



City of Cambridge

PURCHASING DEPARTMENT

795 Massachusetts Ave. • Cambridge, Massachusetts 02139-3219

Amy L. Witts
Purchasing Agent

TO: All Bidders

FROM: City of Cambridge

DATE: August 12, 2016

RE: File No. 7343 – CHAPTER 90 CONTRACT 20: Massachusetts Avenue, Richard Avenue, Muller Avenue and Hurlbut Street - Addendum No. 1

This addendum is comprised of:

1. Pre-bid Meeting Agenda (attached)
2. Sign in sheet from the pre-bid Meeting (attached)
3. Revised specifications (attached)
4. Questions and answers

The following question was asked and answered:

1. **Question:** Can we use WBE subcontractors/suppliers to help meet the MBE goal?

Answer: Every effort should be made to find MBE contractors/suppliers. The City MBE compliance officer will work with the winning bidder.

All other details remain the same.

Handwritten signature of Amy L. Witts in cursive script, positioned above a horizontal line.

Amy L. Witts
Purchasing Agent

Addendum No. 1

**Chapter 90 CT 20
Pre-Bid Agenda
August 11, 2016**

1. **Project Overview** – ADA compliant sidewalk reconstruction (both concrete and brick, curb ramps), raised crossings, roadway reconstruction (including granite curbing, pavement milling and asphalt overlay, driveway reconstruction, pavement markings) and drainage improvements.
 - a. **Richard Avenue** – Muller Avenue to Massachusetts Avenue
Muller Avenue – Churchill Avenue to Murray Hill Road
Hurlbut Street – Linnaean to Martin Street
 - b. **Massachusetts Avenue (Various Locations)** – *This location is part of the MassDOT complete streets program. Work must be completed by May 30, 2017.*
2. **Revised Specifications Sections** –
 - a. Section 00910: Tree Planting Preparation
 - b. Section 00285: Bicycle Traffic
 - i. Priority Bike Routes Map
 - c. Items 700.1, 700.2, 700.3 – Specific to Mass Ave Sidewalks
 - d. Items 701, 701.1, 701.2 – Specific to Richard Ave, Muller Ave and Hurlbut St
3. **Tree Protection and Maintenance and Trimming, Technical Specifications Section 900, Item 102.51**
 - a. Up to \$500.00 fine per incident
 - b. Erect and maintain temporary fencing at all tree locations
 - c. Root pruning should be done only after a certified arborist is contacted
4. **Supplemental Conditions**
 - a. Work hours shall be 7:00 AM to 4:00 PM, Monday through Friday.
 - b. **City Noise Ordinance** – Special permit is need for a contractor to work between 7PM to 7AM. This process will take about 3 weeks.

<http://www.cambridgema.gov/license/noiseordinanceenforcement>

- c. 701 Items- Concrete Sidewalks.
 - i. Sidewalk concrete may be placed April 1 through November 1 and with temperatures above 40 degrees.
 - ii. Proposed sidewalks that abut existing sidewalks shall extend 15' or to nearest ADA compliant panel.
 - ii. Double application of linseed oil, once after pour and 28 days later
- d. Storage of Equipment/Materials
 - i. Contractor shall procure and maintain, at its own expense, a staging area for general construction materials. Work may not begin on this Contract until after the staging area has been identified and approved by the Engineer.

5. Bid Opening at Purchasing Department

- a. Thursday August 18, 2016 at 2:00 pm. (Note: Bids must be received and placed in Purchasing Department lock box prior to 2:00 PM)

