



TOWN OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS

2021 Terrace Hall Sidewalk

Contract #21C-411-0038

Department of Public Works
25 Center Street
Burlington MA 01803

February 3, 2021

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INVITATION FOR BID

PUBLIC WORKS CONSTRUCTION

Sealed bids for 2021 TERRACE HALL SIDEWALK must be received by Department of Public Works, Town Hall Annex, 25 Center Street, Burlington, Massachusetts, 01803 until 9:30 AM on February 25, 2021 and will be publicly opened and read aloud at such time.

- Specifications and bid forms are available on the DPW website site at: <http://www.burlington.org> ,under the Projects & Programs tab.
- Specifications and bid forms may be obtained at the Department of Public Works, Town Hall Annex, 25 Center Street, Burlington, Massachusetts, 01803 after February 11, 2021 between 8:30 AM and 4:00 PM for a fifty (\$50.00) dollar reproduction cost.
- A bid bond of five (5) percent is required.
- Successful bidder must provide 100% Payment and Performance bonds.
- This project is bid according to MGL 30-39M.
- Town's Designated Representative and point of contact for questions is : Meghan Cavalier, mcavalier@burlington.org, 1-781-270-1640
- Prevailing wage must be paid per MGL 149 SECT. 26-27D
- The Bidder must be pre-qualified by MassDOT.

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PROJECT DESCRIPTION

Work under this project includes the installation of a new sidewalk on Terrace Hall Ave connecting two separate existing sidewalks. It will connect the sidewalk from Cranberry Lane to the existing sidewalk in front of the new fire station at the corner of Terrace Hall and Middlesex Turnpike.

The sidewalk will be constructed with six (6) inch vertical granite curbing and concrete panels. The sidewalk is going to be approximately 1500 feet long. It will border wetlands however; none of the sidewalk will be constructed within the wetland.

The sidewalk will be sloped away from the street towards a 1foot by 1foot crushed stone trench wrapped in geotextile fabric, topped with loam and seeding.

There is an existing bridge that has an existing sidewalk along it. The corroded concrete will be removed and existing concrete that is in acceptable condition will remain. New granite curbing will be placed in front of the existing concrete with a twelve (12) inch reveal. A bonding agent will be put down before new concrete is poured. The existing guardrail will be moved and bolted to the outside of the bridge and a chain link fence will be bolted behind the guardrail for an added safety measure.

This project is funding through a grant. Significant penalties will be assess if the project is not completed as specified. See Special Conditions for more information.

INSTRUCTIONS TO BIDDERS

Receipt and Opening of Bids

The Town of Burlington, Massachusetts, herein called the Owner, acting by and through its Department of Public Works, will receive sealed bids as specified in the invitation for Bids at which time bids will be publicly opened and read.

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 will not be considered. The bidder agrees that this bid will be good and may not be withdrawn for a period of thirty (30) days, Saturdays, Sundays, and legal holidays excluded, after opening the bids.

Location and Work to be Done

The Location of the Work to be done is described in the project description.

The Contractor will furnish all labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies, and all other things necessary to do all work required for the completion of each item of the Work and as herein specified.

The Work to be done and paid for under any item will not be limited to the exact extent mentioned or described but will include all incidental work necessary or customarily done for the completion of that item.

Preparation of Bid

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures.

Each bid must be submitted in a sealed envelope bearing on the outside **the name of the bidder, his address, and endorsed with the name of the project as specified in Receipt and Opening of Bids.**

If forwarded by mail, **the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in Receipt and Opening of Bids.**

The following sections need to be filled out and completed as part of the bid package;

- Form of General Bid
- Acknowledgement of Addenda, if any
- Bid Form
- Total Bid Price
- Contractor Reference
- Contractor Certification

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Bid Opening Procedure

The following list of requirements will apply to each filed bid. Bids not meeting all the requirements for timeliness and security will be rejected without opening; bids not meeting signature and addenda requirements will be rejected prior to checking of bid amounts.

Bids will be filed at the place and before the time specified in Receipt and Opening of Bids.

Properly executed bid security will be placed in a sealed envelope and will be attached to the outside of the envelope containing the bid.

Bid signatures will be checked.

The total dollar amount of each bid will be read, and the three apparent lowest bids will be selected for further consideration. These three apparent low bids will be read aloud for the benefit of the other bidders and the bid opening procedure will be closed. All those present at the bid opening may arrange a time to examine all bids after the bid opening and after the reading of the three apparent low bids.

Ability and Experience of Bidder

No award will be made to any bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and resources to enable him to complete the work successfully within the time named. The Owner's decision or judgment on these matters will be final, conclusive, and binding.

Bidder must have a minimum of five (5) years' experience and have completed satisfactorily five (5) jobs within that time of similar size and scope.

All Subcontractors must have a minimum of five (5) years' experience and have completed satisfactorily five (5) jobs within that time of similar size and scope.

The Contractor must submit with his bid proposal a list of five (5) jobs which he has successfully completed, giving the name and the address of these projects so they can be investigated prior to the award of the contract.

The Owner may make such investigations as he deems necessary, and the bidder must furnish to the Owner, under oath if so required, all such information and data for this purpose as the Owner may request.

Condition of Work

Each bidder must familiarize himself fully with 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 obligation to furnish all material and labor necessary to carry out the provisions of this Contract. Insofar as possible the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor.

Addenda and Interpretations

No interpretation of the bid documents will be made orally. Every request for such interpretation should be in writing addressed to the Town's Designated Representative listed in INVITATION TO BID and to be given consideration must be received at least seven (7) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Contract Documents. Failure of any bidder to receive any such addendum or interpretation will not relieve such bidder from any obligation under this bid as submitted. All addenda so issued will become part of the Contract Documents.

Laws and Regulations

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

Bid Security

Each bid must be accompanied by a BID BOND, CASH, or CERTIFIED CHECK, payable to the Town, in the amount stated in INVITATION FOR BID. Such checks will be returned to all except the three (3) lowest responsible and eligible bidders within five (5) days, Saturday, Sundays, and legal holidays excluded, after the opening of bids, and the remaining checks will be returned promptly after the Owner and the accepted bidder have executed the Contract, or if no notice of intent to award has been presented to the selected contractor within thirty (30) days, Saturdays, Sundays and holidays excluded, after the date of the opening of bids, upon demand of the bidder at any time thereafter.

The said amount 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 will be retained from time to time by the Owner from current periodical estimates.

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Right to Reject Bid

The Owner reserves the right to waive any informality or reject any and all bids and alternate bids, should the Owner deem it to be in the public interest to do so.

The Owner also reserves the right to reject the bid of any bidder that the Owner considers to be unqualified based on the criteria set forth herein.

Time for Completion

The bidder must agree to commence work and to fully complete the project within the time limit stated in SPECIAL CONDITIONS.

Comparison of Bids

In the event that there is a discrepancy in FORM OF GENERAL BID between the lump sum or unit prices written in words and figures, the prices written in words will govern.

Rule for Award of Contract

The Contract will be awarded to “the lowest responsible and eligible bidder” for the Total Price Bid pursuant to General Laws Chapter 30, Section 39M, as amended. Such a bidder will possess the skill ability and integrity necessary for the faithful performance of the work, will be able to furnish labor that can work in harmony with all other elements of labor employed, or to be employed, in the work, and will otherwise comply with all applicable provisions of law. Bidder will execute formal agreement within ten (10) days of the Notice of Award.

Statutes Regulating Competitive Bidding

Any bid that does not comply with the provisions of Massachusetts General Laws Chapter 30, Section 39M as amended, need not be accepted and the Owner may reject every such bid.

Wage Rates

Prevailing Wage Rates as determined by the Commissioner of Department of Labor and Industries under the provision of the Massachusetts General Laws, Chapter 149, Section 26 to 27G, as amended, apply to this project. It is the responsibility of the contractor, before bid opening to request if necessary, any additional information on Prevailing Wage Rates for those trades people who may be employed for the proposed work under this contract.

