

**CITY OF  
LOWELL, MASSACHUSETTS**

**IFB 21-46**

**BID PROPOSAL, CONTRACT  
GENERAL CONDITIONS, SPECIAL CONDITIONS  
AND TECHNICAL SPECIFICATIONS  
FOR**

**LOWELL CONNECTOR TRAIL**

**CITY MANAGER - EILEEN DONOGHUE**

**DEPARTMENT OF PLANNING AND DEVELOPMENT  
ASSISTANT CITY MANAGER & DIRECTOR, DIANE N. TRADD**

**DEPARTMENT OF PLANNING AND DEVELOPMENT  
PROJECT MANAGER, CHRISTOPHER G. HAYES,  
NEIGHBORHOOD PLANNER**

**City of Lowell  
Purchasing Department  
Lowell, Massachusetts**



**February 10, 2021**

Prepared by **TEC, Inc.**  
146 Dascomb Road  
Andover, MA 01810



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**INVITATION TO BID**

**Bid Number: 21-46**

**Lowell Connector Trail  
Lowell, Massachusetts**

Sealed bids will be publicly opened on March 10, 2021 at City Hall in the Purchasing Department, Room 60, 375 Merrimack Street, Lowell, MA 01852, at 11:00 AM, EST/EDST, for the work described herein. The bid opening will be held virtually at which time and place a livestream link will be activated and the bids will be publicly opened online and read. A link to the virtual bid opening will be made available at [www.lowellma.gov](http://www.lowellma.gov). **BIDDERS ARE REQUIRED TO SUBMIT A BID INCLUDING ALL BID FORMS CONTAINED IN THIS PACKAGE. DO NOT REMOVE PAGES.**

The bids will be for all labor, materials, equipment, tools, appliances etc. necessary for construction of the **LOWELL CONNECTOR TRAIL**.

A non-mandatory pre-bid meeting is scheduled for 2:00 P.M. on February 24, 2021 at which time a livestream link will be activated for contractor questions. A link to the virtual pre-bid meeting will be made available at [www.lowellma.gov](http://www.lowellma.gov).

Bid Documents, including Plans and Specifications may be obtained after February 10, 2021 at the City of Lowell Purchasing Department Room 60, 375 Merrimack Street, Lowell, MA 01852 and on the City's Website at the following address:

<http://www.lowellma.gov/Purchasing/Pages/General/OpenSolicitations.aspx>

**Bid Number: IFB 21-46**

Each bid proposal must be secured by an accompanying deposit of five percent (5%) of the total bid amount and submitted in a sealed envelope clearly marked, "Proposal for **LOWELL CONNECTOR TRAIL**". The deposit shall be in the form of a Bid Bond, Certified Check, Cashier's or Treasurer's Check, made payable to the City of Lowell, or cash.

The successful bidder must furnish a Payment Bond and a Performance Bond of an amount equal to One Hundred (100%) percent of the total Contract Price, issued by a Surety Company, satisfactory to the Commissioner of Public Works.

Attention of the Bidders is particularly called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

Attention of the Bidders is particularly called to the requirements of the conditions of employment to be observed and the prevailing wage rates to be paid on this project, as determined by the State Department of Labor Division of Occupational Safety.

Note: Bidders must comply with Certification of Compliance G.L.C. 30 & 39S Public Construction More Than \$10,000.00. See page BP-11.

The City of Lowell, acting through its Chief Procurement Officer, reserves the right to waive any informality in, to reject any or all bids or to accept the one which appears in the best interest of the City of Lowell.

MBE's are encouraged to submit proposals. EOE/AA.

Project Value: \$220,000

P. M. Vaughn - CHIEF PROCUREMENT OFFICER

ADVERTISED:                      Central Register, February 10, 2021  
    Comm Buys, February 10, 2021  
    Lowell Sun, February 10, 2021

**INFORMATION FOR BIDDERS**

SUBSECTION

1. Receipt and Opening of Bids
2. Preparation of Bid
3. Price Adjustments For Hot Mix Asphalt Pavement, Diesel Fuel And Portland Cement
4. Qualifications of Bidder
5. Bid Security
6. Damages for Failure to Enter into Contract
7. Duration of Contract
8. Conditions of Work
9. Addenda and Interpretations
10. Security for Faithful Performance
11. Power of Attorney
12. Notice of Special Conditions
13. Laws and Regulations
14. Method of Award - Lowest Qualified Bidder
15. Obligation of Bidder
16. List of Utilities in the Area
17. Testing of Materials
18. Nondiscrimination in Employment
19. Affirmative Action
20. Sales Tax
21. Soil Conditions
22. Compliance with Air and Water Acts
23. Interest of Members, Officers, or Employees of the Owner,  
Members of Local Governing Body, or other Public Officials

## **INFORMATION FOR BIDDERS**

### **1. RECEIPT AND OPENING OF BIDS**

The City of Lowell herein called the “Owner” invites sealed bids on the separate copies of Bid Forms furnished for that purpose, all blanks of which must be appropriately filled in. The bound-in Bid Forms in the Contract Documents are for continuity and the convenience of Bidders and are not to be detached from the Contract Documents, filled out or executed.

Sealed bids will be received at the Lowell City Hall Purchasing Department, 375 Merrimack Street, Room 60, Lowell, MA 01852 until 11:00 A.M. local time, March 10, 2021 at which time and place a livestream link will be activated and the bids will be publicly opened online and read. The envelope containing the bids for the **LOWELL CONNECTOR TRAIL** shall be sealed, addressed to the City of Lowell, Purchasing Department and designated as “**Bid for LOWELL CONNECTOR TRAIL**”

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual date of the opening thereof.

### **2. PREPARATION OF BID**

Each bid for the **LOWELL CONNECTOR TRAIL** shall be submitted on the Basis of Award Form found on page BP-3.

All blank spaces for bid prices must be filled in, with ink or typewriter, in both words and figures, and both of the foregoing Certifications must be fully completed and executed when submitted.

Each bid for the **LOWELL CONNECTOR TRAIL** must be submitted in a sealed envelope bearing on the outside the name of the bidder, his / her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified above.

### **3. PRICE ADJUSTMENTS FOR HOT MIX ASPHALT PAVEMENT, DIESEL FUEL AND PORTLAND CEMENT**

There shall be price adjustment for liquid asphalt, diesel fuel and gasoline in this Contract. Price. Adjustment for these items shall be in accordance with current Massachusetts Department of Transportation (MassDOT) special provisions for price adjustment for Liquid Asphalt, Diesel Fuel, and Gasoline available at <https://www.mass.gov/service-details/massdotspecial-provisions>.

Monthly Price Adjustment for Hot Mix Asphalt shall be the price posted each month on the MassDOT main page under Liquid Asphalt, in accordance with MassDOT Document 00811 and the MassDOT website noted above.

Diesel and Gasoline Period Prices shall be the actual prices paid by MassDOT – Highway Division for these fuels, based on the previous month’s prices posted by the end of the second week of each month, in accordance with MassDOT Document 00812 and the MassDOT website noted above.

#### **4. QUALIFICATIONS OF BIDDER**

The City reserves the right to reject any or all Bids, if it is in the public interest to do so or for any other good cause, not limited to the following.

The City reserves the right to reject any or all Bids, if it determines that the Bidder does not possess the qualifications to perform the Work specified in the Bidding Documents.

The City reserves the right to reject the Bid of any Bidder who the City has determined has not completed a prior project, whether with the City or elsewhere, because of the fault of the Bidder, its Subcontractors or employees; has been declared in default on a prior contract whether with the City or elsewhere; has failed to complete a prior project in a timely fashion whether with the City or elsewhere; based on its work record, is not capable of performing the within Contract whether due to lack of sufficient prior experience, as determined by the City, or any other reason; has a work record of its Subcontractors demanding direct payment from the City; has a work record of its Subcontractors, employees or material suppliers complaining to the City or other awarding authority regarding the Bidder’s failure to pay them; has a record of complaints made to the City or other awarding authority by persons offended by the behavior of the Bidder, its Subcontractors or employees; or has a record of its failure to comply with the Commonwealth and/or City laws and ordinances or requirements. “Work record” or “record” constitutes a minimum of one event in the work history of the Bidder.

The City shall reject every Bid that is not accompanied by a Bid deposit.

- A. Each bid **must include** evidence of the Bidder’s ability to complete the Work in accordance with the Contract Documents. Each bid **must include** the name of the Superintendent who is to be used on this project, and his/her experience.

Each bid must include:

1. A comprehensive list of any and all citations and/or violations issued by regulatory agencies and/or judgments against bidder from a court of law.
2. All assessed penalties or liquidated damages, and the project in which they occurred.
3. Any and all contract terminations.
4. A list of at least five references.

## **5. BID SECURITY**

Each bid shall be accompanied by cash, a certified check, treasurer's check, or cashier's check issued by a responsible bank or trust company, made payable to the City of Lowell in the amount of 5% of the bid or a bid bond prepared in the form of bid bond; duly executed by the bidder as principal and having as surety thereon a surety company listed on the Department of the Treasury's approved listing (Department Circular 570), licensed to do business in the Commonwealth of Massachusetts approved by the OWNER, in the amount of 5% of the bid, but in no event less than one hundred dollars not more than fifty thousand dollars.

Subbids shall be submitted for the following items for work: **NONE**

All bid deposits of general bidders, except those of the three lowest responsible and eligible bidders, will be returned within five (5) days, Saturdays, Sundays and legal holidays excluded, after the opening of the general bids.

The bid deposits of the three lowest responsible and eligible bidders shall be returned upon the execution and delivery of the Contract, or if no award is made, upon the expiration of 90 days, Saturdays, Sundays, and legal holidays excluded, except that, if any bidder fails to perform his agreement to execute a Contract and furnish a Performance Bond and also a Labor and Materials Payment Bond as stated in his bid, his bid deposit shall become and be the property of the City of Lowell as liquidated damages; provided that the amount of the bid deposit which becomes the property of the City of Lowell shall not, in any event, exceed the difference between his bid price and the bid price of the next lowest responsible and eligible bidder; and provided further that, in case of death, disability or other unforeseen circumstances affecting the bidder, his bid deposit may be returned. The ninety-day time limit shall not be applicable to the next lowest eligible bidder, with his and his subbidder's consent, if the original award made within the time limit is invalidated.

All bid deposits of subbidders, except (a) of the subbidders named in the general bids of the three lowest responsible and eligible general bidders, and (b) those of the three lowest responsible and eligible subbidders for each subtrade, will be returned within five days (Saturdays, Sundays, and legal holidays excluded), after the execution of the general contract; except that, if a selected subbidder fails to perform his agreement to execute a subcontract with the general bidder selected as the general contractor contingent upon the execution of the general contract and if requested to do so in the general bid by such a general bidder, to furnish a Performance and Payment Bond as stated in his subbid, the bid deposit which becomes the property of the City of Lowell shall not, in any event, exceed the difference between his subbid price and the subbid price of the next lowest responsible and eligible subbidder; and provided further that, in case of death, disability or other unforeseen circumstances affection any such subbidder, his bid deposit may be returned to him/her.

## **6. DAMAGES FOR FAILURE TO ENTER INTO CONTRACT**



The successful bidder, upon his/her failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the OWNER, as liquidated damages for such failure or refusal, the security deposited with his bid.

## **7. DURATION OF CONTRACT**

The contract shall be for the period beginning on or about **April 1, 2021** or as stated in the **NOTICE TO PROCEED, WHICHEVER IS LATER** and end on or before **June 30, 2021**.

Failure to complete the work by the dates herein specified, or any proper extensions thereof granted by the OWNER will be subject to liquidated damages in the amount of \$500 per day.

The CONTRACTOR shall note that issuance of the Notice to Proceed is contingent on the City of Lowell securing all rights-of-way required for the project

## **8. CONDITIONS OF WORK**

Each bidder must inform himself/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of his/her contract insofar as possible the contractor, in carrying out his/her work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

## **9. ADDENDA AND INTERPRETATIONS**

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Prospective bidders are required to submit all questions in writing to the Chief Procurement Officer by 2:00 P.M. on February 26, 2021. Any questions received after this time will not be considered for review by the City.

Contractors should email questions and addendum acknowledgements to the following email address: [pmvaughn@lowellma.gov](mailto:pmvaughn@lowellma.gov). Please put LOWELL CONNECTOR TRAIL CONTRACTOR QUESTION in the subject line.

Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be e-mailed with return receipt requested to all prospective bidders (at the respective email addresses furnished for such purposes), not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligations under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

## **10. SECURITY FOR FAITHFUL PERFORMANCE**

Simultaneously with his delivery of the executed Contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this Contract and for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company listed on the Department of the Treasury's approved listing (Department Circular 570), licensed to do business in the Commonwealth of Massachusetts and satisfactory to the OWNER.

## **11. POWER OF ATTORNEY**

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

## **12. NOTICE OF SPECIAL CONDITIONS**

The Bidder's attention is particularly called to those parts of the contract documents and specifications which deal with the following:

- A. Inspection and testing of materials
- B. Insurance requirements
- C. Wage rates
- D. Stated Allowances
- E. Non-discrimination in employment
- F. Easements

## **13. LAWS AND REGULATIONS**

The bidder's attention is directed to the fact that all applicable State Laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as through herein written out in full.

## **14. METHOD OF AWARD – LOWEST QUALIFIED BIDDER**

The City shall award the contract to the lowest responsible (demonstrably possessing the skill, ability, and integrity necessary to faithfully perform the work called for by the Contract, based upon a determination of competent workmanship and financial soundness) and eligible (able to meet all requirements for Bidders set forth in the Bidding Documents) Bidder within ninety (90) Business Days after the date of the opening of the Bids. If the Bidder selected as the contractor fails to perform its agreement to execute a contract in accordance with the terms of its Bid and furnish a performance bond and a labor and materials or payment bond, if required by the Bidding Documents, an award shall be made to the next lowest responsible and eligible Bidder. The ninety-day time limit shall not be applicable to a second or subsequent award made after the expiration of the time limit with the consent of the next lowest responsible and eligible bidder,

and made because the original award made within the time limit was invalid, or because the bidder failed to execute the Agreement or to provide a performance and labor and materials or payment bond.

Any Bidder who fails to perform its agreement to execute a contract and furnish a performance bond and a labor and materials or payment bond shall forfeit its Bid deposit which shall become property of the City, but shall not exceed the difference between its Bid price and the Bid price of the next lowest responsible and eligible bidder.

The City will notify the selected Bidder and all other Bidders of the award.

The City will submit to the selected Bidder a Notice of Award and at least three (3) unsigned copies of the Agreement between the City and the Contractor. The selected Bidder will be required to return to the Purchasing Department within ten (10) business days of the date notice of award all of the copies of the Agreement between the City and the Contractor signed, its performance bond, its labor and materials or payment bond and all required certificates of insurance. Failure of the selected Bidder to submit all of the required documents in a timely fashion may result in the withdrawal of the award. The City will return one fully signed copy of the Agreement to the Contractor. Time is of the essence in the performance of the Agreement.

## **15. OBLIGATION OF BIDDER**

At the time of the opening of bids it is presumed that each bidder has inspected the site and has read and is thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to his/her bid.

## **16. LIST OF UTILITIES IN THE AREA**

The following are the names of owners and representatives of the principal utilities affected, but completeness of this list is not guaranteed by the City::

Lowell Water Utility	978-678-4240
Lowell Regional Wastewater Utility	978-674-4248
Lowell Engineering Department	978-674-4070
National Grid Gas-	978-725-1389
National Grid Electric-	978-725-1389
Verizon Telephone	877-686-7007
Comcast	877-633-4266
Lowell Fire Alarm/Electrician	978-674-4114
Kinder-Morgan	800-231-2800

The Contractor shall notify the controlling utility agency at least 72 hours in advance of its intent to excavate in any way or manner, within six feet of any existing utility agency owned pole, anchor guy, underground duct, conduit, pipe, valve or manhole. No excavation shall take place

within six feet of any existing utility agency owned pole, anchor guy, underground duct, conduit, pipe, valve or manhole owned by a utility agency without this notification. In addition, Dig Safe must be notified 72 hours prior to commencing excavation.

**"DIG-SAFE" Call Center: Telephone 1-888-344-7233**

The Contractor shall make his or her own investigation to assure that no damage to existing structures, drainage lines, traffic signal conduits, and other utilities will occur as a result of construction operations.

**17. TESTING OF MATERIALS**

The bidder shall note that inspection of work and testing of materials is a requirement of this contract. The Bidder shall provide a list, including resume and qualifications of all anticipated third-party inspectors, testing labs, etc. required to perform the work in accordance with the Contract Specifications. Any testing as required by the Engineer or City shall be considered incidental to the work being tested.

**18. NON-DISCRIMINATION IN EMPLOYMENT**

Contracts for work under this proposal will obligate the Contractors and subcontractors not to discriminate in employment practices. Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the Contract. The successful bidder must be prepared to comply in all respects with the Contract Provisions regarding Equal Employment Opportunity which are located in the Special Conditions Section of these Specifications.

**19. AFFIRMATIVE ACTION**

The Bidder's attention is called to the Notice for Affirmative Action to ensure equal employment opportunity (Executive Order 11246 and 41CFR Part 60-4) and the notice of Minimum Minority Percentages to be applied to State and State Assisted Contracts within the Commonwealth. To meet the State and Federal requirements Construction Participation for this project are as follows: **MBE's (4.2%) and WBE's (8.8%)**

**20. SALES TAX**

Materials and equipment purchased for permanent installation in this project will be exempt from the Massachusetts Sales and Use Tax. The exemption certificate number will be furnished to the Contractor. Each bidder shall take this exemption into account in calculating his bid for the work.

**21. SOIL CONDITIONS**

No soil sampling has been performed in conjunction with this project.

**22. COMPLIANCE WITH AIR AND WATER ACTS**

This contract is subject to the requirements of the Clean Air Act, as amended, 42 U.S.C. 1857 etc. seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et. seq. and the regulations of the Environmental Protection Agency with respect thereto, 40 CFR Part 15, as amended from time to time.

**23. INTEREST OF MEMBERS, OFFICERS, or EMPLOYEES of the OWNER, MEMBERS of LOCAL GOVERNING BODY, or OTHER PUBLIC OFFICIALS.**

No member, officer, or employee of the OWNER, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure of for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with this Contract.

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REFERENCES

Bidders are required to submit at least five (5) references prior to awarding of the contract.

1) Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Title/Position \_\_\_\_\_  
Type of Services  
Performed: \_\_\_\_\_  
Dates of Work: \_\_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2) Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Title/Position \_\_\_\_\_  
Type of Services  
Performed: \_\_\_\_\_  
Dates of Work: \_\_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3) Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Title/Position \_\_\_\_\_  
Type of Services  
Performed: \_\_\_\_\_  
Dates of Work: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4) Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Title/Position \_\_\_\_\_  
Type of Services  
Performed: \_\_\_\_\_  
Dates of Work: \_\_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5) Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Title/Position \_\_\_\_\_  
Type of Services  
Performed: \_\_\_\_\_  
Dates of Work: \_\_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_

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**BID PROPOSAL**

**CITY OF LOWELL, MASSACHUSETTS**

Project: **LOWELL CONNECTOR TRAIL (CONTRACT #IFB 21-46)**

Location: Lowell, Massachusetts

To the City of Lowell, Massachusetts (hereinafter called OWNER)

Prospective Bidders:

The Bidder, in compliance with your invitation for bids for the construction of the proposed project having examined the plans and specifications with related documents as prepared by TEC, Inc., and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents, within the time set forth therein, and at the prices stated below. This price is to cover all expenses incurred in performing the work required under the contract documents, of which this proposal is a part.

Bidder hereby agrees to commence work under this Contract on or before a date to be specified in a written "notice to proceed" of the OWNER, meet interim specified milestones and to fully complete the Contract by **June 30, 2021**, as stipulated in the specifications.

Bidder understands that the OWNER reserves the right to reject any or all bids and to waive any informality in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of **60 calendar days** after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, bidder will execute the formal contract within 10 days and deliver a Surety Bond or Bonds as required.

The Bid Security attached in the sum of \_\_\_\_\_

(\$ \_\_\_\_\_)

is to become the property of the OWNER in the event the contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the OWNER caused thereby.

Bidder acknowledges receipt of the following addendum(s):

\_\_\_\_\_



Bidder agrees to perform all the work described in the specifications and shown on the plans for the proposed lump sum bid price, plus allowance for police services.