6. Bid Submittal Requirements

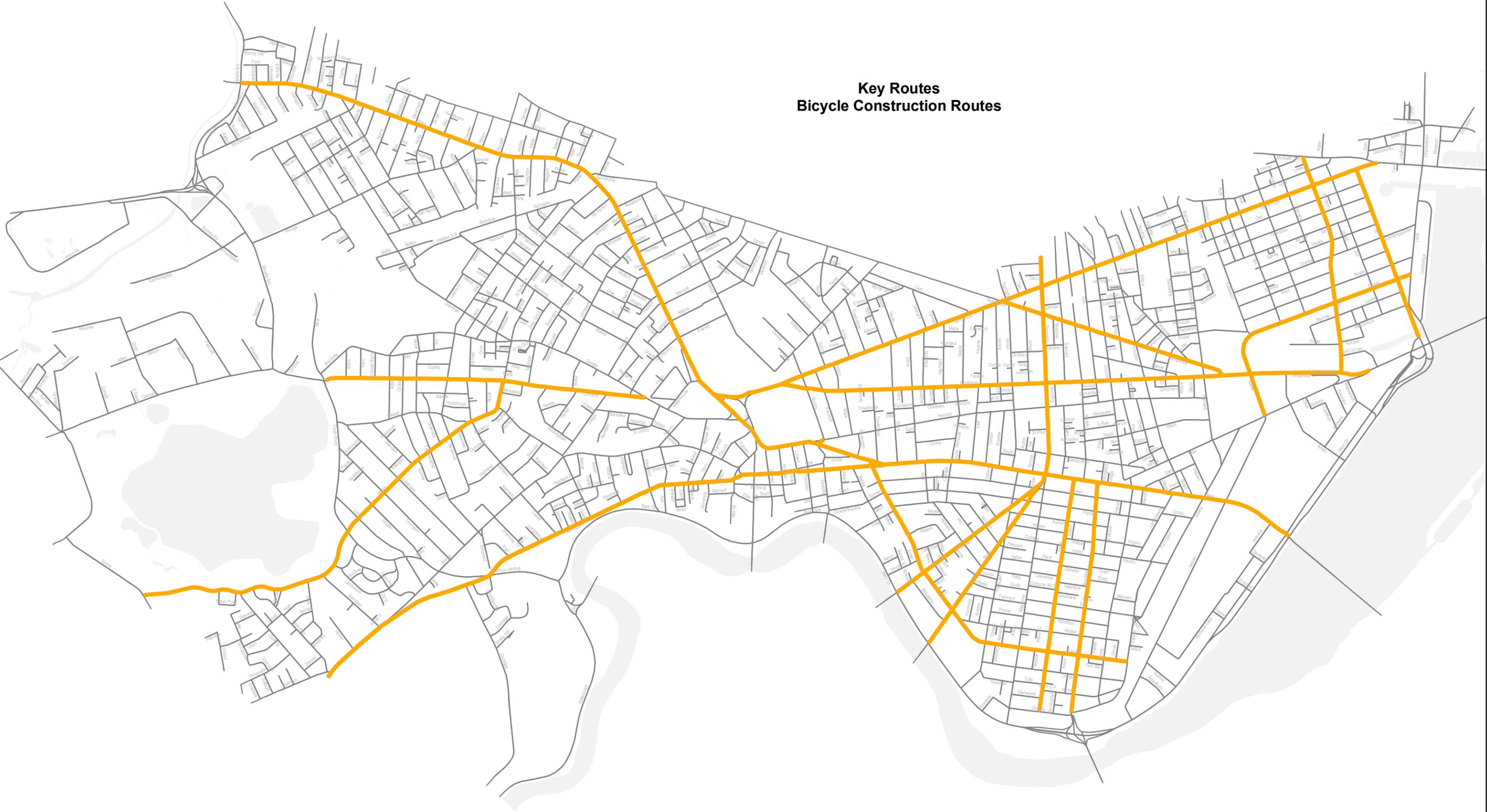
- a. See: "Required Bid Forms"
- b. Contractors must fill in all blanks, including section 00312- Bidder's Qualifications. Attached sheets are not acceptable.

