



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## INVITATION FOR BIDS Pedestrian Safety Enhancements Project Bid # DPW-21-B-029

### I. GENERAL INFORMATION AND PROPOSAL SUBMISSION REQUIREMENTS

- All Bids must be delivered by **11:00 am on Thursday, March 25, 2021** to:

**Procurement Department  
Westwood Town Hall  
580 High Street  
Westwood MA 02090**

- Westwood Town Hall is closed to the public due to COVID-19 concerns. To promote the health and safety of bidders and town employees, the following procedures are in effect and may affect your bid submission.
  - If the bidder is using a delivery service, the package must be signed for by a Westwood Town Hall staff to be considered properly delivered.
  - Bids sent by courier can only be dropped off in the Town Mail Drop Box. The drop box is a green mailbox in front of Town Hall labeled "Town Hall Mail Drop Only."
- Bidders who wish to attend the Bid Opening can do so by telephone conference call. To attend, call 1-888-296-6828. When prompted, enter Participant Passcode #756869.
- Bids will be scanned and posted to the Town website, [www.townhall.westwood.ma.us](http://www.townhall.westwood.ma.us), as soon as practicable after the opening.
- Bids received after the time and date established herein **SHALL NOT** be accepted or considered, regardless of the cause for delay in the receipt of such proposal(s).
- If, at the time of the scheduled proposal due date, the Westwood Town Hall is closed due to uncontrolled events, such as fire, wind, or building evacuation, the proposal opening will be postponed until 12:00 noon on the next normal business day. Proposals will be accepted until that date and time.
- Submit the proposal in a sealed envelope clearly marked "***Bid # DPW-21-B-029, Pedestrian Safety Enhancements Project.***"
- **The proposal must include a Non-Collusion form, a Tax Compliance Certificate and the other Attachments listed below.**
- **The proposal must also include a Bid Signature Form.** When the Bid Signature Form is completed, it declares:
  - The only parties interested in this bid are the Principals named herein.
  - No officer, agent or employee of the Town of Westwood has a direct or indirect interest in this bid.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

- **Contractors must be pre-qualified (or officially waived contractor) with the Massachusetts Department of Transportation at the time of submitting their bid to the Town.** The MassDOT Prequalification Office will provide the Town with an official and a waiver contractor list for all contractors prequalified in the specified class of work within the parameters of this project. Only those bidders listed in the official or waiver contractor lists issued by the MassDOT Prequalification Office will be allowed to submit a bid and receive an award of contract.
  
- **There will be no pre-bid conference for this project.**
  
- The deadline for bidder questions on the project will be 4:00 pm on March 18, 2021. Bidders shall make written request to the Westwood Director of Public Works, Todd Korchin at [tkorchin@townhall.westwood.ma.us](mailto:tkorchin@townhall.westwood.ma.us), **Subject: Pedestrian Safety Enhancements Project.**
  
- **Bid Form**
  - Each bid shall be accompanied by a bid deposit in the form of a certified, bank, Treasurer's or cashier's check or a bid bond issued by a surety company licensed by the Commonwealth of Massachusetts, in the amount of five percent (5%) of the total bid price (including all alternates), made payable to the Town of Westwood.
  - All bid deposits except that of the lowest responsible bidder shall be returned within five (5) days, Saturday, Sunday and legal holidays excluded, after the opening of the bids.
  - The Bidder whose Bid is accepted agrees to furnish the Contract Bonds, each in the sum of the full amount of the Bid and/or Contract Price as determined by the Town, and duly executed and acknowledged by the said bidder as Principal and by a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Town, as Surety, for the faithful performance of the Contract and payment for labor and materials. The premiums for such Bonds shall be paid by the Contractor.
  - The bidder to whom the bid is awarded will be required to execute an Agreement within sixty (60) calendar days from the date when the Notice of Award is received. In the event the bidder fails to execute an Agreement with the Town, the Town may consider the bidder to be in default, in which case the bid deposit shall become the property of the Town.
  - Should the bidder fail to fulfill any of his/her agreements as herein above set forth, the Town shall have the right to retain as liquidated damages the amount of the bid check or cash which shall become the Town's property. If a bid bond was given, it is agreed that the amount thereof shall be paid as liquidated damages to the Town by the Surety. The Town reserves the right to assess additional liquidated damages.
  - All prices, except at the extended totals, shall be stated in both words and figures. In the event of a discrepancy between the price in words and the price in figures, the written word shall govern. In the event of a discrepancy between mathematical totals and the totals stated, the mathematical totals shall govern.
  - **Unbalanced bidding is expressly prohibited, and all unit bid prices will be compared for reasonable conformance with the engineer's estimate. The Town has the right to reject award of a bid, or part thereof, to protect the public interest if it is apparent that a bid is mathematically unbalanced, the bidder front-end loads its bid as to amount to an advanced payment, there are extreme variations from the engineer's estimate or other bids received, if**



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

in the opinion of the Town, the unit prices create a reasonable doubt that the apparent low bidder will actually result in the lowest cost to the Department, and/or if the overall competitive bidding process has been jeopardized.

- The estimated quantities shown are based solely upon a reasonable assessment of the project parameters, thus the Contractor is advised that the actual quantities may vary substantially as field conditions may necessitate. Regardless of the amount of actual quantities, however, the quoted unit prices shall always apply.
  - There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.
  - In case of death, disability, or other unforeseen circumstances affecting the bidder, which materially impairs the bidder's ability to execute an Agreement and perform the required service, such bid deposit may be returned to the bidder by the Town.
- The proposal must be signed as follows: 1) if the bidder is an individual, by her/him personally; 2) if the bidder is a partnership, by the name of the partnership, followed by the signature of each general partner; and 3) if the bidder is a corporation, by the authorized officer, whose signature must be attested to by the Clerk/Secretary of the corporation and the corporate seal affixed.
  - Any bid may be withdrawn prior to the bid's submittal due date. However, bidders may not withdraw or modify their bid for a period of ninety (90) days following the opening of bids.
  - The contract will be awarded within thirty (30) days after the proposal receipt. The time for award may be extended for up to 45 additional days by mutual agreement between the Town and the apparent lowest responsive and responsible bidder.
  - Questions concerning this invitation for proposals must be submitted in writing to: Procurement Department, Westwood Town Hall, 580 High Street, Westwood, MA 02090 or by email at [Procurement@townhall.westwood.ma.us](mailto:Procurement@townhall.westwood.ma.us). Questions may be delivered or mailed. Written responses will be posted on the Westwood Town Hall website.
  - Any and/or all work is subject to available funds. The Town reserves the right to waive any informalities in, or to reject, any or all bids should the Town deem it to be in the Town's best interest to do so.
  - The Town of Westwood may cancel this IFB, or reject in whole or in part any and all proposals, if the Town determines that cancellation or rejection serves the best interests of the Town.
  - Below is a list of all Attachments. Bidders should note that Attachments D-J **must be completed and be submitted** with the bid documents.
    - Attachment A – Special Provisions
    - Attachment B – Monthly Price Adjustments
    - Attachment C – Wage Rates
    - Attachment D – Bid Item Sheet
    - Attachment E – Bid Pricing Sheet
    - Attachment F – Labor Harmony and OSHA Training



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

- Attachment G – Certificate of Non-Collusion
- Attachment H – Tax Compliance Certificate
- Attachment I – Signature Page
- Attachment J – Reference Form

### II. PURCHASE DESCRIPTION/SCOPE OF SUPPLIES/SERVICE

The work under this contract includes, but is not necessarily limited to, providing all necessary labor, materials, and equipment required for sidewalk, pedestrian curb ramp, signing and pavement marking improvements at various locations within the Town of Westwood. The proposed improvements include unclassified excavation, cement concrete sidewalk reconstruction, cement concrete pedestrian curb ramp reconstruction, hot mix asphalt sidewalk and driveway reconstruction, granite curbing, granite curbing remove and reset, drainage structure adjustments, new drainage structures, pavement markings, signage, rectangular rapid flashing beacons, pedestrian safety flashing beacon installation and/or remove and reset, loam and seeding, and other incidental work.

#### Other:

The drawings provided show the general intent of the improvements to be constructed as part of this project and for bidding and estimating purposes only. All improvements must be in compliance with the appropriate ADA, Massachusetts AAB, and MUTCD requirements. The Town reserves the right to remove or add locations to the scope of work. The Contractor must coordinate with the Town and/or Engineer to confirm the orientation and location of ALL improvements before beginning construction.

All work above must be completed within 180 days from the notice to proceed.

The Contractor shall work continuously on the project until all work included in the contract is complete.

#### Unit Quantities Specified:

- Quantities and measurements indicated in this IFB are for bidding and contract purposes only. Quantities and measurements ACTUALLY supplied or placed in the Work and verified by the Engineer shall determine payment.
- If the actual Work requires greater or lesser quantities than those quantities indicated in the Bid Form, Contractor shall provide the required quantities at the unit price contracted.

#### General Conditions:

- Temporary Traffic Control shall be the sole responsibility of the Contractor as approved and/or directed by the Engineer. All temporary traffic control shall conform to the applicable requirements of Section 850 of the Standard Specifications, The Manual on Uniform Traffic Control Devices (MUTCD), and/or as directed by the Engineer.

The Contractor shall furnish, erect, maintain, wash, move, adjust, repair, relocate, re-erect, and store all temporary construction signs, sign mountings, portable barricades, traffic cones, delineators, and other warning devices when, where, and as specified.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

Temporary Traffic Control devices shall cover all work related to the furnishing, installation, maintenance, and movement of traffic protective devices on the project. The Contractor shall provide a sufficient number of signs and other warning devices as required by the nature of the work as determined by the MUTCD and/or the Engineer. Devices that do not meet or exceed MUTCD standards will not be considered an acceptable means for temporarily controlling traffic.

When, in the opinion of the Engineer, the sign or device shall be so severely damaged as to warrant replacement, the Contractor shall provide a new device.

The Contractor shall keep all signs, barricades, and other protective devices in proper position, clean, and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials and equipment, and spoil are not allowed to obscure any sign, lights, or barricade. Signs that do not apply to existing conditions shall be removed or adjusted so that the legend is not visible to approaching traffic. All signs and markers shall indicate actual conditions existing and shall be moved, removed, or changed immediately, as conditions require. When construction is not in progress, all unnecessary signs will be adequately covered.