NOTE: All prices should be written in ink, in words as well as figures, for the entire proposal. In case of discrepancy the amount shown in words will govern.

The CONTRACTOR agrees that its attention has been called to the provisions of the "Reserve System" Ordinance of the City of Lowell, which is now incorporated in "The Code of the City of Lowell, Massachusetts", passed by the City Council on April 26, 1988 and amendments thereto and that each purchase order, so-called, issued in accordance with Section 7-76 of Said Code to cover the services to be rendered under this contract shall be made a part hereof by reference. It is further agreed that no obligation shall be considered to have been incurred under this Contract unless and until a purchase order shall have been issued and approved. And further, that the obligation incurred shall be limited to the amount set forth in each purchase order, or purchase orders, duly issued and approved.

The CONTRACTOR further agrees that his attention has been called to the duration of contract on Pages IB-5 and SC-2 of this Contract.

**SUPPLEMENTAL FORM FOR GENERAL BID**

ITEM NO.	QTY	BASE BID ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL	
			DOLLARS	CENTS	DOLLARS	CENTS
101	0.80	AT CLEARING AND GRUBBING _____ PER ACRE				
120.	50.00	AT EARTH EXCAVATION _____ PER CUBIC YARD				
121.	10.00	AT CLASS A ROCK EXCAVATION _____ PER CUBIC YARD				
151.	150.00	AT GRAVEL BORROW _____ PER CUBIC YARD				
156.	500.00	AT CRUSHED STONE _____ PER TON				
170.	1800.00	AT FINE GRADING AND COMPACTING - SUBGRADE AREA _____ PER SQUARE YARD				
180.01	1.00	AT ENVIRONMENTAL HEALTH AND SAFETY PROGRAM _____ PER LUMP SUM				
180.02	40.00	AT PERSONAL PROTECTION LEVEL C UPGRADE _____ PER HOURS				
180.03	10.00	AT LICENSED SITE PROFESSIONAL SERVICES _____ PER HOURS				
184.1	25.00	AT DISPOSAL OF TREATED WOOD PRODUCTS _____ PER TON				
452.	4.00	AT ASPHALT EMULSION FOR TACK COAT _____ PER GALLON				
453.	500.00	AT HMA JOINT SEALANT _____ PER FOOT				
472.	5.00	AT TEMPORARY ASPHALT PATCHING _____ PER TON				

CARRIED FORWARD \_\_\_\_\_

**BROUGHT FORWARD**

ITEM NO.	QTY	BASE BID ITEM WITH UNIT BID PRICE WRITTEN IN WORDS		UNIT PRICE		TOTAL	
				DOLLARS	CENTS	DOLLARS	CENTS
506.	40.00	AT	GRANITE CURB TYPE VB - STRAIGHT PER FOOT				
506.1	10.00	AT	GRANITE CURB TYPE VB - CURVED PER FOOT				
509.	50.00	AT	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT PER FOOT				
509.1	30.00	AT	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - CURVED PER FOOT				
643.	175.00	AT	36 INCH BLACK VINYL COATED CHAIN LINK FENCE PER FOOT				
697.1	1.00	AT	SILT SACK PER EACH				
701.	90.00	AT	CEMENT CONCRETE SIDEWALK PER SQUARE YARD				
701.2	80.00	AT	CEMENT CONCRETE CURB RAMP PER SQUARE YARD				
702.	250.00	AT	HOT MIX ASPHALT SIDEWALK OR DRIVEWAY PER TON				
74E.	1.00	AT	MOBILIZATION PER LUMP SUM				
751.	180.00	AT	LOAM BORROW PER CUBIC YARD				
765.	1300.00	AT	SEEDING PER SQUARE YARD				
767.121	1000.00	AT	SEDIMENT CONTROL BARRIER PER FOOT				

**CARRIED FORWARD**

**BROUGHT FORWARD**

ITEM NO.	QTY	BASE BID ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL	
			DOLLARS	CENTS	DOLLARS	CENTS
832.	45.00	AT WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A) PER SQUARE FOOT				
832.3	1.00	AT PEDESTRIAN WAYFINDING SIGN PER EACH				
847.1	5.00	AT SIGN SUP (N/GUIDE)+RTE MKR W/I BRKWAY POST ASSEMBLY - STEEL PER EACH				
852.	170	AT SAFETY SIGNING FOR TRAFFIC MANAGEMENT PER SQUARE FOOT				
853.1	4	AT PORTABLE BREAKAWAY BARRICADE TYPE III PER EACH				
856.	90	AT ARROW BOARD PER DAY				
856.12	90	AT PORTABLE CHANGEABLE MESSAGE SIGN PER DAY				
859.	300	AT REFLECTORIZED DRUM PER DAY				
859.1	300	AT REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS PER DAY				
864.04	20	AT PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC) PER SQUARE FOOT				
866.112	200	AT 12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC) PER FOOT				

**BASE BID TOTAL**

**IN WRITTEN WORDS**

BT-3

---

**BASIS OF AWARD**

**LOWELL CONNECTOR TRAIL**

In accordance with the Specifications, and under the terms and conditions mentioned above, I (We) hereby offer to furnish and deliver to departments described above the following services which shall in all respects meet the attached specifications, as required during the terms mentioned above for the following prices:

TOTAL COST (except police services): \_\_\_\_\_

IN WORDS: \_\_\_\_\_

POLICE SERVICES ALLOWANCE: \$10,000

IN WORDS: TEN - THOUSAND

TOTAL COST (Add Total Cost and Police Services) \_\_\_\_\_

IN WORDS: \_\_\_\_\_

**The BASIS OF AWARD is the lowest responsive and responsible bidder offering the lowest TOTAL COST.**

**Note 1:** The contract unit bid prices shall include all Labor, Materials, Equipment and Incidental costs required to complete this work, except for Police Services, which will be paid for on a reimbursable basis.

**Note 2:** Bidders are to include a \$10,000 allowance for the furnishing of police services in their bid (include in the Total Cost section).

**Signature of Bidder:** \_\_\_\_\_

**Print Name and Title:** \_\_\_\_\_

**Company Name and Address:**

\_\_\_\_\_  
\_\_\_\_\_

**Telephone Number:** \_\_\_\_\_

---

**CERTIFICATION OF COMPLIANCE**  
**G.L.c.30, §39S**  
**PUBLIC CONSTRUCTION MORE THAN \$10,000.00**

I certify under the pains and penalties of perjury that:

1. the Contractor is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work;
2. all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration (“OSHA”) that is at least 10 hours in duration and the time the employee begins works and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and
3. that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by OSHA that is at least 10 hours in duration.

\_\_\_\_\_  
Signature of Individual or Corporate  
Name (Mandatory)

\_\_\_\_\_  
By: Corporate Officer  
(Mandatory, if applicable)

Approval of a contract or other agreement will not be granted unless this certification clause is signed by the applicant.

The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all requirements of the Plans and Specifications.

1. Have been in business under present business name of \_\_\_\_\_

\_\_\_\_\_

for \_\_\_\_\_ years.

2. Ever failed to complete any work? \_\_\_\_\_

3. List one or more recent projects with names of Community and Engineer on which you served as general contractor similar to work required for this project.

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

4. Bank Reference \_\_\_\_\_

The undersigned agrees that, if he is selected as general contractor, he will within ten (10) days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of the general bid and furnish a performance bond and also a labor and materials or payment bond, each of a Surety company qualified to do business under the laws of the Commonwealth and satisfactory to the awarding authority and each in the sum of one hundred percent (100%) of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

The undersigned hereby certifies that he is able to furnish labor and can work in harmony with all other elements of labor employed or to be employed on the work.

Date: \_\_\_\_\_

\_\_\_\_\_  
(Name of General Bidder)

BY \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title of Signer)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City and State)

\_\_\_\_\_  
(Phone Number)

**NON-COLLUSION AFFIDAVIT OF PRIME BIDDER**

State of \_\_\_\_\_)

County of \_\_\_\_\_)

\_\_\_\_\_ being duly sworn,  
deposes and says that:

(1) He is (owner, partner, office representative or agent) of \_\_\_\_\_

\_\_\_\_\_ the Bidder that has submitted the  
attached bid;

(2) He is fully informed respecting the preparation and contents of the attached bid and of all  
pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham bid;

(4) Neither the said bidder nor any of its officers, partners, owners, agents, representatives,  
employees or parties in interest, including this affiant, has in any way colluded, conspired,  
connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a  
collusive or sham bid in connection with the Contract for which the attached bid has been  
submitted, or to refrain from bidding in connection with such contract, or has in any manner  
directly or indirectly, sought by agreement or collusion or communication or conference with  
any other Bidder, firm or person to fix the price or prices in the attached bid, or of any other  
Bidder; or to fix any overhead, profit or cost element of the bid price, or the bid price of any  
other Bidder; or to secure through any collusion, conspiracy, connivance or unlawful agreement  
any advantage against the **CITY OF LOWELL** or any person interested in the proposed  
Contract;

**LOWELL CONNECTOR TRAIL**

(5) The price quoted in the attached bid are fair and proper and are not tainted by any collusion,  
conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents  
representatives, owners, employees, or parties in interest, including this affiant.

\_\_\_\_\_  
(Signed) (Title)

Subscribed and sworn to before me on  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Title

My commission expires \_\_\_\_\_



**A. Contractors' Certification**

A contractor will not be eligible for award of a contract unless such contractor has submitted the following certification, which is deemed a part of the resulting contract:

**CONTRACTOR'S CERTIFICATION**

\_\_\_\_\_ certifies that:  
Contractor

1. It intends to use the following listed construction trades in the work under the contract

\_\_\_\_\_

\_\_\_\_\_ ; and

2. Will comply with the minority manpower ratio and specific affirmative action steps contained herein; and

3. Will obtain from each of its subcontractors and submit to the contracting or administering agency prior to the award of any subcontract under this contract the subcontractor certification required by these bid conditions.

\_\_\_\_\_  
(Signature of authorized representative of contractor)

**B. Subcontractors' Certification**

Prior to the award of any subcontract, regardless of tier, the prospective subcontractor must execute and submit to the Prime Contractor the following certification, which will be deemed a part of the resulting subcontract:

**SUBCONTRACTORS' CERTIFICATION**

\_\_\_\_\_ certifies that:

Subcontractor

1. It tends to use the following listed construction trades in the work under the subcontract

\_\_\_\_\_

\_\_\_\_\_ ; and

2. Will comply with the minority manpower ratio and specific affirmative action steps contained herein; and

3. Will obtain from each of the subcontractors prior to the award of any subcontract under this subcontract the subcontractor certification required by these bid conditions.

\_\_\_\_\_  
(Signature of authorized representative of subcontractor)

In order to ensure that the said subcontractors' certification becomes a part of all subcontractors under the prime contract, no subcontract shall be executed until an authorized representative of the state agency (or agencies) administering this project has determined, in writing, that the said certification has been incorporated in such subcontract, regardless of tier. Any subcontract executed without such written approval shall be void.

**MINIMUM MINORITY PERCENTAGES TO BE APPLIED TO  
STATE AND STATE ASSISTED CONTRACTS  
WITHIN THE COMMONWEALTH OF MASSACHUSETTS**

The Construction Reform Law, Chapter 193 of the Acts of 2004, and the revisions it made to M.G.L. c. 23A, §44 and M.G.L. c. 7, §40N, include a new municipal affirmative marketing program. Municipalities (hereinafter Awarding Authorities) must now incorporate Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) goals into both their design and construction procurement for municipal contracts for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any city or town that includes funding provided by the Commonwealth, in whole or in part (such as funding under the School Building Assistance Program, funding in any legislative appropriation, grant awards, reimbursements, municipal commitments to use state funds and the like). To count towards participation the business must be a State Office of Minority and Women Business Assistance (SOMWBA) certified WBE or MBE. Certification as a disadvantaged business enterprise (DBE), certification as an MBE/WBE by any agency other than SOMWBA, or submission of an application to SOMWBA for certification as an MBE/WBE shall not confer MBE or WBE status on a firm for purposes of participation credit. You can access the new law on The General Court of Massachusetts website:

<http://www.mass.gov/legis/laws/mgl/7-40n.htm> and

<http://www.mass.gov/legis/laws/mgl/23a-44.htm>

Affirmative Marketing Participation Goals Each Municipality must enforce the Affirmative Marketing Goals developed by the Division of Capital Asset Management (DCAM) in consultation with SOMWBA as follows:

Design Participation: MBEs (6.6%) and WBEs (15%)

Construction Participation: MBEs (4.2%) and WBEs (8.8%)

A list of currently certified MBEs and WBEs in the design and construction fields is available on SOMWBA's website at:

<http://www.somwba.state.ma.us>.

**Construction Participation for this Project : MBEs (4.2%) and WBEs (8.8%)**

**EXHIBIT A**

**SCHEDULE FOR PARTICIPATION  
BY MINORITY/WOMEN BUSINESS ENTERPRISES**

Project Number \_\_\_\_\_  
Project Location \_\_\_\_\_  
Project Name \_\_\_\_\_

- A. Filed Sub-bidders utilizing MBE/WBE firms, and MBE/WBE Sub-bidders - attach to Filed Sub-bid.
- B. General Contractor must submit to the Awarding Authority within five (5) working days of the opening of General Bids.

**BIDDER CERTIFICATION:**

The Bidder agrees that if awarded the contract it will expend at least the amount of the contract set forth below for MBE/WBE participation. For purposes of this commitment, the MBE and WBE designation means that a business has been certified by SOMWBA as a MBE, WBE or MBE/WBE. The Bidder must indicate the MBE/WBE firms it intends to utilize on the project as follows (attach additional sheets if necessary):

Company Name & Address	MBE or WBE	Describe MBE/WBE Scopes of Work (clarify "Labor Only", "Material Only" or "Labor and Material")	If Supplier, Indicate Total Value of Supplies*	Total Dollar Value of Participation
1.				
2.				
3.				
4.				
5.				

**\*60% of Total Counts toward Participation**

MBE Goal: \$ \_\_\_\_\_ Total Dollar Value of MBE Commitment: \$ \_\_\_\_\_

WBE Goal: \$ \_\_\_\_\_ Total Dollar Value of WBE Commitment: \$ \_\_\_\_\_

The undersigned hereby certifies that he/she has read the terms and conditions of the contract with regard to MBE/WBE participation and is authorized to bind the Bidder to the commitment set forth above.

Name of Firm \_\_\_\_\_

Business Address \_\_\_\_\_

Print Name \_\_\_\_\_ Authorized Signature \_\_\_\_\_

Title \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Date \_\_\_\_\_

**EXHIBIT B**

**LETTER OF INTENT  
MINORITY/WOMEN BUSINESS ENTERPRISES PARTICIPATION**

(To be completed by MBE/WBE, and submitted by the General Bidder to the Municipal Affirmative Marketing Construction Officer (AMCO) within five (5) working days of the opening of General Bids or by Filed Sub-bidder with its bid.)

Project Number \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location \_\_\_\_\_

To \_\_\_\_\_

Name of General Bidder/Sub-bidder

Indicate SOMWBA Certification: \_\_\_\_\_ MBE \_\_\_\_\_ WBE \_\_\_\_\_ M/WBE

This firm intends to perform work in connection with the above project.

This firm is currently certified by SOMWBA to perform the work identified below, and has not changed its minority/women ownership, control, or management without notifying SOMWBA within thirty (30) days of such a change.

This firm understands that if the General Bidder/Sub-bidder referenced above is awarded the contract, the Bidder intends to enter into an agreement with this firm to perform the activity described below for the prices indicated.

This firm also understands that the above-referenced firm, as General Bidder/Sub-Bidder, will make substitutions only as allowed by the terms of the Contract.

This firm understands that under the terms of the contract, only work actually performed by an MBE/WBE will be credited toward MBE/WBE participation goals, and this firm cannot assign or subcontract out any of its work without prior written approval of the Awarding Authority, and that any such assignment or subcontracting will not be credited toward MBE/WBE participation goals.

**MBE/WBE PARTICIPATION**

Section/Item Number (if Applicable)	Describe MBE/WBE Scopes of Work (clarify "Labor Only", "Material Only" or "Labor and Material")	If Supplier, Indicate Total Value of Supplies*	Total Dollar Value of Participation
1.			

\*60% of Total Counts toward Participation

Total Dollar Value: \$ \_\_\_\_\_

Name of MBE/WBE Firm \_\_\_\_\_

Business Address \_\_\_\_\_

Print Name \_\_\_\_\_ Authorized Signature \_\_\_\_\_

Title \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Date \_\_\_\_\_

**EXHIBIT C**

**CONTRACTOR PROGRESS PAYMENT REPORT  
MINORITY/WOMEN BUSINESS ENTERPRISES PARTICIPATION**

**Project Number:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

**Project Location:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Periodical Payment No.:** \_\_\_\_\_

**General Contractor:** \_\_\_\_\_

**MBE and/or WBE:** \_\_\_\_\_

One copy of this report is to be submitted for each Minority Business Enterprise (MBE) and/or Women Business Enterprise (WBE) at the time of submitting a request for payment. Copies of the report must be sent to the Minority Business Enterprise (MBE) and/or Women Business Enterprise (WBE) named above and to the municipalities Affirmative Marketing Construction Officer (AMCO). The AMCO will forward a copy of each Contractor Progress Payment Report to SOMWBA on a quarterly basis.

1. The total price to be paid to the above-named Minority Business Enterprise \_\_\_\_\_ and/or Women Business Enterprise \_\_\_\_\_: \$\_\_\_\_\_
2. The amount remitted to the Minority Business Enterprise and/or Women Business Enterprise as of the above date for work performed under this project: \$\_\_\_\_\_
3. Balance due the Minority Business Enterprise and/or Women Business Enterprise as of the above date for work performed under the above-named project: \$\_\_\_\_\_
4. Comments or explanation of amounts indicated under items 1 and 2 above:

\_\_\_\_\_  
\_\_\_\_\_

5. We hereby certify that the information supplied herein (including pages attached) is correct and complete.

General Contractor:

Minority and/or Women Business Enterprise

\_\_\_\_\_  
(Signed)

\_\_\_\_\_  
(Signed)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Date)

**CITY OF LOWELL**  
**AFFIRMATIVE ACTION CONTRACT REQUIREMENTS**  
**CONTRACTORS' CERTIFICATION**

**NAME OF PROJECT:     LOWELL CONNECTOR TRAIL**

A contractor will not be eligible for award of a contract unless such contractor has submitted the following certification, which is deemed a part of the resulting contract:

**CONTRACTOR'S CERTIFICATION**

\_\_\_\_\_ certifies that

1. It intends to use the following listed construction trades in the work under the contract \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ ; and,
2. Will comply with the minority manpower ratio and specific affirmative action steps contained herein; and
3. Will obtain from each of its subcontractors and submit the contracting or administering agency prior to the award of any subcontract under this contract the subcontractor certification required by these bid conditions.

\_\_\_\_\_  
(Signature of Authorized Representative of Contractor)

**CITY OF LOWELL**  
**AFFIRMATIVE ACTION CONTRACT REQUIREMENTS**  
**SUBCONTRACTORS' CERTIFICATION**

**NAME OF PROJECT:      LOWELL CONNECTOR TRAIL**

Prior to the award of any subcontract, regardless of tier, the prospective subcontractor must execute and submit to the Prime Contractor the following certification, which will be deemed a part of the resulting subcontract:

**SUBCONTRACTOR'S CERTIFICATION**

\_\_\_\_\_ certifies that

1. It intends to use the following listed construction trades in the work under the subcontract \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_ ; and,

2. Will comply with the minority manpower ratio and specific affirmative action steps contained herein; and
3. Will obtain from each of its subcontractors prior to the award subcontract under this subcontract, the subcontractor certification required by these bid conditions.

\_\_\_\_\_  
(Signature of Authorized Representative of Contractor)

In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the Prime Contract, no subcontract shall be executed until an authorized representative of the City administering this project has determined, in writing, that the said certification has been incorporated in such subcontract, regardless of tier. Any subcontract executed without such written approval shall be void.



**CITY OF LOWELL**  
**AFFIRMATIVE ACTION CONTRACT REQUIREMENTS**  
**BIDDERS' CERTIFICATION**

The bidder hereby certifies he shall comply with the minority manpower ratio and specific action steps contained in the Appendix EEO attached hereto, including compliance with the minority contractor compliance specified in Section V of said Appendix. The contractor receiving the award of the contract shall be required to obtain from each of its subcontractors and submit to the contracting or administering agency prior to the performance of any work under said contract a certification by said subcontractor, regardless of tier, that it will comply with the minority manpower ratio and specific affirmative action steps contained in the Appendix EEO.