7. Questions

- a. Submit in writing by **4pm on Thursday, August 11, 2016**
- b. Address to: Amy Witts
Purchasing Dept, Rm 303
Cambridge City Hall
795 Massachusetts Ave
Cambridge, MA 02139
Purchasing Dept Fax: 617-349-4008

8. QUESTIONS?

**Key Routes
Bicycle Construction Routes**



- Notes:
- 1) Contractor to spray all raised castings pink
 - 2) All trenches must be plated, backfilled and paved or properly barricaded to allow bicycle passage at the end of every day

CHAPTER 90 CONTRACT 20
 PRE-BID
 THURSDAY August 11, 2016

Name	Company	Email	Phone
AIZL HOWARD	NBUTER	ahoward@camportcomstrct.com	(603) 765-2882
Juan P. Avendano	CPD	jarendano@cambridgeno.gov	617 349-4655
Melissa miguel	CDPW	mmiguel@cambridgema.gov	617-349-4351
Missie M.	DPA	hmissie@cam	617-349-4831
Brian McLean	DPW	bmclean@cambridgeno.gov	617-349-4829

SUPPLEMENTAL CONDITIONS

1. PROPOSED PROJECT LOCATION (Approximate limits)

Massachusetts Avenue (Upland St. to Linnaean St.)

The work at this location includes pavement milling and asphalt overlay, granite curbing, raised crosswalk construction, concrete sidewalk, brick sidewalk, driveway and curb ramp construction, tree and planting, pavement markings, signage, coordination and installation of water and drainage improvements.

Hurlburt Avenue (Linnaean St. to Martin St)

The work at this location includes pavement milling and asphalt overlay, granite curbing, raised crosswalk construction, concrete sidewalk, brick sidewalk, driveway and curb ramp construction, tree and planting, pavement markings, signage, coordination and installation of water and drainage improvements.

Richard Avenue (Massachusetts Ave. to Muller Ave)

The work at this location includes pavement milling and asphalt overlay, granite curbing, raised crosswalk construction, concrete sidewalk, brick sidewalk, driveway and curb ramp construction, tree and planting, pavement markings, signage, coordination and installation of water and drainage improvements.

Murray Hill Road (Muller Ave. to Matignon Rd.)

The work at this location includes pavement milling and asphalt overlay, granite curbing, raised crosswalk construction, concrete sidewalk, brick sidewalk, driveway and curb ramp construction, tree and planting, pavement markings, signage, coordination and installation of water and drainage improvements.

Muller Avenue (Murray Hill Rd. to Churchill Ave.)

The work at this location includes pavement milling and asphalt overlay, granite curbing, raised crosswalk construction, concrete sidewalk, brick sidewalk, driveway and curb ramp construction, tree and planting, pavement markings, signage, coordination and installation of water and drainage improvements.

2. SPECIFICATIONS AND DETAILS

It is of utmost importance that the Contractor thoroughly understands the contract documents and specifications in their entirety and that this knowledge is shared with all staff and Subcontractors. The Contractor shall be responsible for Subcontractor compliance with all plans and specifications.

Any work that does not meet the specifications established in the contract documents shall be removed and properly replaced at no charge to the City.

3. COORDINATION

The Contractor shall designate a contact person and furnish relevant telephone numbers for use by the Cambridge Department of Public Works (DPW) during work hours and during job related emergencies throughout the duration of the contract. In case of an emergency contact after work hours, the Contractor shall respond within one hour to (617) 349-4860/4862 and shall be present, if necessary, at the job-site within three hours of initial contact.

The Contractor shall have a working foreperson on the job site at all times during construction. Names of the Contractor's contact people shall be given to the City prior to start of construction.

The contractor shall provide all on-site communication, including telephones (cell phones). The contractor shall provide two (2) SMART PHONES (Samsung Galaxy S7, Apple Iphone 6s or better) cellular telephones with a minimum of 32gb of internal storage and cellular service (unlimited Voice and Data). Service and software package shall be capable of receiving and responding to City of Cambridge email server wirelessly (Microsoft Exchange Server). The phones must have the capabilities to be used as a wireless hot spot and has a data plan that will support unlimited use. Contractor shall pay all associated fees including and required support services, for the life of the contract.

