cedar Street over Route 9

Date:

Work	Activi	ty:
------	--------	-----

1) PERSONAL PROTECTIVE EQUIPMENT 7) FALL PROTECTION YES NO N/A YES NO N/A Hard Hats (approved, inspected, good condition) Edges/openings above six (6) feet protected Proper Eye Protection (safety glasses, goggles, shield) Proper guardrails (42" ± 3" tall / support 200 lbs.) Retro-Reflective Vest Fall Arrest System used (see requirements- section 1) Respiratory Protection (respirator) Holes Covered/ Covers marked & secured Hearing Protection (Ear Plugs, Ear Muffs) Fall Arrest System: 8) EXCAVATIONS YES NO 1) Harness (Inspected, Trained, Worn Properly) Utilities located/ marked/ supported Proper protection system (slope/bench/shield/ box/support) 2) Lanyard (Inspected, Proper to avoid striking lower level) 3) Anchorage Point (Support 5000 lbs. per employee) Proper access (ramp/ladder within 25 feet) Proper Clothing/ Footwear (Long Pants, Shirt, Boots) Spoil pile more than two feet (2') from trench Other Protective Clothing required (welding, gloves, etc...) 9) TOOLS YES NO N/A 2) GENERAL CONDITIONS YES NO N/A Guards in place Good Housekeeping (Barrels available/used) Proper training for tools being used Proper Access/ Egress to work location Tools in good condition and used properly Exposure to Vehicle traffic (Jersey Barriers/ Barrels) Exposure to Pedestrian traffic (Ped. Access/ Walkways) 10) SCAFFOLDING YES NO N/A Exposure to Fall Hazard Scaffold inspected (Inspection card in place/signed) Exposure to Slip or Trip Hazard (snow,ice, spill) Personnel received "Scaffold User training" **Proper Lighting 11) CONFINED SPACE** Proper Ventilation NO YES N/A Walking/ Working surface able to support personnel Rescue/ Retrival System inspected/set-up Walking/ Working surface able to support equipment Air monitoring completed/ ongoing Personnel "Confined Space Entry" trained **3) FIRE PROTECTION** YES NO N/A 'Confined Space Permit" required/completed Fire Extinguishers available/ inspected/ charged 12) WORK OVER WATER Flammables /Combustibles stored/ secured properly YES NO N/A Personal Floatation Device (Available/Used) "Hot Work" Permit required/ completed Rescue Skiff immediately available Ring Buoy w/90' of line available 4) CRANE SET-UP YES NO N/A Set-up on firm, level surface (able to support crane) Swing Radius Protection set-up **13) RIGGING EQUIPMENT** YES NO N/A Proper outrigger use (extended/ mats/ pads) Inspected prior to use/ free of visible defects No personnel allowed under load Capacity for load to be lifted Signal Person designated/ Tag lines used Protected from damage (sharp edges, crushing) 5) LADDERS 14) WELDING & TORCH CUTTING YES NO N/A YES NO N/A Tied Off (Secured top & bottom) Proper storage (cages 20' apart, cylinders secured) Flash arrestors at torch & regulator Proper angle (4:1) Inspected/ Free of defects No cylinders below grade Extend three (3) feet above working surface Hoses free of damage/ protected from damage **15) EMPLOYEE INFORMATION** 6) ELECTRICAL YES NO N/A YES NO N/A Extension cords free of damage (cuts, missing ground) New Employee on Crew: NAME: Extension cords protected from damage GFCI outlets used/ tested prior to use Injury to member of Crew: NAME: Foreman: Crew:

J.F. White Contracting Company





Weekly Project Safety Inspection Checklist

Project Name/ Number: Wellesley- Cedar St over Route 9 Date: / / /

Workzone(s) Inspected:____ Inspection Completed By:__

The primary reason for conducting weekly project safety inspections is to determine potential hazards and the proper corrective action. Any hazard, which cannot be immediately corrected, shall be noted and forwarded to project management personnel responsible for the corrective action. Also, note all safety-related observations.