State schedules of Prevailing Wage Rates are included in the contract documents.

Specifications

All specifications and bid items are based on “Commonwealth of Massachusetts Department of Transportation Standard Specifications for Highway & Bridges” 2020 edition, or latest revised.

Bid Items Not Guaranteed

The successful bidder is not guaranteed all items or the total bid price under this contract. Bidders must understand that like items may be bid under other contracts specifically packaged as one complete project. The successful bidder has no right to similar items bid under other projects. The Owner will specify where and when this contract will be applied to undertake a particular improvement.

Liquid Asphalt Adjustment

Per MGL 30-38A paving or Hot Mix Asphalt items bid under this contract (if any) as subject to liquid asphalt price adjustment.

Tie Bids

In the event of tied bids, wherein two or more responsive and responsible vendors provide the same bid price a coin toss will be used to break the tie.

Unforeseen Office Closure

If, at the time of the scheduled bid opening, Town Offices are closed due to uncontrolled events, the bid opening will be postponed until the next normal business day at the original time specified in the documents. Bids will be accepted until that date and time.

FORM OF GENERAL BID

Bid of _____ (hereinafter called
"Bidder")*

(____) a corporation, organized and existing under the laws of the state of _____.

(____) a partnership

(____) a joint venture

(____) an individual doing business as _____

To the Town of Burlington, Massachusetts (hereinafter called "Owner").

Bidder:

The bidder, in compliance with your invitation for bid, examined the Contract Documents and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby propose to furnish all labor, materials, and supplies, and to construct the project in accordance with the Contract Documents within the time set forth in the agreement, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, or which this proposal is a part.

*Insert corporation, partnership or individual as applicable.

ADDENDA

Bidder acknowledges receipt of the following addenda:

No. _____ Dated: _____

No. _____ Dated: _____

No. _____ Dated: _____

No. _____ Dated: _____

No. _____ Dated: _____

BID FORM

ITEMS	QT.		UNIT PRICE		TOTAL
ITEM 1. Clearing and Grubbing	500	SY	\$ _____	SY	\$ _____
ITEM 2. Tree Removal	1	EA	\$ _____	EA	\$ _____
ITEM 3. Unclassified Excavation	50	CY	\$ _____	CY	\$ _____
ITEM 4. Relocation of Large Rocks	12	EA	\$ _____	EA	\$ _____
ITEM 5. ¾" Crushed Stone	60	TONS	\$ _____	TON	\$ _____
ITEM 6. Grading and Finished	135	SY	\$ _____	SY	\$ _____
ITEM 7. Hot Mixed Asphalt (HMA) – Superpave Mix Design	5	TONS	\$ _____	TONS	\$ _____
ITEM 8. 6" Vertical Curbing – Straight	1350	LF	\$ _____	LF	\$ _____
ITEM 9. 6" Vertical Curbing – Curved	20	LF	\$ _____	LF	\$ _____
ITEM 10. 6" Vertical Curbing – 5' Transition Piece	5	EA	\$ _____	EA	\$ _____

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ITEM 11.						
6" Vertical Curbing – Gutter Inlet Stone	1	EA	\$ _____	EA	\$ _____	
ITEM 12.						
Chain Link Fence	35	LF	\$ _____	LF	\$ _____	
ITEM 13.						
Silt Sack	2	EA	\$ _____	EA	\$ _____	
ITEM 14.						
Geotextile Fabric	700	SY	\$ _____	SY	\$ _____	
ITEM 15.						
Cement Concrete Sidewalk	750	SY	\$ _____	SY	\$ _____	
ITEM 16.						
Concrete Accessible Ramps	2	EA	\$ _____	EA	\$ _____	
ITEM 17.						
Loam and Seeding	500	SY	\$ _____	SY	\$ _____	
ITEM 18.						
Hay Bales and Silt Fence	850	LF	\$ _____	LF	\$ _____	
ITEM 19.						
Bridge Rehabilitation	1	EA	\$ _____	EA	\$ _____	
ITEM 20.						
Guardrail Relocation	1	EA	\$ _____	EA	\$ _____	
ITEM 21.						
Excavation of Existing Concrete Sidewalk	15	SY	\$ _____	SY	\$ _____	
ITEM 22.						
Straw Wattles and Silt Fence	650	LF	\$ _____	LF	\$ _____	

ITEM 23.

Traffic Management 1 EA \$ _____ EA \$ _____

TOTAL BID PRICE

Total Price Bid: \$ _____

Bid Price in Words: _____

Name: _____

Signature: _____

Title: _____

Company: _____

Address: _____

Phone: _____

This is an unofficial Bid Spec. If this document is used to submit a bid then you must email your contact information to Engineering@burlington.org in order to be added to the bidders list.

CONTRACTOR REFERENCES

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

1. Have been in business under present name for ___years.
2. The names and addresses of all persons interested in the bid (if made by a partnership or corporation) as Principals are as follows:

(Attach supplementary list if necessary)

3. The bidder is requested to state below what work of a similar character to that included in the proposed contract he has done, and give references that will enable the Owner to judge his experience, skill and business standing (add supplementary page if necessary).

#	Completion Date	Project Name	Contract Amount	Reference Name	Telephone No.
1					
2					
3					
4					
5					

4. Bank reference _____
(Name)

(Bank)

(Address) (Telephone No.)

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CONTRACTOR CERTIFICATION

NON-COLLUSION

I certify under penalties of perjury that this bid or proposal has been made and submitted under good faith and without collusion or fraud with any other person. As used in this certification, the word “person” means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

TAX COMPLIANCE

Pursuant to Massachusetts General Law Chapter 62C, Section 49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

LABOR HARMONY / OSHA 10-HOUR

I will furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work, and All employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health administration that is at least 10 hours in duration.

Signature: _____
(Person Signing Bid)

(Name of Business)

AGREEMENT

THIS AGREEMENT, by and between the party of the first part, the Town of Burlington, hereinafter called "OWNER", acting herein through its Town Administrator, and the party of the second part 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 project described by these bid documents hereinafter called the project, for the sum of the contract price and all extra work in connection therewith, under the terms as stated in the Contract Documents; and at his (its and 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 FORM OF GENERAL BID, GENERAL CONDITIONS, Contract Documents as prepared by the Owner.

IN WITNESS WHEREOF, the parties to these presents have executed this contract.

\$ _____
Contract Price

AGREED:
Town of Burlington

Owner Date

Contractor

Contractor Date

Company Name: _____

Address: _____

In accordance with M.G.L. C. 44, Section 31C, this is to certify than an appropriation in the amount of this contract is available therefore and that the Town Administrator has been authorized to execute the contract and approve all requisitions and change orders.

Account # Town Accountant Date

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SPECIAL CONDITIONS

1. The Contractor must submit, prior to the start of any work, the appropriate current job mix formulas approved by MassDOT Highway Division. The Performance Grade Asphalt Binder (PGAB) must not include any Re-refined Engine Oil Bottoms (REOB).
2. All work under this contract must comply with the most recent edition of the Town of Burlington Department of Public Works; Street Opening/Utility Connection Rules & Regulations.
3. Prior to the commencement of any work the Contractor must obtain a Street Opening permit from the DPW/Engineering Division.
4. Unless otherwise specified, the cost of the Police Detail Officer(s) will be paid for by the Town of Burlington. If the details are not properly canceled by the Contractor in time, then the Contractor will be back charged for any charges occurred for any police details.
5. Tack coats will be made on all HMA and cement concrete surfaces and joints immediately before new HMA pavement is placed at the application rates set forth in the *Standard Specifications for Highway & Bridges*. Tack coating will be considered incidental to the cost of this item.
6. At the end of each week the Contractor must submit an itemized summary/quantities of items per street completed during the week. These quantities will be reviewed with the Town's Designated Representative before the end of the day on Friday.
7. All paving work, related to placing and rolling of the mix, must be self-performed by the awarded contracting company using their own paid employees and equipment. Contractor must customarily/regularly self-perform the aforementioned work. Proof of ability to self-perform the work will be requested by the Owner.
8. In addition to the contract warranty, the Contractor warrants concrete sidewalk panels and wheel chair ramps against spalling for a three (3) year period from the date of project substantial completion. Any spalling concrete identified within a three (3) year period will be deemed defective and considered warranty work. Once the defective panels are replaced, the warranty will reset and continue another three (3) year warranty period on all concrete work covered by the original contract.