No work is to be undertaken until the Contractor has established construction signs and/or safety devices around and about the project zone periphery. To that end, the Contractor shall not commence operations until he has verified that semi-permanent signs (i.e., 'Road Under Construction') and/or daily signing, (i.e., 'Detour') has been appropriately established. The Contractor shall be responsible for establishing supplemental signage, and/or safety devices, as he deemed necessary in order to further provide for the safety of the pedestrian and the motoring public, as well as for affording the opportunity to move the construction process forward without interruption. Under this clause, the Contractor shall work closely with the Engineer in order to coordinate the signing activities in a timely and reasonable manner. Said devices shall conform to the Temporary Traffic Control section of the most recent version of the Manual on Uniform Traffic Control Devices (MUTCD). Further, due to the nature of this work, the Contractor shall be required, from time to time, to erect, move, relocate, repair, and/or to remove at days end, any site sign in order to either expedite his work or to otherwise accommodate the safety and/or delineate the project zone and/or its active or inactive detour status and route line, and this work shall be done either at his discretion and/or at the request of the Engineer. Non-compliance with any such request, as herein described, shall be grounds for the Engineer to halt work until such remedial measures have been taken, and any such loss of time by the Contractor shall be at his own expense. Any devices provided which are lost, stolen, destroyed or deemed unacceptable while their use is required on the project shall be replaced without additional compensation.

If, after notice by the Engineer, signage is determined to be inadequate, the Engineer may withhold payment until it is addressed satisfactorily by the Contractor. Temporary traffic control shall include all labor, materials, and equipment associated with (but not limited to) furnishing, erecting, maintaining, washing, movement, adjustment, repair, relocation, re-erection, storing of all temporary construction signs, sign mountings, portable barricades, traffic cones, delineators, drum barricades, channelizing devices, and all other devices, clean-up, legal disposal of all materials, and all other incidentals required to finish the work, complete and accepted by the Engineer. Any damage shall be the Contractor's responsibility.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

**Delivery Requirements:** All delivery charges shall be included in the price of the service.

- The Delivery should be made to:  
Town of Westwood  
50 Carby Street  
Westwood MA 02090

**Insurance Specifications:**

- **Workman's Compensation:** The Contractor shall, before commencing performances of this contract, provide, by insurance, for the payment of compensation in the furnishing of other benefits under General Laws, Ch. 152 to all persons to be employed under the Contract and shall continue such insurance in full force and effect for the term of the Contract, all in accordance with Massachusetts General Laws, chapter 149, S34A.
- **Bodily Injury Liability Including Death:** The Contractor shall take and maintain during the life of the Contract insurance coverage in the amount of one million dollars on account of any one person and one million dollars on account of any one accident and one million dollars aggregate limit. Extra territorial and guest clause shall be included.
- **Property Damage Liability:** The Contractor shall take out and maintain during the life of the Contract property damage liability insurance in the amount of one million dollars in the aggregate.
- **Motor Vehicles Including Hired Vehicles:** The Contractor shall take out and maintain during the life of the Contract motor vehicle insurance for bodily injury liability including death in the amount of one million dollars on account of any one person and one million dollars on account of any one accident. Additionally, property damage liability in the amount of one million dollars on account of any one accident and one million dollars aggregate. The contractor covenants and agrees to hold the town and its employees, agents and officials, harmless from loss or damage for personal injury and/or property damage arising from or in connection with operations under this Contract.
- **Indemnification Clause:** The Contractor acknowledges and agrees that he is responsible, as an Independent Contractor, for all operations under this Contract and for all acts of his employees and agents hereunder, and agrees that he will indemnify and hold harmless the Town and its officers, Boards, its employees, and Environmental Partners from any loss, damage, cost, charge, expense or claim which may be made against it or them or to which it or they may be subject by reason of an alleged act, action, neglect, omission or default on the part of the Contractor or any of his agents, servant, or employees and will pay promptly on demand all costs and expenses of the investigation and defense thereof, including attorney's fees and expenses. And, if any claim is made, the Town may retain out of any payments, then, or thereafter due to the Contractor, a sufficient amount to protect it completely against such claim, costs and expenses. The public liability and property damage insurance and owners contingent policies, as the case may be, shall include the above-stated Indemnification Clause.

**Construction Specifications:**



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

- All items of work shall be referenced to the “Commonwealth of Massachusetts Highway Department Standard Specifications for Highways and Bridges”, dated 2021, and shall include all subsequent revisions.
- Items that shall be considered incidental to the contract include, but are not limited to, mobilization and any other incidentals as listed. Incidental items shall not be measured for payment and will not be compensated separately but shall be identified to be included as payment for respective other associated work items.
- Work within or adjacent to school zones shall be scheduled to coordinate with school closings, recesses, and vacations. No work shall be constructed in school zones while in session.
- The Contractor shall work to keep the construction zone compressed whenever possible. The length of the construction zone shall be approved by the Engineer before work is started.
- The Contractor is referred to the Special Provisions in Attachment A for items specific to this contract whose specifications differ from those providing in the above document.

### III. PRICING AND PAYMENT

- Contract payment will be by the unit price method or the lump sum method as indicated on the Bid Proposal. Unit prices are to include cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs.
- The Town reserves the right to increase or decrease the scope of the Contract work by up to and including twenty-five percent (25%) of the original scope without adjusting the lump sums or unit prices.
- The Town shall pay and the Contractor shall receive the prices stipulated in the bid made a part hereof as full compensation for everything performed and for all risks and obligations undertaken by the Contractor under and as required by the Contract.
- Final payment for Work governed by unit prices will be made based on the actual measurements and quantities accepted by the Engineer multiplied by the unit price for work that is incorporated in or made necessary by the Work.

### IV. QUALITY REQUIREMENTS

- Bidders must provide all of the items described in Section II: Purchase Description/Scope of Services and comply with all Section I: Proposal Submission Requirements. Missing information may cause the proposal to be considered unresponsive.
- To be considered a responsive bid, the entire project must be bid. The owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose base bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

- All deliveries must comply with the Specifications identified above in Section II, Purchase Description/Scope of Supplies/Services.
- Bidders must have satisfactory performance under **at least five (5) different contracts** similar in size to the proposed contract. Contract information will be provided as part of Attachment J, Reference Form.

### V. RULE FOR AWARD

- The responsive and responsible bidder meeting the requirements described in described in Section II: Purchase Description/Scope of Services and offering the lowest **Base Bid Price** described in Attachment D, Bid Item Sheet.





# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT A SPECIAL PROVISIONS

### Pedestrian Safety Enhancements Project Westwood, Massachusetts

#### SCOPE OF WORK

The work under this contract includes, but is not necessarily limited to, providing all necessary labor, materials, and equipment required for sidewalk, pedestrian curb ramp, signing and pavement marking improvements at various locations within the Town of Westwood. The proposed improvements include unclassified excavation, cement concrete sidewalk reconstruction, cement concrete pedestrian curb ramp reconstruction, hot mix asphalt sidewalk and driveway reconstruction, granite curbing, granite curbing remove and reset, drainage structure adjustments, new drainage structures, pavement markings, signage, rectangular rapid flashing beacons, pedestrian safety flashing beacon installation and/or remove and reset, loam and seeding, and other incidental work.

The drawings provided show the general intent of the improvements to be constructed as part of this project and for bidding and estimating purposes only. All improvements must be in compliance with the appropriate ADA, Massachusetts AAB, and MUTCD requirements. The Town reserves the right to remove or add locations to the scope of work. The Contractor must coordinate with the Town and/or Engineer to confirm the orientation and location of ALL improvements before beginning construction.

All work done under this contract shall be in conformance with the Commonwealth of Massachusetts Department of Transportation Standard Specifications for Highways and Bridges dated 2021, Massachusetts Department of Transportation Construction Standard Details dated October 2017, the latest Manual on Uniform Traffic Control Devices for Streets and Highways with Massachusetts Amendments, the latest Public-Right-of-Way Accessibility Guidelines (PROWAG), and the latest United States Access Board's ADA and ABA accessibility guidelines will govern. **Please note: Each pay item shall conform to the Massachusetts Department of Transportation Standard Specifications and to the provided Special Provisions provided in this Bid Document.**

The General Conditions, Supplementary Conditions and these Special Provisions shall take precedence over the General Requirements of Division 1 of the Standard Specifications of the Massachusetts Department of Transportation (MassDOT).

The Contractor is responsible to secure staging area(s) for storing construction equipment and materials for construction as incidental to this project. No separate payment shall be made.

#### WORK SCHEDULE

Work on this project is restricted to a normal eight-hour day, five-day week, with the Contractor and all Subcontractors working on the same shift. No work shall be done on this Contract on Saturdays, Sundays or



## **TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS**

holidays or on the day before or the day after a long weekend which involves a holiday without prior approval by the Town of Westwood.

No work that will disrupt travel on the existing roadways (lane closures, lane shifts, trenching, etc.) shall be done before 7:00 AM and after 3:00 PM. A minimum of one lane in each direction will be maintained at all times (7:00 AM to 3:00 PM) with the exception of brief periods approved by the Town. Pedestrian access on all sidewalks shall be maintained at all times. The normal hours of operation shall be dictated by the Town. A written request shall be issued by the Contractor for any deviation to hours of operation for approval by the Town. Bids should not assume that any requests shall be granted.

The Contractor shall submit an updated project schedule to the Town weekly or as requested by the Town during construction period for review and approval.

No work shall be allowed on the Memorial Day Weekend or Fourth of July weekend.

The Contractor shall submit an updated project schedule to the Town weekly or as requested by the Town during construction period for review and approval.

The Contractor shall work continuously on the project until all work included in the contract is complete.

### **AUDIO-VIDEO RECORDING**

The Contractor shall provide all labor, materials, and equipment necessary to furnish high quality color audio and video recording of the existing pre-construction conditions of the project area as specified herein.

The Contractor shall submit to the Engineer / Town one original and one copy of a continuous color audio video DVD recording or other format as requested by the Town. The recording shall be submitted to and approved by the Town prior to any construction activity.

The Town reserves the right to reject the audio-video recording because of poor quality, unintelligible audio, or uncontrolled pan or zoom. Any recording rejected by the Engineer / Town shall be re-recorded at no additional cost. Under no circumstances shall construction begin until the Town has received and accepted the audio-video recordings.

The taping shall be performed by a qualified, establish audio-video recording firm knowledgeable in construction practices and experienced in the implementation of established inspection procedures. This task shall be completed with a representative from the Engineering Division. Notice shall be provided to the engineering division at least 48 hours prior to anticipate videotaping efforts.

The cost of this task shall be considered incidental to this project. No additional compensation shall be requested to the Town.

### **PUBLIC SAFETY AND CONVENIENCE**



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

The Contractor shall provide necessary access for fire apparatus and other emergency vehicles through the work zones to abutting properties at all times.

Sweeping and cleaning of surfaces beyond the limits of the project 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.

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

The Contractor shall notify "Mass. DIG SAFE" and procure a DIG SAFE number of each location prior to disturbing ground in any way.