1) HOUSEKEEPING	YES	NO	N/A	7) WELDING & TORCH CUTTING	YES	NO	N/A
Material Storage- Orderly & Free of trip hazards?				Proper Storage? (Cylinders in Cages/ Non-Flammable restraint)			T
Adequate Trash Containers provided?				Flash Arrestors at Regulators?			
Proper disposal of Trash/ Waste/ Construction debris?				Flash Arrestors at Torches?			
Workzone/ Laydown area free of Trash/ Debris?				Cylinders In-Use? (Proper Cart/ Upright/ Properly Secured)			1
Adequate Illumination? (General lighting/ Task lighting)	1			No Cylinders Allowed Below Grade? (Excavation/ Tunnel)		[†
Adequate Ventilation? (Natural/ Mechanical)	1			Hoses Used Properly? (No Defects/ Protected from damage)			
				Regulators Free of Defects?			
2) FIRE PROTECTION	YES	NO	N/A	Welding Cables Free of Defects? (NO repairs/ defects/			
Suitable Fire Extinguishers Available? (Type A,B,C,D)				splices allowed within 10 feet from electrode)			
Fire Extinguishers Inspected/ Charged?				Welder Properly Grounded?			
Proper Flammable/ Combustible storage? (Available/ Used)				Proper "Hot Work" precautions/ permits in use?			
UL Approved Safety Cans? (flashback screens installed)							· · · · ·
Fire Lanes Maintained/ Free of Obstructions?				8) RIGGING EQUIPMENT	YES	NO	N/A
Proper "Hot Work" precautions/permits in use?				CHAIN SLINGS			
>				Free of Visible Defects? (Streched/ Gouged/ Bent/ Melted)			[
3) LADDERS & STAIRWAYS	YES	NO	N/A	Proper I.D. Tag Attached? (Legible)			
Installed where required? (19" change in elevation)				Inspected Prior to Use?			
Properly secured?	Ι			If DamagedRemoved From service? (Destroyed/ Discarded)			
Access & Egress Unobstructed?	1			WIRE ROPE SLINGS			
Proper Stairrail/ Siderail Height? (36" above tread/ landing)				Free of Visible Defects? (Birdcaged/ Kinked/ Broken Strands)			Γ
Landings where required? (every 12'/ Min. of 30" wide)				Proper I.D. Tag Attached? (Legible)			
Equipment Inspected/ Free of Defects?				Inspected Prior to Use?			
Inspection Program? (Maintained/ Competent Person)				If DamagedRemoved From service? (Destroyed/ Discarded)			
· · · · · · · · · · · · · · · · · · ·				SYNTHETIC SLINGS	-		
4) PERSONAL PROTECTIVE EQUIPMENT	YES	NO	N/A	Free of Visible Defects? (Torn/ Cut/ Burned/ Punctured/ Melted)			
Hardhats? (Provided/ Used/ Inspected)				Proper I.D. Tag Attached? (Legible)			
Proper Eye Protection? (Glasses/ Goggles/ Faceshield)				Inspected Prior to Use?			
High Visibility Clothing (Retro-Reflective /Proper class)				If DamagedRemoved From service? (Destroyed/ Discarded)			
Proper Employee Footwear/ Clothing?				RIGGING HARDWARE			
Proper Hearing Protection? (Available/ Used/ Trained)				Free of Visible Defects? (Bent/ Twisted/ Distorted/ Streched/			
Proper Respiratory Protection? (Available/ Used/ Trained)				Elongated/ Cracked/ Broken/ Nicked/ Gouged/ Pitted/ Loose/			2
Respiratory Portection Program? (Medical PFT/ Fit testing)				Missing Parts/ Heat Damaged- Welding Spatter/ Arc Strike			
Seatbelts in Use? (Trucks/ Equipment)				Corroded/ Etc)			
				Manufacturer/ Rated Load I.D. Legible?			
5) FALL PROTECTION	YES	NO	N/A				
Leading edges/ Openings above six (6) feet protected?				9) EXCAVATIONS	YES	NO	N/A
Appropriate Guardrail System? (Top 42" ± 3" / 200 lbs. loading)				"Excavation Inspection Checklist- Daily" Completed by CP?			
Appropriate Safety Net Systems? (1926.502(c))				Dig Safe/ Utilities Contacted?			
Personal Fall Arrest Systems? (1926.502(d))				Proper Access & Egress Established? (Stairs/ Ladders/ ramps)			
Full Body Harness/ Lanyard? (Trained/ Inspected/ Used)				Proper Protection Provided? (Slope/ Bench/ Support/ Shield)			
Proper Anchorage Point? (5000 lb. capacity)				Spoil Piles kept more than two (2) feet from edge?			
Six (6) Foot fall Protection rule? (In effect/ Communicated)				"Jackie's Law" permit acquired from municipality?			
							h
				10) WORK OVER WATER	YES	NO	N/A

					 110	1 1/1 1
6) ELECTRICAL	YES	NO	N/A	PFD Use? (Available/ Used properly/ Trained)		
GFCI Installed? (Used/ Inspected/ Inspection protocol)				Rescue Skiff Immediately Available for Use? (Proper equipment)		
Power & Tool Cords Free of Defects? (Cuts/ Ground Prongs)				Rescue Skiff Inspected/ Good Working Condition?		
Power Cords Protected from damage?				Proper equipment on Skiff? (Ring Buoy/ First Aid Kit/ Oars)		
Power Tool Guards Installed?				Site Specific Work Over Water Plan Completed?		
Temporary Power & Ligting Systems Installed/ Maintained?				Site Specific Water Rescue Plan Completed? (Training)		

1












CIVIL/STRUCTURAL ENGINEERS

CLIENTJF WhitePROJECTWELLESLEYBRIDGE NO.W13015

SUBJECT .

PAGE _____ OF ____ CALC BY __JPG CHECK BY _____ DATE _JULY 2010

DEAD LOADS



CLIENT _____ JF White

WELLESLEY

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PROJECT WELLESI BRIDGE NO. W13015