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**CONTRACT**

THIS AGREEMENT, made this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by  
and between the City of Lowell, Massachusetts acting herein through its Commissioner of the  
Public Works Department, hereinafter called "OWNER" and

\*(1)\_\_\_\_\_

an individual doing business as, a partnership, a corporation of the \_\_\_\_\_

Hereinafter called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements  
hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby  
agrees with the OWNER to commence and complete the construction of Contract described as  
follows: **LOWELL CONNECTOR TRAIL** hereinafter called the Project for the sum of:

\_\_\_\_\_  
Dollars (\$)\_\_\_\_\_

and all extra work in connection therewith, under the terms as stated in the General and Special  
Conditions of the Contract; and at his/her (its or their) own proper cost and expense to furnish all  
the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other  
accessories and services necessary to complete the said Project in accordance with the conditions  
and prices stated in the Proposal, the General and Special Conditions of the Contract, the Plans,  
which include all maps, plates, blue prints, and other drawings and printed or written explanatory  
matter thereof, the Specifications and contract documents therefore as prepared by TEC, Inc. on  
behalf of the City of Lowell, City Engineer herein entitled "Engineer", and as herein enumerated  
all of which are made a part hereof and collectively evidence and constitute the contract.

The Contractor hereby agrees to commence work under this Contract on or before a date to be  
specified in a written "Notice to Proceed" of the OWNER, to meet interim specified milestones  
and to fully complete the project 2 calendar years thereafter. The OWNER agrees to pay the  
CONTRACTOR in current funds for the performance of the Contract, subject to additions and  
deductions, as provided in the General Conditions of the Contract, and to make payments on  
account thereof as provided in Paragraph 25, "Progress Payments", of the General Conditions.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in five (5) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

ATTEST:

\_\_\_\_\_  
Secretary

CITY OF LOWELL, MASSACHUSETTS

\_\_\_\_\_  
Witness

BY \_\_\_\_\_  
City Manager, Eileen Donoghue

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Contractor

\_\_\_\_\_

BY \_\_\_\_\_  
Witness

\_\_\_\_\_  
Address

\_\_\_\_\_

\_\_\_\_\_

APPROVED AS TO FORM

\_\_\_\_\_  
City Solicitor, Christine P. O'Connor

BY \_\_\_\_\_  
Commissioner of Public Works, Christine Clancy

APPROVED AS TO AVAILABILITY OF FUNDS

\_\_\_\_\_  
City Auditor, Tina Masiello  
Account: 18530005-582800-00020

(1) Strike out inapplicable terms. Secretary of the OWNER should attest. If Contractor is corporation, Secretary should attest. Give proper title of each person executing Contract.

**DUAL OBLIGEE RIDER**

TO BE ATTACHED TO AND MADE A PART OF PERFORMANCE AND  
PAYMENT BONDS NO. \_\_\_\_\_

ISSUED BY \_\_\_\_\_ (SURETY) ON BEHALF

OF \_\_\_\_\_ (PRINCIPAL) IN

THE AMOUNT OF \_\_\_\_\_

\_\_\_\_\_ (\$ \_\_\_\_\_) AND DATED \_\_\_\_\_

IN FAVOR OF \_\_\_\_\_ (OBLIGEE).

In consideration of \$1.00 and other valuable consideration the receipt whereof is acknowledged,  
the name (s) of \_\_\_\_\_ shall be added to said Bonds as a named  
Dual Obligee.

The Dual Obligee shall have the same rights and be subject to the same conditions and  
obligations as the original Obligee under the Bonds. Nothing in this Dual Obligee Rider shall be  
interpreted to extend or increase the liability of the Surety beyond that provided by the Bonds. At  
Surety's election, any payment due either Obligee may be made by its check issued jointly to  
both.

\_\_\_\_\_  
(Principal)

By: \_\_\_\_\_

\_\_\_\_\_  
(Obligee)

By: \_\_\_\_\_

\_\_\_\_\_  
(Surety)

By: \_\_\_\_\_

\_\_\_\_\_  
(Dual Obligee)

By: \_\_\_\_\_

**PERFORMANCE BOND**

**Bond Number:** \_\_\_\_\_

**Contract Number:** \_\_\_\_\_

KNOW ALL MEN/WOMEN BY THESE PRESENTS: That we \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_ a \_\_\_\_\_  
(Corporation, Partnership or Individual)

hereinafter called "Principal" and \_\_\_\_\_  
(Surety)

of \_\_\_\_\_, State of \_\_\_\_\_

hereinafter called the "Surety", are held and firmly bound unto the Department of Public  
(Owner)

Works of the City of Lowell, Massachusetts, hereinafter called "Owner", in the penal sum  
(City) (State)

of \_\_\_\_\_  
Dollars (\$ \_\_\_\_\_) in lawful money of the United States, for the payment of  
which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and  
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered  
into a certain contract with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a  
copy of which is hereto attached and made a part hereof for the construction of:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all  
the undertakings, covenants terms, conditions, and agreements of said contract during the  
original term thereof, and any extensions thereof which may be granted by the Owner, with or  
without notice to the Surety, and if he shall satisfy all claims and demands incurred under such  
contract, and shall fully indemnify and save harmless the Owner from all costs and damages  
which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all  
outlay and expense which the Owner may incur in making good any default, and make at its own  
cost and expense any and all defects and deficiencies in materials or workmanship which may

appear in the work provided for in said contract within the period of one year from the date of approval and acceptance of all work under said contract, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

AND PROVIDED, however, that the Surety and Sureties, for value received, hereby stipulate and agree to fully perform and complete the work mentioned and described in said contract and specifications, or cause said work to be performed and completed pursuant to the terms, conditions, and covenants thereof, if for any cause, said Principal fails or neglects to fully perform and complete said work; and the Surety or Sureties further agree to commence said work of completion or cause said work of completion to commence within twenty (20) days of notice thereof from the Owner and to complete same or cause same to be completed within (20) days of the time allowed, said Principal, in said contract and specifications for the completion of said work.

AND PROVIDED, THAT THE SAID Surety and Sureties, for value received hereby further stipulate that should the Principal for any reason terminate the Contract and have the Contract terminated, the Owner shall have the right to complete the Contract under the direction of its own Engineer with all rules, regulations, clauses, etc., of the original Contract and specification in full effect.

AND FURTHER PROVIDED, that no suit, action or proceeding by reason of any default whatever shall be brought on this bond after twenty-four (24) months from the date on which the final payment under the contract falls due.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any claimant thereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in six (6) counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(Principal Secretary)

\_\_\_\_\_  
(Principal)

(SEAL)

By \_\_\_\_\_(S)

\_\_\_\_\_  
(Witness as to Principal)

\_\_\_\_\_  
(Address-zip Code)

(Address-zip Code)

ATTEST:

\_\_\_\_\_  
(Surety) Secretary

(SEAL)

\_\_\_\_\_  
(Surety)

By \_\_\_\_\_  
(Attorney-in-Fact)

\_\_\_\_\_  
(Witness as to Surety)

\_\_\_\_\_  
(Address-zip Code)

\_\_\_\_\_  
(Address-zip Code)

**NOTE:** Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond.

**PAYMENT BOND**

**Bond Number:** \_\_\_\_\_

**Contract Number:** \_\_\_\_\_

**CONTRACTOR PAYMENT BOND**

KNOW ALL MEN/WOMEN BY THESE PRESENTS, That We, \_\_\_\_\_ ("Principal"), and \_\_\_\_\_, a corporation, as Surety ("Surety"), are held firmly bound unto \_\_\_\_\_ ("Owner") and such other Obligees as listed in the attached Dual Obligee Rider (Owner and such Obligees are together referred to as the "Obligees), in the sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for payment of which well and truly to be made we bind ourselves, our heirs, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Owner and Principal have entered into a Contract dated \_\_\_\_\_, 20\_\_\_\_, requiring Principal to furnish, install and perform the work on the Project ("Contract"), all as more fully described and detailed in the Contract; the provisions, terms and conditions of the Contract being fully incorporated herein and made part of this Bond with the same force and effect as if fully set forth herein;

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly pay persons having just claims for (a) labor, materials, services, insurance, supplies, machinery, equipment, rentals, fuel, oils, implements, tools, and/or appliances and any other items of whatever nature, furnished for, used or consumed in prosecution of the Subcontract work and all any all modifications thereto, whether lienable, non-lienable and whether or not permanently incorporated in said work; (b) pensions, welfare, vacation and/or any supplemental employee benefit contributions payable under collective bargaining agreements with respect to persons employed upon said work; (c) federal, state, and local taxes and contributions required by law to be withheld and or paid with respect to the employment of persons upon said work; and (d) otherwise fully indemnify and save the Obligees harmless from and against any claims or liens asserted by any party as a result of payment claimed due or concerning the Contract, including attorneys' fees and expenses; then this obligation shall be null and void; otherwise it shall remain in full force and effect.



The Surety, for value received, agrees that no change, extension of time, alteration, addition, omission and/or any other modification to the Contract or to any of the work to be performed thereunder or any forbearance on the part of either the Principal or the Obligees shall in any way impair or affect its obligations under this Bond and hereby waives notice of any and all such changes, extensions of time, alternations, additions, omissions and/or any other modifications or any forbearance on the part of either the Principal or the Obligees.

The Principal and the Surety, for value received, agree that this Bond shall inure to the benefit of all persons with just claims as aforesaid whether or not they have any direct contractual relationship with the Principal, as well as to the benefit of the Obligees, and that such persons may maintain independent actions based upon this Bond in their names.

IN WITNESS WHEREOF, the Principal and Surety have hereunto executed this Bond as an instrument under Seal executed by a duly authorized representative below as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

PRINCIPAL

SURETY

By: \_\_\_\_\_

By: \_\_\_\_\_

Printed Name:

Printed Name:

Its Duly Authorized:

Its Duly Authorized Attorney In Fact

ATTEST: \_\_\_\_\_

ATTEST: \_\_\_\_\_

**NOTE:** Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond.

**CONTRACT**

**CERTIFICATE OF OWNER'S ATTORNEY**

I, the undersigned  
the duly authorized and acting legal representative, of the City of Lowell, Massachusetts,  
do hereby certify as follows:

I have examined the foregoing Contract and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations and provisions thereof.

\_\_\_\_\_

Date: \_\_\_\_\_

## **GENERAL CONDITIONS**

### **SUBSECTION**

1. Definitions
2. Notice
3. Intent
4. Codes, Regulations and Issue Date of Standard Specifications
5. Drawings and Specifications
6. Conflicting Conditions
7. Samples
8. Quality of Equipment and Materials
9. Shop Drawings
10. Equipment and Material Approval
11. Rejected Work and Materials
12. Money to be Retained for Repairs
13. Separate Contracts
14. Rights of Various Interests
15. Notice to Proceed
16. Time for Completion and Liquidated Damages and Incentives
17. The Contractor's Duties and Rights
18. The Engineer's Authority
19. The Owner's Duties and Rights
20. Assignment
21. Oral Agreements
22. Insurance
23. Contract Security
24. Extra Work
25. Extension of Contract Time
26. Progress Payments
27. Acceptance and Final Payment
28. Correction of Faulty Work after Final Payment
29. Substitutions and Deletions
30. Provisions Required by Law Deemed Inserted
31. Protection of Lives and Health
32. Obstructions Encountered
33. Standard Specifications

## **GENERAL CONDITIONS**

### **1. DEFINITIONS**

#### **1. CONTRACT AND CONTRACT DOCUMENTS.**

The Contract comprises the following documents, including all additions, deletions and modifications incorporated therein before the execution of the Contract:

- a. Legal and Procedural Documents
    1. Invitation to Bid
    2. Information for Bidders
    3. Bid Proposal
    4. Certifications of Bidders
    5. Contract Agreement
    6. Performance Bond
    7. Payment Bond
    8. Certificate of OWNER'S Attorney
    9. Form for Sub-bid (when required)
  - b. General Conditions
  - c. Special Conditions
  - d. Technical Specifications, Drawings, and Addenda as enumerated in the Special Conditions.
2. ENGINEER: City of Lowell, City Engineer or TEC, Inc.
  3. STATE: The Commonwealth of Massachusetts
  4. OWNER, AWARDED AUTHORITY OR MUNICIPALITY: The party of the first part designated in the Contract or any board, officer or agent duly authorized to act for the said party of the first part in the matter covered by the Contract. The OWNER is the City of Lowell, acting through its Commissioner of the Department of Public Works.
  5. CONTRACTOR: The General Contractor, and is the CONTRACTOR, and is the CONTRACTOR named in the Contract Documents.
  6. SUBCONTRACTOR: Any person, firm or corporation with a direct contract with the CONTRACTOR who acts for or in behalf of the CONTRACTOR in executing any part of the Contract, but does not include one who merely furnishes material.
  7. WORK ON (AT) THE PROJECT: Work to be performed at the location of the project, including the transportation of materials and supplies to or from the

location of the project by employees of the CONTRACTOR and any Subcontractor.

8. **DIRECTED, REQUIRED APPROVED, ACCEPTABLE:** Whenever they refer to the work or its performance, “Directed”, “Required”, “Permitted”, “Ordered”, “Designated”, “Prescribed” and words of like import shall imply the direction, requirement, permission, order, designation or prescription of the ENGINEER, and “Approved”, “Acceptable”, “Satisfactory”, “In the Judgement of” and words of like import shall mean approval by, or acceptable to, or satisfactory to or in the judgement of the ENGINEER.
9. **PROPOSAL:** The offer of a bidder to perform the work described by the Contract Documents when made out and submitted on the prescribed form properly signed and guaranteed.
10. **PROPOSAL GUARANTEE:** The bid deposit accompanying the proposal submitted by the bidder, as a guaranty that the bidder will enter into a Contract with the OWNER for the construction of the work if the Contract is awarded to him.
11. **CONTRACT:** The agreement covering the performance of the work described in the Contract Documents and Plans including all supplemental agreements thereto and all general and special provisions pertaining to the work or materials therefor.
12. **PERFORMANCE AND PAYMENT BONDS:** the approved forms of security furnished by the CONTRACTOR and his Surety as a guaranty of good faith on the part of the CONTRACTOR to execute the work in accordance with the terms of the Contract.
13. **SURETY:** The person, firm or corporation who executes the CONTRACTOR’S Performance and Payment Bonds.
14. **SPECIFICATIONS:** The Legal and Procedural Documents, General Conditions, Special Conditions and Technical Specifications with all addenda thereto.
15. **DRAWINGS:** Those listed herein in the Special Conditions.
16. **PROVIDE:** Furnish and install.
17. **SHOP DRAWINGS:** Fabrication and erection drawings and instructions.
18. **ACT OF GOD:** An earthquake, flood, cyclone, or other cataclysmic phenomenon of nature. Rain, wind, flood, or other natural phenomenon of normal intensity for the locality shall not be construed as an Act of God and no reparation shall be made to the CONTRACTOR for damages to the work resulting therefrom.

19. **EXTRA WORK:** Work other than that required either expressed or implied by the Contract in its present form.
20. **SITE:** The area upon or in which the CONTRACTOR'S operations are carried on and such other areas adjacent thereto as may be designated as such by the ENGINEER.
21. **CHANGE ORDER:** A written order issued by the ENGINEER to the CONTRACTOR directing certain changes, additions, or reductions in the work or in the materials or methods to be used.

## **2. NOTICE**

Written notice shall be considered as served when delivered in person or sent by certified mail to the individual, firm or corporation or to the last business address known to him who serves the Notice. It shall be the duty of each party to advise the other parties to the Contract as to any change in his business address until completion of the Contract.

## **3. INTENT**

1. The intent of the Contract Documents is that the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
2. Any work performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the OWNER.

## **4. CODES, REGULATIONS, AND ISSUE DATE OF STANDARD SPECIFICATIONS**

1. Where standard specifications, codes, regulations and similar publications of governmental agencies, technical societies, manufacturer's associations and regulatory groups or bureaus are referred to in these specifications, the applicable portion thereof shall be of the same effect as if fully printed herein, and the work done in full accordance therewith. The edition current as of the date of issue of this specification shall be used except where publication date is specifically stated.

## **5. DRAWINGS AND SPECIFICATIONS**

1. Except as provided for otherwise, all required copies of Drawings and Specifications necessary for the execution of the work shall be furnished to the CONTRACTOR without charge. One complete set of all Drawings and

Specifications shall be maintained at the job site and shall be available to the ENGINEER at all times.

2. All Drawings and Specifications and other data prepared by the ENGINEER shall remain the property of the ENGINEER, and they shall not be reused on other work.
3. Figured dimensions on the Plans will be used in preference to scaling the Drawings. Where the work of the CONTRACTOR is affected by finish dimensions, these shall be determined by the CONTRACTOR at the site, and he shall assume the responsibility therefore.
4. Any discrepancies found between the Drawings and Specifications and site conditions of any errors or omissions in the Drawings and Specifications shall be immediately reported to the ENGINEER, who shall promptly correct such error or omission in writing. Any work done by the CONTRACTOR after his discovery of such discrepancies, errors or omissions without notifying the ENGINEER shall be done at the CONTRACTOR'S risk.

## **6. CONFLICTING CONDITIONS**

1. In the event of a discrepancy between the contract, the specifications and/or the drawings, the contract shall take precedence over the specifications and the specifications shall take precedence over the drawings where the discrepancy is not an omission.
2. On the Plans, the dimensions shown shall govern in case of any discrepancy between a scaled distance and the figures shown. Neither party shall take advantage of any obvious error or omission in the contract documents. Any apparent discrepancies shall be submitted to the ENGINEER for determination. The decision of the ENGINEER thereupon shall be conclusive.
3. The fact that specific mention of a fixture, or any part of the work is omitted in the Specifications, whether intentionally or otherwise, when the same is clearly shown or indicated on the Plans, or is usually and customarily required to complete fully such work as is specified herein, will not entitle the CONTRACTOR to consider action in the manner of any claim for extra compensation, but the same fixtures or work, or both, must be installed or done the same as if called for by both the Plans and Specifications.

## **7. SAMPLES**

All samples called for in the Specifications or required by the ENGINEER shall be furnished by the CONTRACTOR at his expense and shall be submitted to the ENGINEER for his approval. Samples shall be furnished so as not to delay fabrication, allowing the ENGINEER reasonable time for the consideration of the

samples submitted. CONTRACTOR shall furnish such samples of materials, and workmanship shall be in accordance with approved samples.

## **8. QUALITY OF EQUIPMENT AND MATERIALS**

1. Everything furnished and provided shall be new and all materials and equipment shall be of the quality specified. All unspecified materials and equipment shall be equal in grade and quality to specified materials.
2. In order to establish standards of quality, ENGINEER has, in the detailed Specifications, referred to certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design.
3. The CONTRACTOR shall furnish one complete list of proposed desired substitutions prior to signing of the Contract, together with such engineering catalog data and sketches the ENGINEER may require.

The CONTRACTOR shall abide by the ENGINEER'S judgment when proposed substitute materials or items or equipment are judged to be unacceptable and shall furnish the specified materials or item of equipment in such cases. All proposals for substitutions shall be submitted in writing by the General CONTRACTOR and not by individual trades or material suppliers. The ENGINEER will approve or disapprove proposed substitutions in writing within a reasonable time. No substitute materials shall be used unless approved in writing.

## **9. SHOP DRAWINGS**

1. The Contractor shall submit shop drawings and working drawings for all items fabricated or manufactured to be incorporated into the work, including but not limited to concrete reinforcement, structural details, piping layouts (including hangers and supports), manholes and appurtenances, wiring, materials fabricated especially for the Contract, all mechanical equipment without exception, and materials and equipment for which such drawings are specifically requested. Submittals of working drawings, shop drawings, manufacturer's specifications, catalog data, descriptive matter, illustrations, etc. as required by the Technical Specifications shall be made electronically in Portable Document Format (PDF), a file format created by Adobe Systems for document exchange. Provide PDF documents in most current version available.
2. Such Drawings shall show the principal dimensions, weight structural and operating features, space required, clearances, type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the Drawings. When it is customary to do so, when the dimensions are of particular importance, or when so specified, the Drawings shall be certified by the manufacturer or fabricator as correct for the Contract.



