



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



February 15, 2019

608352-105924

ADDENDUM NO. 1

To Prospective Bidders and Others on:

SALEM
Federal Aid Project No. TAP-0034(218)X
Construction of Phase 2 of the Canal Street Rail Trail Shared Use Path
from Canal to Roslyn Streets

BIDS TO BE OPENED AND READ: TUESDAY, MARCH 12, 2018 AT 2:00 P.M.
Transmitting revisions to the Contract Documents as follows:

DOCUMENT A00801: Revised pages 119, 130 and 131.

DOCUMENT A00802: Revised pages 4, 5, and 7 through 10.

Please take note of the above, substitute the revised pages for the originals, and acknowledge Addendum No. 1 in your Expedite Proposal file before submitting your bid.

Very truly yours,

Frank Kucharski, P.E.
Construction Contracts Engineer

SP
c: David Shedd

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① ITEM 755.3 NON-TIDAL WETLAND MITIGATION AREA LUMP SUM

Work under these items shall conform to the relevant provisions of Sections 120, 770, 771 and the following:

The work under this Item includes the furnishing of all labor, transportation, equipment, and materials required for protection, construction, and maintenance of Non-Tidal Wetland Mitigation Areas as compensation for proposed impacts to existing wetlands. Tasks include erosion controls, excavation, fine grading, soil and soil amendments as needed, planting, maintenance and removals as shown on the Plans.

The construction and re-vegetation of the replacement areas shall be in accordance with the Plans and Cross Sections and as directed by the Wetland Specialist. Limits of replacement and proposed plantings shown on the plans are approximate and may require adjustment in the field to accommodate actual conditions.

DESCRIPTION OF WORK

To ensure that no loss of wetland function results from the proposed project, Non-Tidal Wetland Mitigation Area(s) characterized by Bordering Vegetated Wetlands (BVW) shall be replicated through constructed wetlands and/or restored by planting in existing wetland areas shown on the Plans. Non-Tidal Wetland Mitigation Areas shall hereafter be referred to as Mitigation Areas. The following minimum area requirements shall be met for each area shown on the Plans.

Replication:

BVW replication area A = 2,323 sf.

Mitigation Areas shall be constructed to meet the requirements of permits and certifications including relevant performance standards of the Massachusetts Wetlands Protection Act (MGL C. 131, s40) and U.S. Army Corps of Engineers.

The Contractor shall be responsible for protection and preservation of natural areas adjacent to the Mitigation Areas both within and outside of the project limits for the duration of the contract period. Access to Mitigation Areas shall be clearly defined in order to minimize damage to existing vegetation and soils. The Contractor shall use duck boards or mats, as necessary, to minimize impacts from foot paths or construction equipment. All labor and materials required for protection and preservation of site shall be incidental to this item.

Damage to soils or vegetation due to trampling, vehicles, storing of materials, debris, or negligence shall be repaired to the satisfaction of the Engineer and at the Contractor's expense.

RELATED ITEMS

The following tasks related to work within the Mitigation Areas shall be paid for under these separate items.

ITEM 755.3 (Continued)

ITEM 755.9 PROFESSIONAL WETLAND SPECIALIST

The Contractor shall retain a qualified Wetland Specialist as per Item 755.9 PROFESSIONAL WETLAND SPECIALIST to coordinate and oversee work under this item. Work performed by the Wetland Specialist shall be paid for under Item 755.9. The Wetland Specialist shall report directly to the Resident Engineer and work independently of the wetland contractor

SUBMITTALS

Photographic Documentation: Prior to any disturbance, clear and legible digital photographs with date and time stamps shall be taken of the existing site conditions including existing wetlands to be impacted, all proposed wetland mitigation sites and reference/model wetland areas, typically an adjacent undisturbed wetland. These shall be submitted to the Engineer by email or portable drive, or as directed by Engineer.

Contractor shall submit the following for approval by the Engineer in consult with the MassDOT Landscape Architect at least sixty (60) days prior to installation. The Contractor shall be responsible for making all submittals to the Engineer in a timely and complete manner.