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

### PROTECTION OF UNDERGROUND FACILITIES

The Contractor, in constructing or installing facilities alongside or near sanitary sewers, storm drains, water or gas pipes, electric or telephone conduits, poles, sidewalks, walls, vaults or other structures shall, at his expense, sustain them securely in place, cooperating with the officers and agents of the various utility companies and municipal departments which control them, so that the services of these structures shall be maintained. The Contractor shall also be responsible for the repair or replacement, at his own expense, of any damage to such structures caused by his acts or neglect, and shall 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 or Town, furnish labor and equipment to work temporarily under the utility owner's direction in providing access to the utility. Pipes or other structures damaged by the operation of the Contractor may be repaired by the Department or by the utility owner that suffers the loss. The cost of such repairs shall be borne by the Contractor, without compensation therefore. The Contractor shall be borne the responsibility and cost to coordinate if a pole needs to be secure in place while construction is in progress.

If, as the work progresses, it is found that any of the utility structures are so placed as to render it impracticable, in the judgment of the Engineer or the Town, to do the work called for under this Contract, the Contractor shall protect and maintain the services in such utilities and structures and the Owner will, as soon thereafter as reasonable, cause the position of the utilities to be changed or take such other actions deemed suitable and proper.

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 prices paid for the various Contract items of work and no additional compensation will be allowed therefore.

### NOTICE TO OWNERS OF UTILITIES



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

*(Supplementing Subsections 5.05, 7.13 and 7.18)*

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities in the project vicinity of the Contractor's intention to commence operations affecting such utilities at least two weeks in advance of the commencement of such operations, and the Contractor shall at that time file a copy of such notice with the Engineer / Town.

The Contractor shall also be responsible for notifying the Town of Westwood, in writing, at least two weeks in advance of commencement of work. The Contractor shall also coordinate with the Town, as required, throughout the duration of the project, so that all the Town utilities may be located and all required permits may be obtained.

The Contract Plans indicate the approximate location of known utilities in the vicinity of the work. The accuracy and completeness of the information is not guaranteed.

Any damage to these utilities caused by negligence of the Contractor shall be repaired by the Contractor at their own expense and as accepted by the Engineer / Town.

It is the intent of these Special Provisions that the Contractor having been given due notice hereof will safeguard the utilities during construction and shall assume liability for damage, relieving the Town of Westwood from any liability.

A list of public and private utilities can be found on the MassDOT website at: <https://www.mass.gov/info-details/utility-contacts-by-district-and-municipality>

Select District 6 on top of the webpage, select Westwood, and then locate the utility. 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 and Sewer Department,  
Police and Fire Department, Electric Department

Town officials are shown on the following website:

<https://www.mass.gov/lists/massachusetts-city-and-town-websites>

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

### ELECTRIC

Eversource Electric  
50 Duchaine Blvd  
New Bedford, MA, 02745  
Contact: Richard Comeau  
Telephone: 508-441-5881

### GAS

Enbridge  
8 Wilson Way  
Westwood, MA 02090  
Contact: Kathy Aruda  
Telephone: 508-938-7728



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

Eversource Gas  
157 Cordaville Road, 3113  
Southborough, MA 01772  
Contact: Jeffrey Evans-Mongeon  
Telephone: 508-305-6970

### TELEPHONE

Verizon  
385 Myles Standish Boulevard  
Taunton, MA 02780  
Contact: Karen Mealey  
Telephone: 508-828-6437

### WATER

Dedham-Westwood Water District  
P.O. Box 9137  
Dedham, MA 02027  
Contact: Stephen Locke  
Telephone: 781-329-7090

### SEWER

Westwood DPW - Sewer  
50 Carby Street  
Westwood, MA 02090  
Contact: Todd Korchin  
Telephone: 978-251-2578

MWRA  
2 Griffin Way  
Chelsea, MA 02150  
Contact: Kevin McKenna  
Telephone: 617-222-3361

### 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

### EVERSOURCE EMERGENCY TELEPHONE NUMBERS

#### GAS:

Outage/ Emergency: 800-592-2000  
New Service: 866-678-2744  
Customer Support: 800-592-2000

#### ELECTRIC:

Outage/ Emergency: 800-592-2000 or 844-726-7562 New Service: 1-888-633-3797 (1-888-NEED PWR)  
Customer Support: 1-800-340-9822



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **PRICE ADJUSTMENT**

NOTICE: In accordance with MGL Chapter 303 Section 60 and Chapter 86 of the Acts of 2008, this contract shall be subject to the provisions relative to energy escalation. A price adjustment for liquid asphalt and Portland cement shall be made on a monthly basis when the monthly change exceeds +/- 5 percent. Base prices for this contract shall be the New Method period prices posted on the MassDOT website at the following link for the month of the Contract bid opening:

[MassDOT Contract Price Adjustments | Mass.gov](#)

See Attachment B for further details on the monthly price adjustments for hot mix asphalt (HMA) mixtures and diesel fuel and gasoline.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 102.511

## TREE PROTECTION – ARMORING AND PRUNING

EACH

The work under this item shall conform to the relevant provisions of Section 771 of the Standard Specifications and the following:

The work shall include furnishing and installation of temporary tree trunk protection and limb pruning to prevent injury to the tree from construction equipment and activities. Trunk armoring is for instances where construction activity (the use of heavy equipment) comes close enough to potentially damage the tree trunk or limbs. It shall be used where shown on the plans and as required by the Engineer.

### MATERIALS

Trunk armoring shall be such that it prevents damage to the trunk from construction equipment. Selected materials shall be such that installation and removal will not damage the trunk.

Acceptable materials include 2x4 wood cladding with wire or metal strapping or, for instances when duration of construction activities is less than three months, corrugated plastic pipe mounted with duct tape. Height of cladding shall be from base of tree (including root flare) to the bottom of the first branch or as recommended by the Engineer. Materials and methods shall be approved by the Engineer.

### METHODS OF WORK

Prior to construction activities, the Engineer, the Contractor and the Town Tree Warden shall review trees noted on the plans to be protected. Final decision as to trees armored and/or pruned shall be per the Engineer.

Care shall be taken to avoid damage to the bark during installation and removal of armoring. Trunk armoring shall be replaced and maintained such that it is effective for as long as required and shall be removed immediately upon completion of work activities adjacent to trees.

Pruning of limbs shall conform to the techniques and standards of the most recent ANSI A300 standards.

### DAMAGES & PENALTIES

In the event that trees designated for protection under this item are damaged, including root damage from unapproved trespassing onto the root zone, the Contractor shall, at his own expense obtain an Arborist. The Arborist shall be approved by the Town.

If, based on the recommendations of the Arborist, the Engineer determines that damages can be remedied by corrective measures, such as repairing trunk or limb injury, soil compaction remediation, pruning, and/or watering, the damage will be repaired as soon as possible within the appropriate season for such work and according to industry standards.

If the Engineer determines that damages are irreparable, the Contractor shall pay for the damages in the amount of \$500.00 per diameter inch at breast height (DBH) per tree.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 102.511** (Continued)

Additionally, if the Engineer determines that the damages are such that the tree is sufficiently compromised as to pose a future safety hazard, the tree shall be removed. Tree removal will include clean up of all wood parts, grinding of the stump to a depth sufficient to plant a replacement tree or plant, removal of all chips from the stump site, and filling the resulting hole with topsoil.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Tree Protection – Armoring and Pruning will be measured by each and paid at the Contract unit price per each, which price shall include all labor, materials, equipment, and incidental costs to complete the work. No separate payment will be made for the removal and disposal of the protective materials upon completion of the Contract, but all costs in connection therewith shall be included in the Contract unit price bid.

In the event of tree damage, cost of remediation measures, and/or tree removal shall be paid by the Contractor. Payment under this item will be scheduled throughout the length of contract:

- 40% of value will be paid upon installation of trunk armoring and completion of pruning work, if required.
- 60% will be paid at the end of construction operations that would damage the tree and after protection materials have been removed and properly disposed of by the Contractor. In the event of repairable damages, payment will be made after the completion of remediation measures.

In the event of irreparable damage due to lack of proper protective measures being take there will be no compensation in addition to the \$500.00 per diameter inch penalty.





## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 222.3**

### **FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD**

**EACH**

The work under this item shall conform to the relevant provisions of Section 201 and 220 of the Standard Specifications and the following:

Work under this item consists of furnishing Frame and Grate (or Cover) Municipal Standard.

Frames and grates shall have a two-directional or “grid-pattern” type and shall be manufactured by a MassDOT approved fabricator listed on the Qualified Construction Materials List (QCML). Casting date shall be listed on the QCML.

Frames and covers shall have a diamond pattern; pick holes and the appropriate word “DRAIN” or “SEWER” cast in 3-inch letters to match the corresponding utility. Frames and covers shall be manufactured by a MassDOT approved fabricator listed on the Qualified Construction Materials List (QCML). Casting date shall be listed on the QCML.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 222.3 shall be measured and paid at the Contract unit price per Each Frame and Grate (or Cover) Municipal Standard furnished, which price shall include all labor, materials, equipment, loading, unloading, storage, transportation, and all incidental costs required to complete the work.

Frame and Grate or Frame and Cover shall be considered as a one unit.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 503.2

## GRANITE CURB TYPE VA3 – STRAIGHT/CURVED

FOOT

Work under this item shall conform to the relevant provisions of section 500 and the following:

At locations where granite curb is needed to make up elevation at the back of pedestrian curb ramps or sidewalk and as directed by the Town and/or Engineer, straight or curved Granite Curb Type VA3 with a depth of 21 inches shall be provided and installed. Prior to ordering curbing, Contractor shall field verify placement of all curbing with the Town in determining straight or curved segments and the appropriate curvature and shall be responsible for ADA compliance.

All required sawcutting of existing roadway pavement to install the curb shall be considered incidental to the cost of this item.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 503.2 Granite Curb Type VB – Straight/Curved shall be measured complete in place and paid for at the Contract price per foot, which price shall include all labor, materials, equipment, sawcutting, and incidentals required to complete the work.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEM 504.2

### GRANITE CURB TYPE VA-4 – SPLAYED END

EACH

Work under this item shall conform to the relevant provisions of section 500 and the following:

At locations shown on the plan and as directed the Town and/Engineer, a splayed end curb shall be provided to transition from the vertical curb to the sloped granite edging or asphalt berm. The splayed end curb shall be six feet in length with a sawn face which shall match the slope of the existing edging or berm

All required sawcutting of existing roadway pavement to install the curb shall be considered incidental to the cost of this item.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 504.2 Granite Curb Type VA-4 Splayed End shall be measured complete in place. Each six-foot splayed end curb shall constitute a single unit. Payment shall be at the contract unit price per each, which shall constitute full payment for furnishing all labor materials, equipment, supplies, sawcutting, and miscellaneous appurtenances necessary to complete the installation including field verification of the dimensions of the existing curb, edging, or berm to which this curb is to provide a smooth transition.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 506.2**

### **GRANITE CURB TYPE VB – STRAIGHT/CURVED**

### **FOOT**

Work under this item shall conform to the relevant provisions of section 500 and the following:

At locations shown on the plan and as directed the Town and/Engineer, straight or curved Granite Curb Type VB shall be provided. Prior to ordering curbing, Contractor shall field verify placement of all curbing with the Town in determining straight or curved segments and the appropriate curvature and shall be responsible for ADA compliance.