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9. All certified payroll slips must be submitted as part of the pay requisition package for each individual pay requisition request, for each contractor and sub-contractor that has performed work under this contract, up to date of the current pay requisition before the pay requisition will be processed and paid.
10. Under this contract the Contractor agrees to complete “Punch List of Items” assembled by the Designated Representative. This work includes driveway apron adjustments, installation of new bituminous berm, grind and inlays, loam and seeding, and structure adjustment, included but not limited to the various roads paved under this contract. The “Punch List of Items” must be completed before the final payment requisition is processed. All the items will be paid for under the appropriate bid item under this contract.
11. **Penalties** - This project is funded by the MassDOT, Winter Street Program. Time is of the essence; all work under this contract must be completed, accepted, and invoiced by the end of day May 31, 2021. If the work is not completed by this date the contractor will be responsible to reimburse the Town for the loss of grant money as well as the cost of any work that is incomplete.
12. Under this contract the chain link fence shall be set in place before the existing guard rail is removed and new concrete is poured. Other precautions such as cones and barrels should be set in place to prevent any crashes or accidents by residents.
13. Per the Conservation Committees Order of Conditions, the contractor will be required to remove any waste or litter within fifteen (15) feet from the road.
14. Per the Conservation Committees Order of Conditions, the contractor will be responsible for taking the necessary requirements to prevent debris from going into the stream.
15. The Contractor is also made aware that there is an existing Order of Conditions upon this project set forth by the Town of Burlington Conservation Commission and the Commonwealth of Massachusetts Department of Environmental Engineering. A copy of the Order of Conditions is available in Appendix B.
16. Traffic Management under this contract must be considered at all times meaning the following points apply:
 - Two (2) way traffic must be maintained at all times
 - Complete compliance with the Traffic Management Plan standards set forth in the Town of Burlington Department of Public Works Street Opening/Utility Connections Rules & Regulations
 - Detours not included as part of the Traffic Management Plan will be allowed only upon written authorization from the Owner and the

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Contractor is responsible for supplying all necessary sign(s) and traffic barrels to which to attach the signs, for the detour.

17. Attention is directed to the following parts of the contract:

Description	Location in Contract
Preparation of Bid	Instructions Bidders
Experience of Bidders	Instructions to Bidders
Bid Security	Instructions to Bidders
Execution, Correlation and Intent	General Conditions; Article 1
Contract Administration	General Conditions; Article 2
Superintendent	General Conditions; Article 4, Section 8
Project/Progress Schedule	General Conditions; Article 4, Section 9
Liquidated Damages	General Conditions; Article 6
Project Plans	Appendix B
Prevailing Wage Rates	Appendix C

18. Summary Table of Important Contract Dates

Item	Date
Bid Opening	2/25/2021
Commencement of Work No Later Than	4/1/2021 – weather dependent
Completion of Work No Later Than	5/31/2021
Liquidated Damages Starting	5/31/2021

GENERAL CONDITIONS

ARTICLE 1

CONTRACT DOCUMENTS

1.1 DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, and other Conditions), the Drawings, the Specifications, all Addenda issued prior to and all Change Orders issued after execution of the Contract, and all applicable laws, ordinances and regulations. The Contract Documents include Bidding Documents such as the Advertisement or Invitation for Bid, the Instructions to Bidders, sample forms, the Contractor's Bid or portions of Addenda relating to any of these, or any other documents, specifically enumerated in the Owner-Contractor Agreement.

1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. This Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Change Order.

1.1.3 THE WORK

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated in such construction.

1.1.4 THE PROJECT

The project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

1.1.5 OR EQUAL

The use of the words "Or Equal" following the name of any manufacturer, vendor or proprietary product will be understood to mean that articles or materials may be substituted which, in the opinion of the Owner, are equal in quality, durability, appearance, strength, design and performance to the articles or materials named or described and will perform adequately in providing a first-class facility.

When submitting shop drawing information on articles or materials which are being proposed as substitutes for specified items, the Contractor must clearly identify them as such. If the articles or materials are accepted as equal to those on which dimensions on the drawings are based, any dimensional variance from those shown and/or specified must be shown on the shop drawings prepared by the Contractor, illustrating the manner in which conformity to dimensions and design is to be obtained. All such drawings will

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be subject to the approval of the Owner and the installation of the article will not proceed without first obtaining said approval.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1

By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.

1.2.2

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one will be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable there from as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

1.2.3

The Notice to Proceed will come in the form of a written letter to the Contractor. Once the written Notice to Proceed has been received by the Contractor, that date will be the legal start date for work under the Contract.

In the event of a failure to issue a Notice to Proceed written document specifying the commencement date, the pre-construction meeting date will serve as the Notice to Proceed date.

1.3 OWNERSHIP AND USE OF DOCUMENTS

1.3.1

All Drawings, Specifications and copies thereof furnished by the Owner are and will remain the Owner's property. They are to be used only with respect to this Project and are not to be used on any other project without prior written consent of the Owner. With the exception of one contract set for each party to the Contract, such documents are to be returned or suitably accounted for to the Owner at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of any reserved rights.

ARTICLE 2

ADMINISTRATION

2.1 ADMINISTRATION OF THE CONTRACT

2.1.1

The Owner or its Designated Representative will visit the site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. However, the Owner's Designated Representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

2.1.2

The Owner will at all times have access to the Work whenever it is in preparation and progress. The Contractor must provide facilities for such access so the Owner may perform its functions under the Contract Documents.

2.1.3

The Owner will make payments for completed work, as approved by the Owner, in accordance with M.G.L. Ch. 30, Sec. 39G. A five percent retainage will be deducted from periodic payments to the Contractor.

2.1.4

The Owner will render information necessary for the proper execution or progress of the Work within twenty (20) days of any request by the contractor or in accordance with any time limit agreed upon.

2.1.5

The Owner will have authority to reject Work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the Work whether or not such Work is then fabricated, installed or completed. Any such rejection of work will not relieve the Contractor of the responsibility for maintaining protection of the Work and the Owner's property.

2.1.6

The Owner or its Designated Representative will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action will be taken with reasonable promptness so as to cause no delay. The Owner's approval of a specific item will not indicate approval of an assembly of which the item is a component.

2.1.7

The Owner will conduct inspections to determine the date of Substantial Completion and Final Completion, will review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment.

ARTICLE 3

OWNER

3.1 DEFINITION

3.1.1

The Owner is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Town of Burlington or its designated representative.

3.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

3.2.1

The Owner will, at the time of execution of the Agreement and any subsequent Change Orders, certify for the Contractor that financial arrangements have been made to fulfill the Owner's obligations under the Contract.

3.2.2

The Owner will furnish all documents describing the work.

3.2.3

Except as provided in Subparagraph 4.7.1. Owner will secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

3.2.4

Information or services under the Owner's control will be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.

3.2.5

The Owner will furnish the Contractor with three (3) copies of all Drawings and Specifications and revisions issued during the progress of the Work; all additional copies will be furnished upon request at the cost of reproduction.

3.2.6

The Owner, through its Designated Represented, will forward all instructions directly to the Contractor.