Soil and soil amendments: Contractor shall submit for approval all sources of soil and other amendments including compost prior to ordering. Off-site sources shall be identified and available for inspection by the Wetland Specialist prior to transport of material to the site to verify that they are likely to be free of invasive plant species including all viable plant parts.

Plants: Confirmation of availability, source of plant material and certification of provenance from the nursery supplier.

Seed: Source, certification of compliance and certification of provenance from supplier shall be submitted and approved prior to ordering materials.

Samples

Cut sheets for erosion controls

Sample(s) of soils and soil amendments tested and accepted, if needed.

MATERIALS

All materials are incidental to this item unless specified otherwise.

Erosion and Sediment Control

Sediment controls shall be sediment barrier or compost filter tubes and paid for under that item.
Erosion control shall be hydromulch or straw mulch as recommended by the Wetland Specialist and approved by the Engineer, and shall be incidental to this item.

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ITEM 755.9 (Continued)**SCOPE OF WORK**

- ① The Wetland Specialist shall be responsible for oversight and monitoring of work associated with Item 755.3 Non-Tidal Wetland Mitigation Area including, but not limited to, the following tasks:
- a. Review environmental permits relevant to wetland replication and ensure compliance through the duration of the contract.
 - b. Evaluate site and conditions prior to construction. Identify and inform the Engineer of unique site conditions that could require adjustments to the schedule, design or construction methods. For example, wildlife nesting, illegal dumping or presence of invasive plant species.
 - c. Review suitability of material submittals prior to submission to the Engineer with copies to MassDOT Landscape Architect.
 - ① d. Participate in site meetings as outlined in Item 755.3 Non-Tidal Wetland Mitigation Area.
 - e. Review erosion controls (within the Mitigation Areas only), monitor construction impacts to adjacent areas and regulated wetland resources.
 - ① f. Provide updates at project milestones according to Item 755.3 Non-Tidal Wetland Mitigation Area.
 - g. Perform digital photo documentation through the duration of the contract and submit a photo archive on compact disk upon completion.
 - h. Perform site observations at least two times during the growing season in late spring/early summer and again in late summer/early fall.
 - i. Submit annual monitoring reports in the format provided in the US Army Corps of Engineers - New England District: Compensatory Mitigation Guidance.
 - j. Make written recommendations on maintenance and corrective measures following each site observation in order to achieve the Mitigation Performance Standards.

The Wetland Specialist shall be responsible for oversight and approval of, including but not limited to, the following activities in coordination with the Contractor and Engineer.

- a. Location and boundaries of wetland replication area, location of tree protection associated with the wetland replication areas, limits of clearing and limits of work in the replication areas
- b. Installation and removal of erosion controls
- c. Target elevations and grade stakes prior to excavation
- d. Final grades prior to planting and/or seeding
- e. Flagging wetland plant locations prior to installation
- f. Planting installation and/or seeding procedures.
- g. Removal of perimeter controls, such as goose fence

Unless specified otherwise in the Federal, State and municipal permits, the Wetland Specialist shall monitor the above-referenced activities (i.e. replication site construction) at least twice weekly for the duration of the wetland replication area construction effort.

ITEM 755.9 (Continued)

Prior to replication area construction, a minimum of two (2) brightly colored control stakes identifying fixed construction monitoring locations will be placed adjacent to the replication site. At each of these monitoring locations, photographs will be taken before, during and after each phase of site preparation and planting. Each photograph will note the date, time, weather, and other relevant observations.

Following final grading, at least three (3) brightly colored control stakes identifying fixed plot centers for monitoring purposes will be placed at scattered locations within the wetland replication area. At least one (1) control stake will be located within a shrub cluster.

In addition to replication area monitoring, these pre- and post-construction monitoring locations will serve as photographic stations to document the status of the wetland replication areas during each monitoring event.