All required sawcutting of existing roadway pavement to install the curb shall be considered incidental to the cost of this item.

In addition to curb installation for sidewalks, all flush granite curb to be used at the pedestrian curb ramp openings at the direction of the Town shall also be paid for under this item.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 506.2 Granite Curb Type VB – Straight/Curved shall be measured complete in place and paid for at the Contract price per foot, which price shall include all labor, materials, equipment, sawcutting, and incidentals required to complete the work.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 509.2** **FOOT**

### **GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – STRAIGHT/CURVED**

Work under this item shall conform to the relevant provisions of section 500 and the following:

At locations shown on the plan and as directed by the Town and/or Engineer, straight or curved Granite Transition Curb for Pedestrian Curb Ramps shall be provided and installed. Prior to ordering curbing, Contractor shall field verify placement of all curbing with the Town in determining straight or curved segments and the appropriate curvature and shall be responsible for ADA compliance.

All required sawcutting of existing roadway pavement to install the curb shall be considered incidental to the cost of this item.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 509.2 Granite Transition Curb for Pedestrian Curb Ramps – Straight/Curved shall be measured complete in place and paid for at the Contract price per foot, which price shall include all labor, materials, equipment, sawcutting, and incidentals required to complete the work.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 701.2 YARD

## CEMENT CONCRETE PEDESTRIAN CURB RAMP

## SQUARE

The work to be done under this item shall conform to the Standard Specifications Subsection 701 and the following:

### GENERAL

The work shall include the furnishing and constructing cement concrete pedestrian curb ramps as shown on the plans or as directed by the Town and/or Engineer. This item shall include the replacement of individual cement concrete panels for installing detectable warning panels as well as entire cement concrete pedestrian curb ramps; no separate payment shall be made for individual panel replacement.

All cement concrete pedestrian curb ramps shall be four (4) inches in depth, as shown on the plans.

Detectable warning panels shall be used on all pedestrian curb ramps and as detailed in MassDOT Standard Construction Details E 107.2.0, E 107.2.1, E 107.6.0, E 107.6.4, and E 107.6.5. The tile shall conform to the Americans with Disabilities Act (ADA) requirements. Detectable Warning Panels shall be incidental to Item 701.2. The color of the detectable warning panels shall be determined by the Town prior to ordering any panels. The contractor shall provide a sample of the panels to the Town of Westwood DPW Director for approval.

The provided conceptual plans illustrate the general intent for bidding purposes only. The Contractor shall verify orientation, placement and configuration/style of all pedestrian curb ramps with the DPW Director or his representatives prior to construction. The Contractor is responsible for ensuring that all pedestrian curb ramps are designed to conform to AAB/ADA and MassDOT Standard Construction Details.

The cost of the detectable warning panel installed in pedestrian curb ramps shall be included in the square yard cost of the pedestrian curb ramp item.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Work performed under this item shall be measured and paid for at the contract unit price for Item 701.2 Cement Concrete Pedestrian Curb Ramp per square yard. Such payment shall be considered full compensation for all materials, tools, labor, coordination with the Town for pedestrian curb ramp design approval, sawcutting, and equipment needed to complete the work under this item. No additional payment will be provided for the detectable warning panels.



**TOWN OF WESTWOOD  
COMMONWEALTH OF MASSACHUSETTS**

**ITEM 702.**

**HOT MIX ASPHALT SIDEWALK OR DRIVEWAY**

**TON**

Work under this item shall conform to the relevant provisions under Section 702 of the standard specifications and the following:

All required sawcutting of existing driveway or sidewalk pavement at all limits of work shall be considered incidental to the cost of this item.

**METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 702. shall be measured and paid for at the Contract unit price per ton, which price shall include all labor, materials, equipment, sawcutting, and incidentals required to complete the work.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEM 706.3

### BRICK ACCENT BAND REMOVED AND RELAID

### SQUARE YARD

#### GENERAL

This work shall be consist of removing and resetting brick accent bands as directed by the Town and/or Engineer.

Existing brick shall be removed from existing mortar by hand. All mortar is to be removed from each brick by sandblasting, and then, the bricks shall be stockpiled. The subgrade area of the bricks shall be adjusted adequately to achieve the proposed grade, and compacted gravel borrow shall be installed 8 inches deep. The stockpiled bricks shall be set in a mortar bed 4 inches deep set on the compacted gravel subgrade. The bricks will be set with masonry sand (minimum depth of 1" above the mortar bed), as directed by the Town and/or Engineer. The masonry sand shall be tampered where the walk surface materials are to be placed. The pattern of reset material shall match the existing pattern.

Existing brick that is broken or chipped shall be replaced in kind by the contractor at his own expense.

#### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Work under this Item shall be measured by square yard and paid for at the Contract Unit Price bid per Square Yard, which shall include all equipment, tools, removal and stockpiling of existing brick accent band, grading, compacting and labor to perform the work described above, including the replacement of individual bricks in poor condition, gravel borrow, masonry sand, mortar and mortar bed, which shall be considered incidental to this item.





# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 824.01

## RECTANGULAR RAPID FLASHING BEACON

EACH

All work performed under this Item shall be in accordance with the relevant provisions of Sections 815 and 824 of the Standard Specifications and the following:

This work shall consist of furnishing two (2) Rectangular Rapid Flashing Beacons (RRFBs) (one on each side of the crosswalk) at the locations indicated on the plans or as directed by the Town and/or Engineer. All work shall comply with the guidelines set forth and located in the Federal Highway Administration Interim Approval Memorandum IA-11, and this special provision. One pair of beacons (e.g., on each side of the road at a given location) shall be considered as one unit of measurement for estimating and bidding purposes.

[http://mutcd.fhwa.dot.gov/resources/interim\\_approval/ia11/fhwamemo.htm](http://mutcd.fhwa.dot.gov/resources/interim_approval/ia11/fhwamemo.htm)

The light assemblies shall be solar powered with battery back-up and each shall have a pedestrian push button conforming to the requirements of the American with Disabilities Act (ADA). The light assemblies shall be wirelessly controlled and the two units shall be fully synchronized.

### GENERAL REQUIREMENTS

1. Each RRFB shall consist of two rapidly and alternately flashing rectangular yellow indications having LED array based pulsing light sources.
2. Each RRFB shall be a complete assembly, consisting of but not limited to concrete foundation, pole, signage, sign, push-button bollard, mounting, indications, down arrow signage, and electrical components (wiring, solid-state circuit boards, etc).
3. In accordance with the Federal Highway Administration (FHWA) interim approval, each RRFB shall be installed at a crosswalk to supplement pedestrian warning signs with a diagonal downward arrow plaque, located at or immediately adjacent to a marked crosswalk.

### FUNCTIONAL REQUIREMENTS

#### Assembly

1. Each solar-powered, wireless, radio-communicated assembly, with battery-powered backup system, shall provide for pedestrian-activated push buttons on each side of the crosswalk that simultaneously commence operation of the RRFBs located at the crosswalk. The following additional conditions shall be met:
2. Two (2) sets of solar-powered rectangular rapid flashing beacons located at the crosswalk shall be capable of being viewed by motorists approaching the crosswalk from the primary direction of travel. Where the crosswalk crosses a multi-lane, bi-directional roadway, the units shall be equipped flashers facing both directions. The unit shall include a single, side-mounted LED array facing the crosswalk, advising pedestrians of RRFB activation.
3. Two (2) free-standing solar panel units are required. One unit shall be mounted on top of each pole supporting the RRFB set.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEM 824.01 (Continued)

4. Two (2) supporting poles must include all mounting hardware to support ground installation, as well as installation of the various assembly items.

### Power

Each RRFB shall utilize a backup battery source powered by a solar panel unit mounted on top of the sign assembly support. The solar power package shall be sized, using location and load based calculation software, to meet the power needs of the installation location. Autonomy with a fully charged battery shall be 10 days.

### Activation

Each RRFB shall be activated by push button. The push button shall be fully ADA compliant and shall require no more than 2lbs. of pressure to activate. The push button device shall provide visual confirmation for the full flashing duration period.

### Beacon Operation

1. The RRFB shall be normally dark, shall initiate operation only upon pedestrian actuation, and cease operation at a predetermined time after the pedestrian actuation.
2. All RRFB's associated with a given crosswalk (including those with an advance crossing sign, if used) shall, when activated, simultaneously commence operation of their alternating rapid flashing indications and shall cease operation simultaneously.
3. All RRFB light indications shall be wirelessly synchronized (All lights will turn on within 120 milliseconds and remain synchronized through-out the duration of the flashing cycle).
4. A pedestrian instruction sign with the legend "PUSH BUTTON TO TURN ON WARNING LIGHTS" should be mounted adjacent to, or integral with, each pedestrian pushbutton.
5. The duration of a predetermined period of operation of the RRFB's following each actuation should be based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals.
6. A small light directed at and visible to pedestrians in the crosswalk shall be installed integral to the RRFB to give confirmation that the RRFB is in operation.
7. The activation length of the flashing lights shall be programmable 1 second to 24 hours in one second, minutes and hours.

### Beacon Flashing Requirements

1. When activated, the two yellow indications in each RRFB shall flash in a rapidly alternating "wig-wag" flashing sequence (left light on, then right light on).
2. Each of the two yellow indications shall have 70 to 80 periods of flashing per minute and shall have alternating but approximately equal periods of rapid pulsing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, one of the yellow indications shall emit two rapid pulses of light and the other yellow indication shall emit three pulses of light.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEM 824.01 (Continued)

3. The flash rate of each yellow indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second, to avoid frequencies that may cause seizures.
4. The light intensity of the yellow indications shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.
5. Beacons shall be simple to maintain and allow replacement of individual rectangular beacons. It shall be rated for a minimum of 10 years.

### Control Unit

The control unit shall be housed in a durable enclosure and shall be attached to the mounting pole. The control unit shall be readily accessible and easily and fully interchangeable.