These items shall be turned over to the Public Works representative prior to the beginning of construction.

4. WORK HOURS

Work hours shall be 7:00 a.m. through 4:00 p.m. Monday through Friday only (except as noted below). No weekend or holiday work shall be allowed except during emergencies and as noted herein.

A list of the City holidays will be supplied by the City upon the awarding of the contract.

The Massachusetts Avenue portion of this contract is part of the MassDOT Complete Streets program. As a required of this program \$250,000 worth of work, including paving, sidewalk, signage and drainage, must be completed and invoiced to the City of Cambridge no later than May 30, 2017. This work cannot commence prior to the City receiving the approval of the Complete Street Grants by MassDOT. The City will notify the Contract upon approval of the grant and any additional requirements that may arise. If the contractor fails to meet the May 30, 2017 deadline the contractor will be required to pay a \$250,000.00 penalty.

Work on Muller Ave. shall not commence before the start of the 2018 spring construction season. Eversource Gas will be replacing the main and services on Muller Ave. during the 2017 construction season. Close coordination with Eversource gas will be required.

5. TRAFFIC CONTROL

This section specifies maintenance and protection of vehicular, bicycle and pedestrian traffic during construction and other safety control devices and requirements for the protection of the traveling public and working personnel during construction and related operations, as approved by the City.

The Contractor must provide barrels, (detour) signs, flashers, channeling devices, lights, and arrow boards. The design, application, and installation of all devices required by this section shall conform to the requirements of the Manual on Uniform Traffic Control Devices (MUTCD) and Part VI of the Manual on Uniform Traffic Control Devices, published by U.S. DOT, latest edition, Americans with Disabilities Act (ADA), Massachusetts Architectural Access Board (MAAB), and the Commonwealth of Massachusetts, Highway Department (MHD), Standard Specifications for Highways and Bridges, latest edition except as modified herein. **All traffic signs provided by the Contractor must be gender-neutral.**

Traffic Management Plan: Before starting any work under this Contract, the Contractor shall prepare a plan that indicates the traffic routing proposed by the Contractor during the various stages and time periods of the work, and the temporary pedestrian and construction facilities, temporary barricades, gender neutral signs, drums, and other traffic control devices to be employed during each stage and time period of the work, to maintain traffic and cyclist and pedestrian access to abutting properties. Particular care shall be taken to establish and maintain methods and procedures that will not create unnecessary or unusual hazards to public safety. Traffic control devices required only during working hour operations shall be removed at the end of each working day. The Contractor shall submit the aforementioned Traffic Management Plan for approval by the City. Implementation shall begin only after the plan has been reviewed and approved by the City.

No separate measurement or payment will be made for Traffic Control work. All preparation of traffic management plans, construction signs, cones, drums, barricades, flashers, lights, pavement markings and other temporary traffic control devices necessary for compliance with the requirements of this Section, shall be furnished and installed by the Contractor at its expense, and will be considered incidental to the work of this Contract.

VEHICULAR TRAFFIC

The Contractor shall meet the following conditions, unless otherwise specifically approved by the City and/or Engineer:

1. All work shall be prosecuted with proper regard for the convenience of the public and in a manner to permit unimpeded traffic flow whenever possible. The interruption of traffic will not be permitted unless specifically allowed by the City and/or Engineer and in accordance with the requirements of the City and in

conformance with MUTCD requirements.