Monitoring reports shall be submitted no later than November 1 of each monitoring period. For each project update and monitoring report, submit one (1) printed copy and a digital copy in Portable Document Format (e.g., Adobe PDF) to the Engineer for distribution to the MassDOT Landscape Architect, MassDOT Environmental Services, U.S. Army Corps of Engineers, National Marine Fisheries Service (Habitat Conservation) the US Environmental Protection Agency, and the Conservation Commission. All reports shall be marked with the applicable permit numbers and identifying information as required in the permits.

Monitoring

- ① Monitoring will be performed for the wetland replication areas in order to ensure satisfactory plant establishment and compliance with the Mitigation Performance Standards as defined in Item 755.3 Non-Tidal Wetland Mitigation Area and as defined in the Wetland Mitigation Report approved by the US Army Corps of Engineers.

Plant species listed as invasive by Massachusetts Invasive Plant Advisory Group (MIPAG) and the USACE – New England District shall be identified as such in the monitoring reports and corrective measures taken to control them within the limits of the wetland mitigation areas for the duration of the contract. The definition of invasive plant species referred to herein shall be as defined by Massachusetts Invasive Plant Advisory Group (MIPAG) and classified as Invasive, Likely Invasive or Potentially Invasive according to their current classification lists. MIPAG link: <http://www.massnrc.org/MIPAG/>

Invasive plant species shall also include those listed by the USACE New England District.

As per the monitoring schedule, the Wetland Specialist shall complete and submit a monitoring report detailing the relative success of the replication areas and make recommendations for maintenance and/or corrective measures. According to the USACE permit conditions, a growing season starts no later than May 31. Reports shall include data sheets. Data summaries shall be cumulative in each successive report.

Monitoring report requirements shall be as outlined in the USACE New England District Compensatory Mitigation Guidance and include the following.

ITEM 101. **CLEARING AND GRUBBING**

- STA. 100+50 to 134+50, average width 20 FT
- As needed within limits of Shared Use Path

ITEM 112.1 **DEMOLITION OF BUILDING NO. 1**

- STA. 125+00
- Collapsed shed along Shared Use Path, Concrete Foundation 50 x 18 x 3
- Removal and disposal of wood frame and collapsed roof

ITEM 112.2 **DEMOLITION OF BUILDING NO. 2**

- STA. 126+00
- Concrete and steel foundation along Shared Use Path, Concrete foundation 74 x 32 x 5
- Removal and disposal of steel

ITEM 129.5 **TRACK EXCAVATION**

- As needed along Shared Use Path alignment at locations:
 - STA. 116+74 to 119+10
 - STA. 125+39 to 129+50
 - STA. 126+25 to 129+50
 - STA. 129+50 to 132+73

ITEM 142. **CLASS B TRENCH EXCAVATION**

- As needed for 36" at locations:
 - STA. 119+75 to 120+14
 - STA. 120+14 to 120+13
 - STA. 120+13 to 120+51
 - STA. 120+51 to 122+33
 - STA. 122+33 to 123+85
 - STA. 123+85 to 125+48
 - STA. 125+48 to 127+80
 - STA. 127+80 to 129+45
 - STA. 129+45 to 130+59
 - STA. 130+59 to 130+68

- As needed for 12" at locations:
 - STA. 117+68 to 116+68
 - STA. 116+68 to 115+68
 - STA. 115+68 to 114+90

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ITEM 153. **CONTROL DENSITY FILL - EXCAVATABLE**

-To be used for backfill of pipe connection to drainage box, from Shared Use Path

ITEM 154. **SAND BORROW**

-To be used for Infiltration Trenches

ITEM 156. **CRUSHED STONE**

-To be used under Drainage Structures and Infiltration Trenches, and as directed by engineer

ITEM 201.5 **CATCH BASIN- MUNICIPAL STANDARD**

-Along Shared Use Path at locations:
STA. 115+98
STA. 129+44 LT
STA. 100+02 LT

ITEM 202.01 **MANHOLE – MUNICIPAL STANDARD**

-Along Shared Use Path at locations:
STA. 115+68
STA. 116+68
STA. 117+68

① **ITEM 202.21** **MANHOLE (9 TO 14 FOOT DEPTH) – MUNICIPAL STANDARD**

-To be used at locations:
STA. 119+74
STA. 120+16
STA. 120+13
STA. 120+71
STA. 122+33
STA. 123+85
STA. 125+48
STA. 127+80
STA. 129+45
STA. 130+59