3. When so specified or if considered by the ENGINEER to be acceptable, manufacturer's specifications, catalog data, descriptive matter, illustrations, etc., may be submitted for approval in place of shop and working drawings. In such case the requirements shall be as specified for shop and working drawings, insofar as applicable.
4. The CONTRACTOR shall be responsible for the prompt and timely submittal of all shop and working drawings so that there shall be no delay to the work due to the absence of such drawings.
5. No material or equipment shall be purchased or fabricated especially for the Contract until the required shop and working drawings have been submitted as hereinabove provided and approved as conforming to the Contract requirements. All such materials and equipment and the work involved in their installation or incorporation into the work shall then be as shown on and represented by said drawings.
6. Until the necessary approval has been given, the CONTRACTOR shall not proceed with any portion of the work (such as the construction of foundations), the design or details of which are dependent upon the design or details of work, materials, equipment or other features for which approval is required.
7. All shop and working drawings shall be submitted to the ENGINEER by and /or through the CONTRACTOR, who shall be responsible for obtaining shop and working drawings from drawings from his subcontractors and returning approved drawings to them. All drawings shall be clearly marked with the names of the OWNER, CONTRACTOR, and building, equipment, or structure to which the drawing applies, and shall be suitably numbered. Each shipment of drawings shall be accompanied by a letter of transmittal giving a list of the drawing numbers and the names mentioned above.
8. Only drawings which have been checked and corrected by the fabricator should be submitted to the CONTRACTOR by his subcontractors and vendors. Prior to submitting drawings to the ENGINEER, the CONTRACTOR shall check thoroughly all such drawings to satisfy himself that the subject matter thereof conforms to the Drawings and Specifications in all respects. ALL DRAWINGS WHICH ARE CORRECT SHALL BE MARKED WITH THE DATE, CHECKER'S NAME AND SUBMITTED TO THE ENGINEER: OTHER DRAWINGS SHALL BE RETURNED FOR CORRECTION.
9. The approval of shop and working drawings, etc., will be general only and shall not relieve or in any respect diminish the responsibility of the CONTRACTOR for details of design, dimensions etc., necessary for proper fitting and construction of the work as required by the Contract and for achieving the result and performance specified thereunder.

10. Should the CONTRACTOR submit for approval equipment that requires modifications to the structures, piping, layout, etc., detailed on the Drawings, he shall also submit for approval details of the proposed modifications. Any modifications to structures or substitute designs submitted for approval must carry the stamp of a Registered Professional ENGINEER with the State. If such equipment and modifications are approved, the CONTRACTOR, at no additional cost to the OWNER, shall do all work necessary to make such modifications.
11. The shop or working drawings and/or copies of catalog cuts shall be returned to the CONTRACTOR in electronic Portable Document Format (PDF format).

## **10. EQUIPMENT AND MATERIAL APPROVAL**

1. As soon as practical and within fifteen (15) days after date of award of Contract and before any materials, fixtures or equipment are purchased, the CONTRACTOR shall furnish three copies of complete catalog data for every manufactured item of equipment and all components to be used in the work, including specific performance data, material description, rating, capacity, working pressure and general type. This submittal shall be compiled by the CONTRACTOR and approved by the ENGINEER before any of the equipment is ordered. Each data sheet or catalog in the submittal shall be indexed according to specifications section and paragraph for easy reference.
2. If prior to the expiration of the above specified period or of any authorized extension thereof, the CONTRACTOR fails to submit a list of materials, fixtures and equipment as specified above, the selection made by the ENGINEER shall be final and binding and all items shall be furnished and installed by the CONTRACTOR without change in contract price or time of completion.
3. Where conformance to any standard is specified, the catalog data for that item shall state that the item conforms to that standard; or after the ENGINEER'S approval of the item subject to conformance to the standard, the CONTRACTOR shall furnish a notarized affidavit on the manufacturer's letterhead signed by an officer certifying compliance to the standard. The CONTRACTOR shall stamp all such affidavits by which it is understood that the item certified is the item provided.
4. The name and address of and organization authorized by the manufacturer to service each item of equipment shall be included with the submittal. Proof of authorization shall be furnished on request. If the ENGINEER decides that the service organization is too far distant for practical servicing, such equipment shall be rejected.
5. After written approval, this submission shall become a part of the Contract, and may not be deviated from except upon written approval of the ENGINEER.

6. Catalog data for equipment approved by the ENGINEER does not in any case supersede the ENGINEER'S Contract Documents. The approval of the ENGINEER shall not relieve the CONTRACTOR from responsibility for deviations from Drawings or Specifications unless he has in writing called to the ENGINEER'S attention such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any in the items submitted. The CONTRACTOR shall check the work described by the catalog data with the ENGINEER'S Contract Documents for deviations and errors.
7. It shall be the responsibility of the Contractor to ensure that items to be furnished fit the space available. He shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Drawings and Specifications.
8. Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the CONTRACTOR to install the equipment to operate properly and in harmony with the intent of the Drawings and Specifications, and to make all changes in the work required by the different arrangement of connections.
9. Manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer unless herein specified to the contrary.
10. After the execution of the Contract, substitution of equipment of makes other than those named in the Contract will be considered only if the equipment proposed for substitution is equal in construction and/or efficiency to that named in the Contract. It will be assumed that the cost to the CONTRACTOR of the equipment proposed to be substituted is less than the equipment named in the Contract and if the substitution is approved, the Contract Price shall be reduced a corresponding amount.

To receive consideration, requests for substitution must be accompanied by documentary proof of the actual difference in cost to the CONTRACTOR in the form of certified copies of Equipment Company's quotation to the CONTRACTOR covering the original equipment and also equipment proposed for substitution or other proof satisfactory to the OWNER. It is the intention that the OWNER shall receive the full benefit of the savings in cost involved in any substitution. In all cases the burden of proof that the equipment offered for substitution is equal or superior in construction and/or efficiency to that named in the Contract shall rest on the CONTRACTOR, and unless the proof is satisfactory to the OWNER, the substitution will not be approved. Requests for substitution on the grounds that better delivery can be obtained on the equipment proposed for substitution will not be approved for it will be assured that the CONTRACTOR in

his proposal has named equipment on which he has received proposals from equipment manufacturers giving a delivery time which will permit completion of the project within the contract time. Requests for substitution of equipment which the CONTRACTOR cannot prove to the satisfaction of the OWNER to be equal or superior in construction and/or efficiency to that so named in the Contract will not be approved.

In the event that the CONTRACTOR obtains the ENGINEER'S approval on equipment other than that which is shown on the Plans and specified herein, the CONTRACTOR shall, at his own expense, make any changes in the structures, buildings or piping necessary to accommodate the equipment.

## **11. REJECTED WORK AND MATERIALS**

1. All materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the ENGINEER, or are in any way unsatisfactory or unsuitable for the purpose, for which they are intended, shall be rejected. Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause, shall be removed within ten (10) days after written notice is given by the ENGINEER, and the work shall be re-executed by the CONTRACTOR. The fact that such defective work may not have been reported on previous inspections shall not constitute an acceptance of any part of it.
2. Should the CONTRACTOR fail to remove rejected work or materials within ten (10) days after written notice to do so, the OWNER may remove the rejected work and then may store the materials.
3. The removal of rejected work or materials and storage of materials by the OWNER shall be paid for by the CONTRACTOR within thirty (30) days after the written notice to pay is given by the OWNER. If the CONTRACTOR does not pay the expense of such removal and after ten (10) days written notice being given by the OWNER of his intent to sell the materials, the OWNER may sell the materials at auction or at a private sale and shall pay to the CONTRACTOR the net proceeds therefrom after deducting all the costs and expenses that should have been borne by the CONTRACTOR.

## **12. MONEY TO BE RETAINED FOR REPAIRS**

The CONTRACTOR agrees that the OWNER may retain out of the final payment due to the CONTRACTOR under this Contract, five percent (5%) of the amount thereof, and may expend the same in the manner hereinafter provided, in making such repairs or replacements of said work as the OWNER may deem expedient.

If at any time within one-year period of guarantee any part of the work constructed under the terms of this Contract requires repairing or replacement, the

OWNER may notify the CONTRACTOR in writing to make the required repairs or replacements. If the CONTRACTOR neglects to begin making such repairs or replacements within ten (10) days from the date of receipt of such notice, the OWNER may employ other persons to make the same. The OWNER shall pay the expense of the repairs out of the sum retained for that purpose. Upon the expiration of the one year period of guarantee, provided that the work at the time is in good order, the CONTRACTOR will be entitled to receive the whole or such part of the sum retained as may remain after the expense of making repairs or replacements has been paid.

For settlement of all claims arising out of this Contract against the OWNER, its officers, or agents and for all expenses, losses, or damages incurred by the OWNER by reason of said claims, it is agreed that the OWNER may keep the whole or any portion of the sum retained.

### **13. SEPARATE CONTRACTS**

The OWNER may let other contracts in connection with the work of the CONTRACTOR. The Contractor shall cooperate with other CONTRACTORS with regard to storage of materials and execution of their work. It shall be the CONTRACTOR'S responsibility to inspect all work by other CONTRACTORS affecting his work and to report to the ENGINEER any irregularities which will not permit him to complete his work in a satisfactory manner. His failure to notify the ENGINEER of such irregularities shall indicate the work of other CONTRACTORS has been satisfactorily completed to receive his work. The CONTRACTOR shall not be responsible for defects of which he could not have known which develop in the work of others after the work is completed. It shall be the responsibility of the CONTRACTOR to measure the completed work in place and report to the ENGINEER immediately any difference between completed work by others and the Drawings.

### **14. RIGHTS OF VARIOUS INTERESTS**

Whenever work being done by the OWNER'S forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the ENGINEER, to secure the completion of the various portions of the work in general harmony.

### **15. NOTICE TO PROCEED**

Following the execution of the Contract by the OWNER, Written Notice to Proceed with the work shall be given to the CONTRACTOR. Computation of Contract Time shall commence on a date to be specified in the Notice to Proceed and every calendar day following, except as herein provided, shall be counted in the time for completion.

The CONTRACTOR shall note that issuance of the Notice to Proceed is contingent on the City of Lowell securing all rights-of-way required for the project.

## **16. TIME FOR COMPLETION AND LIQUIDATED DAMAGES AND INCENTIVES**

1. It is hereby understood and mutually agreed by and between the CONTRACTOR and the OWNER, that the date of beginning and the time for completion as specified in the Information to Bidders of the Work to be done hereunder are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the work embraced in this Contract shall commence on a date to be specified in the "NOTICE TO PROCEED".
2. The CONTRACTOR agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
3. If the said CONTRACTOR shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extensions thereof granted by the OWNER, then the CONTRACTOR does hereby agree, as a part consideration for the awarding of this Contract, to pay to the OWNER the \$500 per day, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the work.
4. The said amount (\$500 per day) is fixed and agreed upon by and between the CONTRACTOR and the OWNER because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER would in such event sustain, and said amount is agreed to be the amount of damages which the OWNER would sustain and said amount shall be retained from time to time by the OWNER from current periodic estimates.
5. It is further agreed that time is of the essence of each and every portion of this Contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract and additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract. Provided, that the CONTRACTOR shall not be charged with liquidated damages or any excess cost when the OWNER determines that the CONTRACTOR is without fault and the CONTRACTOR'S reasons for the time extension are acceptable to the OWNER: provided, further, that the CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due;

- a. To any preference, priority or allocation order duly issued by the Government;
  - b. To unforeseeable cause beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to Acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and severe weather.
6. The CONTRACTOR shall begin within ten (10) days from the beginning of any such delay, unless the OWNER shall grant a further period of time prior to the date of final settlement of the Contract, notify the OWNER, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the CONTRACTOR within a reasonable time of its decision in the matter.

## **17. THE CONTRACTOR'S DUTIES AND RIGHTS**

1. The CONTRACTOR shall begin and shall prosecute the work regularly and uninterruptedly after Notice to Proceed has been given (unless otherwise directed in writing by the OWNER) with such force as to secure the completion of the work, in and acceptable manner, within the time stated in the Proposal.
2. The CONTRACTOR shall submit at such times as may reasonably be requested by the ENGINEER, schedules which shall show the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the several parts of the work, and estimated dates of completion of the several parts.
3. For Lump Sum items the CONTRACTOR shall within ten (10) days of receipt of Notice to Proceed, submit a complete breakdown of the Contract Amount showing the value assigned to each part of the work, including an allowance for profit and overhead. Upon approval of the breakdown of the Contract Amount by the Engineer, it shall be used as the basis for all Requests for Payments.
4. The CONTRACTOR shall utilize the services of specialty subcontractors on those parts of the work which under normal contracting practices are performed by specialty subcontractors; provided that if the ENGINEER shall determine that the specialty work in question has been customarily performed by the CONTRACTOR'S own organization and that such organization is presently competent to perform such work, the CONTRACTOR shall be permitted to do so; provided further that, if the ENGINEER shall determine that the performance of any specialty work by specialty subcontractors will result in materially increased costs or inordinate delays, the requirements of this paragraph shall not apply. At the time specified by the Contract Documents or when requested by the

ENGINEER, the CONTRACTOR shall submit in writing to the OWNER for the ENGINEER, the names of the subcontractors proposed for the work. Subcontractors may not be changed except at the request of the CONTRACTOR with the approval of the ENGINEER. The CONTRACTOR is responsible to the OWNER for the acts and omissions of his subcontractors, and of their direct and indirect employees to the same extent as he is responsible for the acts and omissions of his employees. The Contract Documents shall not be construed as creating any contractual relation between any subcontractor and the OWNER. The CONTRACTOR shall bind every subcontractor by the terms of the Contract Documents. For convenience of reference the Specifications are separated into titled sections. Such separations shall not, however, operate to make the ENGINEER an arbiter to establish limits to the contracts between CONTRACTOR and Subcontractors.

The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the CONTRACTOR by the terms of the Contract Documents insofar as applicable to the work of subcontractors and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the Contract Documents.

5. The CONTRACTOR shall develop and make all detail surveys necessary for construction, including setting the construction baselines, slope stakes, batter boards, lines and elevations. The ENGINEER will provide base lines ties and bench marks for the use of the CONTRACTOR in laying out the work. The CONTRACTOR shall be responsible for the accuracy of all lines and levels and of the work as built in accordance therewith. The CONTRACTOR shall have the responsibility to carefully preserve bench marks, reference points and stakes established by the ENGINEER and in the case of destruction thereof by the CONTRACTOR or resulting from his negligence, resulting therefrom and shall be responsible for any mistakes that may be caused by the unnecessary loss or disturbance of such bench marks, reference points and stakes.
6. The CONTRACTOR, if required, shall employ at his own expense a competent surveyor or engineer registered in the STATE as a Professional Engineer or Land Surveyor, and necessary assistants who shall stake out all structures and other parts of the work, using as reference the base lines and bench marks established by the ENGINEER. The CONTRACTOR shall be responsible for the accuracy of all levels of the work as built in accordance therewith.
7. The CONTRACTOR shall secure and pay for all permits and licenses necessary for the prosecution of the work.
8. The CONTRACTOR shall give all notices and comply with all Federal, State and Local laws, or ordinances and regulations in any manner affecting the conduct of the work, and all such orders and decrees as exist, or may be enacted by bodies or



tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the OWNER against any claim or liability arising from or based on, the violation of any such law, ordinance, regulation, order or decree, whether by the OWNER or the OWNER's employee.

9. The CONTRACTOR shall pay all royalties and license fees for any design, device, material or process covered by letters, patent or copyright by legal agreement with the owner of the patent or a duly authorized licensee of such owner, and shall save harmless the OWNER from any and all loss or expense on account thereof, including its use by the OWNER.
10. The CONTRACTOR shall confine his apparatus and storage of materials and operation of his workmen to those areas described in the Drawings and Specifications and such additional areas which he may provide as approved by the ENGINEER.
11. The CONTRACTOR shall not enter upon private property for any purpose without obtaining permission or having a current easement or agreement in place, and the CONTRACTOR shall be responsible for the preservation of all public property, trees, monuments, etc., along and adjacent to the street and/or right-of-way, and shall use every precaution necessary to prevent damage or injury thereto. The CONTRACTOR shall be responsible for the preservation of all private property within, along, and adjacent to rights-of-way, easements, and access agreement areas. The CONTRACTOR shall use suitable precautions to prevent damage to pipes, conduits, and other underground structures, and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed.
12. The CONTRACTOR shall provide adequate signs, barricades, red lights and watchman and take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be protected at night by red signal lights which shall be of substantial construction and shall be painted white or whitewashed to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist.
13. The CONTRACTOR shall conduct his work at all times to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work, and to ensure the protection of persons and property in a manner satisfactory to the ENGINEER. No road or street shall be closed to the public except with the permission of the ENGINEER and proper governmental authority. Fire hydrants on or adjacent to the work shall be kept accessible to firefighting equipment at all times. Temporary provisions shall be made by the CONTRACTOR to ensure the use of sidewalks and the proper

functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the ENGINEER.

14. The CONTRACTOR shall secure written permission from the proper authority before executing new construction when such new construction crosses highways, railroad, streets or utilities under jurisdiction of State, County, or other public agency, public utility or private entity. A copy of this written permission must be filed with the ENGINEER or OWNER before any work is done.

The CONTRACTOR will be required to furnish a release from the proper authority before final acceptance of the work.

15. The CONTRACTOR shall provide and maintain such sanitary accommodations for the use of his employees and those of his subcontractors as may be necessary to comply with the requirements and regulations of the Local and State Departments of Health and as directed by the ENGINEER.
16. The CONTRACTOR shall maintain on the work a qualified superintendent who is acceptable to the ENGINEER, and who shall give efficient supervision to the work until its completion. The Superintendent shall have full authority to act in behalf of the CONTRACTOR, and all directions given to the Superintendent shall be considered given to the CONTRACTOR. In general, the ENGINEER'S instructions shall be confirmed in writing and always upon written request from the CONTRACTOR.
17. The CONTRACTOR shall be responsible for the conduct and discipline of his employees and/or any subcontractor or persons employed by subcontractors. All workmen must have sufficient knowledge, skill, and experience to perform properly the work assigned to them. Any foreman or workman employed by the CONTRACTOR or subcontractor who, in the opinion of the ENGINEER, does not perform his work, in a skillful manner or appears to be incompetent or to act in a disorderly or intemperate manner shall, at the written request of the ENGINEER, be discharged immediately and shall not be employed again in any portion of the work without approval of the ENGINEER.
18. The CONTRACTOR shall provide suitable on-site storage for all equipment and materials necessary for use in construction of the project. All materials improperly stored shall be subject to rejection by the ENGINEER. Private property shall not be used for storage purposes without the written permission of the owner or lessee.
19. The CONTRACTOR shall perform any work and shall furnish and install any materials and equipment necessary during an emergency endangering life or property. In all cases he shall notify the ENGINEER of the emergency as soon as practical but he shall not wait for instructions before proceeding to properly protect both life and property.

20. The CONTRACTOR shall do all necessary cutting and patching of the work that may be required to properly receive the work of the various trades or as required by the Drawings and Specifications to complete the structure. He shall restore all such cuts or patch work as directed by the ENGINEER. Cutting of existing structures that shall endanger the work, adjacent property, workmen or the public shall not be done unless approved by the ENGINEER and under his direction.
21. The CONTRACTOR shall keep the OWNER'S property free at all times from accumulations of waste materials or rubbish and shall remove from the OWNER'S property, and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and remove all surplus materials resulting from his operation or caused by his employees, leaving the site smooth, clean and true to line and grade.
22. The CONTRACTOR shall pay for all transportation and utility services not later than the twentieth day of the calendar month following that in which such services are rendered; pay for all materials, tools and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the twentieth day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the thirtieth day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used; and pay to each of his subcontractors not later than the fifth day following each payment to the CONTRACTOR, the respective amounts allowed to CONTRACTOR on account of the work performed by his subcontractors, to the extent of each subcontractor's interest therein.
23. The CONTRACTOR shall at the termination of this Contract before acceptance of the work by the ENGINEER, remove all his equipment, tools and supplies from the property of the OWNER. Should the CONTRACTOR fail to remove such equipment, tools and supplies, the OWNER shall have the right to remove them, and the CONTRACTOR shall pay all costs incurred by the OWNER in removing them.
24. The CONTRACTOR shall deliver to the OWNER a complete release of all liens arising out of this Contract before the retained percentage or before the final Request for Payment is paid. If any lien remains unsatisfied after all payments are made, the CONTRACTOR shall refund to the OWNER such amounts as the OWNER may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fee.
25. The CONTRACTOR shall warrant all material and equipment furnished and work performed by him for a period of one year from the date of written acceptance of the work, and furnish all guarantees applicable to definite parts of the work as stipulated in the sections of the Technical Provisions.

