

August 6, 2018

Mr. Peter Delaney, Chair Conservation Commission Town of Boxford 7A Spofford Rd. Boxford, MA 01921

RE: NOI 114-1260 - VALLEY ROAD CULVERT REPLACEMENT NEAR 67 VALLEY ROAD

Mr. Delaney:

In response to question posed during the August 2, 2018 hearing, Bayside Engineering offers the following:

Provide construction sequencing for the project.

With respect to construction operations that affect the resource areas, Sheet 7 has the Construction Notes/Construction Sequencing. I have also included the first two pages of the Special Provisions from the contract documents which details the lack of space onsite and lists the requirement for removing, storing and staging materials offsite. This has been provided to clarify construction operation constraints in the limited space at the site.

Sincerely,

BAYSIDE ENGINEERING, INC.

Sie Sellia

Bree D. Sullivan, P.E. Senior Civil and Environmental Engineer

SPECIAL PROVISIONS

BOXFORD

Culvert Replacement at Valley Road

SCOPE OF WORK

ALL WORK DONE UNDER THIS CONTRACT SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JULY 1, 2015; THE 2017 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATES TO TRAFFIC STANDARD DETAILS ONLY), THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z-60.1-2004); THE PLANS; AND THESE SPECIAL PROVISIONS.

The scope of the work includes constructing specific items of work shown on the plans titled "Culvert Replacement - Valley Road over Unnamed Brook; Boxford, Massachusetts". The Contractor's work includes all labor, equipment, materials and preparation for the performance of all work shown on the plans.

The project requires a complete roadway closure and detour. All work that is necessary to occur during the road closure shall be completed during five (5) consecutive 12 hour workdays beginning on a Monday at 7 a.m. and ending on Friday at 7 p.m. during the month of August 2019. The construction detour components are provided in Attachment B: "Culvert Replacement - Valley Road over Unnamed Brook; Boxford, Massachusetts Detour Plan".

The culvert replacement must be completed during a low or no flow period. Water crossing can be temporarily obstructed. The contractor shall verify weather reports and coordinate with the Boxford DPW Superintendent to schedule the water crossing obstruction.

The site does not have sufficient area to stockpile all materials. Only small amounts of bulk material may be able to be stored on-site. Excavated material shall be removed from the site and disposed or stockpiled off-site for reuse during backfill operations.

The site is located adjacent to residential driveways. During the workday, driveway access may be obstructed temporarily for construction operations. Access shall not be obstructed overnight unless prior arrangements have been made with the Town of Boxford.

Prior to road closure the contractor is required to complete the following:

- 1. All necessary materials, equipment and work crew shall be onsite or at the previously designated offsite lay-down area.
- 2. Water crossing flow obstruction, if necessary, shall be in place
- 3. Site dewatering measures, if necessary, shall be installed

- 4. Culvert pre-installation and assembly steps shall be completed
- 5. The conditions set forth in the Construction Detour Plan shall be met
- 6. The pre-construction conditions set forth in the Conservation Commission Order of Conditions shall be met

EMERGENCY SERVICES AND POLICE TRAFFIC CONTROL DETAILS

The Contractor is responsible to arrange for police traffic details and fire department general call procedures as required in the Construction Detour Plan.

OPTION TO EXTEND TWELVE (12) HOUR WORKDAY LIMITATION

The project requires a complete roadway closure and detour. All work that is necessary to occur during the road closure shall be completed <u>five (5) consecutive 12 hour workdays beginning on a</u> <u>Monday at 7 a.m. and ending on Friday at 7 p.m. during the month of August 2019.</u>

If necessary, the Contractor may request an extension to work beyond 7 p.m. on any of the days when the road is closed by contacting the 24 hour Town of Boxford Communications Center at 978-887-8135. Upon request for a workday time extension, the Communications Center Operator will notify Alan Benson, Town Administrator or John Dold, Town DPW Superintendent/Town Engineer and a timely response will be provided to the Contractor. Note that the Contractor shall be <u>solely responsible</u>, without further compensation from the Town, for any additional costs associated with the road closure workday time extension including, but not limited to, the Fire and Police detail expenses.

PERSONAL PROTECTIVE SAFETY EQUIPMENT FOR CONTRACTOR PERSONNEL

The Contractor is responsible to ensure that all personnel, including all subcontractors, working on the project are issued and are wearing all necessary personal protective safety equipment while working within the project limits. This equipment shall include, as a minimum, a hardhat and a safety vest, regardless of the type of work being performed. Other safety equipment shall be added as required to perform the work in which they are engaged and in accordance with all local, state and federal requirements in effect. Safety equipment shall be provided at no additional cost to the Town of Boxford.

PRESERVATION OF ROADSIDE GROWTH

(Section 8.08 shall be amended as follows)

The Contractor shall take all necessary care when excavating or working in the vicinity of existing trees so that the root systems, trunks and branches are not damaged. All precautions shall be taken to insure that heavy equipment does not damage any roots, including those that lie below the limits of excavation.

Trees that, in the judgment of the Engineer, have been irreparably damaged by the Contractor shall be replaced in kind and in size, or, with a quantity of 2" caliper replacement trees (the quantity of which shall be determined by the Engineer) such that the cumulative caliper of the replacement trees will be up to the equivalent of diameter of the lost tree at breast height. Cost of replacement trees shall be paid by the Contractor.

Replacement value will also be considered when determining the damaged caused by the Contractor operations.