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ITEM 204. **GUTTER INLET**

-Along Shared Use Path
STA. 101+44
STA. 103+05

① **ITEM 234.12** **12 INCH DRAIN PIPE – OPTION**

-Along Shared Use Path at locations:
STA. 117+68 to 116+68
STA. 116+68 to 15+68
STA. 115+68 to 115+97
STA. 115+68 to 115+56

① **ITEM 238.10** **10 INCH DUCTILE IRON PIPE**

-Along Shared Use Path
STA. 101+44 to 101+45
STA. 103+05 to 116+68

① **ITEM 244.36** **36 INCH REINFORCED CONCRETE PIPE CLASS V**

-To be used at locations:
STA. 119+74 to 120+16
STA. 120+16 to 120+13
STA. 120+13 to 120+72
STA. 120+72 to 122+33
STA. 122+33 to 123+85
STA. 123+85 to 125+48
STA. 125+48 to 127+80
STA. 127+80 to 129+44
STA. 129+44 to 130+59
STA. 130+59 to 130+70

ITEM 265.06 **6 INCH PIPE SUBDRAIN- OPTION**

-To be used for Pipe out of Infiltration Trench along Shared Use Path

STA. 100+93
STA. 103+32
STA. 104+28
STA. 105+23
STA. 106+48
STA. 108+60
STA. 110+17
STA. 111+21
STA. 112+48
STA. 113+48
STA. 114+49
STA. 115+67
STA. 116+67
STA. 117+67
STA. 120+47
STA. 122+12
STA. 123+85

ITEM 269.06 **6 INCH SLOT-PERFORATED CORRUGATED PLASTIC PIPE
(SUBDRAIN)**

-To be used for Infiltration Trench along Shared Use Path

STA. 100+93 to 101+18, 6.0' LT
STA. 103+32 to 103+57, 6.0' LT
STA. 104+28 to 104+53, 6.0' LT
STA. 105+23 to 105+48, 6.0' LT
STA. 106+48 to 106+73, 6.0' LT
STA. 108+60 to 108+85, 6.0' LT
STA. 110+17 to 110+42, 6.0' LT
STA. 111+21 to 111+46, 6.0' LT
STA. 112+48 to 112+73, 6.0' LT
STA. 113+48 to 113+73, 6.0' LT
STA. 114+49 to 114+74, 6.0' LT
STA. 115+67 to 115+92, 6.0' LT
STA. 116+67 to 116+92, 6.0' LT
STA. 117+67 to 117+92, 6.0' LT
STA. 120+47 to 120+72, 6.0' LT
STA. 122+12 to 122+37, 6.0' LT
STA. 123+85 to 124+10, 6.0' LT
STA. 125+47 to 125+72, 6.0' LT
STA. 127+55 to 127+80, 6.0' LT

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ITEM 402. **DENSE GRADED CRUSHED STONE FOR SUB-BASE**

Contingency Item.

ITEM 458.7 **LIGHTWEIGHT AGGREGATE**

-To be used at locations:
STA. 122+00 to 130+00

ITEM 485. **GRANITE RUBBLE BLOCK PAVEMENT**

-To be used at Canal St STA. 50+18 and Pocket Park STA. 120+16

① **ITEM 622.2** **STEEL W BEAM HIGHWAY GUARD**
(DOUBLE FACED/WOOD POST) (GALVANIZED STEEL)

-To be used at locations:
STA. 103+08 TO STA. 105+12
STA. 114+82 TO STA. 119+00

① **ITEM 627.2** **STEEL W BEAM TERMINAL SECTION (DOUBLE FACED)**

-Along Shared Use Path at locations:
STA. 103+08
STA. 105+12
STA. 114+82
STA. 119+07