26. The CONTRACTOR shall have the right to suspend work or terminate the Contract upon ten (10) days written notice to the OWNER and the ENGINEER, for any of the following reasons:
  - a. If an order of any court, or other public authority caused the work to be stopped or suspended for a period of ninety (90) days through no act of the CONTRACTOR or his employees.
  - b. If the ENGINEER should fail to act upon any Request for Payment within fifteen (15) days after it is presented in accordance with the General Conditions of the Contract.
  - c. If the OWNER should fail to act upon any Request for Payment within thirty (30) days after its approval by the ENGINEER.
27. The CONTRACTOR shall comply with State and Local regulations pertaining to trench excavation, specifically MGL c. 82A
28. When a set of drawings has been produced for a job, the CONTRACTOR shall maintain at the site a set of the drawings. On this set shall be accurately shown the actual installation of all work under each section, indicating thereon any variations from the Contract Drawings, including changes in sites, locations and dimensions. This drawing set will be referred to as the Redlined As-Built. For this purpose the ENGINEER will furnish two sets of black and white drawings. At the conclusion of the work, the Redlined As-Built showing the entire work as actually installed will be scanned as high resolution color PDFs and both the paper copy and PDFs shall be delivered to the ENGINEER for approval and shall become property of the OWNER.

## **18. THE ENGINEER'S AUTHORITY**

1. The ENGINEER shall have general supervision and direction of the work. The ENGINEER shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, interpretation of Drawings and Specifications and all questions as to the acceptable fulfillment of the Contract on the part of CONTRACTOR. All claims of the OWNER or the CONTRACTOR shall be presented to the ENGINEER for decision which shall be made in writing within a reasonable time. All decisions of the ENGINEER shall be final.
2. The ENGINEER shall have the authority to suspend the work, wholly or in part, for such period or periods, as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for prosecution of the work, or failure on the part of the CONTRACTOR to carry out the provisions of the Contract or to supply materials meeting the requirements of the Specifications. The CONTRACTOR shall not suspend operations due to unsuitable weather

without the ENGINEER'S permission.

3. In the event of temporary suspension of work or during inclement weather or whenever the ENGINEER shall direct, the CONTRACTOR will and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the ENGINEER, any work or materials shall have been damaged or injured from the weather, by reason of failure on the part of the CONTRACTOR or any of his subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the CONTRACTOR.
4. The ENGINEER shall have the authority at all times to inspect all materials and each part or detail of the work and the CONTRACTOR will be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship and the diligent execution of the Contract. Such inspection may include mill, plant or shop inspection, and any material furnished under these Specifications is subject to such inspections. The ENGINEER shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the CONTRACTOR as is required to make a complete detailed inspection.
5. The ENGINEER shall have the authority at any time before acceptance of the work to direct the CONTRACTOR to remove or uncover any portions of the finished work. After examination, the CONTRACTOR shall restore said portions of the work to the standard required by the Specifications. Should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good of the parts removed shall be paid for as Extra Work, but should the work so exposed or examined prove unacceptable, the uncovering, removing and replacing shall be at the CONTRACTOR'S expense.
6. The ENGINEER shall have the authority to direct the CONTRACTOR to correct work that has been damaged or that was not performed in accordance with the Contract Documents. An equitable deduction from the Contract Amount shall be made to compensate the OWNER from the uncorrected work.

## **19. THE OWNER'S DUTIES AND RIGHTS**

1. The OWNER will provide the land shown on the Drawings upon which the work under the Contract is to be performed and to be used for rights-of-way for access. Any delay in furnishing these lands by the OWNER shall be deemed proper cause for adjustment in the Contract Amount and in time of completion.
2. The OWNER shall have the right to suspend the work or any portion thereof at any time provided that he gives the CONTRACTOR five (5) days written notice of suspension which shall set forth the date on which work is to be resumed. The CONTRACTOR shall resume the work upon written notice from the OWNER and within ten (10) days after the date set forth in the notice of suspension, the

CONTRACTOR may abandon that portion of the work so suspended and shall be entitled to payment for all work done on the portions so abandoned, plus 15 percent of the value of the abandoned work to compensate for overhead, plant expense, and anticipated profit.

3. The OWNER, acting upon the recommendation of its ENGINEER, shall have the authority to suspend the work wholly or in part, for such period or periods, as may be deemed necessary, due to unsuitable weather, or such other conditions as are considered unfavorably for prosecution of the work, or failure on the part of the CONTRACTOR to carry out the provisions of the Contract or to supply materials meeting the requirements of the Specifications. The CONTRACTOR shall not suspend operations due to unsuitable weather without the OWNER'S permission.
4. In the event of temporary suspension of work or during inclement weather or whenever the OWNER, acting upon the recommendation of the ENGINEER, shall direct, the CONTRACTOR and his subcontractors will protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the OWNER, acting upon the recommendation of the ENGINEER, any work or materials shall have been damaged or injured from the weather, by reason of failure on the part of the CONTRACTOR or any of his subcontractors to protect his work, such materials shall be removed and replaced at the expense of the CONTRACTOR.
5. The OWNER shall have the right to correct any deficiencies, without prejudice to any other remedy he may have, upon failure of the CONTRACTOR to perform the work in accordance with the CONTRACT documents, including any requirements with respect to the Schedule of Completion, after five (5) days written notice to the CONTRACTOR and receipt of written approval from the ENGINEER. The cost of the work so performed by the owner shall be paid for by the CONTRACTOR.
6. The OWNER, acting upon the recommendation of the ENGINEER, shall have the authority to direct the CONTRACTOR not to correct work that has been damaged, or that was not performed in accordance with the Contract Documents. An equitable deduction from the Contract Amount shall be made to compensate the OWNER for the uncorrected work.
7. The OWNER shall have the right to terminate the employment of the CONTRACTOR giving ten (10) days written notice of termination to the CONTRACTOR in the event of any default by the CONTRACTOR and upon receiving written notice from the ENGINEER certifying cause for such action in the event of such termination, the OWNER may take possession of the work and of all materials, tools and equipment thereon and may finish the work by whatever method and means he may select. It shall be considered a default by the CONTRACTOR whenever he shall:

- a. Declare bankruptcy, become insolvent, or assign his assets for the benefit of his creditors.
- b. Disregard or violate important provisions of the Contract Documents of the ENGINEER'S instructions, or fail to prosecute the work according to the agreed Schedule of Completion including extensions thereof.
- c. Fail to provide a qualified superintendent, competent workmen or subcontractors, or proper materials, or fail to make prompt payment therefore.

If the right of the CONTRACTOR to proceed is so terminated, the OWNER may take possession of and utilize in completing the work such materials, appliances, supplies, plant and equipment as may be on the site of the work, and necessary therefor. Upon termination of the Contract by the OWNER, no further payments shall be due the CONTRACTOR until the work is completed. If the unpaid balance of the Contract Amount shall exceed the cost of completing the work including all overhead costs, the excess shall be paid to the CONTRACTOR.

If the cost of completing the work shall exceed the unpaid balance, the Contractor and his sureties shall pay the difference to the OWNER. The cost incurred by the OWNER, as herein provided, and the damage incurred through the CONTRACTOR'S default, shall be certified by the OWNER, and approved by the ENGINEER.

8. The OWNER shall have the right to order changes in the work through additions, deletions or modifications without invalidating the Contract. Compensation and time completion affected by the change shall be adjusted at the time of ordering such change.
9. The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding that the time for completing the entire work or such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the completion of uncompleted work or causes refinishing of completed work, the CONTRACTOR shall be to such extra compensation, or extension of time or both, as the ENGINEER may determine.

## **20. ASSIGNMENT**

Neither the CONTRACTOR nor the OWNER shall sublet, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

## **21. ORAL AGREEMENTS**

No oral order, objection, claim or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing, and no evidence shall be introduced in any proceeding of any other waiver or modification.

## **22. INSURANCE**

The CONTRACTOR shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been approved by the OWNER, nor shall the CONTRACTOR allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved. Approval of the insurance by the OWNER shall not relieve or decrease the liability of the CONTRACTOR hereunder. The amounts of such Insurance shall not be less than those enumerated hereinafter. Certificates from the CONTRACTOR'S insurance, carriers stating the coverage provided, the limits of liability, and expiration dates shall be filed in triplicate with the ENGINEER before operations are begun.

**21.1** The CONTRACTOR shall carry public liability insurance with an insurance company satisfactory to the City so as to save the City harmless from any and all claims for damages arising out of bodily injury to, or death of, any person or persons and for all claims for damages arising out of injury to, or destruction of, property caused by accidents resulting from the use of implements, equipment or labor used in the performance of the Contract or from any neglect, default omission or want of proper care or misconduct on the part of the CONTRACTOR or of any one in his employ during the execution of the work. Such insurance shall include coverage for blasting and explosion, if explosives are to be used.

**21.2** The CONTRACTOR shall carry any other types of insurance as may be required elsewhere in the Contract Documents.

### **21.3 General Requirements**

**21.3.1** All insurance policies required in the Contract Documents shall be provided by companies satisfactory to the City. Any insurance carrier utilized to fulfill the insurance requirements of this Contract shall be licensed by the Massachusetts Division of Insurance to do business in the Commonwealth of Massachusetts shall have a minimum A.M. rating. The CONTRACTOR must provide the required insurance at its own expense.

**21.3.2** CONTRACTOR shall either (1) require each subcontractor to procure and to maintain during the life of its subcontract, Subcontractor's General Liability and Property Damage Insurance of the same type and in the same manner as specified herein, or (2) insure activities of his subcontractors in his own policy.



**21.3.3** Each policy must list the City as an additional insured and shall be primary to and non-contributory to any coverage maintained by the City.

**21.3.4** All insurance shall be written on an occurrence basis, unless the City approves in writing coverage on a claims-made basis. Insurance coverage whether written on an occurrence or a claims-made basis shall be maintained without interruption from the date of commencement of the work until the date of final payment and termination of any coverage required to be maintained after final payment.

**21.3.5** Certificates of Insurance acceptable to the City and confirming the insurance coverage required herein are attached to the Contract. Certificates of Insurance evidencing (1) either the claims-made or occurrence form coverage, (2) work description/location, (3) CONTRACTOR's corporate name, and (4) naming the City as an additional insured must be furnished to the City within five (5) business days after presentation of the Contract to the CONTRACTOR for execution. The City shall have no obligation to execute the Contract and may award the Contract to the next lowest responsible and responsive bidder, if such insurance certificates have not been provided to the City. The Certificate must provide that the insured will give Notice of Accident and Notice of Claim to the insurance company as soon as practicable after receiving such notice. The CONTRACTOR shall promptly provide the City with Certificates of Insurance evidencing policies' annual renewal.

**21.3.6** In the event of paid claims, the CONTRACTOR shall bear costs of any amount deductible.

**21.3.7** All insurance policies must contain a minimum thirty (30) day written notice of cancellation clause, and provide that the insurance company will notify the City via registered mail, of any cancellation, change or expiration of the policy. The CONTRACTOR shall furnish to the City copies of any said cancellation, change or expiration. Prior to the effective date of any such cancellation the CONTRACTOR shall take out new insurance to cover the policies so cancelled. The Insurance Companies shall remain liable, however, until new and satisfactory insurance policies have been delivered to, and accepted by, the City.

**21.3.8** In the event of the cancellation of any policy during the term of this Contract, or the failure to keep in effect the insurance required by this section, the City may, on twenty-four (24) hours' notice and at its option, procure or renew such insurance on the account of the CONTRACTOR. The CONTRACTOR agrees to repay the City's expense with interest thereon at the rate of eighteen percent (18%) annually from the date of the expenditure by the City.

**21.3.9** The insurance required under 21.4 through shall include all major divisions of coverage and shall be on a comprehensive general basis including Premise and Operations (including X-C-U), Owner's Protective (as a separate policy), Products and Completed Operations, and Owned, Non-owned, Leased, and Hired Vehicles. Such

insurance shall be written for not less than any limits of liability required by law or the limits set forth in said insurance amounts under 21.4 through, whichever are greater.

**21.3.10** The City reserves the right, at its sole discretion, to amend the insurance requirements contained herein.

**21.3.11** The CONTRACTOR and all Subcontractors waive subrogation rights against the City for all losses.

**21.3.12** Unless greater amounts of insurance coverage are required elsewhere in the Contract Documents, the amounts of insurance shall not be less than the minimum amounts set forth below.

**21.4** **Commercial General Liability Insurance** – for personal injury, bodily injury and property damage in an amount not less than \$1,000,000 for any one person, \$2,000,000 per occurrence and \$3,000,000 in the aggregate covering all work performed on or adjacent to City property including:

All premises and operations; Contractual liability; Coverage for the so-called “X, C, U” hazards, i.e., collapse of building, blasting, and damage to underground property; Products and Completed Operations (for a period of at least two (2) years following acceptance by the City or the completed Contract); Asbestos abatement, when applicable.

**21.4.1** This policy (ies) shall include coverage relating to explosion, collapse, and underground property damage and contractual liability coverage.

**21.4.2** Additionally, CONTRACTOR shall provide the following coverage against loss or damage by fire and against loss or damage covered by the special perils insurance endorsement on all Work: Special Perils 80% of Contract Price minimum. Upon completion of Work at City buildings, CONTRACTOR shall provide an installation floater, in the full amount of the Contract Price, for the requirements set forth above. The policy or policies shall specifically state that they are for the benefit and payable to the City, the CONTRACTOR, and all persons furnishing labor or labor and materials for the Work, as their interests may appear.

**21.4.3** Personal & Advertising Injury, on an occurrence basis, \$1,000,000 each occurrence.

**21.5** **Automobile Liability Insurance** – including the use of all vehicles owned, non-owned, leased and/or hired in an amount not less than \$2,000,000 combined single limit or Bodily Injury, each person in an amount no less than \$ 500,000 and each accident in amount no less than \$ 2,000,000 and Property Damage, each occurrence \$2,000,000.

**21.6** **Workers Compensation Insurance** - CONTRACTOR shall provide during the life of this Contract Worker's Compensation Insurance in accordance with the Worker's Compensation Act of the Commonwealth of Massachusetts (G.L. c. 149 § 34A and G.L. c. 152) including Employees Liability Insurance, covering all work as follows:

**21.6.1** Coverage A is statutory;

**21.6.2** Coverage B in amounts no less than the following: each accident - \$500,000; Disease Policy limit - \$500,000; and Disease- each employee - \$500,000.

Further, in addition to the General Requirements, CONTRACTOR shall provide by insurance for the payment of compensation and the furnishing of other benefits under M.G.L. c. 152 to all persons to be employed under the Contract, and the CONTRACTOR shall continue such insurance in full force and effect during the term of the Contract. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the Contract and shall operate as an immediate termination thereof. No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the City at least fifteen (15) days prior to the intended effective date thereof, which date shall be expressed in said notice.

**21.7** **Umbrella Liability Coverage** – in an amount not less than \$5,000,000 combined single limit and \$5,000,000 in the aggregate.

**21.8** **Pollution Liability Insurance** - CONTRACTOR shall provide during the life of this Contract Worker's Compensation Insurance in accordance with the Worker's Compensation Act of the Commonwealth of Massachusetts (G.L. c. 149 § 34A and G.L. c. 152) including Employees Liability Insurance, covering all work as follows:

**21.8.1** **Pollution Liability Insurance** – for sudden and/or gradual occurrences in an amount not less than \$1,000,000 per occurrence and \$5,000,000 in the aggregate arising out of the work, including but not limited to all hazardous materials identified in the contract;

**21.8.2** When applicable, CONTRACTOR will designate the disposal site and furnish a Certificate of Insurance from the Disposal Facility for Environmental Impairment Liability Insurance for (a) sudden and accidental occurrences in an amount no less than \$3,000,000 per occurrence and \$6,000,000 in the aggregate and (b) non-sudden occurrences in the amount no less than \$5,000,000 per occurrence and \$10,000,000 in the aggregate.

**21.8.3** Certificates of Insurance will clearly state the hazardous materials exposure work being performed.

**21.8.4** Further, the CONTRACTOR shall be responsible for the confirmation, verification, remediation, and disposal of all environmental impact and hazardous materials consistent with accomplishing the work of the contract documents. The CONTRACTOR shall adhere to the Massachusetts Contingency Plan, U.S. Environmental Protection Agency, Massachusetts Department of Environmental Protection, regulatory groups and bureaus, as well as all state, federal, local, health, and

environmental codes, rules, publications, ordinances, regulations, recommendations, and laws consistent with the removal and disposal of Environmental Impact and Hazardous Materials, to include, but not limited to: lead paint, asbestos, presumed asbestos, oils, refrigerants, fluids, chemical waste, general waste, tanks, polychlorinated biphenyls, Mercury, antifreeze, fluorescent light ballasts, capacitors, drums and containers, pigeon guano, dead animals, unknown or unidentified materials, contaminated soils, etc. The edition of the publication and/or governing agency current as of the date of the identification of the environmental impact and hazardous material item shall be used for accomplishing the work of the contract documents.

**21.9 Builder's Risk Insurance** - covering loss by fire and extended coverage in the amount of the total insurable value of all structures, materials, and equipment to be built and installed. The policy shall indicate the City, the CONTRACTOR, and all subcontractors as the named insured with loss payable to the City as Trustee. The policy shall provide for a thirty (30) day notice to the City of cancellation or restrictive amendment.

**21.9.1** A copy of this insurance policy shall be furnished to the City.

**21.9.2** The Builder's Risk Insurance shall be obtained before the work is started and shall be maintained until the date of completion of the work, or until the City occupies or otherwise takes possession of the project, whichever occurs first.

**21.10 Owner's Protective Liability (requires a separate policy)** - in an amount not less than \$2,000,000 per occurrence and \$5,000,000 in the aggregate.

**21.11 Optional Insurance**

**21.11.1** Excess Liability Insurance - The CONTRACTOR may purchase and maintain excess liability insurance in the umbrella form in order to satisfy the limits of liability required for the insurance to be purchased and maintained in accordance with the requirements set forth above. Any such amounts must be in addition to the umbrella limits required, must list all underlying policies, and must list the City as an additional insured. Evidence of such excess liability shall be delivered to the City in the same form and manner as the required insurance policies.

**21.11.2** Property Insurance - The City does not intend to purchase property Insurance covering the Project or the Work. The City shall not be required to provide such insurance, but the CONTRACTOR may, if it so desires, procure property insurance which will protect the interests of the CONTRACTOR, Subcontractor and Sub-subcontractors in the Work. The CONTRACTOR understands that such property insurance is solely the CONTRACTOR's responsibility, and the CONTRACTOR, its Subcontractors and Subsubcontractors shall have no claim against the City on account of the City's failure to provide such property insurance

**21.12 Limitation Of Liability** - Notwithstanding anything herein to the contrary, the Contractor's maximum aggregate liability for any loss or damages (other than death or

personal injury) incurred by the City as a result of or in consequence of the acts or omissions of the Contractor, its employees, subcontractors or agents in the performance of services covered by this Agreement shall not exceed one hundred percent (100%) of the Contract value plus any adjusted value per executed change order; provided, however, that if the Contractor's applicable insurance coverage is greater than this amount, the limit of liability for the Contract shall be the total insurance coverage.

IT IS AGREED AND UNDERSTOOD THAT THE CITY SHALL BE ENTITLED TO RECOVER DIRECT DAMAGES INCLUDING "BENEFIT-OF-THE-BARGAIN" EXPECTATION DAMAGES AND DAMAGES FOR BREACH OF WARRANTY SUBJECT TO THE LIMITATION OF LIABILITY, AND THAT IN NO EVENT SHALL CONTRACTOR BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF REVENUES OR LOSS OR FAILURE TO REALIZE ANTICIPATED SAVINGS OR EFFICIENCIES ARISING IN CONNECTION WITH THIS AGREEMENT.

**21.13 Indemnification of the City** - The Contractor agrees to indemnify, save harmless, and defend the City and all of its officers, agents, and employees from and against any and all third party suits, claims, or proceedings ("Claims"), and any losses, damages, charges or expenses, whether direct or indirect, and liability of every name and nature related to such Claims ("Liabilities") for or due to any loss or injury to persons or damages to real or tangible property to the extent caused by the Contractor or its employees, subcontractors or agents.