SUBJECT ____

CIVIL/STRUCTURAL ENGINEERS

PAGE _____OF _____ CALC BY __JPG _____ CHECK BY _____

DATE JULY 2010

NON COMPOSITE D				
NUN-COMPOSITE D	EAD LOADS		W13015 PROPC	DSED
Number of Beams = 8		Span Length =	82.5417	
Roadway Width = 39	.0000'	Beam Spacing =	6.7500'	
Deck Thickness = 8.0	0000"	Wearing Surface Thickness =	3.0000"	
Utilities Weight = 150	0.0000'	Flange Width =	15.5650"	
BEAM I SIDEWALK				
DECK:	(326.6/(8x12)+	3.375') x 8.00" /12	x 150 pcf =	678 plf
HAUNCH: 2	.0" HAUNCH @ BRGS	I.O" HAUNCH @ MID SPAN	,	12 plf
DIAPHRAGMS:	0	Ũ	ASSUME =	15 plf
UTILITES:			UTILITES =	75 plf
		Be	eam NCDL =	780 plf
BEAM 2 I ST INTERI	OR			, 00 F
DECK:		6.750' x 8.00"/12	$x \downarrow 50 pcf =$	675 plf
HAUNCH: 2	.O" HAUNCH @ BRGS	LO" HAUNCH @ MID SPAN	x 100 por	24 plf
DIAPHRAGMS:			ASSUME =	25 plf
UTILITES:			LITILITES =	Z5 plf
0 1121 201		Be	2 NCDL =	799 plf
BFAM 3 - BFA				700 pi
DFCK:		6 750' x 8 00"/12	$x \downarrow 50 \text{ pcf} =$	C75 plf
HALINCH: 2	O" HALINCH @ BRCS		x 100 per	24
	.U TRUNCH @ DRGJ	1.0 HAUNCH @ MID SI AN	ACCLINE	24 plf
			AJJUNE =	25 plf
OTILITES:			OIILIIE5 =	<u>U pit</u>
BEAM 9 LOT INTERI	OP	De	am 3 NCDL =	724 pit
DECK-	UN		x 150 met -	C75
		6.750 x 0.00 712	x + 50 pct =	675 pir
	.U" HAUNCH @ BRGS	I.O. HAUNCH @ MID SPAN		24 plt
			ASSUME =	25 plt
UTILITES:		_	UTILITES =	<u>O plf</u>
		Be	am 9 NCDL =	724 plf
BEAM TO EXTERIOR S	DAFELY CURB			
DECK:	(326.6/(8x12)+	3.375') x 8.00" /12	x 150 pcf =	678 plf
HAUNCH: 2	.O" HAUNCH @ BRGS	I.O" HAUNCH @ MID SPAN		12 plf
DIAPHRAGMS:			ASSUME =	15 plf
UTILITES:			UTILITES =	<u>O plf</u>
		Bear	m IONCDL =	705 plf

7

JF White CLIENT _

BRIDGE NO. W13015

PROJECT

SUBJECT ____

WELLESLEY

.

CALC BY JPG

СНЕСК ВУ

DATE JULY 2010

SUPERIMPOSED DEAD	LOADS	907 1 102	/1 4 4 v	W13015 F	ROPOSED
BARRIER		679 0 m2	/144 x	150 pcl =	707 pli
SCREEN (1)		675.0 112	BRIDGE MAN		21 plf
WEARING SURFACE	39 1250	× 3 00"	/12 v	150 pcf =	LACT plf
SIDEWALK	00.1200	1130 8 m2	/12 ^	150 pcl =	1 78 plf
		1150.0 m2	/1 -1 -1 x	100 pcr =	1170 pi
BFAM I					
SIDEWALK		1007 plf	60% =	604 plf	
BARRIER & SCREEN	(707 plf	+ 21 plf x	60% =	437 plf	
WEARING SURFACE:	(, - , 1, ,	1467 plf	/8 =	183 plf	
			, -	1 225 plf	
BEAM 3 THROUGH	BEAM 9			1	
SIDEWALK		1007 plf x	40%/6 =	67 plf	
SIDEWALK	l x	1178 plf x	40%/6 =	79 plf	
BARRIER	2 x	707 plf x	40%/6 =	94 plf	
SCREEN	2 x	21 plf x	40%/6 =	3 plf	
WEARING SURFACE:		1467 plf	/8 =	183 plf	
				426 plf	
BEAM IO				1	
SIDEWALK		78 plf	60% =	707 plf	
BARRIER & SCREEN	(707 plf	+ 2 plf) x	60% =	437 plf	
WEARING SURFACE:	- 1	1467 plf	/8 =	183 plf	
		·		1327 plf	
	SUPERIMPOSED DEAD SIDEWALK BARRIER SCREEN (1): WEARING SURFACE: SIDEWALK BARRIER & SCREEN WEARING SURFACE: BEAM 3 THROUGH SIDEWALK BARRIER SCREEN WEARING SURFACE: BEAM 10 SIDEWALK BARRIER & SCREEN WEARING SURFACE:	SUPERIMPOSED DEAD LOADSSIDEWALKBARRIERSCREEN (1):WEARING SURFACE:SIDEWALKBEAM_LSIDEWALKBARRIER & SCREENWEARING SURFACE:BEAM_STHROUGHBEAM_LSIDEWALKSIDEWALKBARRIERSIDEWALKSIDEWALKSIDEWALKSIDEWALKBARRIERSCREENWEARING SURFACE:BEAM_LOSIDEWALKBARRIER & SCREENSIDEWALKBARRIER & SCREENVEARING SURFACE:	SUPERIMPOSED DEAD LOADSSIDEWALK967.1 m2BARRIER679.0 m2SCREEN (1):39.1250'WEARING SURFACE:39.1250'SIDEWALK1 30.8 m2BEAM 11007 plfSIDEWALK1 007 plfBARRIER & SCREEN(707 plfWEARING SURFACE:1 007 plfSIDEWALK1 xBEAM 3THROUGH BEAM 9SIDEWALK1 xSIDEWALK1 xSIDEWALK1 xSIDEWALK2 xSIDEWALK2 xSCREEN2 xWEARING SURFACE:1467 plfBEAM 10SIDEWALKSIDEWALK1 178 plfBARRIER & SCREEN(707 plf+ 21 plf) xWEARING SURFACE:1467 plf	SUPERIMPOSED DEAD LOADS. SIDEWALK 967.1 in2 $/144 \text{ x}$ BARRIER 679.0 in2 $/144 \text{ x}$ BARRIER 679.0 in2 $/144 \text{ x}$ SCREEN (1):BRIDGE MANWEARING SURFACE: 39.1250° $x 3.00^{\circ}$ $/12 \text{ x}$ SIDEWALK 130.8 in2 $/144 \text{ x}$ BEAM_LSIDEWALK 1007 plf $60\% =$ BARRIER & SCREEN $(707 \text{ plf} + 21 \text{ plf}) \text{ x}$ $60\% =$ WEARING SURFACE: 1 x 1007 plf x $40\%/6 =$ BEAM_3THROUGH BEAM 9 300% $40\%/6 =$ SIDEWALK 1 x 1178 plf x $40\%/6 =$ BARRIER 2 x 707 plf x $40\%/6 =$ SIDEWALK $1 \text{ 40\%}/6 =$ $40\%/6 =$ BARRIER 2 x 21 plf x $40\%/6 =$ BARRIER 2 x 21 plf x $40\%/6 =$ BARRIER 2 x 21 plf x $40\%/6 =$ BARRIER 2 x 21 plf x $40\%/6 =$ BEAM_LO 1178 plf $60\% =$ BARRIER & SCREEN $(707 \text{ plf} + 21 \text{ plf}) \text{ x}$ $60\% =$ WEARING SURFACE: 1467 plf $78 =$	SUPERIMPOSED DEAD LOADS.WI 3015 FSIDEWALK967.1 in2/144 x150 pcf =BARRIER679.0 in2/144 x150 pcf =SCREEN (1):BRIDGE MANUAL 9.1.1 =WEARING SURFACE:39.1250'x 3.00"/12 x150 pcf =SIDEWALK1130.8 in2/144 x150 pcf =BEAM ISIDEWALK1007 plf60% =604 plfBARRIER & SCREEN(707 plf + 21 plf) x60% =437 plfVEARING SURFACE:1 467 plf/8 =163 plfSIDEWALK1 x1007 plf x40% /6 =67 plfBEAM 3THROUGHBEAM 9SIDEWALK1 x107 plf xSIDEWALK1 x1007 plf x40% /6 =39 plfBEAM 11 x1007 plf x40% /6 =39 plfSIDEWALK1 x1178 plf x40% /6 =39 plfGOREEN2 x21 plf x40% /6 =3 plfWEARING SURFACE:1 467 plf/8 =163 plfBEAM 10SIDEWALK1178 plf60% =437 plfSIDEWALK1178 plf60% =707 plfBARRIER & SCREEN(707 plf + 21 plf) x60% =437 plfBEAM 10I178 plf60% =437 plfSIDEWALK1178 plf60% =437 plfBARRIER & SCREEN(707 plf + 21 plf) x60% =437 plfBARRIER & SCREEN(707 plf + 21 plf) x60% =437 plfBARRIER & SCREEN(707 plf + 21 plf) x60% =437 plfBARRIER & SCREEN </td