### Signs

1. All signs shall conform to MUTCD standards for size and retro-reflectivity requirements.
2. All sign assemblies shall use anti-vandal fasteners to mount components to sign and sign to fixture.
3. All sign assemblies shall have a W11-2 (36 inch by 36 inch) and W16-7P Arrow on each pole, with a pole on both sides of the street. Where the crosswalk crosses a multi-lane, bi-directional roadway, signs shall be mounted on both sides of the poles, on both sides of the roadway.
4. All pedestrian signs shall have the MUTCD yellow-green background color.

### Warranty

The manufacturer shall guarantee products and components to be free of any defects in materials and workmanship for a minimum period of four (4) years from the date of original purchase and will repair or replace any part of the unit which proves to be defective within the warranty period.

Warranty details must be included in the submittal.

### CONSTRUCTION REQUIREMENTS

#### Beacon Dimensions and Placement in Sign Assembly

1. The RRFB light bar shall be a two-sided box with dimensions of 3.25" (height) by 20" (width) by 8" (depth) or equivalent. There shall be five (5) LED's that are recessed for vandal resistance and the box shall be painted federal yellow. The power required is 12 volts, DC (solar power).
2. The crosswalk assembly shall include two (2) high intensity yellow LED fixtures on the front side, which deliver indication to motorists approaching from one direction only. Each LED unit shall also be capable of swiveling up to 52 degrees left or right of center to direct the maximum LED light to approaching traffic.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 824.01 (Continued)**

3. The housing units shall also include a high intensity yellow LED mounted on the street side of the assembly, which will flash upon the receipt of an incoming digital radio signal from either one of the assemblies. This is intended to provide pedestrians confirmation that the assembly across the street has been activated.
4. Each RRFB indication shall be a minimum size of 5" wide x 2" high.
5. The two RRFB indications shall be aligned horizontally, with the longer dimension horizontal, and a minimum space between the two indications of approximately seven inches (7"), measured from the inside edge of one indication to the inside edge of the other indication.
6. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the integral signage of the RRFB.
7. The RRFB shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque.
8. Each RRFB to be supplied with all required hardware to install assembly. All exposed hardware shall be anti-vandal.

### **Controller**

The controller unit shall be housed in a NEMA 4X rated, pole mounted, aluminum cabinet with stainless steel hinge.

### **Control Circuit**

1. The control circuit shall have the capability of independently flashing up to two independent outputs. The LED light outputs and flash pattern shall be completely programmable. The flashing output shall have 70 to 80 periods of flashing per minute with a 100 – millisecond duration on time consisting of double and triple flashes per cycle.
2. The output shall reach the output current as programmed for the duration of the pulse. The flashing output shall be programmable.
3. The control circuit shall be installed in a NEMA rated enclosure.

### **Battery**

1. Battery unit shall be a 12VDC 45 AHR Sealed AGIM Lead Battery
2. All batteries used shall have a minimum of 35-ampere hours.

### **Wireless Radio**

1. Radio control shall operate on a FCC approved 900mhz frequency hopping spread spectrum network with a normal operating range of 1000'.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

2. Radio shall integrate with communication of RRFB control circuit to activate sign from pushbutton or passive detection input.

### **ITEM 824.01 (Continued)**

3. The Radio shall synchronized all of the remote RRFB light indications so they will turn on within 120msec of each other and remain synchronized throughout the duration of the flashing cycle.
4. Radio systems shall operate from 3.6 volts dc to 15 volts DC.

### Push Button

1. The push button shall be ADA compliant and require no more than 2lbs. of pressure for activation. The button must be designed so that ice cannot form such that it would impede the function of the button.
2. The pushbutton shall incorporate visual feedback to indicate the button has been pressed and the displays are active. Once the pushbutton is pressed, the LED must stay on for the full duration and the beacons active.
3. The pushbutton shall have transient surge protection that shall include at a minimum, a resistor and TVS diode at the input connection. The pushbutton assembly shall be vandal resistant designed to withstand impacts from heavy objects. The button body must have raised ridges on all sides to protect button cap against side impacts. The button shall be designed so that it cannot be made to stay on. If the event the button is pressed for longer than 10 seconds, it shall reset itself and work normally even if it is still being held in.
4. The button shall be completely sealed and the electronics shall be encapsulated so that the button can function even after being immersed in water for an extended period of time.
5. The pushbutton shall be capable of continuous operation over a temperature range of -30 degree F to 165 degree F.

### Solar Panel

1. The solar panel shall provide up to 55 watts peak total output.
2. The solar panel shall be mounted to an aluminum plate and bracket at the optimum angle for the install location latitude to provide maximum output.
3. All fasteners used shall be anti-vandal.

### Supporting Structure

The supporting structure of the RRFB shall be a standard 10-foot traffic signal post and base. Supports shall be colored similarly to other traffic control equipment in the same intersection, or in the near vicinity. Each RRFB shall be supplied with all required installation hardware.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Rectangular Rapid Flashing Beacon will be measured by the Lump Sum for a complete and working installation



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

as described above.

### **ITEM 824.01 (Continued)**

Rectangular Rapid Flashing Beacon will be paid by the Lump Sum which will include all items necessary to install and operate a pair of RRFBs (one in each direction) at the crosswalk, including both signal assemblies, concrete foundations, anchor posts, poles, signs, arrays of RRFB indications, push button assemblies with user instructional sign, controller unit(s), confirmation indication lights, antennas, mounting hardware, batteries, components, and all labor, materials, equipment and incidental costs required to complete the work.

Warning signs mounted on the signal post with the RRFB will be paid for separately under item 832. Warning, Regulatory and Route Marker, Aluminum Panel (Type A).



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 824.02

## SOLAR-POWERED PEDESTRIAN SAFETY BEACON

EACH

### GENERAL

The work under this item shall conform to the relevant provisions of Section 800 of the Standard Specifications, the 2009 Manual on Uniform Traffic Control Devices (MUTCD), and the following:

This work shall consist of furnishing two (2) solar-powered pedestrian safety beacons (one on each side of the crosswalk) at the locations indicated on the plans or as directed by the Town and/or Engineer.

The work shall include the furnishing and installation of all of the following items: pedestrian crosswalk signs and warning lights; steel post with base and foundation; pole mounted cabinet; battery(s); solar controller; solar panel(s) with mounting rack; and all other equipment, materials and incidental costs necessary to provide a complete, fully operational solar-powered pedestrian safety beacon as specified herein and as shown on the plans. One pair of beacons (e.g., on each side of the road at a given location) shall be considered as one unit of measurement for estimating and bidding purposes.

### SPECIFICATIONS

The solar-powered pedestrian safety beacon shall meet the following specifications:

#### Beacon Flasher

- Diameter: 12" (amber or red)
- LED Quantity: 138
- Luminous Intensity:  $\geq 4,000$  cd
- LED Lifetime: 5.5 years
- Visual Distance:  $\geq 1,600$  ft
- Operating Time: 30 rainy days when fully charged
- Battery Capacity: 12 VCD & 18 aH
- Solar Panel: 20 W
- Weight: 14 lb
- Enclosure Protection: IP65
- Material: UV-stabilized polycarbonate
- Timer: 7 programs, 24 hour and weekly

#### Motion Detector

- Sensor: PIR motion sensor
- Sensing Range: 30 ft (sensor to vehicle)
- Wireless Distance: 1,500 ft (sensor to beacon flasher)
- Sensor Power: Solar



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 824.02 (Continued)**

#### **SHOP DRAWINGS**

Within 30 days following execution of the Contract, the Contractor shall submit a list of equipment and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Section 815.20.

The Contractor shall commence no work until approval of the shop drawings and manufacturer's data has been received in writing from the Engineer. Approval of these drawings will be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans and specifications.

The Contractor shall deliver certificate of compliance with the manufacturer to the Engineer for all materials purchased from the manufacturer.

#### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

The work under Item 824.02 will be paid for at the contract lump sum price, which shall include all costs required to install and operate a pair of pedestrian safety beacons (one in each direction) at the crosswalk, including both signal assemblies, all posts, mounting hardware, components, and all labor, materials, equipment and incidental costs required to complete the work.





# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

**ITEM 852.11**  
**ITEM 852.12**

**TEMPORARY PEDESTRIAN BARRICADE**  
**TEMPORARY PEDESTRIAN CURB RAMP**

**FOOT**  
**EACH**

## DESCRIPTION

Work under these items consist of furnishing, deploying, maintaining in proper operating conditions, and removing temporary pedestrian barricades and temporary pedestrian ramps as part of a Temporary Pedestrian Access Route (TPAR) in order to guide pedestrians around a fully- or partially-closed sidewalk. These devices are intended to prevent pedestrians from entering the work area and to prevent pedestrians from inadvertently entering the vehicle travel lane by providing visual and physical separation between each space.

## MATERIALS

The Temporary Pedestrian Barricade shall have a continuous bottom rail or edge no more than two (2) inches above the ground and eight (8) inches in height (minimum) to accommodate cane users, have a smooth and continuous hand railing along the top edge no less than 32 inches above the ground and not obstruct or project into the pedestrian path of travel. Barricade walls shall be nearly vertical and generally within the same plane.

If exposed to traffic, Temporary Pedestrian Barricades shall be crashworthy.

The Temporary Pedestrian Curb Ramp shall provide a 48 inch minimum width, with a firm, stable, and non-slip surface. Protective edging with a two (2) inch minimum height shall be installed when the curb ramp or landing platform has a vertical drop of six (6) inches or greater.

The Temporary Pedestrian Curb Ramp walkway and landing area surface shall be of a solid, continuous, contrasting color abutting up to the existing sidewalk.

If a Temporary Pedestrian Curb Ramp leads to a crosswalk, a detectable warning pad must be used at the base of the ramp; if it leads to a protected path that does not conflict with vehicular traffic then a detectable pad shall not be used.

## CONSTRUCTION METHODS

The Temporary Pedestrian Barricade shall be placed in an area that will provide pedestrians with a TPAR on a smooth, continuous hard surface for its entirety. The geometry and alignment of the facility shall meet the applicable requirements of the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities" and the Massachusetts Architectural Access Board.

The recommended width of the TPAR is 60 inches, but if constraints exist a minimum clear width of 48 inches shall be provided along its entirety. If a 60 inch width cannot be accommodated in full, a 60 inch by 60 inch passing space shall be provided every 200 feet or less along the TPAR.

Turning areas shall be 60 inches by 60 inches minimum.

Lateral joints between any surfaces shall not exceed 0.5 inches. Lateral edges may be vertical up to 0.25 inches high and shall be beveled at 1V:2H between 0.25 inches and 0.5 inches.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

The TPAR shall be kept clear of debris, snow, and ice and the Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall not obstruct drainage.