## **23. CONTRACT SECURITY**

1. The CONTRACTOR shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a labor and materials payment bond in an amount not less than One Hundred Percent (100%) of the Contract price as security for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract; each such bonds naming the OWNER as obliges under an oblige rider (attached in appendix)
2. The Sureties of all bonds shall be such surety company or companies as are approved by the OWNER, and are authorized to transact business in the State.
3. If at any time the OWNER, for justifiable cause, shall be or become dissatisfied with any surety or sureties then upon the Performance or Payment Bonds, the CONTRACTOR shall within five (5) days after notice from the OWNER to do so, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such bond shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished such and acceptable bond to the OWNER.

## **24. EXTRA WORK**

Payment for extra work shall be governed by Sec. 9.03 of the “Standard Specifications for Highways and Bridges”, published by the Commonwealth of Massachusetts, Massachusetts Highway Department, dated 1988 including the Supplemental Specifications dated June 15, 2012 or the latest version.

## **25. EXTENSION OF CONTRACT TIME**

When extra work is ordered at any time during the progress of the work which, in the sole judgment of the ENGINEER, unavoidably increases the time for the completion of the work, an extension of time shall be granted.

A delay beyond the CONTRACTOR’S control occasioned by an Act of God, an act of omission on the part of the OWNER or by strikes, lockouts, fires, etc., may entitle the CONTRACTOR to an extension of time in which to complete the work as determined by the ENGINEER, provided however, that the CONTRACTOR shall immediately give written notice to the ENGINEER of the cause of such delay, together with a statement of the portions of work so delayed. Delays in work for which necessary material has not been received by the CONTRACTOR will not be recognized or allowed until after receipt of such necessary material.

## **26. PROGRESS PAYMENTS**

1. The CONTRACTOR may submit once each month, a Request for Payment for work done. The CONTRACTOR shall furnish the ENGINEER all reasonable facilities required for obtaining the necessary information relative to the progress and execution of the work. Each Request for Payment shall be computed from the work completed on all items listed in the detailed breakdown of Contract Amount, less Five percent (5%) to be retained until final completion and acceptance of the work, and less previous payments.

If the ENGINEER determines that the progress of the Work will be benefitted by the delivery to the site of certain materials and equipment, when available, in advance of actual requirement therefore and if such materials and equipment are delivered and properly stored and protected, the cost to the CONTRACTOR or subcontractor as established, by invoices or other suitable vouchers satisfactory to the ENGINEER, less the retained percentages as above provided, may be included in the progress estimates; provided always that there be duly executed and delivered by the CONTRACTOR to the ENGINEER at the same time a Bill of Sale in form satisfactory to the OWNER, transferring and assigning to the OWNER, full ownership and title to such materials or equipment.

2. Within fifteen (15) days of submission of any Request for Payment by the CONTRACTOR, the ENGINEER shall:

- a. Approve the Request for Payment as submitted, or
  - b. Approve such other amount as he shall decide is due to the CONTRACTOR, informing the CONTRACTOR in writing of his reasons for approving the amended amount, or
  - c. Withhold the Request for Payment, informing the CONTRACTOR in writing of his reasons for withholding it.
3. Within thirty (30) days from the date of approval of a Request for Payment by the ENGINEER, the OWNER shall:
- a. Pay the Request for Payment as approved, or
  - b. Withhold payment in whole or in part on an approved Request for Payment to the extent necessary to protect itself from loss on account of any of the following causes discovered subsequent to approval of Request for Payment by the ENGINEER provided he informs the CONTRACTOR and the ENGINEER in writing of his reasons for withholding payment in whole or in part:
    1. Defective Work
    2. Evidence indicating the probable filing of claims by other parties against the CONTRACTOR.
    3. Failure of the CONTRACTOR to make payments to Subcontractors, material suppliers or labor.
    4. Damage to another CONTRACTOR.

## **27. ACCEPTANCE AND FINAL PAYMENT**

When the CONTRACTOR shall have completed the work in accordance with the terms of the Contract Documents, the ENGINEER shall certify his acceptance to the OWNER and his approval of the CONTRACTOR'S final Request for Payment, less any money to be retained for repairs if so specified in the Special Conditions Section of these Specifications, which shall be the Contract Amount plus all approved additions less all approved deductions and less previous payments made. The CONTRACTOR shall furnish evidence that he has fully paid all debts for labor, materials and equipment incurred in connection with the work, following which the OWNER shall accept the work and release the CONTRACTOR except as to the conditions of the Performance Bond, any legal rights of the OWNER, required guarantees, and Corrections of Faulty Work after final payment and shall pay the CONTRACTOR'S final Request for Payment. The CONTRACTOR must allow sufficient time between the time of completion of the work and approval of the final Request for Payment for the ENGINEER to assemble and check the necessary data.

## **28. CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT**

The approval of the Final Request for Payment by the ENGINEER and the making of the final payment by the OWNER to the CONTRACTOR shall not relieve the CONTRACTOR of the responsibility for faulty materials or workmanship. The OWNER shall promptly give notice of faulty materials or workmanship and the CONTRACTOR shall promptly replace any such defects discovered within one year from the date of written acceptance of the work. The ENGINEER shall decide all questions arising under this paragraph.

## **29. SUBSTITUTIONS AND DELETIONS**

Substitutions and deletions in the work shall be accomplished by the CONTRACTOR upon written order from the OWNER as approved by the ENGINEER or upon written order from the ENGINEER: which order shall state the reasons for original inclusion and subsequent elimination or substitution for materials, fixtures or equipment; and that the deviation does not materially injure the project as a whole, is in the best interest of the OWNER and is of the same cost and quality as originally specified or giving the amount in dollars of any equitable adjustment to which the parties have agreed.

## **30. PROVISIONS REQUIRED BY LAW DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forth will be physically amended to make such insertion or correction.

## **31. PROTECTION OF LIVES AND HEALTH**

In order to protect the lives and health of his employees under this Contract, the CONTRACTOR and his Subcontractors shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in course of employment on work under the Contract. He alone shall be responsible for the safety, efficiency, ad adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.



### **32. OBSTRUCTIONS ENCOUNTERED**

The location of existing underground pipes, cables, conduits and structures as shown has been collected from the best available sources and the Owner together with its agents does not imply or guarantee the data and information in connection with underground pipes, cables, conduits, structures and such other parts as to their completeness nor their locations as indicated. The Contractor shall contact utility owners and request marking location of all their lines in the work areas. The Contractor shall assume that there are existing water, gas, and other utility connections to each and every building enroute, whether they appear on the Drawings or not. Any expense and/or delay occasioned by these utilities and structures or damage thereto, including those not shown, shall be the responsibility of the Contractor at no additional expense to the Owner. See General Notes on Contract Drawings.

Before proceeding with construction operations at any location, the Contractor shall make such supplemental investigations, including test pits, as it deems necessary and approved by the Owner to uncover and determine the exact location of utilities, structures, or other conditions, and the Contractor shall have no claims for damages due to encountering subsurface structures, utilities, or other conditions. The Contractor shall also have no claims for damages due to encountering subsurface utilities, utilities, or other conditions which are made known to the Contractor prior to construction operations.

### **33. STANDARD SPECIFICATIONS**

For the purpose of governing the work to be done under this contract, the OWNER has adopted as its Standard Specifications format the “2020 MassDOT Highway Division Standard Specifications for Highways and Bridges; the English Supplemental Specifications, dated March 31, 2020; the Standard Special Provisions contained in this book; the 2017 MassDOT Highway Division Construction Standard Details; the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)” with revisions; the 1990 Standard Drawings for Signs and Supports; the 1968 Standard Drawings for Traffic Signals and Highway Lighting; the latest edition of American Standards for Nursery Stock, City of Lowell Standards, the Plans, and these Special Provisions.

These Standard Specifications shall apply as if reprinted herein except as modified by the General Conditions, Special Conditions and Technical Specifications.

In case of conflict between these documents, the Supplement to Standards and the Special Provisions of these Specifications shall govern.

## **SPECIAL CONDITIONS**

### **SUBSECTION**

1. Location and Description
2. Duration of Contract
3. Safety Signs, Barricades, etc.
4. Architectural Access Board Tolerances
5. Qualified Superintendent
6. Delivery and Storage of Materials
7. Material Slips
8. Construction Schedule
9. Submittal Schedule
10. Project Meetings
11. Work Schedule
12. Protection of Utilities and Properties
13. Traffic Control
14. Abutter Notification and Easement Coordination
15. Owner's Rights
16. Parking
17. Noise
18. Personal Conduct Policy
19. Daily Cleanup
20. Snow Removal and Deicing
21. Prevailing Wage Rates – (See Appendix)
22. Record Retention
23. Materials Removed and Stacked
24. Disposal of Surplus Materials
25. Massachusetts Department of Environmental Protection (DEP) File Number Sign
26. As Built Plans
27. Right to Reject Bids
28. Work within State Highway Layout

## **SPECIAL CONDITIONS**

### **1. LOCATION AND DESCRIPTION**

The proposed project includes sidewalk construction of a 10' shared-use path. Improvements will also include ADA compliant curb ramps, cement concrete sidewalk, portions of hot-mix asphalt sidewalk reconstruction, and landscaping improvements.

The work includes earth excavation, Superpave asphalt pavement, cement concrete sidewalks, and granite curbing.

All work shall take place between the hours of 7:00AM and 3:00PM unless otherwise approved by the Engineer.

This work shall be bid as item unit prices. The Contract unit prices shall include all labor, materials, equipment, and incidental costs required to complete the work. A separate allowance for police details has also been included in the contract.

### **2. DURATION OF CONTRACT**

The contract shall be for the period beginning on or about **April 1, 2021** or as stated in the **NOTICE TO PROCEED, WHICHEVER IS LATER** and end on or before **June 30, 2021**.

Failure to complete the work by the dates herein specified, or any proper extensions thereof granted by the OWNER will be subject to liquidated damages.

### **3. SAFETY SIGNS, BARRICADES, ETC.**

The CONTRACTOR shall conduct his operations in a safe manner at all times. The public shall be protected at all times with adequate warning signs, lighted barrels or barricades, warning tapes, etc. around the work area. Safety controls for construction operations shall be done in accordance with the relevant provisions of Section 850 of the Standard Specifications, the Manual on Uniform Traffic Control Devices and the Temporary Traffic Control Plan. The cost of providing and maintaining the signs, barrels, barricades, etc. shall be included in the lump sum cost of the project.

The CONTRACTOR shall provide temporary safe access for pedestrian and vehicle traffic to adjacent properties at all times. The cost of temporary access shall be incidental to the CONTRACTOR'S Total price bid.

When it is determined by the Lowell Police Department that a uniformed Police Officer should be present during working hours for safety of the public in the CONTRACTOR'S area of work, a uniformed Police Officer shall be provided by the Contractor.

Protection of the CONTRACTOR'S work shall be the responsibility of the CONTRACTOR and the cost for any protection of the work shall be included in the CONTRACTOR'S total price bid.

#### **4. ARCHITECTURAL ACCESS BOARD TOLERANCES**

The Contractor is hereby notified that they are ultimately responsible for constructing all Project elements in strict compliance with the current AAB/ADA rules, regulations and standards.

All construction elements in this project associated with sidewalks, walkways, wheelchair ramps and curb cuts are controlled by 521CMR – Rules and Regulations of the Architectural Access Board.

The AAB Rules and Regulations specify maximum slopes and minimum dimensions required for construction acceptance. There is no tolerance allowed for slopes greater than the maximum slope or for dimensions less than the minimum dimensions.

#### **5. QUALIFIED SUPERINTENDENT**

The CONTRACTOR shall maintain at the work site a qualified superintendent who is acceptable to the ENGINEER, and who shall give efficient supervision to the work until its completion. The Superintendent shall have full authority to act in behalf of the CONTRACTOR, and all directions given to the Superintendent shall be considered given to the CONTRACTOR. The CONTRACTOR shall submit the superintendent's qualifications to the ENGINEER prior to the start of the project. The superintendent shall not be replaced by the CONTRACTOR without prior approval from the ENGINEER.

The Superintendent shall be responsible for assisting Federal, State or local agencies for periodic inspections if performed. This shall include providing visitor hard hats and accompanying the individuals.

#### **6. DELIVERY AND STORAGE OF MATERIALS**

Materials and equipment shall be progressively delivered at the site so that there will be neither delay in the progress of the work nor an accumulation of materials that is not to be used within reasonable time. Approved portions of the right-of-way may temporarily be used for storage purposes but must be removed and cleaned up at the end of the working day. Any additional space required for storage must be provided by the Contractor at his expense in coordination with the City.

#### **7. MATERIAL SLIPS**

At the conclusion of each working day, the CONTRACTOR shall deliver to the ENGINEER the material slips, in triplicate, for all materials delivered to the job site that day. The ENGINEER shall sign the material slips and retain one copy for the City.

## **8. CONSTRUCTION SCHEDULE**

Within 10-days of Notice to Proceed, the CONTRACTOR shall submit for the OWNER and ENGINEER review and approval a Contractor's Construction Progress Schedule for the Work of this Contract. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates for the various subdivisions of the Work required by the Contract, early action items, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; (3) the time required for completion of each portion of the Work; and (4) anticipated amount of each monthly payment based on the Construction Progress Schedule. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract.

The CONTRACTOR shall provide a full, updated Contractor's Construction Progress Schedule monthly on the first weekday of each month with any significant changes to the schedule noted; this shall continue until the project is completed.

The CONTRACTOR shall provide a detailed three-week work schedule in writing every Friday; this shall continue until the project is completed.

Before work is begun on each phase of work, the CONTRACTOR shall discuss fully with the ENGINEER the order and manner of doing the work, and the operating procedures shall comply with the requirements of the ENGINEER.

## **9. SUBMITTAL SCHEDULE**

Within 10-days of Notice to Proceed, the Contractor shall promptly submit to the Owner's Representative for approval a Submittal Schedule. Thereafter Contractor shall update the Submittal Schedule as necessary to maintain a current schedule. The submittal schedule shall (1) be coordinated with the Contractor's Construction Progress Schedule, and (2) allow the Owner's Representative reasonable time to review submittals. If the Contractor fails to submit a Submittal Schedule, or fails to provide submittals in accordance with the approved Submittal Schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

## **10. PROJECT MEETINGS**

The successful bidders shall attend a preconstruction conference and organizational meeting at City offices or via videoconference prior to any field work to review responsibilities and personnel assignments and to ensure that Specifications, drawings, and all conditions are understood to properly complete this Contract.

The CONTRACTOR shall conduct progress meetings with OWNER, ENGINEER, and/or other parties decided upon by the Project Team at the project site or via videoconference at least biweekly and as needed unless otherwise agreed upon. No less

than 2 working days prior to each progress meeting, submit a proposed agenda to all parties for review and comment. Amend and expand as directed by participants. Distribute minutes to all participants no later than 3 days after each progress meeting date.

## **11. WORK SCHEDULE**

The normal hours of operation shall be dictated by the City of Lowell. Extended work hours may be permitted on this project, however, all activities to be performed outside the normal hours of operation shall adhere to the City's noise ordinance which limits construction hours to 7:00AM to 6:00PM. A written request shall be issued by the Contractor for any requested deviation to the work day or times indicated in the contract.

## **12. PROTECTION OF UTILITIES AND PROPERTY**

Written notice shall be given by the CONTRACTOR to all public service corporations or municipal and State officials owning or having charge of publicly or privately owned utilities at least one week in advance of the commencement of operations that will affect the utilities. The CONTRACTOR shall, at the same time, file a copy of such notice with the Engineer.

The CONTRACTOR, in constructing or installing facilities alongside or near sewers, drains, water or gas pipes, electric or telephone conduits, poles, sidewalks, walls, vaults or other structures shall sustain them securely in place. The CONTRACTOR shall coordinate with the officers and agents of the various utility companies and municipal departments to assure that the services of these structures are maintained. The CONTRACTOR shall also be responsible for the repair or replacement, at no additional cost to the OWNER (Department), of any damage to such structures caused by construction operations. The CONTRACTOR is responsible to leave them in the same condition as they existed prior to commencement of the work. In case of damage to utilities, the CONTRACTOR shall promptly notify the utility owner and shall, if requested by the ENGINEER, furnish labor and equipment to work temporarily under the utility OWNER'S direction. Pipes or other structures damaged by the operation of the CONTRACTOR may be repaired by the Department or by the utility owner which suffers the loss. The cost of such repairs shall be borne by the CONTRACTOR, without compensation therefore.

If during construction there is an existing utility and/ or structure found to be in conflict with the proposed work under this Contract, the CONTRACTOR shall protect and maintain the services to the utilities and structures. The ENGINEER will, as soon as possible identify the utilities to be relocated or other such activities deemed suitable for resolution.

If live service connections are to be interrupted by excavations of any kind, the CONTRACTOR shall not break the service until new services are provided. Abandoned services shall be plugged off or otherwise made secure.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in protecting or repairing property as specified in this Section, shall be considered included in the lump sum cost of the project and no additional compensation will be allowed therefore.

**13. TRAFFIC CONTROL**

The intent of this project is to maintain access to all residences and businesses at all times during construction. The CONTRACTOR must furnish all required traffic control, including detour signs, barriers, drums, and all related equipment. The CONTRACTOR may not close traffic lanes, roadways, driveways or sidewalks without prior written approval from the OWNER. The CONTRACTOR shall submit a Traffic Control Plan reflecting how they plan to implement the traffic management plan provided in the Construction Documents. No work shall begin on a street until the Traffic Control Plan has been reviewed and approved by the OWNER. The Traffic Control Plan shall show proposed signage and placement of drums for roadway work and accessible pedestrian routes, detours and signage required to complete the work on Newhall Street. When directed by the ENGINEER, the CONTRACTOR shall call for police details which will be paid for by the CONTRACTOR.

During the progress of the work, the CONTRACTOR shall make every effort to maintain access to abutting properties. When it becomes necessary to temporarily block access to a property, the CONTRACTOR shall notify the owner of the property in writing at least two weeks in advance of blocking access so that the property owner can move vehicles and make alternate arrangements.

The cost for preparation of the Traffic Control Plan shall be incidental to the lump sum cost of the project.

**14.**

**14. NOTIFICATION TO ABUTTERS AND EASEMENT COORDINATION**

The Contractor shall hand deliver notices to abutting properties at least one week before the start of construction. The notice will indicate the timing of the construction and any access restrictions or other inconveniences that may result. The Contractor shall notify and coordinate with the City's waste disposal contractor and school bus and transit companies when construction activities commence.

The City shall obtain all temporary and permanent easements prior to the start of construction.

**15. OWNER'S RIGHTS**

OWNER'S Rights to be exercised by the Department of Public Works wherever in this Contract the OWNER is to give or receive a notice or provisions are included for the exercise of rights and privileges and without limiting the generality thereof, the acts

dealing with the OWNER'S prerogatives in the Contract shall be exercised by the Commissioner of Public Works or his authorized representative for and in behalf of the OWNER.

## **16. PARKING**

Please note parking lots in the area are private lots. Parking outside the construction area shall be at Contractor's and Subcontractor's expense.

## **17. NOISE**

Follow Lowell, Massachusetts noise ordinance: Chapter C City Charter, Part II General Legislation, Chapter 204: Noise.

Develop and maintain a noise abatement program and will enforce strict discipline over all personnel to keep noise to a minimum. Require all work forces to comply with noise reduction requirements, including, but not limited to: Equipping air compressors with silencers and power equipment with mufflers, managing vehicular traffic and scheduling to reduce noise, minimized vehicular idling, no playing of music and use of radios, iPods or other similar devices, etc.

## **18. PERSONAL CONDUCT POLICY**

The use of drugs, alcohol and smoking is prohibited on the City and Private property.

The following activities are prohibited on the City property or easement areas at all times:

1. Failure to follow the instructions of City of Lowell public service personnel
2. Use of tobacco and/or nicotine products, including smoked tobacco, smokeless tobacco and nicotine vapor, in buildings, garage, on premises or in vehicles parked or operating on premises.
3. Use of loud, foul, rude or profane language
4. Use or possession of intoxicants or illegal or mood altering drugs or substances, except for qualified, legal prescriptions: when requested, allow inspection of prescription drugs
5. Threats to fight or fighting
6. Running, horseplay or other unprofessional conduct
7. Stealing of any materials, objects, furnishings, equipment, fixtures, supplies, clothing, or other tangible or intellectual property.
8. Harassment of either sex: All forms of physical and verbal sexual harassment, including without limitation: touching, whistling, sexually explicit stories, jokes, drawings, photos and similar representations, exhibitionism and all other sexually oriented offensive behavior.
9. Entertainment Devices (including, but not limited to radios, CD players, MP3 players and televisions): The use of all entertainment devices, including portable listening devices (iPod type) with headphones or earphones, is strictly prohibited at all times.