EIGHT BEAMS 6'-9" SPACING PER FINLEY PROPOSAL

SUMMA	ARY OF DEAD	LOADS
	NCDL	SDL
BEAM I	780 plf	1225 plf
BEAM 2	799 plf	426 plf
BEAM 3	724 plf	426 plf
BEAM 4	724 plf	426 plf
BEAM 5	724 plf	426 plf
BEAM G	724 plf	426 plf
BEAM 7	724 plf	426 plf
BEAM 8	724 plf	426 plf
BEAM 9	724 plf	426 plf
BEAM IO	705 plf	1327 plf

GILL ENGINEERING ASSOCIATES, INC. 85 FRANKLIN STREET, SUITE 2, NEEDHAM, MA 02494

PAGE _____ OF _____

CIVIL/STRUCTURAL ENGINEERS

CIVIL/STRUCTURAL ENGINEERS

CLIENT ____ JF White PROJECT _____ WELLESLEY BRIDGE NO. _____ W13015

SUBJECT .

PAGE ______ OF _____ CALC BY _____ CHECK BY _____ DATE __JULY 2010

DECK ANALYISIS

JF White CLIENT _ PAGE _____ OF _____ **GILL ENGINEERING ASSOCIATES** WELLESLEY CALC BY JPG PROJECT BRIDGE NO. W13015 CHECK BY _ DATE JULY 2010 SUBJECT . CIVIL/STRUCTURAL ENGINEERS CONCRETE SLAB RATING PROGRAM BY THE LOAD FACTOR DESIGN METHOD INPUT PARAMETERS: Town: WELLESLEY Client: MDOT DB Road: CEDAR STREET Date: Jul-10 Over: ROUTE 9 Calc By: JPG Bridge No. W13015 F'c = 4000 ps. Fy= 60.000 ksi Slab Thick = 8.000 in Main Steel Size Top = #5 Bottom Cover = 1.500 in Top Sapcing = 7.000 in Top Cover = 2.000 in Main Steel Size Bot = #5 Bottom Spacing = 7.000 in Beam Spacing = 81.000 in Flange Width = 15.500 in W.5. Thickness = 3.000 in W.5. = Wearing Surface assumed weight = 150 pcf Effective Span = 6.104 ft For Effective Span - See MHD Bridge Manual DWG 7.1.2 Losses Top Steel = 0%Bottom Steel = 0%Steel Losses in Percentage Top Concrete = 0.000 in Bottom Concrete = 0.000 in Concrete Losses in Inches (beyond cover) SLAB DESIGN PARAMETERS: Ес = 3604997 ры Es = 29000000 psi 10p Bar 0 = 0.625 in $d_{\rm T} = 5.688$ m Top Bar Area = 0.31 in 2d_B = 6.188 m As Top = 0.53 m2/ftBot Bar $\emptyset = 0.625$ m Bot Bar Area = 0.31 in2 $\frac{\text{JT:}}{M_{\text{DL}}} = 0.512 \text{ k-ft} \quad M_{Dl} = \frac{Wl^2}{10} \quad L = EffectiveSpan$ $W = Deck_{Ol} + W.S._{Dl}$ DEAD LOAD MOMENT: As Bot = 0.53 m2/ftLIVE LOAD MOMENTS: AASHTO 3.24.3.1 - Main Reienforcement Perpendicular to Traffic Where P HS14 = 11.20 k $M_{LL} = \left(\frac{S+2}{32}\right)P$ S = EffectiveSpan P H520 = 16.00 k P H525 = 20.00 k P = WheelLoad per Massachusetts CMR maximum axle load is limited P Type 3 = 8.50 k to 11.2 tons this equates to an H14 Truck axle P Type 352 = 7.75 k P User Defined = .11.20 k