3.3 OWNER'S RIGHT TO STOP THE WORK

3.3.1

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If the Contractor fails to correct defective Work as required by the Owner or fails to carry out the Work in accordance with the Contract Documents or if the Owner will for any other reason so require, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated or until further written notice from the Owner; however, this right of the Owner to stop the Work will not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. The Contractor must resume the Work after such stoppage promptly upon written notice to do so from the Owner. If such stoppage is required through no fault of the Contractor, the Contract Time (and the dates for achieving Substantial Completion and Final Completion) will be extended by a period equal to the period of the stoppage, and the Contractor will be compensated for its reasonable and justifiable cost incurred as a result of such stoppage.

3.4 OWNER'S RIGHT TO CARRY OUT THE WORK

3.4.1

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to any other remedy he may have, perform such work or cause such work to be performed and/or make good such deficiencies. In such case an appropriate Change Order will be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover the amount, the Contractor must pay the difference to the Owner.

3.5 OWNER'S RIGHT TO TERMINATE CONTRACT

3.5.1

The Town reserves the right to terminate this Contract at their discretion with thirty (30) days written notice to the contractor. In the event of Contract termination, all finished or unfinished work, or un-used material, already paid for under Contract prices, will become the property of the Town of Burlington.

ARTICLE 4

CONTRACTOR

4.1 DEFINITION

4.1.1

The Contractor is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1

The Contractor must carefully study and compare the Contract Documents and must at once report to the Owner any error, inconsistency or omission he may discover. The Contractor will not be liable to the Owner for any damage resulting from errors, inconsistencies or omissions in the Contract Documents which he discovers but will be liable for damage to the extent he reasonably should have but failed to discover such errors, inconsistencies or omissions. The Contractor will perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1

The Contractor must supervise and direct the Work, using his best skill and attention which will not be less than such state of skill and attention generally rendered by the contracting profession for projects similar to the Project in scope, difficulty and location. The Contractor must maintain adequate supervisory personnel at the Site during the performance of the Work. He will be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

4.3.2

The Contractor will be responsible to the Owner for the acts and omissions of his employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor. This obligation will also extend to the presence on the Site of suppliers of materials or equipment, their employees, contractors, and agents engaged in the work.

4.3.3

The Contractor will not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Owner in its administration of the Contract.

4.4 LABOR AND MATERIALS

4.4.1

Unless otherwise provided in the Contract Documents, the Contractor will provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and service necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

4.4.2

The Contractor will at all times enforce strict discipline and good order among his employees and will not employ on the Work any unfit person or anyone not skilled in the task assigned to him including all persons on the Site controlled directly or indirectly by the Contractor.

4.5 WARRANTY

4.5.1

The Contractor warrants to the Owner that all materials and equipment furnished under this Contract will be new and of recent manufacture unless otherwise permitted in writing by the Owner and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and, promptly after written notification of non-conformance, will be repaired or replaced by the Contractor with Work conforming to such requirements. If required by the Owner, the Contractor will furnish satisfactory evidence as to the kind and quality of materials and equipment.

4.6 TAXES

4.6.1

The Contractor will pay all applicable sales, consumer, use and other similar taxes for the Work or portion thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.

4.7 PERMITS, FEES AND NOTICES

4.7.1

Unless otherwise expressly provided in the SPECIAL CONDITIONS, the Contractor will secure and pay for all permits and fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received, and the

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same will at all times be the property of the Owner and will be delivered to the Owner upon completion of the Project.

4.7.2

The Contractor must give all notices and comply with all federal, state and local laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work. The Contractor must provide the Owner with reproductions of all permits, licenses and receipts for any fees paid. The Owner represents that it has disclosed to the Contractor all orders and requirements known to the Owner of any public authority particular to this Contract.

4.7.3

If the Contractor observes that any of the Contract Documents are at variance with applicable laws, statutes, codes and regulations in any respect, he must promptly notify the Owner in writing, and any necessary changes must be accomplished by appropriate Modification.

4.7.4

If the Contractor performs any Work which he knows or should know is contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he will assume full responsibility therefore and will bear all costs attributable thereto.

4.8 SUPERINTENDENT

4.8.1

The Contractor must employ a competent superintendent and necessary assistants who will be in attendance at the Project site at all times during the progress of the Work. The superintendent will represent the Contractor and all communications given to the superintendent will be as binding as if given to the Contractor. Important communications will be confirmed in writing. Other communications will be so confirmed on written request in each case.

4.9 PROGRESS SCHEDULE

4.9.1

The Contractor, immediately after being awarded the Contract, must prepare and submit for the Owner's information an estimated progress schedule for the Work. The progress schedule must be related to the entire Project to the extent required by the Contract Documents, and will provide for expeditious and practicable execution of the Work. No work will start without the Project schedule. The Contractor must submit the project schedule five days prior to start the work.

4.10 DOCUMENTS AND SAMPLES AT THE SITE

4.10.1

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The Contractor must maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, and “As-Built”

Drawings and Specifications in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These will be available to the Owner upon completion of the Work.

4.11 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.11.1

Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.11.2

Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

4.11.3

Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.11.4

The Contractor must review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

4.11.5

By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he has determined and verified all material, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

4.11.6

The Contractor will not be relieved of responsibility for any deviation from the requirements or the Contract Documents by the Owner’s approval of Shop Drawings, Product Data or Samples or the Owners’ approval of the same unless the Contractor has specifically informed the Designated Representative in writing of such deviation at the time of submission and the Designated Representative has given written approval to the specific deviation. The Contractor will not be relieved from responsibility from errors or omissions in the Shop Drawings, Product Data or Samples by the Owner’s approval thereof.

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4.11.7

The Contractor must direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Owner or its Designated Representative on previous submittals.

Designated Representative

4.11.8

No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample will be commenced until the submittal has been approved by the Owner or Designated Representative . All such portions of the Work will be in accordance with approved submittals.

4.12 USE OF SITE

4.12.1

The Contractor will confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and must not unreasonably encumber the site with any materials or equipment.

4.13 CUTTING AND PATCHING OF WORK

4.13.1

The Contractor will be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

4.13.2

The Contractor must not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering any work or by excavation. The Contractor must not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Contractor must not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

4.14 CLEANING UP

4.14.1

The Contractor at all times will keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he will remove all his waste materials and rubbish from and about the Project in full compliance with all applicable laws and regulations as well as all his tools, construction equipment, machinery and surplus materials and the Project must be thoroughly cleaned and ready for immediate occupancy by the Owner.

4.14.2

If the Contractor fails to clean up at the completion of the Work, the Owner may do so as provided in Paragraph 3.4 and the cost thereof will be charged to the Contractor.

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4.15 COMMUNICATIONS

4.15.1

The Contractor must forward all communications to the Owner's designated representative.

4.16.2

The Contractor will at all times have a designated representative in the field that is authorized to act on behalf and make decisions for the Contractor under this contract agreement.

4.16 ROYALTIES AND PATENTS

4.16.1

The Contractor must pay all royalties and license fees. He must defend all suits or claims for infringement of any patent rights and will save the Owner harmless from loss on account thereof, except that the Owner will be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor believes or has reason to believe that the design, process or product specified is an infringement of a patent, he will be responsible for such loss unless he promptly gives such information to the Owner, and thereafter the Owner insists on the use of the design, process or products specified.

4.17 INDEMNIFICATION

4.17.1

To the fullest extent permitted by law, the Contractor will indemnify and hold harmless the Owner, the Designated Representative, and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury or destruction of tangible property (other than the Work itself) including the loss of use resulting there from, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified there under. Such obligation will not be construed to negate, abridge, or otherwise reduce any other right or of indemnity which would otherwise exist as to any party or person described in this Paragraph 4.17.

4.17.2

In any and all claims against the Owner the Designated Representative or any of their agents or employees by any employee of the Contractor, any Subcontractor anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.17 will not be limited in

any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

4.17.3

The obligations of the Contractor under this paragraph 4.17 will not extend to the liability of the Owner, the Designated Representative, their agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) written directions or instructions given by the Owner, the Designated Representative, their agents or employees, provided they are the sole cause of the injury or damage.