2. The Contractor shall be responsible for necessary coordination with the City departments affected by the project
3. Traffic control devices and signs shall be removed, dismantled or properly covered for those periods of the day when not in use.
4. The DPW shall be notified of any re-routing of traffic. Approval must be obtained from the City prior to any re-routing of traffic (except emergencies).
5. The Contractor shall coordinate the work with the schedules of City Rubbish & Recycling Collection trucks so as not to impede access to the adjacent stores and property owners and shall cooperate with delivery personnel to facilitate deliveries to properties within the work zone.
6. No operations shall be conducted, including the loading or unloading of vehicles, on or near the traveled lanes or road shoulders without first erecting warning signs and channelizing devices as directed. These precautions shall be maintained at all times while work is in progress.
7. Construction signs, temporary paint or tape pavement markings, and channelizing devices shall be used to separate traffic from the work areas and for traffic control. Placement other than as shown in the plans or the MUTCD will require prior approval.
8. Temporary signs and channeling devices shall not be set up until there is adequate visibility or appropriate construction lighting. The Contractor shall schedule his/her work so that temporary signs and channeling devices are removed and traffic is returned to its normal pattern before the end of the work period.
9. Work requiring overnight lane closures shall not begin until all materials required for the completion of each night's work are delivered or available to the project site, unless otherwise approved by the City and/or Engineer.
10. Access to residences and businesses shall be maintained at all times.
11. Work operations shall not be performed on the roadway in such a manner that traffic is obstructed or endangered simultaneously from both sides of the roadway.
12. The Contractor shall keep all roadway areas open to traffic as clear as possible at all times. Materials shall not be stored on any roadway area or within 4 feet of the traveled way. Material shall be delivered to the installation areas as they are needed to provide a continuous installation. Location of storage areas shall be subject to approval.

13. The Contractor shall remove all equipment and construction vehicles from the traveled way and shoulders open to traffic during non-work hours. Vehicles shall be parked in pre-approved areas no closer than four feet from the traveled way in unless specifically permitted.
14. The Contractor shall furnish 60-inch x 30-inch approved signs reading "CONSTRUCTION VEHICLE - DO NOT FOLLOW" to be used on trucks hauling to the project, when such signs are deemed necessary by the City and/or Engineer. The color, type of sheeting and size of lettering shall conform to that of the permanent construction signs.
15. Temporary signs and channeling devices shall not be set up in inclement weather.
16. The Contractor shall furnish, install, and maintain 36-inch x 36-inch approved signs reading "GROOVED PAVEMENT AHEAD" in advance of all roadway areas which have been milled.
17. The Contractor shall furnish, install and maintain additional temporary cones and barrels, as directed by the Engineer, after Traffic Calming devices (horizontal and vertical deflections) have been constructed.
18. The Contractor will be responsible for snow removal within active work zones.

BICYCLE TRAFFIC

1. Contractor should review the Priority Bicycle Route located in the end of the specifications. At all Priority Routes the contractor will provide a safe area for cyclist to travel throughout construction.
2. Bicycle traffic shall be accommodated on all public streets either within bicycle lanes where existing or in vehicular travel lanes.
3. All trenches, surface depressions or other hazards of that nature shall be plated, paved or properly barricaded on all key bike routes. (refer to map in appendix). If barricades are used contractors must assure safe passage for bicycles during none work areas.
4. Where bicycle lanes are not present, provide a shared vehicle lane as wide as physically feasible.
5. When travel lanes are restricted to less than 14-foot in width warning signage (W11-1/W16-1 combination - Bicycle warning symbol with SHARE THE ROAD plaque) shall be placed warning motor vehicle operators of the presence of bicycles in the roadway.

6. If the disruption occurs in a bicycle lanes over a short distance (approximately 500 feet or less), bicyclists should be routed to share a motor vehicle lane.
7. On projects where the disruption occurs over a longer distance (more than 500 feet), and on busy roadways, a temporary bicycle lane or wide outside lane (at least 14 foot wide) should be provided. If that is not feasible, provide access, including ramps if necessary, for bicyclists to have the option of using sidewalks, except within zones where sidewalk bicycle riding is prohibited by the City.
8. Steel plates:

When steel plates are used in the travel way warning signage (Warning Steel Plates Ahead) shall be placed at least 50 feet in advance.