Also consider tandem axles per MHD Bridge Manual 7.2.3.9 from 1983 AASHTO Maint. Manual For Spans 2' to 7' $M_{LL} = 0.2 \left(\frac{P}{E}\right) S^{\text{Applied to Type 3, Type 352}}$ and User Defined Wheel Load Above

E=0.36 5 + 2.58 For Spans Greater than 7' E=0.063 S + 4.65 Continuity Factor = 0.8 AASHTO 3.24.3.1 allows a 20% reduction of spans continuous over 3 or more

lmpact = 1.3

Single Axle Loading M_{LL} H514 = 2.950 k-ft M_{LL} H520 = 4.214 k-ft M_{LL} HS25 = 5.268 k-ft M_{LL} User = 2.950 k-ft

 $p_E = \phi M_N - 1.3 M_{DL}$ p_E

Tandem Axle Loading M_{LL} Type 3 = 2.824 k-ft M_{LL} Type 3s2 = 2.575 k-ft M_{LL} User = 3.721 k-ft

 $\phi M_N - 1.3 M_{DL}$

Impact is typically 1.3 for decks, howerver user input is allowed

E =

4,778

RATING EQUATIONS

JF White CLIENT _ PAGE _____ OF _____ **GILL ENGINEERING ASSOCIATES** WELLESLEY CALC BY JPG PROIECT W13015 BRIDGE NO. CHECK BY DATE JULY 2010 SUBJECT . CIVIL/STRUCTURAL ENGINEERS $RF_{INV} = \frac{\phi M_N - 1.3M_{DL}}{1.3(1.67M_{LL})}$ $RF_{OPER} = \frac{\phi M_N - 1.3M_{DL}}{1.3M_{LL}}$ Based upon AASHTO Based upon AASHTO Table 3.22.1 A Load Group IB Table 3.22.1A Load SECTION CAPACITY: $\phi M_N = \phi \left[A_S F_Y \left(d - \frac{a}{2} \right) \right]$ AASHTO 8.16.3.2 WHERE $a = \frac{A_s F_y}{0.85 F_c b}$ EQ 8-16 \$ 8-17 per AASHTO MCEB 6.6.3.2 need to limit steel available to 75% pb $\rho_b = \frac{0.85\beta_i f_c}{f_y} \left(\frac{87,000}{87,000 + f_y} \right)$ BI = 0.85 **ρ**b = 0.0285 Positive Negative 75% pb = 0.0214 As $pb = 2.12 \ln 2/\text{ft} 1.95 \ln 2/\text{ft}$ As $75\% \, \rho b = 1.59 \, \ln 2/\text{ft}$ 1.46 in2/ft Φ= 0.90 AASHTO 8.16.1.2.2 Positive Negative 0.53 in2/ft As = As = 0.53 in2/ft Fy = 60.000 ksi 6.188 in d = d = 5.688 in F'C =4.000 ksi a = 0.7815 a = 0.7815 ↑ Mn = 166.3 k-in ⊕ Mn = 152.0 k-in LIVE LOAD RATING Inventory Level - H514 Inventory Level - H520 Positive Negative Negative Positive RF(INV) =2.06 1.87 RF(INV) =1.44 1.31 Operating Level - HS14 Operating Level - HS20 Positive Negative Positive Negative RF (OPER) = 3.44 3.13 RF (OPER) = 2.41 2.19 Inventory Level - HS25 Inventory Level - User Positive Positive Negative Negative RF (INV) = 1.15 1.05 RF(INV) =2.06 1.87 Operating Level - HS25 Operating Level - User Positive Negative Negative Positive RF (OPER) = 1.93 1.75 RF (OPER) = 3.44 3.13 Inventory Level - Type 3 Inventory Level - Type 352 Positive Negative Positive Negative RF(INV) =2.15 1.96 RF (INV) = 2.36 2.15 Operating Level - Type 352 Operating Level - Type 3 Positive Negative Positive Negative RF (OPER) = 3.59 3.27 RF (OPER) = 3.94 3.59 Inventory Level - User Tandem LFD Rating Summary Positive Negative RF (INV) = 1.63 1.49 Inventory Operating Operating Level - User Tandem H514 47.2 T 78.9 T Positive Negative H20 26.2 T 43.8 T RF (OPER) = 2.73 2.48 47.2 T H520 78.9 T HS25 47.2 T 78.9 T Type 3 48.9 T 81.7 T Type 352 77:3 T 129.I T User 21.0T 35.0 T User Tandem 16.6 T 27.81