10. Excessive noise volume: Control the volume of all communication radios and loudspeakers to avoid creating a nuisance.

## **19. DAILY CLEAN UP**

Before completion of each day's work, the CONTRACTOR shall be responsible for cleaning up and removing and relocating all removed material, debris, equipment and the like to ensure the continuous flow of traffic in roadways where work is progressing including access to private property during non-working hours. Sweeping and cleaning of surfaces beyond the limits of the project required to clean up material caused by spillage or vehicular tracking during the various phases of the work shall be considered as incidental to the work being performed under the Contract and there will be no additional compensation.

## **20. SNOW REMOVAL AND DEICING**

Take full responsibility for snow clearing and removal and deicing operations within the job site boundaries. Stock piling of snow and ice and deicing compounds within the Work Area may only be allowed with prior discussion and approval from the ENGINEER and OWNER.

The City will determine when conditions are unfavorable for work and may order the work or any portion of it suspended whenever, if in the City's opinion, the conditions are not such as to insure first class work. In general, work shall be prosecuted throughout the year and the contractor will be expected to keep work going and employment of labor as continuous as possible.

All methods and materials used in the performance, and for the protection of, the work in cold weather shall be subject to the approval of the City. The contractor shall take necessary precautions at no additional cost to the City to protect the work from damage and for removing ice and frost from materials, including heating the water, sand, and aggregate, and for protecting newly installed work. The contractor will be responsible for snow removal and sidewalk maintenance and de-icing within the project area at the time of a snow event. The contractor will receive no extra payment for any labor, equipment, tools, or materials to comply with the above requirements.

The contractor will provide a phone number to the City for the party responsible for snow removal.

## **21. PREVAILING WAGE RATES – (SEE APPENDIX)**

Attention of the Bidders is particularly called to the requirements of the conditions of employment to be observed and the prevailing wage rates to be paid on this project, as determined by the State Department of Labor Division of Occupational Safety and the U.S. Department of Labor under the Davis Bacon and related Acts. In the case of differences between the two wage requirements the greater wage shall prevail.

## **22. RECORD RETENTION**

All records pertinent to this contract shall be kept retained for a period of three years from the date of submission of the final project closeout.

## **23. MATERIALS REMOVED AND STACKED**

The CONTRACTOR shall carefully remove, transport and stack all material that, in the opinion of the ENGINEER, is salvageable. The material shall be stacked at a location approved by the City of Lowell. The CONTRACTOR shall coordinate with the City of Lowell to schedule drop-off time and location.

## **24. DISPOSAL OF SURPLUS MATERIALS**

Surplus materials obtained from any type of excavation, and not needed for further use as determined by the ENGINEER shall become the property of the CONTRACTOR and shall be removed from the site during the construction period and legally disposed of. The removal and disposal of surplus material shall adhere to the regulations and requirements of local authorities governing the disposal of such materials, at no additional compensation.

## **25. MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) FILE NUMBER SIGN**

This project is subject to Massachusetts General Laws, Chapter 131, Section 40 as amended. Signs shall be in accordance with the latest MassDOT Construction Standards. No separate payment will be made for the signs, but all costs for the maintenance, erection, maintenance, moving, and removal of the signs shall be included in the lump sum cost of the project. For this project the Massachusetts Department of Environmental Protection File Number is pending and will be provided to the Contractor upon receipt.

## **26. AS BUILT PLANS**

CONTRACTOR shall produce a complete set of Record Drawings ("AS BUILT" plans) and Record Specifications for this Project. CONTRACTOR shall incorporate Record Redlined As-Built Drawings, subcontractor redlined drawings, field sketches, approved submittals, RFI responses and clarifying notes. CONTRACTOR shall check conformance sets for accuracy. CONTRACTOR to update all product schedules, - hardware, finish, equipment, and lighting – to reflect approved submittals. The PDF "AS BUILT" plans shall be titled "AS BUILT" and stamped and dated by a Professional Engineer registered in the Commonwealth of Massachusetts. The Professional Engineer's stamp is required to certify any changes made to the contract drawings and shall not dictate responsibility for the original design drawings.

CONTRACTOR shall incorporate Record Redlined As-Built Specifications, subcontractor redlined revisions, all updates and revisions to the specifications to provide

Record Specifications. The OWNER will provide MS Word files to the CONTRACTOR upon request. A format of recording As-Built information will be determined at the time of the file turnover.

CONTRACTOR shall furnish CAD and PDF versions of "AS BUILT" plans to the ENGINEER. CONTRACTOR shall furnish MS Word and PDF versions of Record Specifications to the ENGINEER. Record Drawings and Record Specifications shall be furnished prior to the date of final acceptance. Full compensation for Record Drawings and Record Specifications shall be included as incidental to the various unit prices bid and no additional compensation will be allowed therefore.

The Record Drawings and Record Specifications will provide a record of constructed improvements for future reference; therefore partial plan sets will not be accepted.

#### Production of Record/As-built Drawings CAD REQUIREMENTS

##### 1. General Notes

- a. Use U.S. National CAD Standard - AIA CAD Layer Guidelines.
- b. Bind all external references; no 'xrefs' are to appear on the cad files.
- c. Explode all blocks.
- d. Provide a detailed drawing list as a text file.
- e. Where applicable, show base drawings with columns on every drawing.
- f. Provide pen weight files.
- g. Include date, project name, owner, designer, property address, building name, building address, drawing type (progress, bid, permit, construction...) drawing title, unique drawing no., and revision section in the title block.
- h. Include the key plan (provided by ) locating the building within the site and the project area within the building; position a key plan at bottom right on drawing
- i. Locate a directional arrow near the key plan.
- j. Provide a graphic scale on each drawing
- k. Save .dwg files to be read by earlier versions of AutoCAD. (currently uses version 2014.)

## **27. RESERVATION OF RIGHTS TO REJECT BIDS**

The City reserves the right to reject any or all Bids, if it is in the public interest to do so or for any other good cause, not limited to the following.

The City reserves the right to reject any or all Bids, if it determines that the Bidder does not possess the qualifications to perform the Work specified in the Bidding Documents.

The City reserves the right to reject the Bid of any Bidder who the City has determined has not completed a prior project, whether with the City or elsewhere, because of the

fault of the Bidder, its Subcontractors or employees; has been declared in default on a prior contract whether with the City or elsewhere; has failed to complete a prior project in a timely fashion whether with the City or elsewhere; based on its work record, is not capable of performing the within Contract whether due to lack of sufficient prior experience, as determined by the City, or any other reason; has a work record of its Subcontractors demanding direct payment from the City; has a work record of its Subcontractors, employees or material suppliers complaining to the City or other awarding authority regarding the Bidder's failure to pay them; has a record of complaints made to the City or other awarding authority by persons offended by the behavior of the Bidder, its Subcontractors or employees; or has a record of its failure to comply with the Commonwealth and/or City laws and ordinances or requirements. "Work record" or "record" constitutes a minimum of one event in the work history of the Bidder.

The City shall reject every Bid that is not accompanied by a Bid deposit.

## **28. Work within State Highway Layout**

Portions of this project are within State Highway Layout and are subject to a pending MassDOT Access Permit. The contractor will be responsible to adhering to all terms, conditions, and restrictions of the permit and shall properly notify MassDOT prior to all construction activities within the State Highway Layout.

## **SPECIAL PROVISIONS**

### **Lowell**

#### **Lowell Connector Trail**

Labor participation goals for this Project shall be 15.3% for minorities and 6.9% for women for each job category. The goals are applicable to both Contractor's and Subcontractor's on-site construction workforce. Refer to Document 00820 for details.

### **SCOPE OF WORK**

The proposed project includes construction of a 10-foot-wide shared-use path. Improvements will also include ADA compliant curb ramps, portions of hot-mix asphalt sidewalk reconstruction, and landscaping improvements.

The work includes earth excavation, Superpave asphalt pavement, railroad track and tie removal, cement concrete sidewalks, and granite curbing.

All work under this contract shall be done in conformance with the *2021 Standard Specifications for Highways and Bridges*, the *Supplemental Specifications* contained in this book, the *2017 Construction Standard Details*, the *Traffic Management Plans and Detail Drawings*, the *1990 Standard Drawings for Signs and Supports*; the *2015 Overhead Signal Structure and Foundation Standard Drawings*, the *2009 Manual on Uniform Traffic Control Devices (MUTCD)* with Massachusetts Amendments; the *1968 Standard Drawings for Traffic Signals and Highway Lighting*; *The American Standard for Nursery Stock*; the Plans and these Special Provisions.

### **CCOVID 19 GUIDELINES AND PROCEDURES**

Commonwealth of Massachusetts COVID-19 GUIDELINES AND PROCEDURES FOR ALL CONSTRUCTION SITES AND WORKERS AT ALL PUBLIC WORK dated March 2020 as amended shall be adhered to.

It is the Contractor's responsibility to stay current with any changes or addendums issued to these guidelines. For copies of the guidelines go to:

<https://www.mass.gov/covid-19-guidelines-and-procedures-for-all-construction-sites-and-workers-at-all-public-work>

These Guidelines and Procedures will remain in effect until further notice. At the start of the Work the Contractor is required to submit a letter to the Engineer certifying that the Contractor is in compliance with CDC, OSHA and the Commonwealth's COVID-19 guidelines. The certification applies to the general contractor as well as all subcontractors engaged with the Work covered under this contract. No Work will be allowed to begin until the letter is submitted and approved by the Engineer. In addition, on a daily basis, the Contractor is required to submit a

copy of the MassDOT Contractor COVID-19 Guidelines Compliance Checklist to the Engineer. If the Contractor fails to submit the daily checklist no work will be allowed until one is submitted. Any items checked with a NO will require immediate corrective action by the Contractor before any Work can begin.

Per Subsection 5.09 – Inspection of the Work - the Contractor is required to provide assistance to the Engineer to make a complete and detailed inspection of the work. That assistance includes furnishing equipment to perform the inspection, therefore the Contractor will be required to provide CDC compliant Personal Protective Equipment (PPE) to Department personnel field staff. The CDC compliant PPE shall consist of face masks, gloves and eye protection.

All costs associated with compliance with this provision are considered to be incidental to the contract cost and therefore the contractor will not be entitled to any additional compensation.

### **ACCESS MASSDOT HIGHWAY INFORMATION ON WEBSITE**

Access MassDOT Highway Information related to Construction, Design/Engineering, Contractor/Vendor Information, Approved Materials and Fabricators, Manuals, Publications and Forms at:

<http://www.mass.gov/massdot/highway>

### **PROCEDURE FOR RELEASING AUTOCAD FILES TO THE GENERAL CONTRACTOR**

After the bid opening the low bidder may submit the Request for Release of AutoCAD Files Form to the Design Engineer. When the Design Engineer has received both the AutoCAD files and the Request for Release of AutoCAD Files Form from the Contractor, the Design Engineer will email the contractor a link through Dropbox.com with a reminder disclaimer of use (copy to Project Manager and City).

### **WORK SCHEDULE**

The Contractor shall perform all work in accordance with Lowell standard work hours for construction as follows: Monday through Friday (Excluding Holidays) 7:00 AM to 3:00 PM

The Contractor and any subcontractors shall only work overtime as approved by the Resident Engineer. The Contractor shall coordinate with the Resident Engineer and Lowell Police Department to obtain a waiver if work on Saturdays, Sundays or Holidays is necessary.

**HOLIDAY WORK RESTRICTIONS FOR CALENDAR YEAR 2020**

(Supplementing Subsection 7.09)

The District Highway Director (DHD) may authorize work to continue during these specified time periods if it is determined by the District that the work will not negatively impact the traveling public.

Below are the holiday work restrictions for the calendar year 2020.

New Years Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on Tuesday, December 31, 2019 until the normal start of business on Thursday, January 2, 2020. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Martin Luther King's Birthday (Federal Holiday)

No work restrictions due to traffic concerns however work on local roadways requires permission by the DHD and local police chief.

President's Day (Federal Holiday)

No work restrictions due to traffic concerns however work on local roadways requires permission by the DHD and local police chief.

Evacuation Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Patriot's Day (State Holiday)

Work restrictions will be in place for Districts 3, 4 and 6 along the entire Boston Marathon route and any other locations that the DHD in those districts determine are warranted so as to not to impact the marathon. All other districts work restrictions will be as per DHD.

Mother's Day

No work on Western Turnpike and Metropolitan Highway System from 5:00 AM on Friday, May 8, 2020 until the normal start of business on Monday, May 11, 2020.

Memorial Day (Federal Holiday)

Monday, May 31, 2021:

**HOLIDAY WORK RESTRICTIONS FOR CALENDAR YEAR 2020 (Continued)**

No work on major arterial roadways from 5:00 AM on Friday, May 22, 2020 until the normal start of business on Tuesday, May 26, 2020.

Bunker Hill Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Independence Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on Friday, July 3, 2020 until the normal start of business on Monday, July 6, 2020.

Labor Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on Friday, September 4, 2020 until the normal start of business on Tuesday, September 8, 2020.

Columbus Day (Federal Holiday)

No work on major arterials from 5:00 AM on Friday, October 9, 2020 until the normal start of business on Tuesday, October 13, 2020. DHD may allow work in those areas on a case by case basis and where work is behind barrier and will not impact traffic.

Veterans' Day (Federal Holiday)

No work restrictions due to traffic concerns.

Thanksgiving Day (Federal Holiday)

No work on major arterials from 5:00 AM on Wednesday, November 25, 2020 until the normal start of business on the Monday, November 30, 2020.

Christmas Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on Thursday, December 24, 2020 until the normal start of business on Monday, December 28, 2020.

**PROMPT PAYMENT**

Contractors are required to promptly pay Subcontractors under this Prime Contract within ten (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 payments due under this provision have been received by the Subcontractor(s) and/or referral to the Prequalification Committee for action which may affect the Contractor's prequalification status.

**DESIGNER**

DESIGNER

TEC, Inc.

Jake Carmody, P.E.

(978) 794-1792



### **ARCHITECTURAL ACCESS BOARD TOLERANCES**

The Contractor is hereby notified that they are ultimately responsible for constructing all project elements in strict compliance with the current AAB/ADA rules, regulations and standards.

All construction elements in this project associated with sidewalks, walkways, wheelchair ramps and curb cuts are controlled by 521CMR - Rules and Regulations of the Architectural Access Board (AAB).

The AAB Rules and Regulations specify maximum slopes and minimum dimensions required for construction acceptance. There is no tolerance allowed for slopes greater than the maximum slope nor for dimensions less than the minimum dimensions.

Contractors shall establish grade elevations at all wheel chair ramp locations, and shall set transition lengths according to the appropriate table in the Construction Standards (or to the details shown on the plans).

All wheelchair ramp joints and transition sections which define grade changes shall be formed, staked and checked prior to placing cement concrete. All grade changes are to be made at joints.

### **EMERALD ASH BORER ADVISORY**

To the extent possible, all trees and brush shall be disposed on site, typically chipped and spread in place. When trees or brush must be removed, such as in urban, or otherwise populated areas, Contractor shall identify proposed location for disposal, and provide written notification to the Engineer for approval. Disposal shall be in city or town of project, or at minimum, within county, of construction operations.

**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.

Do not store equipment or stockpile materials within drip line of trees or in areas enclosed by tree protection fencing.

Avoid any direct soil contamination in root zone area by petroleum, petroleum products or solvents, salts or any other pollutant during construction.

All cutting or trimming of trees to be preserved shall be performed by a Massachusetts Certified Arborist. The Contractor shall provide the Engineer with a copy of the certification prior to any work on trees.

Existing plants adjacent to construction may be protected as a group using temporary tree protection fence as specified under Item 102.52. Individual trees close to construction may be protected using individual tree protection as specified under Item 102.51.

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 inch 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.

Cost of removal of destroyed tree, including roots and stump, as well as the cost of replacement trees, shall be paid for by the Contractor.

Existing trees located on private property beyond the limit of grading shall be protected by the Contractor. Trees damaged by the Contractor's operations shall be repaired or replaced at the Contractor's expense as determined by the MassDOT Landscape Section.

**NEW INTRODUCTIONS OF INVASIVE PLANTS INTO OR AROUND THE SITE**

(Supplementing Subsections 7.01(D) Plant Pest Control and 7.13 Protection and Restoration of Property)

The Contractor shall ensure that no invasive plant species, as defined and listed by the Massachusetts Invasive Plant Advisory Group, are introduced or moved around the site by construction activities either by improperly cleaned construction equipment or importation of infected materials such as borrow, compost, nursery stock, seed, or hay bales. Corrective measures, if necessary, shall be made by the Contractor as directed by the Engineer. The Contractor shall be solely responsible for all costs associated with ensuring that invasive species are not introduced or moved around the site by construction activities and for all corrective measures required for as long as necessary to eliminate the introduced invasive plant species and prevent re-establishment of same.

**PROTECTION OF UNDERGROUND FACILITIES**

The Contractor's attention is directed to the necessity of making his own investigation in order to assure that no damage to existing structures, drainage lines, traffic signal conduits, etcetera, will occur.

The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for each location prior to disturbing existing ground in any way. Contact the Dig Safe Call Center by dialing 811 or 1-888-344-7233 or online at [www.digsafe.com](http://www.digsafe.com).

**RE-USE OF EXCAVATED MATERIALS**

It is intended that no excavated materials shall be removed from the site and that all excavated material be re-used in the proposed work.

**NOTICE TO OWNERS OF UTILITIES**

(Supplementing Subsection 7.13)

Written notice shall be given by the Contractor to all public service corporations or municipal and State officials owning or having charge of publicly or privately owned utilities of his intention to commence operations affecting such utilities at least one week in advance of the commencement of such operations. The Contractor shall, at the same time, file a copy of such notice with the Resident Engineer.

Before commencing work on service connections, the Contractor shall be responsible for contacting the Electric Company servicing the area to obtain construction requirements, standards, and to give adequate notice of commencement of work. The Contractor's attention is further directed to the requirements of work in the immediate vicinity of certain underground structures and poles herein included in these Special Provisions.

The Contractor shall inform the following officials in each area that he assigned to work:

Superintendent, Department of Public Works or Town Engineer  
Superintendent, Water Department  
Superintendent, Sewer Department  
Police and Fire Department  
Electric Department

**NOTICE TO OWNERS OF UTILITIES** (Continued)

Town officials are shown at website <http://www.mass.gov> under the Cities and Towns.  
Select “Choose Lowell” from the “pull down” menu.  
Press “Go” and locate the official Municipality Home Page.

The following are the names of owners and representatives of the principal utilities affected, but completeness of this list is not guaranteed by the Department:

National Grid Electric (Electric) 548 Haydenville Road Leeds, MA 01053	Sandra Annis 413-582-7424
National grid Gas (Gas) 40 Sylvan Road Waltham, MA 02451	Melissa Owens 781-907-2845
Tennessee Gas Pipeline Company (Gas) 8 Anngina Drive Enfield, CT 06082	David Wood 860-763-6005
Verizon (Telephone) 385 Myles Standish Blvd. Taunton, MA 02780	Karen Mealey 774-409-3160
Lowell Regional Water Utility (Water) 815 Pawtucket Blvd. Lowell, MA 01854	Mark Young 978-674-1675
Central Rivers Power (Water) 670 N Commercial Street Suite 204 Manchester, NH 03101	John Robichaud 603-617-6165
Lowell Regional Wastewater Utility (Sewer) 451 First Street Blvd.- (Rte.110) Lowell, MA 01850	Mark Young 978-674-1601
MBTADocument Control Group (Railroad) 500 Arborway Boston, MA 02130	Tyler Scott
PanAm Railways (Railroad) Iron Horse Park North Billerica, MA 01862	Ted Krug 978-663-1077

**NOTICE TO OWNERS OF UTILITIES** (Continued)

National Park Service Trolley (Railroad)  
67 Kirk Street  
Lowell, MA 01852

Christine Bruins  
978-275-1726

Comcast (Cable)  
PO Box 6505  
Chelmsford, MA 01824

Wendy Brown  
978-848-5183

AT&T (Cable)  
50 Mall Road Suite 203  
Burlington, MA 01803

Hayleigh Walker  
781-221-8400

Lumen (Cable)  
1025 Eldorado Blvd.  
Broomfield, CO 80021

Renoy Thomas  
516-712-3041

FirstLight (Cable)  
359 Corporate Drive  
Portsmouth, NH 03801

Paulie Polacke

Crown Castle (Cable)  
80 Central Street  
Boxborough, MA 01719

Mark Bonanno  
508-616-7818

MCI-Verizon Business (Cable)  
P.O Box 600  
Charlton, MA 01507

Stephen Parretti  
508-248-1305

Lowell City Electrician (Fire Alarm)  
1356 Middlesex Street  
Lowell, MA 01852

Steven Couto  
978-674-1813

Lowell City Engineer  
375 Merrimack Street  
Lowell, MA 01719

Joseph Cady  
978-674-4070

**NATIONAL GRID EMERGENCY TELEPHONE NUMBERS**

**GAS:**

Emergency: 1-800-233-5325  
New Service: 1- 877-696-4743  
Customer Support: 1-800-732-3400

**ELECTRIC:**

Outage/ Emergency: 1-800-465-1212  
New Service: 1-800-375-4730  
Customer Support: 1-800-322-3223

**ITEM 120.**

**EARTH EXCAVATION**

**CUBIC YARD**

The work under this item shall conform to the relevant provisions of Subsections 101 and 120 of the Standard Specifications and the following:

The work shall include the excavation of material of every description regardless of the type encountered, from within the project limits as shown on the plans and as required by the Engineer.