ITEM 630.2 **HIGHWAY GUARD REMOVED AND DISCARDED**

-To be used at locations:
STA. 117+00

ITEM 644.172 **72 INCH CHAIN LINK FENCE (SPRING TENSION WIRE)**
VINYL COATED (LINE POST OPTION)

-To be used at locations:
STA. 105+40 to 110+57
STA. 127+98 to 130+80

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① **ITEM 647.096** **96 INCH CHAIN LINK FENCE (PIPE TOP RAIL) W/ BARB
(LINE POST OPTION)**

-To be used along Shared Use Path
STA. 116+27 to 120+06
STA. 120+22 to 130+85
STA. 131+00 to 134+50

ITEM 651.096 **96 INCH CHAIN LINK GATE WITH GATE POSTS AND BARBED
WIRE**

-To be used at locations:
STA. 120+06 to 120+22
STA. 130+85 to 131+00

ITEM 657. **TEMPORARY FENCE**

-To be used when needed at locations:
STA. 100+50
STA. 107+00 to 108+80
STA. 114+50 to 120+00
STA. 120+00 to 128+00
STA. 128+00 to 131+00
STA. 131+00 to 134+50
STA. 134+64

ITEM 666.1 **CHAIN LINK FENCE REMOVED AND DISCARDED**

-To be used at locations:
STA. 116+25 to 134+50 LT

ITEM 668 **CHAIN LINK FENCE GATE W/GATE POSTS REMOVED AND
RESET**

STA. 127+95

ITEM 673.2 **REMOVE & DISPOSE UTILITY POLE & WIRE**

STA. 120+55

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ITEM 751. **LOAM BORROW**

-To be used at locations:

- STA. 100+50 to 101+00
- STA. 101+00 to 102+00
- STA. 102+00 to 103+00
- STA. 103+00 to 104+00
- STA. 104+00 to 105+00
- STA. 105+00 to 106+00
- STA. 106+00 to 107+00
- STA. 107+00 to 108+00
- STA. 108+00 to 109+00
- STA. 109+00 to 110+00
- STA. 110+00 to 111+00
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- STA. 133+00 to 134+00
- STA. 134+00 to 134+50

① **ITEM 755.3** **NON-TIDAL WETLAND MITIGATION AREA**

To be used for Wetland Creation for Items Retrieval Shaft Site, Launch Shaft Wetland Z Mitigation Area, and Planting

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① **ITEM 767.121** **SEDIMENT CONTROL BARRIER**

-To be used along Shared Use Path at the locations
STA. 100+37 to 116+59 LT
STA. 100+63 to 105+40 RT
STA. 113+75 to 120+07 RT
STA. 120+24 to 130+81 RT
STA. 124+82 to 134+55 LT

ITEM 823.211 **AREA LIGHTING UNDER 10' TALL**

-To be spaced at every 75 FT between STA. 100+00 to 134+50

ITEM 901 **4000 PSI, 1.5 IN, 565 CEMENT CONCRETE**

-To be used for low retaining wall at STA. 126+28 to 126+72 along Shared Use Path

ITEM 901.3 **4000 PSI, 1.5 IN, 565 CEMENT CONCRETE FOR POST FOUNDATION**

-To be used for chain link fence, one concrete foundation every 6'
-Foundation size 3 FT x 1.17 FT x 1.17 FT

① **ITEM 910** **STEEL REINFORCEMENT FOR STRUCTURES**

-To be used for low retaining wall along Shared Use Path STA. 126+28 to 126+72

ITEM 983.1 **RIP RAP**

-To be used for rip rap slopes along Shared Use Path, STA. 128+80 to 129+80

ITEM 986. **MODIFIED ROCKFILL**

-To be used for pipe ends for Shared Use Path at locations:

STA. 100+95, 12.2' LT	STA. 111+21, 11.3' LT
STA. 101+44, 18.5' LT	STA. 112+48, 11.4' LT
STA. 103+04, 14.7' LT	STA. 113+49, 23.4' LT
STA. 104+55, 14.0' LT	STA. 114+49, 12.1' LT
STA. 106+47, 12.8' LT	STA. 115+56, 16.7' LT