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LIVE LOAD DISTRIBUTION FACTORS

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PROPOSED LIVE LOAD DISTRIBUTION FACTORS - SHEAR/REACTION INTERIOR BEAMS





$$LLDF_{M} = \frac{5}{4 + 0.255} = \frac{6.750'}{4 + 1.6875} = 1.187$$

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PROGRAM 114 OUTPUT INTERIOR STRINGER

CIVIL/STRUCTURAL ENGINEERS

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	CONSTANTS A DECADA DE DE DECADA DE DE DECADA DE DE DECADA DE	BM ID NS LL CLASS NONC-RC-EXWDLNC WDLC WSW L INTERIOR 2 HS25 0 0 1 0.7990 0.4260 0.0000	E BM SPAC ZR INF 0000 29.0000 6.7500 0.00000	WAL BEAM CONSTANTS	DEM DEVE DED N 3N SKIP-TLM LL CYCLES 2 1.2270 1.5320 1.2270 8 24 001 500000	FU FC FS .0000 58.0000 1.6000 24.0000	SPAN 1 INPUT DATA	M S L EM TPLS BPLS CS 3 1 0 · 41.5417 1.0000 0.0000 0.0000 2.0000	PC WPN WPC WF N G 0000 0.00000 0.00000 1 0	BEAM SECTION AND LOADS	RANGE 1 RANGE 2 RANGE 4 RANGE 5 RANGE 6 RANGE 7 RANGE 8 RANGE 9 RANGE 10 RANGE 11	41.542 14.980 46.700 1900.0 0.000	28.700 41.542 81.000 72.000 8.000 0.000 0.000 0.000 0.000 0.000		
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BEAM	PN	MDLNC	NAW	TOT.NC *	PC	WDLC	WPC	TOT.C *	SWK.+	SWK	+ T+TT	* - I+TT	MAX.+	
8.9	0.0	44.8	0.0	53.7	0.0	24.8	0.0	24.8	0.0	0.0	191.1 T	-25.8 T	269.6	
15.1	0.0	75.8	0.0	6.06	0.0	42.2	0.0	42.2	0.0	0.0	318.6 T	-51.6 T	451.7	
18.5	0.0	93.1	0.0	111.6	0.0	52.2	0.0	52.2	0.0	0.0	385.4 T	-77.4 T	549.2	
19.2	0.0	96.5	0.0	115.7	0.0	54.9	0.0	54.9	0.0	0.0	412.0 T	-103.2 T	582.7	
17.1	0.0	86.2	0.0	103.3	0.0	50.3	0.0	50.3	0.0	0.0	408.2 T	-129.0 T	561.8	
12.3	0.0	62.0	0.0	74.4	0.0	38.3	0.0	38.3	0.0	0.0	391.8 T	-154.8 T	504.4	
4.8	0.0	24.1	0.0	28.9	0.0	18.9	0.0	18.9	0.0	0.0	327.0 T	-180.5 T	374.8	•
-5.5	0.0	-27.6	0.0	-33.1	0.0	-7.8	0.0	-7.8	0.0	0.0	225.2 T	-206.3 T	184.3	•
-18.5	0.0	-93.1	0.0	-111.6	0.0	-41.8	0.0	-41.8	0.0	0.0	81.5 T	-232.1 T	-71.9	•
-34.3	0.0	-172.4	0.0	-206.6	0.0	-83.2	0.0	-83.2	0.0	0.0	0.0 L	-261.2 T	-289.9	•
-18.5	0.0	-93.1	0.0	-111.6	0.0	-41.8	0.0	-41.8	0.0	0.0	48.0 T	-144.1 T	-105.4	•
-5.5	0.0	-27.6	0.0	-33.1	0.0	-7.8	0.0	-7.8	0.0	0.0	138.8 T	-117.9 Т	98.0	•
4.8	0.0	24.1	. 0.0	28.9	0.0	18.9	0.0	18.9	0.0	0.0	247.5 T	-103.2 T	295.3	
12.3	0.0	62.0	0.0	74.4	0.0	38.3	0.0	38.3	0.0	0.0	322.5 T	-88.5 T	435.2	
17.1	0.0	86.2	0.0	103.3	0.0	50.3	0.0	50.3	0.0	0.0	354.8 T	-73.7 T	508.4	
19.2	0.0	96.5	0.0	115.7	0.0	54.9	0.0	54.9	0.0	0.0	367.1 T	-59.0 T	537.7	
18.5	0.0	93.1	0.0	111.6	0.0	52.2	0.0	52.2	0.0	0.0	350.8 T	-44.2 T	514.6	
15.1	0.0	75.8	0.0	9.06	0.0	42.2	0.0	42.2	0.0	0.0	296.3 T	-29.5 T	429.4	
8.9	0.0	44.8	0.0	53.7	0.0	24.8	0.0	24.8	0.0	0.0	181.6 Т	-14.7 T	260.0	
				33.8			×	21.0	0.0	0.0	336.0	-178.2	390.8	
				26.8				18.0	0.0	0.0	236.3	-102.1	281.1	