The work shall also include the removal and proper disposal of railroad tracks (steel only), discarded curbing, discarded signs and posts, and all other items to be removed that are not otherwise covered under other Contract items.

**ITEM 180.01 ENVIRONMENTAL HEALTH AND SAFETY PROGRAM LUMP SUM**

It is the Contractor's ultimate responsibility to ensure the health and safety of all the Contractor's employees and subcontracting personnel, the Engineer and his representatives, and the public from any on-site chemical contamination.

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 CFR 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 Contractor 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 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 Contractor. The on-site copy shall contain the signature of the Engineer and each on-site employee of the Department, Contractor 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 the Engineer at the conclusion of the Contract, or at the Engineer's request. Signature sheets shall be submitted monthly, or at the request of the Engineer.

**IMPLIMENTATION**

For all construction activities which require handling or exposure to potentially hazardous materials, the Health and Safety Plan shall specify an on-site Safety Officer. The Site Health and Safety Officer duties shall include, but are not limited to: implementation of the site Health and Safety Plan, training, evaluating risks, safety oversight, determining levels of personnel protection required, and performing any required monitoring at the site. A Daily Log shall be kept by the on-site Safety Officer and provided weekly to the Engineer. This log shall be used to record a description of the weather conditions, levels of personnel protection being employed, monitoring data and any other information relevant to on-site safety conditions. The Site Health and Safety officer shall sign and date the Daily Log.



**ITEM 180.01 (Continued)**

In the event that subsurface contamination is discovered during construction, the Site Safety Officer shall be present to oversee all handling, storage, sampling, and transport of such contaminated materials.

The level of protection, relative to respiratory and dermal hazards, required to ensure the health and safety of on-site personnel will be stipulated in the Health and Safety Plan and will be subject to modification by the on-site Safety Officer based on changing site and weather conditions and the following factors: type of operation or activity, chemical compounds identified on-site, concentration of the chemicals, physical state of the hazardous materials, potential duration of exposure to hazardous materials, dexterity required to perform work, decontamination procedures, necessary personnel and equipment, and type of equipment to be utilized.

The Contractor shall be required to provide appropriate personnel protective equipment for anyone who is working in an area either containing or suspected of containing a hazardous environment. This work will include both individuals physically working in these areas and those directing the work of same. Contingencies for upgrading the level of protection for on-site workers will be identified in the Health and Safety Plan and the contractor shall have the necessary materials/equipment on hand to implement the level of protection upgrade in a timely manner. Payment for this level of upgraded protection shall be paid for under Item 180.02.

**BASIS OF PAYMENT**

The work to be done under this Item shall be paid at the Contract Lump Sum Price under Item 180.01 for the development, preparation and implementation of the HASP by a qualified individual. The cost of enforcement by an on-site Safety Officer shall also be included.

**ITEM 180.02**

**PERSONAL PROTECTION  
LEVEL 'C' UPGRADE**

**HOUR**

The Contractor shall provide to all workers disposable, protective clothing appropriate to the hazard level of the work. The protective equipment and its use shall be in strict compliance with the Environmental Health and Safety Program (Item 180.01), and all appropriate regulations that address employee working conditions.

**BASIS OF PAYMENT**

Payment for Item 180.02 will be at the contract unit price, per hour, per man, required in level 'C' personal protection.

**ITEM 180.03**

**LICENSED SITE PROFESSIONAL SERVICES**

**HOUR**

A Licensed Site Professional (LSP) will be required to provide the services necessary to comply with the requirements of the Massachusetts Contingency Plan (MCP), 310 CMR 40.000, with respect to the scope of work for this Contract. These services will include, but are not limited to, sampling and analysis of potentially contaminated media, preparation of IRA, URAM and RAM Plans, status reports, transmittal forms, release notification forms, completion statements and related documents required pursuant to the MCP. The LSP will be responsible for obtaining all permits related to the characterization, treatment, and disposal of contaminated media. The LSP will provide oversight of handling, stockpiling, re-use, treatment and disposal of contaminated media, including preparation of Bills of Lading, Manifests, and related shipping documents. Environmental technicians, including but not limited to personnel conducting field monitoring and sampling, data interpretation and support services directly related to MCP compliance, are also included in this Item.

The name and qualifications of the Licensed Site Professional shall be submitted to the Engineer for review and approval at least two weeks prior to initial site activities. The LSP shall have significant experience in the oversight of MCP activities at active construction sites.

The LSP shall coordinate all activities with the Engineer.

The LSP shall be responsible for adequately characterizing contaminated media to ensure that it meets the requirements of the MCP and, in the case of contaminated media to be disposed of off-site, to ensure that it meets the acceptance criteria set forth by the disposal facility. The LSP shall be responsible for adequately characterizing subsurface conditions prior to backfill in areas where contaminated soil/sediments are excavated. The cost of laboratory analyses conducted in accordance with the sampling and assessment requirements for compliance with the MCP will be considered incidental to the unit price bid for Licensed Site Professional Services.

**BASIS OF PAYMENT**

Work under this Item shall be paid at the Contractor bid price per hour of service provided to perform the work as described above. The bid price shall reflect the cost of the LSP and any environmental technicians providing the services described above.

**ITEM 184.1**

**DISPOSAL OF TREATED WOOD PRODUCTS**

**TON**

Work under this item shall include the removal and disposal of all treated existing wood products as directed by the Engineer.

The work shall include the removal and proper disposal of existing railroad ties from the project site. 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.

Dismantling of the existing railroad tracks, where applicable, shall be considered incidental to the work performed under this item.

Measurement and payment shall be by the weight, in tons, of treated wood removed from the project site and subsequently accepted at a licensed facility. The work shall be considered full compensation for all labor, tools, track dismantling, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

**ITEM 643. 36 INCH BLACK VINYL COATED CHAIN LINK FENCE FOOT**

Work under this item shall conform to the relevant provisions under Section 644 of the standard specifications and the following:

The proposed work includes connecting the proposed chain link fence screen directly to the existing pipe handrail on the bridge over the Meadow River Brook in the location shown on the plans. An additional bottom rail shall be added to support the bottom of the fence screen. The fence screen, bottom rail, and connection components shall be furnished vinyl coated and color black. The existing rails shall be field painted color black. The contractor shall furnish a sketch for review prior to construction.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item will be measured and paid for at the Contract unit price per foot, which price shall include all labor, materials, equipment and incidentals required to complete the work.

**ITEM 697.1**

**SILT SACK**

**EACH**

Work under this item shall conform to the relevant provisions of Subsections 227 and 670 of the Standard Specifications and the following:

The work under this item includes the furnishing, installation, maintenance and removal of a reusable fabric sack to be installed in drainage structures for the protection of wetlands and other resource areas and the prevention of silt and sediment from the construction site from entering the storm water collection system. Devices shall be ACF Environmental (800)-448-3636; Reed & Graham, Inc. Geosynthetics (888)-381-0800; The BMP Store (800)-644-9223; or approved equal.

**CONSTRUCTION**

Silt sacks shall be installed in all existing and proposed catch basins and drop inlets within the project limits and as required by the Engineer.

The silt sack shall be as manufactured to fit the opening of the drainage structure under regular flow conditions, and shall be mounted under the grate. The insert shall be secured from the surface such that the grate can be removed without the insert discharging into the structure. The filter material shall be installed and maintained in accordance with the manufacturer's written literature and as required by the Engineer.

Silt sacks shall remain in place until the placement of the pavement overlay or top course and the graded areas have become permanently stabilized by vegetative growth. All materials used for the filter fabric shall become the property of the Contractor and shall be removed from the site.

The Contractor shall inspect the condition of silt sacks after each rainstorm and during major rain events. Silt sacks shall be cleaned periodically to remove and disposed of accumulated debris as required. Silt sacks, which become damaged during construction operations, shall be repaired or replaced immediately at no additional cost to the Owner.

When emptying the silt sack, the Contractor shall take all due care to prevent sediment from entering the structure. Any silt or other debris found in the drainage system at the end of construction shall be removed at the Contractor's expense. The silt and sediment from the silt sack shall be legally disposed of off-site. Under no condition shall silt and sediment from the insert be deposited on site or used in construction.

All curb openings shall be blocked to prevent stormwater from bypassing the device.

All debris accumulated in silt sacks shall be handled and disposed of as specified in Subsection 227.

**ITEM 697.1 (Continued)**

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Silt Sacks will be measured and paid for at the Contract unit price per each, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

No separate payment will be made for removal and disposal of the sediment from the insert, regardless of the frequency of removal and disposal, but all costs in connection therewith shall be included in the Contract unit price bid.

**ITEM 765.**

**SEEDING**

**SQUARE YARD**

Work under this item shall conform to the relevant provisions of Subsection 765 of the Standard Specifications and the following:

Grass seed and fertilizer shall be applied with a hydraulic spray machine in accordance with Subsection 765.65.

All materials, application methods, and method of measurement and payment shall otherwise meet the requirements in Subsection 765.



**ITEM 767.121**

**SEDIMENT CONTROL BARRIER**

**FOOT**

The work under this item shall conform to the relevant provisions of Sections 670, 751 and 767 of the Standard Specifications and the following:

The work includes the furnishing and placement of a sediment control barrier where indicated on the plans. Sediment Control Barrier shall be installed prior to disturbing upslope soil.

The purpose of the sediment control barrier is to slow runoff velocity and filter suspended sediments from storm water flow. Sediment barrier may be used to contain stockpile sediments, to break slope length, and to slow or prevent upgradient or water off road surfaces from flowing into a work zone. Contractor shall be responsible for ensuring that barriers fulfill the intent of adequately controlling siltation and runoff.

Twelve-inch diameter (after installation) compost filter tubes are intended to be the primary sedimentation control barrier.

For small areas of disturbance with minimal slope and slope length, the Engineer may approve the following sediment control methods;

- Straw tubes/wattles which shall be trenched
- Straw bales which shall be trenched

Additional barriers (adding depth or height) shall be used at specific locations of concentrated flow such as at gully points, steep slopes, or identified failure points in the sediment capture line.

Where specified or required by permits, silt fence shall be used in addition to compost filter tubes or straw bales and shall be incidental to this item.

**MATERIALS AND CONSTRUCTION**

Prior to initial placement of barriers, the Contractor and the Engineer shall review locations specified on the plans to ensure that the placement will provide maximum effectiveness.

Barriers shall be stacked, trenched and/or wedged as specified herein and shall be securely in contact with existing soil such that there is no flow beneath the barrier.

**Compost Filter Tube**

Compost material inside the filter tube shall meet M1.06.0, except for the following: no manure or bio-solids shall be used; no kiln dried wood or construction debris shall be allowed; material shall pass through a 2-inch sieve; and the C:N ratio shall be disregarded.

Outer tube fabric shall be a knitted mesh with 1/8 – 3/8” openings and made of 100% biodegradable materials (e.g., cotton, hemp or jute).

**ITEM 767.121** (Continued)

Compost Filter tubes shall be a minimum of 12 inches in diameter installed. Tubes shall be placed, filled, and stacked in place as required to ensure stability against water flows. All tubes shall be tamped, but not trenched, to ensure good contact with soil.

Where reinforcement is necessary, additional tubes shall be installed as shown on plans.

**Straw Bales**

Straw bales shall conform to the requirements of section M6.04.3 of the Standard Specifications and the following:

Bales should be a minimum size of 12 x 16 x 36 inches and shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.

The bales shall be trenched and backfilled. The trench shall be excavated with the width of the bale and the length of the proposed barrier to a depth of 4 inches. After the bales are stacked the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier.

**Straw Wattle**

Straw wattle shall be a minimum of 12 inches in diameter. Straw filling shall conform to the requirements of Section M6.04.3, shall be encased in durable netting, and shall have a density of 3 lb/foot.

Straw wattle shall be trenched in 3 inches deep and staked according to the plans. The wattles shall be sufficiently secure on the upstream side to prevent water flowing underneath the wattle.

**Silt Fence**

Materials and Installation shall be per Section 670.40 of the Standard Specifications and the following:

Silt fence shall be used when required by the Engineer and as specified by the Orders of Condition or other permitting.

When used with compost filter tubes, the tube shall be placed on a minimum of 8 inches of folded fabric on the upslope side of the fence. Fabric does not need to be trenched.

When used with straw bales, an 8-inch deep and 4-inch wide trench or V-trench shall be dug on the upslope side of the fence line. One foot of fabric shall be placed in the bottom of the trench followed by backfilling with compacted earth or gravel. Stakes shall be driven 16 inches into the ground on the down slope side of the trench and shall be spaced such that the fence remains vertical and effective.

**ITEM 767.121** (Continued)

Width of fabric shall be sufficient to provide a 36-inch high barrier after fabric is folded or trenched. Sagging fabric will require additional staking or other anchoring.

Stakes

Stakes for anchoring compost filter tubes, straw wattles, and straw bales shall be as shown on the plans and shall be a minimum of 1x1 inch diameter x 4 feet hardwood stakes.

When used with silt fence, stakes for compost filter tubes shall be driven 12 inches into the ground. Stakes for straw bales shall be driven 16 inches into the ground.

Stakes of other material of equivalent strength may be used if approved by the Engineer.

MAINTENANCE

Maintenance of Sediment Control Barriers shall be per Subsection 670.60 of the Standard Specifications or per the NPDES Stormwater Pollution Prevention Plan (SWPPP).

The contractor shall inspect the sediment barrier after each rain event and as specified in relevant permits to ensure that they are working effectively and as intended. Contractor shall be responsible for ensuring that an effective barrier is in place for all phases of the contract.

Barriers that decompose naturally due to weatherization over time such that they no longer provide the function required shall be repaired or replaced as directed. If the resulting berm of compost within the fabric tube is sufficiently intact and continues to provide water and sediment control, barrier does not necessarily require replacement.

DISMANTLING & REMOVING

Barriers shall be dismantled and/or removed when construction work is complete and when site conditions are sufficiently stable to prevent surface erosion and after receiving permission to do so from the Engineer.

For all instances, all nonbiodegradable material, including photo-biodegradable fabric, plastic netting, nylon twine, and silt fence, shall be removed and disposed off-site by the Contractor regardless of site context.

For naturalized areas, biodegradable, natural fabric and material may be left in place to decompose on-site. Compost filter tubes may be left as they are with stakes removed. Straw bales shall be broken down and spread evenly. All nylon or nonbiodegradable twine shall be removed along with silt fence. Wooden stakes may be left on site, placed neatly and discreetly.

On urban, residential, and other locations where aesthetics is a concern, the following shall apply:

- Filter tube fabric shall be cut and removed, and compost shall be raked to blend evenly

**ITEM 767.121** (Continued)

(similar to a soil amendment or mulch). Not more than a 2-inch depth shall be left on soil substrate.

- Straw bales shall be removed and disposed off-site by the Contractor. Areas of trenching shall be raked smooth and disturbed soils stabilized with a seed mix matching adjacent grasses (i.e., lawn or native grass mix).
  
- Silt fence, stakes, and other debris shall be removed and disposed off-site. Site shall look neat and clean upon completion.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 767.121 will be measured and paid for at the contract unit price per foot of sediment control barrier installed, complete in place, which price shall include all labor, materials, equipment, and incidental costs required to complete the work.

Silt fence, when used in conjunction with compost filter tubes or straw bales, will be incidental to this item.

Additional barrier, such as double or triple stacking of compost filter tubes, shall be paid for per foot of tube to be installed.

Barriers that have been driven over or otherwise damaged by construction activities shall be repaired or replaced as directed by the Engineer at the Contractor's expense.

**ITEM 832.3**

**PEDESTRIAN WAYFINDING SIGN**

**EACH**

The work under this item shall conform to the relevant provisions of Subsections 828 and 840 of the Standard Specifications and the following:

This work shall include the installation and placement of the Pedestrian Wayfinding Sign located on the Lowell Connector Path.

**CONSTRUCTION**

The contractor shall install the wayfinding signage at the location designated on the plan. All sign assembly posts shall be P-5 posts and shall be installed with Subsection 840.60 of the Supplemental Specifications, dated September 30, 2020.

The minimum height of post-mounted signs measured vertically from the bottom of the sign to the top of the elevation near the edge of the pathway, shall be 7-feet.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Pedestrian Wayfinding Sign will be measured for payment by each, complete, approved and maintained in place for the duration of the Contract. Pedestrian Wayfinding Sign will be paid for at the Contract unit price per each, which price shall include all labor, equipment, materials and incidental costs required to complete the work.

**ITEM 859.1**      **REFLECTORIZED DRUMS WITH SEQUENTIAL**      **DAY**  
**FLASHING WARNING LIGHTS**

The work under this Item shall conform the relevant provisions of Section 850 of the Standard Specifications and the following:

Work under this item consists of furnishing, installing, maintaining in proper operating conditions, and removing reflectorized drums, and any necessary ballast, equipped with sequential flashing warning lights.

**MATERIALS**

Reflectorized drums shall be listed on the MassDOT Qualified Traffic Control Equipment List. Reflective sheeting on drums shall meet or exceed ASTM D4956 Type VIII. All drums shall be maintained in a satisfactory manner including the removal of oils, dirt, and debris that may cause reduced retroreflectivity.

The Contractor shall use one of the following sequential flashing warning light systems unless otherwise approved by the Engineer:

- Empco-Lite LWCS D.
- pi-Lit® Sequential Barricade-Style Lamp; or
- Unipart Dorman SynchroGUIDE.

Sequential flashing warning lights shall be secured to reflectorized drums per the light manufacturer's specifications.

**CONSTRUCTION METHODS**

The first ten (10) drums in any merging or shifting taper as designated in the Temporary Traffic Control Plan shall be equipped with sequential flashing warning lights. These lights shall be operating, at a minimum, between dusk and dawn when the taper is deployed.

The successive flashing of the sequential warning lights shall occur from the upstream end of the merging or shifting taper to the downstream end of the taper in order to identify the desired vehicle path. Each warning light in the sequence shall be flashed at a rate of not less than 55, nor more than 75 times per minute.

Warning lights shall be powered off when drums are not deployed in a taper.

**ITEM 859.1** (Continued)

**METHOD OF MEASUREMENT**

A group of ten (10) reflectorized drums with sequential flashing warning lights is considered one (1) unit and will be measured by the day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times that the drums are positioned, repositioned, removed, or returned to service.

**BASIS OF PAYMENT**

Reflectorized Drums with Sequential Flashing Warning Lights will be paid for at the contract unit price per day, which shall include full compensation for furnishing, positioning, repositioning, and removing the group of ten (10) drums as directed by the Engineer.

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**PROPOSED  
LOWELL CONNECTOR TRAIL  
LOWELL, MA 01852**

**APPENDIX A – BID PLANS**

**PREPARED BY: TEC, INC., DATED 02/09/2021**

**PROPOSED  
LOWELL CONNECTOR TRAIL  
LOWELL, MA 01852**

**APPENDIX B – ENVIRONMENTAL PERMITS  
(PENDING ISSUANCE OF ORDER OF CONDITIONS)**

**PROPOSED  
LOWELL CONNECTOR TRAIL  
LOWELL, MA 01852**

**APPENDIX C – PREVAILING WAGE RATES**