### **ITEMS 852.11 & 852.12 (Continued)**

Removal and/or resetting of Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall be considered incidental.

### **COMPENSATION**

Payment for Temporary Pedestrian Barricades will be made at the contract price per foot installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.

Payment for Temporary Pedestrian Curb Ramps will be made at the contract price per each unit installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.



**TOWN OF WESTWOOD  
COMMONWEALTH OF MASSACHUSETTS**

<b><u>ITEM 868.06</u></b>	<b><u>6 INCH REFLECTORIZED WHITE LINE (EPOXY)</u></b>	<b><u>LINEAR</u></b>
<b><u>FOOT</u></b>		
<b><u>ITEM 868.12</u></b>	<b><u>12 INCH REFLECTORIZED WHITE LINE (EPOXY)</u></b>	<b><u>LINEAR FOOT</u></b>
<b><u>ITEM 869.06</u></b>	<b><u>6 INCH REFLECTORIZED YELLOW LINE (EPOXY)</u></b>	<b><u>LINEAR</u></b>
<b><u>FOOT</u></b>		

Work under these items cover white and yellow epoxy reflectorized pavement striping material that is sprayed onto the pavement. Following a surface application of glass beads and upon drying, the resultant marking is a reflectorized stripe of specified thickness and width that is capable of resisting deformation by traffic. Work under these items shall conform to the relevant provisions of Section 860 of the Standard Specifications and the following:

**MATERIAL REQUIREMENTS**

**Regular-Dry Epoxy Suggested Suppliers**

<b>BRAND NAME</b>	<b>SUPPLIER/LOCATION</b>
Epoplex LS50	Epoplex - Stonhard Inc. Maple Shade, NJ
Hotline TM 8212 (Part A White) Hotline TM 8213 (part A Yellow) Hotline TM 8214 (Part B Hardener or Converter)	Baltimore Paint and Chemical Co. Division of Sherwin-Williams Baltimore, MD Edison, NJ
Lumiline, Lumiline II	Accent Stripe, Inc. Orchard Park, NY
Poly-Carb Mark 55.3	Poly-Carb Inc. Solon, OH
Super Lifeline II, III	Linear Dynamics Ball Ground, GA
Thermopoxy Series 100 Part A (Series 101 White) Part A (Series 102 Yellow) Part B (Series 103)	Technical Coatings Corp. Alpharetta, GA

**Epoxy Material**

- Composition



## **TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS**

The epoxy resin composition shall be specifically formulated for use as a pavement marking material and for hot-spray application at elevated temperatures. The type and amounts of epoxy resins and curing



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEMS 868.06 through 869.06 (Continued)

agents shall be at the option of the manufacturer, providing the other composition and physical requirements of this specification are met.

The epoxy marking material shall be two-component (Part A and Part B), 100% solids type system formulated and designed to provide a simple volumetric mixing ratio (e.g., two volumes of Part A to one volume of Part B).

The epoxy marking material shall be supplied as either a regular-dry or a slow-dry material. Regular-dry may be used for all marking patterns. Slow-dry material is intended for marking hatchlines, edgelines, and other marking patterns located out of the general path of traffic.

All acceptances of uninstalled epoxy marking material shall expire six (6) months after the date of manufacture.

Part A of both white and yellow shall conform to the following requirements:

### PERCENT BY WEIGHT OF PART A

WHITE	Pigment - 18 Minimum, Titanium Dioxide (ASTM D476, Type II) Epoxy Resin - 75 to 82
YELLOW	Pigment - 18 Minimum, Titanium Dioxide (ASTM D476, Type II) 5 Minimum, Organic Yellow, Epoxy Resin – 73 to 77

The entire pigment composition shall consist of either titanium dioxide or titanium dioxide and organic yellow. No extender pigments are permitted. Yellow pigment shall be lead-free.

The epoxy content of the epoxy resin in Part A will be tested in accordance with ASTM D 1652 and calculated as the weight per epoxy equivalent (WPE) for both white and yellow. The epoxy content will be determined on a pigment free basis. The epoxy content (WPE) shall meet a target value provided by the manufacturer and approved by the Department. A ±50 tolerance will be applied to the target value to establish the acceptance range.

The amine value of Part B shall be tested in accordance with ASTM D2074(2) to determine its total amine value. The total amine shall meet a target value provided by the manufacturer and approved by the Department. A ±50 tolerance will be applied to the target value to establish the acceptance range. The manufacturer may specify an alternate test method for determining the amine value subject to the approval of the Town.

- Physical Properties of Mixed Components (Part A and Part B).

Unless otherwise noted, all samples are to be prepared tested at an ambient temperature of 23 ± 2°C.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEMS 868.06 through 869.06 (Continued)

**a. Color**

Yellowness Index (ASTM D-1925).

- cure 72 hours after sample preparation
- Take yellow index reading, XYZ C/2°, following 72 hour cure and preceding QUV
- Maximum index before QUV: 8.0
- Place sample in QUV for 72 hours
- Maximum index after QUV: 20

Typical White Standard

X78.5  
Y81.1  
Z90.4  
Y14.7

Typical Yellow Standard

X52.7  
Y48.1  
Z7.6

**b. Directional Reflectance**

The white epoxy composition (without glass spheres) shall have a daylight directional reflectance of not less than 84% relative to a magnesium oxide standard when tested in accordance with ASTM E1347.

The yellow epoxy composition (without glass spheres) shall have a daylight directional reflectance of not less than 55 % relative to a magnesium oxide standard when tested in accordance with ASTM E 1347.

**c. Drying Time (Laboratory)**

When tested in accordance with ASTM D711 as modified below, regular-dry epoxy marking material shall reach a no-pick-up time in 30 minutes or less. Under these same test conditions, slow-dry epoxy marking material shall reach a no-pick-up time in 60 minutes or less. A Bird Applicator or other suitable instrument shall be used to spread a nominal 15 ± 1 mil thick wet film. Reflective glass spheres shall be immediately dropped onto the epoxy film at a rate of 18 pounds per gallon.

**d. Drying Time (Field)**

When installed at 77°F at the specified wet film thickness and reflectorized with glass spheres, regular-dry and slow-dry epoxy markings shall reach a no-track condition in approximately 30 minutes, and 60 minutes, respectively.

Dry to "no-tracking" shall be considered as the condition where no visual deposition of the epoxy marking to the pavement surface is observed when viewed from a distance of 50 feet, after a passenger car is passed over the line.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEMS 868.06 through 869.06 (Continued)

**e. Hardness**

The epoxy composition when tested in accordance with ASTM D2240 shall have a Shore D hardness of between 75 and 100. Samples shall be allowed to cure for not less than 72 hours nor more than 96 hours prior to testing.

**f. Infrared Spectrophotometer Analysis (ASTM D2621)**

Samples of Part A and Part B shall be analyzed by infrared spectrography. The spectrum of each component shall be a reasonable match to the spectrum of the original formulation accepted by the Department.

- Reflective Glass Spheres

Reflective glass spheres for drop-on application shall conform to the following requirements:

The glass spheres shall be colorless, clean, transparent, free from milkiness or excessive air bubbles, and essentially clean from surface scarring or scratching. They shall be spherical in shape and at least 80 % of the glass beads shall be true spheres when tested in accordance with ASTM is D-1155, Procedure A. The refractive index of the spheres shall be a minimum of 1.5 as determined by the liquid immersion method at 77°F. The silica content of the glass spheres shall not be less than 60%. The glass spheres shall have the following gradation when tested in accordance with ASTM D-1214.

### DOUBLE DROP METHOD

TYPE I		TYPE II	
Sieve Opening	% Retained	Sieve Opening	% Retained
No. 10	0	No. 20	0 - 5
No. 12	0 - 5	No. 30	5 - 20
No. 14	5 - 20	No. 50	30 - 50
No. 16	40 - 80	No. 80	9 - 32
No. 18	10 - 40	No. 100	0 - 5
No. 20	0 - 5	Pan	0 - 2
Pan	0 - 2		

The glass spheres, Type I, shall be coated with a silane-type adherence coating to enhance embedding in and adherence to the applied binder film. The coated beads shall emit a yellow-green fluorescence when tested by the Danayl Chloride test procedure. The Type II glass spheres shall be treated with a moisture-proof coating. The beads shall show no tendency to adsorb moisture in storage and shall remain free of clusters and lumps. The beads shall flow freely from the dispensing equipment at any time when surface and atmospheric conditions are satisfactory for marking operations. The moisture-resistance of the glass spheres shall be determined on the basis of the following test:

Place one kilogram of spheres in a washed cotton bag having a thread count of approximately 52 per square inch (warp and woof) and immerse the bag in a container of water for 30 seconds. Remove the bag and force excess water from the sample by squeezing the bag. Suspend and allow to drain for two hours at room temperature (73 ± 2°F). Then mix the sample in the bag by shaking thoroughly. Pour the



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEMS 868.06 through 869.06 (Continued)

sample slowly into a clean, dry glass funnel having a stem 4 inches in length, with a 0.4 inch inside diameter stem entrance opening and a minimum exit opening of 0.25 inches. The entire sample shall flow freely through the funnel without stoppage. When first introduced into the funnel, if the spheres clog, it is permissible to lightly tap the funnel to initiate the flow.

Reflective glass spheres may be accepted at the job site on the basis of the manufacturer's certification, or they may be submitted to the Research and Materials Laboratory for testing.

- Packaging and Shipment

Epoxy pavement marking materials shall be shipped to the job site in strong, substantial containers. Individual containers shall be plainly marked with the following information:

1. Name of Product
2. Item Number
3. Lot Number
4. Batch Number
5. Test Number
6. Date of Manufacture
7. Date of Expiration of Acceptance (6 months from date of manufacture)
8. The Statement (as appropriate): "Part A - Contains Pigment and Epoxy Resin," or "Part B - Contains Catalyst"
9. Quantity
10. Mixing Proportions, Application Temperature and Instructions
11. Safety Information
12. Manufacturer's Name and Address

Reflective glass spheres shall be shipped in moisture resistant bags. Each bag shall be marked with the name and address of the manufacturer and the name and net weight of the material.

### EQUIPMENT AND APPLICATION REQUIREMENTS

#### Striping Equipment

The equipment shall have a system capable of spraying the epoxy paint in the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability, and with an adequate power source to produce lines of uniform dimension and prevent application failure. It shall be capable of placing stripes on the left and right sides and of placing two intermittent lines simultaneously. It shall also be capable of applying glass beads at the rate of 25 pounds per gallon. All guns must be in full view of the operator at all times. The equipment shall be provided with a metering device to register the accumulated installed footage for each gun each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and epoxy application techniques.





## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEMS 868.06 through 869.06 (Continued)

Equipment shall have such a design that the pressure gauges for each proportioning pump are constantly visible to the operator at all times during its operation so that any fluctuation and pressure difference can be addressed immediately.

#### Surface Preparation

The pavement surface on which the epoxy paint material is placed shall be clean and dry. Existing traffic markings shall be removed by blasting or grinding. The curing compound on Portland cement concrete shall also be removed. Existing markings shall be removed so that at least 95% of the underlying pavement is visible. The abrasive material shall be removed from the pavement surface before the pavement is opened to uncontrolled traffic flow.

#### Application

- Epoxy

The epoxy paint markings shall have a thickness of 25 mils  $\pm$  1mil, calculated without drop-on glass beads. All markings shall have uniform thickness with a uniform distribution of glass beads throughout the line width. The width of lines shall be as specified with a tolerance of 0.25 inch. Markings shall have sharp edges and cutoff at the ends.

- Glass Beads

The glass beads shall be applied by the double drop method, which requires that Type I and Type II reflective glass spheres be injected into or dropped onto the liquid epoxy marking. Each type shall be applied simultaneously, at a minimum rate of 10 to 13 pounds per gallon of resin with a minimum total application of 25 pounds per gallon. Type I beads shall be applied first, immediately followed by Type II beads. The beads shall adhere to the cured epoxy or all marking operations shall cease until corrections are made.

- Temperature Limitations

During marking operations, the pavement surface where the epoxy is to be placed shall have a minimum temperature of 40° F and the air temperature shall be at least 35° F. The pavement surface temperature, and the air temperature shall be determined at the start of each day of marking operation and at any time deemed necessary by the Engineer. The spraying temperatures shall be in accordance with the manufacturer's recommendations.

- Application Rates

Application rates will be checked by the Engineer at convenient intervals by comparing tallies of materials used to the length of lines placed. For initial application and occasionally during the course



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEMS 868.06 through 869.06 (Continued)

of work, the Engineer may also check application to a pre-weighed sheet specifically placed for test purposes. Drop-on spheres shall not be applied in this test.

- Protecting Newly installed Markings

Newly installed markings shall be protected from tracking during the setting period by one or more of the following methods:

- 1) Cone off wet lines from traffic
- 2) Use a convoy of moving vehicles to prevent traffic from crossing wet lines
- 3) Saturate lines with glass beads to prevent tracking.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Items 868.06, 868.12, and 869.06 shall be measured and paid for at the Contract unit price per linear foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### ITEM 874.2

### TRAFFIC SIGN REMOVED AND RESET

EACH

#### GENERAL

Work under this item shall conform to the relevant provisions under Section 828 of the standard specifications and the following:

The Contractor shall carefully remove and reset all designated existing signs including attachment hardware and sign support posts located as needed and where directed by the Town and/or Engineer.

Work shall include the dismantling, removal, transporting, storing and resetting of existing traffic signs at the locations shown on the plans. The Contractor shall completely remove the sign and post and reset said sign and post at the new location. If existing sign and/or post are not suitable for reuse as determined by the Engineer, the contractor shall provide new sign and/or post under items 832. and/or 847.1, respectively. New attachment hardware shall be furnished as necessary to replace any missing or unusable existing hardware.

Existing sign and/or post damaged by the Contractor's operations shall be replaced in-kind by the Contractor at no additional compensation.

Included under this item are warning, regulatory, and route marker signs and miscellaneous directional signs.

The Contractor shall backfill with compacted gravel all holes resulting from the removal of the existing signs and their foundations and restore the area to match existing conditions of adjacent areas.

#### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Measurement and payment for this item shall be made at the Contract Unit Price per each traffic sign removed and reset complete in place. Payment shall constitute full compensation for dismantling, loading, transporting and resetting of the signs as designated above, gravel backfill and incidental costs required to complete the work.



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### **ITEM 874.4**

### **TRAFFIC SIGN REMOVED AND STACKED**

**EACH**

#### **GENERAL**

Work under this item shall conform to the relevant provisions under Section 828 of the Standard Specifications and the following:

Work shall include removing, transporting, protection, temporary storage and stacking of signs, posts and hardware. The signs, posts and hardware within Town Layout shall be stacked on boards at the Town of Westwood Department of Public Works, as determined by the Town and/or Engineer.

Traffic signs determined to be unsatisfactory for reuse shall become the property of the Contractor and shall be removed and discarded.

The Contractor shall completely remove the sign and post. If existing sign and/or post are damaged by the Contractor's operations, a new sign and/or post of the same size and material shall be provided to the Town at the Contractor's expense.

The Contractor shall backfill with compacted gravel all holes resulting from the removal of the existing signs and their foundations and restore the area to match existing conditions of adjacent areas.

#### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Item 874.4 shall be measured and paid for at the Contract unit price per each, which price shall include all labor, materials, equipment and incidental costs required to complete the work.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ITEM 999.

## POLICE SERVICES

## LUMP SUM

### GENERAL

The Contractor shall furnish police services required to direct traffic on existing roadways where traffic is maintained.

The Contractor shall provide such police officers as may be deemed necessary by either the Engineer and/or Town for the direction and control of all traffic traveling within and through the project area. The police officers shall be obtained from the Town Police Department as applicable. The police officers shall be paid by the Contractor at the prevailing rate of wages established by the Town of Westwood.

### ALLOWANCE FOR POLICE SERVICES

Allowances of Eighty Eight Thousand Dollars (\$88,000.00) for the furnishing of police services has been included in all bids. This allowance is determined by multiplying the number of hours estimated as necessary by the prevailing hourly rate of wages established for such services. The Contractor shall submit certified copies of itemized bills of services rendered for review and approval by the Engineer and/or Town. The allowance will be adjusted to the actual amount paid for authorized and approved police services as stipulated and shall include other payments due to any legal requirements of the State and Federal governments.

### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

The quantity to be paid for under this item shall be the actual amount paid by the Contractor to provide satisfactory police services as stipulated and required. Any overhead costs shall be included in the prices bid for the other items of the Contract.

\*\*\* END OF SPECIAL PROVISIONS \*\*\*



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## Attachment B Monthly Price Adjustments

### MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES ENGLISH UNITS Revised: 02/02/2009

This provision applies to all projects using greater than 100 tons of hot mix asphalt (HMA) mixtures containing liquid asphalt cement as stipulated in the Notice to Contractors section of the bid documents.

The Price Adjustment will be based on the variance in price for the liquid asphalt component only from the Base Price to the Period Price. It shall not include transportation or other charges. This Price Adjustment will occur on a monthly basis.

#### BASE PRICE

The Base Price of liquid asphalt on a project as listed in the Notice to Contractors section of the bid documents is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price detailed below.

#### PERIOD PRICE

Please note that, starting December 15, 2008, two sets of period prices will be posted each month on the MassHighway website at <http://www.mhd.state.ma.us/>. They will be labeled "New Asphalt Period Price Method" and "Old Asphalt Period Price Method".

#### NEW ASPHALT PERIOD PRICE METHOD

The "New Asphalt Period Price Method" is for contracts bid after December 15, 2008 and will show the Period Price of liquid asphalt for each monthly period as determined by MassHighway using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. MassHighway will post this

Period Price on this website within two (2) business days following their receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted MassHighway the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

#### OLD ASPHALT PERIOD PRICE METHOD

The "Old Asphalt Period Price Method" Period Price will be for contracts bid on or before December 15, 2008 and will contain liquid asphalt prices as determined by the old or previous method. These prices will continue to be posted on MassHighway's website until all contracts using the "Old Asphalt Period Price Method" Period Price have been closed.



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### NEW AND OLD ASPHALT PERIOD PRICE METHODS

The paragraphs below apply to both the New and the Old Asphalt Period Price Methods.

The Contract Price of the hot mix asphalt mixture will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M3.11.03.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of tons of hot mix asphalt mixtures placed during each monthly period times the liquid asphalt content percentage times the variance in price between Base Price and Period Price of liquid asphalt. This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department approved extension of time.





## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

### MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE – ENGLISH UNITS

Revised: 01/26/2009

This monthly fuel price adjustment is inserted in this contract because the national and worldwide energy situation has made the future cost of fuel unpredictable. This adjustment will provide for either additional compensation to the Contractor or repayment to the Commonwealth, depending on an increase or decrease in the average price of diesel fuel or gasoline.

This adjustment will be based on fuel usage factors for various items of work developed by the Highway Research Board in Circular 158, dated July 1974. These factors will be multiplied by the quantities of work done in each item during each monthly period and further multiplied by the variance in price from the Base Price to the Period Price.

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site ([www.mhd.state.ma.us](http://www.mhd.state.ma.us)) for the month in which the contract was bid, which includes State Tax. The Period Price will be the average of prices charged to the State, including State Tax for the bulk purchases made during each month.

This adjustment will be effected only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments. No adjustment will be paid for work done beyond the extended completion date of any contract.

Any adjustment (increase or decrease) to estimated quantities made to each item at the time of final payment will have the fuel price adjustment figured at the average period price for the entire term of the project for the difference of quantity.

The fuel price adjustment will apply only to the following items of work at the fuel factors shown:

ITEMS COVERED	FUEL FACTORS	
	Diesel	Gasoline
Excavation: and Borrow Work: Items 120, 120.1, 121, 123, 124, 125, 127, 129.3, 140, 140.1, 141, 142, 143, 144., 150, 150.1, 151 and 151.1 (Both Factors used)	0.29 Gallons / CY.	0.15 Gallons / CY
Surfacing Work: All Items containing Hot Mix Asphalt	2.90 Gallons / Ton	Does Not Apply

\*\*\*\* END OF ATTACHMENT B \*\*\*\*



**TOWN OF WESTWOOD  
COMMONWEALTH OF MASSACHUSETTS**

**ATTACHMENT C  
WAGE RATES**



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT D BID ITEM SHEET

The Bidder shall insert unit prices for each item in ink, in both words and figures, and is to show a total bid price (unit price x estimated quantities). In the event a discrepancy between the written words and figures, the written words shall govern. In the event an error in the bidders total bid price, the corrected total bid obtained by the summation of the products of the unit prices multiplied by the respective quantities shall stand as the bidder's total bid price.

Unbalanced bidding is expressly prohibited, and all unit bid prices will be compared for reasonable conformance with the engineer's estimate. The Owner has the right to reject award of a bid, or part thereof, to protect the public interest if it is apparent that a bid is mathematically unbalanced, the bidder front-end loads its bid as to amount to an advanced payment, there are extreme variations from the engineer's estimate or other bids received, if in the opinion of the Owner, the unit prices create a reasonable doubt that the apparent low bidder will actually result in the lowest cost to the Owner, and/or if the overall competitive bidding process has been jeopardized.