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)	GES (PS		BO	STE	6162 10516 13145 13145 14635 15260 15526 15526 24006 20411 14838	12357	9085 12147 16589 19440 20271 20154 18686 15414 9286	14607 24324	16006 16006	
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	ACTUAL	D.L.	TOP	CONC.	409 827 8233 823 00 00 00	0		689 0	0 0 7	
		OAD,	BOT.	STEEL	-3349 -5676 -6982 -6982 -7266 -7266 -7266 -12563 -2263 1931 1931	13712	7257 1931 -2263 -5329 -5329 -5329 -7265 -7765 -7748 -7748	-2282 -2590	-2120 -2120	
		DEAD I	TOP	STEEL	2768 4686 5756 5976 5347 5347 2369 2263 11931	13712		1789 2590	2120	
	Ŀ	TOTAL	TOP	CONC.	0 0 0 0 0 0 1 8 8 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	і 0	000000000	27 0	00	
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			ç		¢		ALL VLL	E LOADS	*	MAXIMUM	LL SHEAF
BEAM	N	NM	NJW	TOT.C	TOT. DL *	SWK.+	SWK	LL+I +	* - T+TT	V OR R	RANGE
2.476	0.000	12.447	0.000	6.845	21.767	0.000	0.000	61.795 T	-6.209 T	83.562	68.00
1.815	0.000	9.128	0.000	5.075	16.018	0.000	0.000	46.011 T	-6.209 T	62.029	52.22(
1.155	0.000	5.809	0.000	3.305	10.269	0.000	0.000	38.347 T	-8.313 L	48.616	46.66(
0.495	0.000	2.489	0.000	1.536	4.520	0.000	0.000	30.922 T	-14.206 T	35.442	45.128
0.165	0.000	-0.830	0.000	-0.234	-1.229	0.000	0.000	24.107 T	-18.279 T	22.878	42.386
0.825	0.000	-4.149	0.000	-2.004	-6.978	0.000	0.000	17.840 T	-23.555 T	-30.533	41.395
1.485	0.000	-7.468	0.000	-3.773	-12.727	0.000	0.000	12.108 T	-30.480 T	-43.207	42.588
2.145	0.000	-10.787	0.000	-5.543	-18.476	0.000	0.000	7.597 T	-38.128 T	-56.604	45.726
2.806	0.000	-14.107	0.000	-7.313	-24.225	0.000	0.000	4.614 T	-44.846 T	-69.070	49.460
3.466	0.000	-17.426	0.000	-9.082	-29.974	0.000	0.000	2.064 T	-51.680 T	-81.654	53.744
1.126	0.000	-20.745	0.000	-10.852	-35.723	0.000	0.000	0.000 L	-65.856 T	-101.578	65.856
3.252	0.000	41.490	0.000	21.704	71.446	0.000		74.421 T		145.867	
1.126	0.000	20.745	0.000	10.852	35.723	0.000	0.000	67.578 T	0.000 T	103.300	67.578
3.466	0.000	17.426	0.000	9.082	29.974	0.000	0.000	53.956 T	-1.649 T	83.930	55.605
.806	0.000	14.107	0.000	7.313	24.225	0.000	0.000	47.443 T	-3.785 T	71.668	51.228
2.145	0.000	10.787	0.000	5.543	18.476	0.000	0.000	40.458 T	-6.353 T	58.934	46.811
L.485	0.000	7.468	0.000	3.773	12.727	0.000	0.000	33.194 T	-10.291 T	45.921	43.486
.825	0.000	4.149	0.000	2.004	6.978	000.0	0.000	25.958 T	-15.523 T	32.936	41.481
.165	0.000	0.830	0.000	0.234	1.229	0.000	0.000	18.363 T	-21.478 T	-20.249	39.841
.495	0.000	-2.489	0.000	-1.536	-4.520	000.0	0.000	14.004 T	-28.147 T	-32.667	42.151
155	0.000	-5.809	0.000	-3.305	-10.269	0.000	0.000	8.309 L	-35.668 T	-45.937	43.977
815	0.000	-9.128	0.000	-5.075	-16.018	0.000	0.000	4.529 L	-43.706 T	-59.724	48.235
.476	0.000	-12.447	0.000	-6.845	-21.767	0.000	0.000	3.549 T	-60.069 T	-81.836	63.618

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CIVIL/STRUCTURAL ENGINEERS

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BEARINGS

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DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION MASSACHUSETTS HIGHWAY DEPARTMENT



BERNARD COHEN SECRETARY

LUISA PAIEWONSKY COMMISSIONER

June 27, 2008

Joseph P. Gill, P.E., President Gill Engineering Associates, Inc. 85 Franklin Street – Suite 2 Needham, MA 02494

Dear Mr. Gill:

Enclosed is the Attachment H, which certifies that your Affirmative Action Plan has been approved. This certification will be in effect from June 27, 2008 through June 27, 2010.

Please contact this office before your firm's certification anniversary date in order to re-certify.

Should you have any question or concerns, please do not hesitate to contact me in writing or by telephone at 617-973-7024.

Thank you for your attention to this matter.

Very truly yours, way Rudikoff Anke Director of Civil Rights - External Operations

Enclosure

TEN PARK PLAZA, BOSTON, MA 02116-3969 TELEPHONE: (617) 973-7800 • TELEFAX: (617) 973-8040 • TDD: (617) 973-7306 • WWW.MHD.STATE.MA.US

ATTACHMENT H

AFFIRMATIVE ACTION CERTIFICATE

This is to certify that <u>Gill Engineering Associates</u>, Inc. has an approved AFFIRMATIVE ACTION PLAN with the Massachusetts Highway Department (MHD).