ARTICLE 5
INSURANCE

Contractor must provide insurance as specified below:

General Liability

Includes:

- Comprehensive form
- Premises/Operations
- Underground Explosion & Collapse Hazard
- Products / Completed Operations
- Independent Contractors
- Broad From Property Damage
- Personal Injury

Each Occurrence	\$1,000,000
Aggregate	\$2,000,000

Automobile Liability

Includes:

- All Owned Vehicles
- Hired Vehicles
- Non-owned Vehicles

Bodily Injury & Property Damage Combined	\$1,000,000
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Workers Compensation & Employers Liability

- As Required by State of Massachusetts

Each Accident	\$100,000
Bodily Injury by Disease (Policy Limit)	\$500,000
Bodily Injury by Disease (Each Employee)	\$100,000

Additional Insurance / Requirements

- The Town of Burlington Will be named as Additional Insured

ARTICLE 6
LIQUIDATED DAMAGES

6.1 LIQUIDATED DAMAGES

If the Contractor neglects, fails or refuses to complete the work as herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this Contract, to pay to Owner the amount of \$1,000 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 Contract will be in default after the date stipulated in the Contract for completing the work.

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MEASUREMENT & PAYMENT

The work under this contract shall include all equipment, labor, material, supplies, etc. necessary to transport, furnish and install the items described in the following section. The prices of which shall be included in each of the unit items as set forth in the Bid Form. All measurement for purposes of payment shall be based upon actual quantities used, removed, excavated, etc., in the field of each of the following items.

Item 1: Clearing and Grubbing

This work shall consist of clearing, grubbing, cutting, removal, and disposal of all vegetation and debris from existing vegetated areas, as shown on the plan set or as directed by the Engineer. This work shall also include the preservation from injury or defacement of all vegetation and objects designated by the Engineer to remain.

The stumps of all trees, brush, and major roots shall be grubbed and removed in all areas in preparation for the proposed building pad, as shown upon the plan set or as designated by the Engineer, to within one (1) foot of existing surface grade.

Trees having the shortest diameter of at least nine (9) inches or less shall be considered part of the clearing and grubbing item.

All material removed will become the property of the contractor to dispose of in an offsite legal manner.

Measurement and payment for clearing and grubbing shall be based upon the actual number of square yards cleared and grubbed in the field.

Item 2: Tree Removal

This work shall consist of the removal of trees larger than nine (9) inches in diameter. The stumps of the trees and major roots shall be removed in the area.

All materials removed will become the property of the contractor to dispose of in an offsite legal manner.

The measurement and payment for individual trees to be removed will be paid for at the contract unit price per each and shall include the stump and major root systems.

Item 3: Unclassified Excavation

This work shall consist of the excavation, removal and disposal of any existing subsurface soils or debris encountered during the paving process deemed unsuitable for a proper functional base, as determined by the Engineer.

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If, in the opinion of the Engineer, the material at or below normal grade for the bottom of milled surface, or in the area of a blowout, is unsuitable for foundation, it shall be removed to such depths and widths within the limits of payment as directed by the Engineer. The Engineer has final say on material that is considered unsuitable, but the material may include but not limited to debris such as wood, metal, plastic, etc., peat or organic material.

The unit price for this item shall constitute full compensation for excavation below normal grade and disposal of unsuitable material. The Contractor will not be reimbursed for over-excavating which has not been ordered by the Engineer. The Contractor shall backfill any such over-excavated areas in accordance with the specifications, at no additional cost to the owner. Unclassified excavation material will become the property of the contractor and will be disposed of legally offsite.

Once the unsuitable material has been excavated and removed, it shall be the responsibility of the Contractor to replace any removed material removed with the appropriate amount of replacement material, as approved by the Engineer. Any necessary backfill material will be paid for under the appropriate unit item as set forth in the Bid Form.

Measurement and payment for all unclassified excavation shall be based upon the number of cubic yards of material actually excavated in the field.

Item 4: Rock Relocation

This work shall consist of the relocation of large rocks. The will be relocated to the back side of the new sidewalk.

Measurement and payment for the rock relocation will be based upon the actual number relocated of in the field.

Item 5: 3/4" Crushed Stone Trench

This work shall consist of the installation of 3/4 inch crushed stone, in a 1 foot by 1 foot trench, as shown upon the plan. The trench shall be in the on the back edge of the sidewalk, wrapped in geotextile fabric, and then covered with loam and seeding.

Measurement and payment for 3/4 inch crushed stone shall be per ton compacted and in place in the field. The Contract unit price shall include all labor, material, and equipment needed to transport and excavate, fill and compact the stone as set forth in the Bid Form.

Item 6: Grading and Finishing

This work shall consists of the shaping, trimming, compaction and finishing of the subgrade surface, including the grading and finishing of all unpaved shoulders and

slopes, in preparation for loam and hydro seed. The subgrade material shall be constructed to conform to the lines and grades as shown on the Plan Set or directed by the Engineer. **Grading for sidewalks is not covered under this item.**

Measurement and payment for grading and finishing will include all grading work not included under any other item and shall be measured by the square yard. The price shall constitute all labor, equipment, and machines necessary to prepare the surface for loam and hydro seed.

Item 7: Hot Mixed Asphalt (HMA) – Superpave Mix Design

The HMA pavement shall be constructed as shown on the plans and as directed on the prepared or existing base in accordance with these specifications and in close conformity with the lines, grades, compacted thickness and typical cross section as shown on the plans. Unless specified otherwise, each HMA pavement course placed shall be comprised of one of the mixture types listed in Table 455.1

A job mix formula for both the binder and top courses to be used throughout the entire project must be submitted to the Engineer for Approval before placement of the pavement can start.

SSC – 9.5 – Two (2) One and one half (1.5) inches lifts for designated areas.
 Tack Coat – 0.05 – 0.1 gallon/square yard (to be applied on the binder course before placement of final top course)

Table 455.1 - SUPERPAVE HMA Pavement Courses & Mixture Types

Pavement Course	Mixture Type	Mixture Designation
Friction Course	<ul style="list-style-type: none"> Open-Graded Friction Course - Polymer Modified 	OGFC – P
Surface Course	<ul style="list-style-type: none"> SUPERPAVE Surface Course - 4.75 SUPERPAVE Surface Course - 9.5 SUPERPAVE Surface Course - 12.5 SUPERPAVE Surface Course - 19.0 	SSC - 4.75 SSC - 9.5 SSC - 12.5 SSC - 19.0
Intermediate Course	<ul style="list-style-type: none"> SUPERPAVE Intermediate Course - 12.5 SUPERPAVE Intermediate Course - 19.0 	SIC - 12.5 SIC - 19.0
Base Course	<ul style="list-style-type: none"> SUPERPAVE Base Course - 25.0 SUPERPAVE Base Course - 37.5 	SBC - 25.0 SBC - 37.5
Leveling Course	<ul style="list-style-type: none"> SUPERPAVE Leveling Course - 4.75 SUPERPAVE Leveling Course - 9.5 	SLC - 4.75 SLC - 9.5
Bridge Surface Course	<ul style="list-style-type: none"> SUPERPAVE Bridge Surface Course - 9.5 SUPERPAVE Bridge Surface Course - 12.5 	SSC-B - 9.5 SSC-B - 12.5
Bridge Protective Course	<ul style="list-style-type: none"> SUPERPAVE Bridge Protective Course - 9.5 SUPERPAVE Bridge Protective Course - 12.5 	SPC-B - 9.5 SPC-B - 12.5

The Contractor is responsible for providing an appropriate Quality Control system to ensure that all materials and workmanship meet the required quality levels for each specified Quality Characteristic.

All joints shall be treated with a Tack Coat, including longitudinal seams.