**\*The estimated quantities shown here are based solely upon a reasonable assessment of the project parameters, thus the Bidder is advised that the actual quantities may vary substantially as field conditions may necessitate.**

**There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.**

\_\_\_\_\_  
Signature of individual submitting bid or proposal

\_\_\_\_\_  
Printed Name of individual submitting bid or proposal

\_\_\_\_\_  
Business Phone Number

\_\_\_\_\_  
Printed Name of company submitting bid or proposal

\_\_\_\_\_  
Business Email



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 101: CLEARING AND GRUBBING  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	0.1	A	\$ _____
ITEM 102.1: TREE TRIMMING  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	200	FT	\$ _____
ITEM 102.511: TREE PROTECTION – ARMORING & PRUNING  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 120.1: UNCLASSIFIED EXCAVATION  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	860	CY	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 146: DRAINAGE STRUCTURE REMOVED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 151: GRAVEL BORROW  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	570	CY	\$ _____
ITEM 156: CRUSHED STONE  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	1	TON	\$ _____
ITEM 170: FINE GRADING AND COMPACTING – SUBGRADE AREA  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	1,960	SY	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 201: CATCH BASIN  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 220: DRAINAGE STRUCTURE ADJUSTED  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	5	EA	\$ _____
ITEM 220.5: DRAINAGE STRUCTURE REMODELED  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	5	EA	\$ _____
ITEM 222.3: FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	2	EA	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 223.2: FRAME AND GRATE (OR COVER) REMOVED AND DISCARDED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 241.12: 12 INCH REINFORCED CONCRETE PIPE  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	20	FT	\$ _____
ITEM 381.3: SERVICE BOX ADJUSTED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	5	EA	\$ _____
ITEM 451: HMA FOR PATCHING  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	50	TON	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 453: HMA JOINT SEALANT  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	3,400	FT	\$ _____
ITEM 472: TEMPORARY ASPHALT PATCHING  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	10	TON	\$ _____
ITEM 503.2: GRANITE CURB TYPE VA3 – STRAIGHT/CURVED  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	50	FT	\$ _____
ITEM 504.2: GRANITE CURB TYPE VA4 – SPLAYED END  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	3	EA	\$ _____





## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 506.2: GRANITE CURB TYPE VB – STRAIGHT/CURVED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	320	FT	\$ _____
ITEM 509.2: GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – STRAIGHT/CURVED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	910	FT	\$ _____
ITEM 516: GRANITE CURB CORNER – TYPE A  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	1	EA	\$ _____
ITEM 580: CURB REMOVED AND RESET  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	1,580	FT	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 581: CURB INLET REMOVED AND RESET  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	3	EA	\$ _____
ITEM 582: CURB CORNER REMOVED AND RESET  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 594: CURB REMOVED AND DISCARDED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	590	FT	\$ _____
ITEM 597: EDGING REMOVED AND DISCARDED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	70	FT	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 670: FENCE REMOVED AND RESET  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	80	FT	\$ _____
ITEM 691: BALANCE STONE WALL REMOVED AND REBUILT  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	10	FT	\$ _____
ITEM 701: CEMENT CONCRETE SIDEWALK  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	170	SY	\$ _____
ITEM 701.1: CEMENT CONCRETE SIDEWALK AT DRIVEWAYS  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	70	SY	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 701.2: CEMENT CONCRETE PEDESTRIAN CURB RAMP  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	1,540	SY	\$ _____
ITEM 702: HOT MIX ASPHALT SIDEWALK OR DRIVEWAY  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	35	TON	\$ _____
ITEM 706.3: BRICK ACCENT BAND REMOVED AND RELAID  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	10	SY	\$ _____
ITEM 751: LOAM BORROW  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	130	CY	\$ _____



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 765: SEEDING  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	1,110	SY	\$ _____
ITEM 767.6: AGED PINE BARK MULCH  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	20	CY	\$ _____
ITEM 824.01: RECTANGULAR RAPID FLASHING BEACON  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 824.02: SOLAR-POWERED PEDESTRIAN SAFETY BEACON  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	1	EA	\$ _____



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 824.50: FLASHING WARNING BEACON REMOVED AND RESET  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	2	EA	\$ _____
ITEM 832: WARNING-REGULATORY AND ROUTE MARKER – ALUM. PANEL (TYPE A)  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	590	SF	\$ _____
ITEM 847.1: SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY – STEEL  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	51	EA	\$ _____
ITEM 852: SAFETY SIGNING FOR TRAFFIC MANAGEMENT  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	460	SF	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 852.11: TEMPORARY PEDESTRIAN BARRICADE  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	100	FT	\$ _____
ITEM 852.12: TEMPORARY PEDESTRIAN CURB RAMP  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	4	EA	\$ _____
ITEM 854.1: PAVEMENT MARKING REMOVAL  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	3,280	SF	\$ _____
ITEM 859: REFLECTORIZED DRUM  THE SUM OF: _____ DOLLARS  AND _____ CENTS  (\$ _____ ) PER UNIT	5,300	DAY	\$ _____



## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

<b>Bidder Name:</b> _____ <b>Phone Number:</b> _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 868.06: 6 INCH REFLECTORIZED WHITE LINE (EPOXY)  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	500	FT	\$ _____
ITEM 868.12: 12 INCH REFLECTORIZED WHITE LINE (EPOXY)  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	3,400	FT	\$ _____
ITEM 869.06: 6 INCH REFLECTORIZED YELLOW LINE (EPOXY)  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	500	FT	\$ _____
ITEM 874.2: TRAFFIC SIGN REMOVED AND RESET  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	25	EA	\$ _____





## TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

Bidder Name: _____ Phone Number: _____			
ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 874.4: TRAFFIC SIGN REMOVED AND STACKED  THE SUM OF: _____ DOLLARS AND _____ CENTS (\$ _____ ) PER UNIT	4	EA	\$ _____
ITEM 999: POLICE SERVICES  THE SUM OF: _____ <i>Eighty Eight Thousand</i> _____ DOLLARS AND _____ <i>Zero</i> _____ CENTS (\$ _____ <i>88,000</i> _____ ) PER UNIT	1	LS	\$ <u><i>88,000</i></u>
<b>TOTAL BID:</b>  _____ AND _____ (\$ _____ ) <p style="text-align: center;">Amount in Figures</p>			



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT E BID PRICING SHEET

Bid form must be completed in ink or by typewriter. The bid price for each item on the form shall be stated in figures. Discrepancies between indicated sum of any column(s) and the correct sum of any column(s) will be resolved in favor of the correct sum. Please Attach Additional Sheets if necessary.

### **BASE BID PRICE**

The Bidder submits this bid proposal to perform all of the work (including labor and materials) as described in the solicitation for this Base Bid Price (including the costs for all Allowances, Incidentals, Bonds, and Addenda):

Total Bid in figures      \$ \_\_\_\_\_

Total Bid in words      \$ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Signature of individual submitting bid or proposal

\_\_\_\_\_  
Printed Name of individual submitting bid or proposal

\_\_\_\_\_  
Business Phone Number

\_\_\_\_\_  
Printed Name of company submitting bid or proposal

\_\_\_\_\_  
Business Email



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT F LABOR HARMONY AND OSHA TRAINING

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that 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 that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards made subject to section 44A.

---

(Signature of authorized individual submitting proposal)

---

(Printed Name)

---

(Name of Bidder (if different than name))

---

(Date)



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT G CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

---

Signature of individual submitting bid or proposal

---

Printed Name of individual submitting bid or proposal

---

Name of business



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT H TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, §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.

Signed under the penalties of perjury.

---

Signature of individual submitting bid or proposal

---

Printed Name of individual submitting bid or proposal

---

Name of business



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT I SIGNATURE PAGE

This Bid must bear the written signature of the Bidder or authorized agent of the Bidder. If the Bidder is a corporation or a partnership, the Bid must be signed by a duly authorized officer of such corporation or by a partner; the title of such officer must be stated.

The bidder hereby acknowledges the receipt of, and has included in this BID, the following Addenda:

(To be filled in by Bidder, if Addendums are issues.)

Addendum No. \_\_\_\_\_, dated \_\_\_\_\_

Addendum No. \_\_\_\_\_, dated \_\_\_\_\_

Addendum No. \_\_\_\_\_, dated \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Corporation, Company or Individual

\_\_\_\_\_  
Printed Name of Person Authorized to Sign

\_\_\_\_\_  
Title

\_\_\_\_\_  
Email Address



# TOWN OF WESTWOOD COMMONWEALTH OF MASSACHUSETTS

## ATTACHMENT K REFERENCE FORM

Bidder: \_\_\_\_\_

The following shall accompany the bid and is required as evidence of the bidder's qualifications to perform the work, as bid upon, in accordance with the contract drawings and specifications. This statement must be notarized. All questions must be answered. Additional data may be submitted on separate attached sheets. When assessing bidder's qualification, the Town will not be limited to information provided herein. The Town intends to use information outside this document to assess Bidder Qualifications.

1. Name of Bidder \_\_\_\_\_
2. Permanent Main Office Address \_\_\_\_\_
3. Official Mailing Address for This Contract \_\_\_\_\_
4. When Organized? \_\_\_\_\_
5. Where Incorporated, If a Corporation \_\_\_\_\_
6. Years Contracting under Present Name \_\_\_\_\_
7. List contracts on hand, and those completed similar in nature to this kind of project.

Owner	Engineer	Contract	Description	Contract Amount	Completion Date



**TOWN OF WESTWOOD  
COMMONWEALTH OF MASSACHUSETTS**

8. List any work the firm has failed to complete in the last five years, state where and why.

---

---

9. If you have ever defaulted on any contract, state where and why.

---

---

10. List full names of all principals (i.e., Officers, Directors, Partners, Owners) interested in this bid.

Name	Title	Firm

11. State name(s) and qualifications of resident supervisor(s) for this project.

---

---

---

12. List major equipment available for this project and identify ownership or rental.

---

---

13. List bank references for verifying financial ability of your company.





**TOWN OF WESTWOOD  
COMMONWEALTH OF MASSACHUSETTS**

Name

Address

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

14. The undersigned hereby authorized and requests any person, firm or corporation, to furnish all information requested by the Owner and/or its designated agents relative to the recitals comprising this Statement of the Bidder's Qualifications.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

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

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

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

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

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

\_\_\_\_\_ being duly sworn in person, deposes and says

that he is \_\_\_\_\_ of \_\_\_\_\_,  
(Title) (Name of Bidder)

that he is the firm's duly authorized agent to execute these contract documents, and that the answers to the foregoing questions and all statements therein contained are correct and true.

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

(SEAL)

\_\_\_\_\_  
(Notary Public)