Angela Hemingway Rudikoff Director of Civil of Rights - External Operations

<u>June 27, 2008 - June 27, 2010</u> Date


THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION MASSACHUSETTS HIGHWAY DEPARTMENT



BERNARD COHEN SECRETARY

LUISA PAIEWONSKY COMMISSIONER

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

April 14, 2008

Tetra Tech Rizzo 1 Grant Street Framingham, MA 01701

Attn: Dolores Young Human Resources Coordinator

Dear Ms. Young:

Enclosed is the Attachment H, which certifies that your Affirmative Action Plan has been approved. This certification will be in effect from April 14, 2008 through April 14, 2010.

Please contact this office before your firm's certification anniversary date in order to re-certify.

Should you have any question or concerns, please do not hesitate to contact me in writing or by telephone at 617-973-7024.

Thank you for your attention to this matter.

Very truly your

Angela Hemingway Rudikoff Director of Civil of Rights - External Operations

Enclosure

TEN PARK PLAZA, BOSTON, MA 02116-3969

TELEPHONE: (617) 973-7800 • TELEFAX: (617) 973-8040 • TDD: (617) 973-7306 • WWW.MHD.STATE.MA.US

ATTACHMENT H

AFFIRMATIVE ACTION CERTIFICATE

This is to certify that <u>Tetra Tech Rizzo</u> has an approved AFFIRMATIVE ACTION PLAN with the Massachusetts Highway Department (MHD)₀

Angela Hemingway Rudikoff Director of Civil of Rights - External Operations

<u>April 14, 2008 - April 14, 2010</u> Date

DEBARMENT CERTIFICATION

The undersigned, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- (a) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- (b) has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- (c) does not have a proposed debarment pending; and
- (d) has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any manner involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

[exceptions]

Exceptions will not necessarily result in denial of award, but will be considered in determining proposer responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Note: Providing false information may result in criminal prosecution or administrative sanctions.

Date: July 21, 2010

Signature Kevin K. Egan Executive Vice President

Title

CERTIFICATION OF DUMPING FACILITIES

L Kevin K. Egan

certify that I have adequate dumping facilities at _____ Westford Station

and that these facilities will be used in connection with work undertaken on this Contract and that such use will be in a manner compliant with State and Local requirements.

Signature of Authorized Proposer Representative J.F. White Contracting Company 10 Burr St. Framingham, MA 01701-9020

Name and Address of Proposer

July 21, 2010

Date



Sht No.

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Max. Deck Concrete Tensile Stress = 119 psi Max. Barrier Concrete Tensile Stress = 98 psi

Max. Deck Concrete Tensile Stress = 188 psi Max. Barrier Concrete Tensile Stress = 229 psi

Max. Deck Concrete Tensile Stress = 255 psi Max. Barrier Concrete Tensile Stress = 225 psi





































POWER OF ATTORNEY

Farmington Casualty Company **Fidelity and Guaranty Insurance Company** Fidelity and Guaranty Insurance Underwriters, Inc. St. Paul Fire and Marine Insurance Company St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company **Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America** United States Fidelity and Guaranty Company

Attorney-In Fact No. 222121

TRAVELERS

Certificate No. 003534062

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Jean Correia, Jean M. Feeney, John J. Gambino, Kevin A. White, Mark P. Herendeen, Michael J. Cusack, Natalie Coneys, Susan M. Kedian, Nicole Roy, Kathleen M. Flanagan, and Sandra C. Lopes

of the City of _____Boston Massachusetts _, State of_ _, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

19th

day of

Farmington Casualty Company Fidelity and Guaranty Insurance Company Fidelity and Guaranty Insurance Underwriters, Inc. St. Paul Fire and Marine Insurance Company St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company **Travelers Casualty and Surety Company** Travelers Casualty and Surety Company of America **United States Fidelity and Guaranty Company**

	1977 by	HICORPORATED	SE ALLS	Seal insuration	UNLTY AND BUILTON	HARTFORD	SULTY AUGRATION
State of Connectica City of Hartford ss	ut			By:	George W Thomps	Son, Senior Vice Pres	ident

March

2010

19th day of , before me personally appeared George W. Thompson, who acknowledged On this the himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2011.



aric C. Jetreau

Aarie C. Tetreault, Notary Publi

58440-4-09 Printed in U.S.A.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, and Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kori M. Johanson, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

 $_{20}10$ ALTHOUT ROAD 21st September IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _ day of

Kori M. Johanson, Assistant Secretary













To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.



WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2011.



aris C. Jetreo

Marie C. Tetreault, Notary Public

58440-4-09 Printed in U.S.A.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kori M. Johanson, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 21st September ATTOUT PORDER day of

Kori M. Johanson, Assistant Secretary













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To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

	Accelera	ited Bridge Program			Today's Date:			
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tem #	Contract #	Contractor/Location	681 Form	CT Form	MHD Approval Form	NTP Letter	Action Date: ((Meeting	Commissioner's I Date)
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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpor on the front if space permits. Article Addressed to: J. F. White Contract IO BUCK Strong 	A. Signature Agent Arse Agent Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? Yes If YES, enter delivery address below:
Framing ham, MH Acontrace 6 5281.6	3. Service Type 4 Image: Certified Mail Express Mail Image: Certified Mail Express Mail Image: Certified Mail Registered Image: Certified Mail Receipt for Merchandise Image: Certified Mail C.O.D. Image: Certified Mail C.O.D.
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