Measurement for payment for Hot Mix Asphalt Superpave mix design pavement shall be based upon the number of tons of such material placed and rolled as measured in the field. The price of which shall constitute full compensation for removal and disposal of any temporary pavement, restoring and regarding any gravel base course, application of tack coat bleeder berm, disposal of any excess material and all work incidental thereto.

Items 8-11: Granite Curbing

Items 8 and 9: 6" Vertical Granite Curbing – Straight and Curved

This work shall consist of the installation of six (6) inch vertical granite curbing as depicted upon the Plan Set or as directed by the Engineer.

Curb Contractor shall have a minimum of five (5) years' experience and have completed satisfactorily five (5) jobs within that time of similar size and scope. All grade stakes and field engineering are the responsibility of the Contractor. The curb shall be set to grades as depicted upon the Plan Set or as directed by the Engineer.

It is the responsibility of either the Contractor or the Curb Contractor to provide all labor, material, and equipment to excavate the trench for which the granite curbing shall be placed. Once the material is excavated, any excess material becomes the property and responsibility of the Contractor or Curb Contractor to dispose of in an offsite location and legal manner.

Once the granite curb has been set in the field, the curbing, shall have air entrained cement concrete, with a minimum strength of 4,000 pounds per square inch, shall be placed in the front and back of the curbing, between the face of the curb and the edge of the binder course. The concrete shall be poured for the entire length of the curbing, both front and back, and brought to the elevation of the binder course.

Measurement for payment for the granite curbing will be based upon the total number of linear feet furnished, measured, removed if necessary, and installed in the field. The price shall constitute compensation for cutting of existing pavement, excavation, grading, furnishing and installing the granite curbing, concrete, backfill, removal and disposal of excess material, pavement patching, and mortaring joints.

****Edging on bridge will be done in concrete. Please see details for more information.**

Item 10: 6" Vertical Granite Curbing – Transition Piece

This work shall consist of the installation of six (6) inch vertical granite curbing transition pieces. All transition pieces shall be installed as the final piece of curbing in a row of

proposed granite curb lines, where the proposed granite curb shall transition material type, whether to proposed or existing curbing.

All transition pieces shall be five (5) feet in length, whether a straight or curved piece of granite, with the transition face starting at the half length point of the piece of granite and have a gradual bevel that tapers from perfectly vertical to a cut face with a slope of forty five (45) degrees. The pieces shall be cut appropriately for each situation as necessary.

Once the granite curb has been set in the field, the curbing, shall have air entrained cement concrete, with a minimum strength of 4,000 pounds per square inch, shall be placed in the front and back of the curbing, between the face of the curb and the edge of the binder course. The concrete shall be poured for the entire length of the curbing, both front and back, and brought to the elevation of the binder course.

Measurement for payment for the granite curbing shall be based upon each six (6) inch vertical granite curb transition piece, removed if necessary, and installed in the field. The price shall constitute compensation for cutting of existing pavement, excavation, grading, furnishing and installing the granite curbing, concrete, backfill, removal and disposal of excess material, pavement patching, and mortaring joints.

Item 11: 6" Vertical Granite Curbing – Gutter Inlet Stone

This work shall consist of the installation of a six (6) inch vertical granite curb gutter inlet stone installation behind catch basins where new concrete sidewalks and granite curbing will be installed.

Once the granite curb has been set in the field, the curbing, shall have air entrained cement concrete, with a minimum strength of 4,000 pounds per square inch, shall be placed in the front and back of the curbing, between the face of the curb and the edge of the binder course. The concrete shall be poured for the entire length of the curbing, both front and back, and brought to the elevation of the binder course.

Measurement for payment for the Gutter inlet stone shall be based upon each installed in the field. The price shall constitute compensation for cutting of existing pavement, excavation, grading, furnishing and installing the Gutter inlet stone, concrete, backfill, removal and disposal of excess material, pavement patching, and mortaring joints.

Item 12: Chain Link Fence

This work shall consist of the construction of a five (5) foot tall chain link fence and gates in accordance with these specifications, and in close conformity with the lines and grades shown on the plan or established by the Engineer.

The posts shall be set true to the line and grade of the proposed fence.

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End, Corner and Intermediate Brace Posts shall be set in concrete bases as shown in the Construction Standards.

The posts in masonry walls shall be set in pipe sleeves or sockets.

All line posts shall be placed in a concrete base as shown in the Construction Standards.

Where solid rock is encountered without an overburden of soil, line posts shall be set a minimum depth of 8 in., and end, corner, gate and intermediate posts a minimum of 12 in. in the solid rock. The hole shall have a minimum width or diameter of 1 in. greater than the largest dimension of the post section to be set. The posts shall be cut, before installation to lengths which will give the required length of post above ground, or if the Contractor so elects they may use an even length of post above ground, or if the Contractor so elects they may use an even length of post set at greater depth into the solid rock.

After the post is set and plumbed the hole shall be filled with grout consisting of one part Portland cement and one part clean, well graded sand. The grout shall be thoroughly worked into the hole so as to leave no voids. Where posts are set in the above manner, concrete footings will not be required.

Where solid rock is covered by an overburden of soil or loose rock, the posts shall be set to the full depth shown on the standard drawing unless the penetration into solid rock reaches the minimum depths specified above, in which case the depth of penetration may be terminated. Concrete footings shall be constructed from the solid rock to the top of the ground as designated. Grouting will be required on the portion of the posts in solid rock.

Intermediate Brace Posts as used in these specifications, shall be spaced at 500-ft maximum intervals.

Gate, end, corner, and intermediate brace posts shall be braced as shown on the standard drawing. Changes in line of 30° or more shall be considered as corners.

Foundation Bases

Forms for placing concrete bases will not be required. Chamfer or bevel edges will not be required.

Where chain link fences are used to enclose Engineers field office and material buildings, the posts shall be set in ground without concrete bases to facilitate ease in removal later.

Top Rail

Top rails shall pass through the ornamental tops of line posts, forming a continuous brace from end to end of each stretch of fence. Lengths of top rail shall be jointed by sleeve type couplings. Top rails shall be securely fastened to terminal posts by pressed steel fittings.

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Spring Tension Wire

One continuous length of spring tension wire shall be used between end, corner or intermediate brace posts. Sufficient tension shall be applied so that there is no visible sag. On completion of the spring tension wire installation the wire shall be attached to the fence fabric with hog rings and to each line post with tie wire.

Fence Fabric

Chain link fabric over 5-ft fence shall be placed on the face of the post away from the highway, and for fence 5 ft. or less, erect fabric on the face of the posts designated by the Engineer, except that on curves the fabric on all types of fence shall be placed on the face of the post which is on the outside of the curve.

The chain link fabric shall be placed approximately 2 in. above the ground and on a straight grade between posts. The chain link fence shall be secured to the bridge using side wall post surface mount for 1-5/8" OD post, corrosion resistant finish, affixed to vertical face of concrete wall and 3/8" diameter anchor bolts, exterior rated embedded 2" min. There shall be two (2) mounts for each pole mounted to the bridge.

The fabric shall be stretched taut and securely fastened to the posts. Stretching by motor vehicle will not be permitted. Fastening to end, gate, corner, and intermediate brace posts shall be with stretcher bars and fabric bands spaced at 1-ft intervals. The fabric shall be cut and each span attached independently at all intermediate brace and corner posts. Fastening to post, top rail, top tension cable or spring tension wire shall be with wire, metal bands, hog rings, or by other approved method.

Rolls of wire fabric shall be joined by weaving a single strand into the ends of the rolls to form a continuous mesh.

Measurement and payment for the chain link fence shall be per linear foot of fence installed. **The fence will need to be put in place before the guardrail is removed for concrete pouring.**

Item 13: Silt Sack with Overflow Bypass

This work shall consist of the furnishing and installation of silt sack catch basin filters, with overflow bypass holes, Silt sack – High-Flow-Type A by ACF Environmental, or approved equal. Considered incidental to the cost of this item, will include the necessary rebar lengths to support the silt sack, as shown in the attached detail specification.

Considered incidental to this item, will be routine inspection for current sedimentation/debris levels within the silt sack, and any sediment or debris found to be above the level of the overflow holes, shall be removed and disposed of in a legal

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manner. In the event that the silt sack is damaged or becomes full, the Contractor must remove the existing silt sack and replace with a new silt sack, at no additional cost. Inspections will also be made after each rain event, for any over sedimentation or washed out debris.

Considered incidental to this bid item, will be the removal and disposal of the silt sack, material/debris trapped in the silt sack, and the metal rebar, by the Contractor in an offsite and legal manner, once directed by the Engineer.

The silt sacks will be installed to all catch basin and adjacent catch basins on all reclaim streets prior to the start of any reclamation work, as directed by the Engineer.

Measurement and payment for silt sack with overflow bypass shall be per silt sack installed in the field.

Item 14: Geotextile Fabric

This work shall consist of the installation of non-woven geotextile fabric wrapped around the newly installed pipe.

The geotextile fabric shall conform to AASHTO M288 Non-woven 601 451 specifications from Advanced Drainage Systems, Inc. or approved equal. The measurement and payment for the geotextile fabric shall be per square yards.

Item 15: Cement Concrete Sidewalk

This work shall consist of the installation of new cement concrete sidewalk as depicted upon the plan set or as directed by the Engineer, and meet the following specifications;

This work shall consist of the installation of cement concrete sidewalk. Concrete shall have fiber mesh added at the plant. All work shall conform to the latest edition of the MassDOT, AAB, and ADA standards.

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.

The Contractor shall install all new concrete sidewalks to a width of sixty (60) inches, from face of panel to back of panel and provide a clear path travel of thirty six (36) inches from any sidewalk obstructions, unless otherwise directed by the Engineer. All new concrete sidewalks will be abutted on the outside face by six (6) inch vertical granite curb, making the total width of sidewalk to be sixty six (66) inches.

Sidewalks shall be constructed in accordance with requirements as set forth in this specification, including placement of alternating sections, thirty (30) feet in length and

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provided with expansion joints. Expansion filler shall also be used at pours against existing sidewalks, buildings, walls, other hard objects, and to create isolation areas around existing utility poles, fire hydrants, etc. Expansion joints shall be comprised of a felt based material capable of resisting moisture penetration, and provide adequate thermal expansion/contraction of the concrete. The expansion joint shall be installed to complete depth of the pour.

Control joints should be scored or saw cut to a depth of one quarter (1/4) inch per one (1) inch of poured depth of the sidewalk. For example, for a pour of four (4) inches, the scored or saw cut depth shall be one (1) inch. Scored or saw cut joints shall be installed every five (5) feet, square to the face of granite curbing, to make a square panel.

Four (4) inches of cement concrete will be placed upon eight (8) inches of compacted gravel, for all sidewalks, and six (6) inches of cement concrete will be placed upon eight (8) inches of compacted gravel for all driveway crossings, curb cuts, and access ramp locations. The depth of and compaction of the gravel sub base should be checked using a level edge capable of spanning the width sidewalk, from curbing to form, and the depth to the top of the compacted gravel will be measured from the bottom of the level edge. The purpose of the measurement is not to check the depth of gravel, but rather to check that the area has been prepared to an appropriate depth, for the appropriate pour depth.

The curbing for the bridge will be done in concrete. The curbing will be formed to be six (6) inches into the pavement of the bridge. (If the depth of pavement is not deep enough to accommodate this four (4) inches can be used. This will be determined after the test bit.) The concrete cement curbing should have an eight (8) inch reveal.

Concrete for sidewalk shall be 5,000 psi at twenty eight (28) days, with three quarter (¾) inch coarse aggregate, 610 pounds cement per cubic yard, seven (7) percent air entrained (AASHTO – M154), Type A water reducing admixture (AASHTO – M194), four to five (4 to 5) inch slump, and fiber mesh.

Once the concrete arrives on site and it is determined to need a small addition of water before the pour, water must be added prior to discharge from the shoot, and spun a minimum of thirty (30) times at mixing speed. During the pour, if the concrete is setting too quickly due to heat or wind, **NO WATER** is allowed to be added once it has been poured. Instead a curing agent must be added to slow the curing process, allowing more workable time with the concrete.

Fiber mesh

Fiber mesh fibers (100% virgin polypropylene, collated, fibrillated fibers) at a rate of one to one and a half (1.0 to 1.5) pounds per cubic yard of concrete shall be added for reinforcement. Fiber mesh shall be FIBERMESH 150, manufactured by PROPEX Concrete Systems or an approved equal. Installation shall be per manufacturer's recommendations.

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Contractor is responsible for securing areas with curing concrete, and shall supply barricades or watchmen, as necessary to prevent defacement of concrete surfaces.

The measurement and payment for the cement concrete sidewalk will be based upon the number of square yards actually installed measured in place. The price shall constitute compensation for clearing and grubbing, saw cut of the existing pavement excavation in eight (8) inches of gravel borrow compacted in four (4) inch lifts and four (4) inches of cement concrete (air entrained Class D, one course), fiber mesh and removal and disposal of surplus materials.

The contractor will warranty the installation of all concrete flatwork for a period of one (1) year from the date of installation, or the last installation date in the event of a large pour over multiple days, for any damage or defects caused by poor product, installation methods/techniques, or other issues that arise within the warranty period. The contractor will also warranty the work for a period of three (3) years against spalling, from de-icing chemicals. Warranty work will be considered incidental to the original bid price as set forth in the Bid Form, and no additional monetary compensation will be paid for by the Owner, for all labor, equipment, material, etc., necessary to repair the damage.

Once the Contractor is notified they will be required to repair or remove and replace and damaged concrete sidewalk, under the direction of the Engineer, the repairs will be required in a timely manner. Failure to complete the work in a timely manner, as agreed upon by the Engineer, could result in the Contractor to be considered in breach of contract at be barred from being awarded any future contracts, or be required to complete the warranty work before any work can begin on a new contract.

In the event that warranty work is undertaken by the Contractor, as directed by the Engineer, than the warranty timeframe will reset and start back at time zero (0).

The Contractor will also be responsible for repairing any damage to adjacent areas of the concrete sidewalk, as a result of their work to repair/remove the concrete sidewalk, at no additional cost to the Owner. All necessary repair work will be dictated to the Contractor by the Engineer/Owner.

All grade stakes and field engineering are the responsibility of the Contractor. The Sidewalk Contractor shall have a minimum of five (5) years' experience and have completed satisfactorily five (5) jobs within that time of similar size and scope.

The measurement and payment for the cement concrete sidewalk will be based upon the number of square yards actually installed measured in place.

Item 16: Concrete Accessible Ramp

This work shall consist of the installation of cement concrete accessible ramps shall be constructed in compliance with current ADA and AAB standards, with the exception of the installation of the raised warning panels, which will **NOT** be installed in the footprint of the ramp.

Cement Concrete Wheel Chair Ramps

Curb – six (6) inch vertical granite curb (to be paid for under the appropriate bid item, as set forth in the Bid Form)

Surface – four (4) inch cement concrete (air entrained class D, one course).

Foundation – eight (8) inch gravel borrow, compacted in four (4) inch lifts, with appropriate wire meshing.

Existing sidewalk shall be neatly & squarely cut, and finished in a manner to provide a smooth transition from existing to new surfaces. **All grade stakes and field Engineering are the responsibility of the Contractor.** Wheel chair ramps are to be laid out and constructed in the field.

The Ramp Contractor shall have a minimum of five (5) years' experience and have completed satisfactorily five (5) jobs within that time of similar size and scope.

Measurement for payment for concrete accessible ramp will be based upon each wheel chair ramp actually installed in the field. The price of which shall constitute full compensation for excavation and material disposal, grading, compaction, formwork, cement concrete, necessary joint work, labor, material. New granite curbing shall be paid for under the appropriate item as set forth in the Bid Form. Any excess material shall be disposed of by the Contractor.

Item 17: Loam and Hydro Seed

This work shall consist of furnishing and placing of four (4) inches of screened loam or topsoil, re-handled, spread and machine sprayed hydro seed or approved equal as directed by the Engineer.

The loam shall be pre-screened before delivery to the site and be free of any rocks and stones greater than three quarters ($\frac{3}{4}$) of an inch trash, debris, refuse, etc. Any loam delivered to the site that is found to be sub-standard in the opinion of the Engineer, shall be removed and trucked away by the Contractor, the price of which shall be considered incidental to this item.

The hydro seed mixture shall consist of a cellulose fiber mulch, fertilizer and versatile grass seed mixture, capable of growing in shade, direct sun and partial conditions of shade and sun.

Measurement and payment for loam and hydro seed shall be per square yards as measured in the field. The price of which shall also include the grading of areas where stockpiles of topsoil are removed.

Item 18: Hay Bales and Silt Fence

This work shall consist of placing a continuous hay bale and siltation fence barrier, or approved equal as directed by the Engineer or the Town of Burlington Conservation Agent/Commission, along easements within wetlands, as well as any section of the project that borders the 100 foot buffer zone of any wetlands as directed by the Engineer or the Town of Burlington Conservation Agent/Commission in accordance with all Environmental Protection Agency regulations.

Baled Hay or Straw

The bales should be securely staked to prevent overturning, flotation, or displacement and during installation care shall be taken to keep the bales from breaking apart. All deposited sediment shall be removed periodically. Hay bales shall be removed after construction and only after all seeded grass areas are established or removal permission is given by the Town of Burlington Conservation Agent/Commission.

Silt Fence

Where indicated on the drawings or where directed by the Engineer, the Contractor shall erect and maintain a temporary silt fence. The silt fence shall be used specifically to contain sediment from runoff water and to minimize environmental damage caused by construction. The silt fence shall be removed after construction and only after all seeded grass areas are established or removal permission is given by the Town of Burlington Conservation Agent/Commission.

The silt fence shall consist of a three (3) foot wide continuous length sediment control fabric, stitched to a two (2) foot wide, continuous length support netting, and stapled to typical wooden stakes/grade stakes, installed as shown on the drawings or as directed by the Engineer. The support netting shall be industrial strength polypropylene.

Measurement and Payment for hay bales and siltation fence shall be per linear foot, set in place and approved, which the price shall include the maintenance and replacement of any damaged or disintegrated of the hay bales and siltation fence, as directed by the Engineer. The Contract unit price shall include all labor, material and equipment needed to transport, excavate, install, maintain and replace if necessary, and then remove and dispose of a legal offsite location of the hay bales and silt fence as set forth in the Bid Form.

Item 19: Bridge Rehabilitation

This work shall consist of the rehabilitation of the existing bridge on Terrace Hall Ave.

In bonding new concrete to concrete already set, the surface of the concrete shall be thoroughly cleaned, roughened, wetted with clean water, and then flushed with a mortar composed of equal parts of the cement and sand specified for the new concrete, before new concrete is placed adjacent thereto. Corroded existing concrete shall be removed. New concrete shall be placed before mortar has taken initial set. In lieu of the mortar, an epoxy adhesive suitable for bonding fresh concrete to hardened concrete for load bearing applications may be used. The epoxy adhesive shall conform to the MassDOT list of qualified products for Type V agents.

The measurement and payment will be lump sum for the total cost of all bridge rehabilitation.

Item 20: Guardrail Relocation

This work shall consist of removing the guardrail and resetting it onto the newly poured concrete. The guardrail should be set with new 5/8" anchor bolts with a minimum of 3" embedment in the same location it previously resided in. The guardrail shall not be placed until the concrete has had at least one week to cure in place.

Five (5) foot chain link fence in addition to cones and barrels to secure the bridge MUST be in place prior to removing guardrail and while permanent guardrail is in installed.

The measurement and payment for the guardrail relocation will be a lump sum cost.

Item 21: Excavation and Disposal of Existing Concrete Sidewalk

This work shall consist of the excavation and disposal of the existing concrete sidewalk to make room for new concrete sidewalk as depicted upon the plan set or as directed by the Engineer. Existing concrete sidewalk shall be excavated to suitable material, as determined by the Engineer. The Contractor is responsible to dispose of the excavated material in an offsite location and in a legal manner.

Measurement and payment for the excavation and disposal of existing concrete sidewalk shall be based upon the number of square yards of material actually excavated in the field.

Item 22: Compost Wattles

This work shall consist of the furnishing and installation of rolled twelve (12) inch diameter compost wattles, staked as shown upon in the detail on the plan set, in place prior to any work, in the location as shown upon the plan set.

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Considered incidental to this bid item, will be the removal and disposal of the compost wattles and any staking material, by the Contractor in an offsite and legal manner, once directed by the Engineer.

Measurement and payment for compost wattles will be per linear foot of compost wattle actually installed in the field.

Item 23: Traffic Management

This work shall consist of all signage, barricade structures, traffic barrels, cones, and all other appurtenances and work required to close the road, maintain a proper detour route, and reopen the road at the completion of the Project. All signage and barricades shall be installed at heights and sight distances to the maximum extent practicable as stated in the 2009 Edition Manual on Uniform Traffic Control Devices (MUTCD). All signage shall be affixed to permanent structures such as telephone poles or other existing sign posts. All sign names and barricade names stated herein are references to the 2009 MUTCD. The Contractor shall be responsible for the removal and disposal of all components of this item.

This work also consist of all work, labor, equipment, supplies and materials necessary to paint, with florescent orange paint, and mark and erect construction signage on/for roads with raised structures/gates after the reclamation of the roadway surface. All paint and signage that fades/become damaged will be the responsibility of the contractor to freshen up/replace, as directed by the Engineer.

The Traffic Management plan does not include the cost of Police Detail Officer(s). The cost of the Police Detail Officer(s) will be paid for by the Town of Burlington. The responsibility to arrange the appropriate amount of Police Detail Officer(s) is the responsibility of the Contractor. The quantity will be determined by the Engineer and/or Town of Burlington Police Department. The contractor is responsible to arrange the Police Detail Officer(s) the night before the Officer(s) are needed and also responsible for the appropriate cancellation of the Officer(s) if the need should arise. The Town of Burlington Police Department requires two (2) hour notice for proper cancellation of a detail. Failure of the Contractor to cancel the Officer(s) in the appropriate time will cause the Owner to back charge the Contractor for the charges incurred for each Officer(s).

Road Closure Signs

Road closure signs shall be W20-3 and installed at the as directed by the Engineer.

Detour Signs

Detour signs without arrows shall be M4-8 and installed at the approximate locations as directed by the Engineer.

Turning detour signs shall be either M4-9 or M4-10 for the as directed by the Engineer. One type of sign shall be selected for the entire detour route and a combination of the two will not be acceptable.

Barricades, Traffic Barrels, Cones

Detour barricades shall be Type 3 Barricades based on the 2009 MUTCD with warning lights. These barricades shall be installed in a method that, when and where possible, will allow residents to access their property, as best as possible to prevent damage to the new pavement surface, while detouring common traffic.

Worksite barricades shall be installed at the worksite for the duration of the road closure to prevent all types of traffic to enter. Acceptable worksite barricades, fencing, traffic barrels, cones, or other barricades as approved by the Engineer.

Measurement and payment for traffic management shall be a lump sum payment for implementing and maintaining the traffic management plan as well as all painting of raised structures and gates described herein. The lump sum price shall constitute furnishing, installing, and dismantling and disposing all the necessary barricades to fully isolate each construction site, as necessary, for the entire duration of this contract. Number of tons actually installed measured in place.

APPENDIX A –

Plans, prevailing wage, details, etc.

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