Steel plates shall be set so there is no vertical lip over 1/4 inch between the plate and adjacent pavement. This shall be accomplished in one of the following ways:
 - a. Recessing the plate so that the top of the plate matches adjacent pavement (with no lip over 1/4 inch).
 - b. Providing bituminous concrete lip painted reflective orange to provide a smooth transition slope up from existing pavement to top of plate.
Non-slip surface steel plates are preferred for use, and must be used where plates are in an intersection or within a crosswalk.
9. Raised castings: Where raised castings are present after cold planing and/or in anticipation of final paving, provide the following:
 - a. Advance warning signs saying: "Caution – Raised Castings Ahead."
 - b. Spray paint reflective fluorescent pink the raised portions of the entire castings.
10. Cold planing and pavement installation: Where cold planing or the installation of pavement in lifts results in vertical joints greater than 1/4 inch, provide temporary bituminous concrete lip painted reflective orange to provide a smooth transition slope between the pavement layers.
11. When the roadway or travel lanes narrow due to construction, advance warning signs should be placed at least 20 feet in advance.
12. Narrow cuts that are parallel with the direction of travel create an extreme hazard for cyclists, whose tires could get caught. These should never be made and left in an area where bicyclists will be traveling. If necessary, they should be blocked off

and cyclists routed around the hazard. When performing advance pavement cutting for trenching or other roadway excavation, use only saw cutting (approximately 1/4 inch or narrower).

13. Debris should be swept to maintain a reasonably clear riding surface in the bicycle lanes or, where there are no bicycle lanes, the outer 5 or 6 feet of roadway. Promptly remove gravel, debris, litter, sand, stone, and other obstructions from bicycle lanes and travel lanes.
14. Advance construction signs shall not be placed in bicycle lanes and shall not otherwise obstruct bicyclists' path.
15. Temporary ramps for site access ramps. The creation of ramps in the roadway is not permitted unless being created in an area that is otherwise used by on-street parking.
16. Restore pavement markings for bike lanes within 2 weeks of paving.

PEDESTRIAN TRAFFIC

1. Sidewalks and pedestrian ramps shall be maintained at all times through the construction periods. Temporary sidewalks, pedestrian detours, crosswalks and other pedestrian facilities shall be constructed as needed to maintain pedestrian traffic and business access, as shown on the plans or as ordered. The Contractor shall anticipate that temporary pavement markings (paint or tape) will be required in order to comply with this provision. **Constructed items such as approved temporary sidewalks and ramps will be paid for under the appropriate items of the Contract. Temporary signs, markings and other traffic control devices will not be paid for, as stated above.**
2. Pedestrian access will be provided to abutting land users at all times, as approved by the City and in accordance with MUTCD, ADA and AAB requirements.
3. Unobstructed walkways of 4 feet minimum width, unless otherwise approved by the City, shall be provided at all times.
4. Temporary pedestrian walkways shall be separated from roadway and construction areas by barricades as approved by the City.
5. The Contractor shall be notified by telephone of any location not providing adequate pedestrian access. The Contractor shall acknowledge notification of the call within one (1) hour by contacting the Project Engineer or the Public Works Dispatcher at (617) 349-4800.
6. The Contractor shall respond to the work site within one and a half (1.5) hours of acknowledged notification with sufficient equipment and labor to perform the

required work.

7. The Contractor's failure to respond within the specified response time twice within the Contract time will result in a permanent deduction of \$250.00 from Contract payments due.
8. The Contractor's failure to respond within the specified response time three times within the Contract time will result in an additional permanent deduction of \$400.00 from Contract payments due/
9. The Contractor's failure to respond within the specified response time four or more times within the Contract time will result in an additional permanent deduction of \$500.00, per each occurrence, from Contract payments due.
10. Continued failure to provide adequate pedestrian access may result in the City terminating the contract in accordance with Paragraph 18.3 of Section 800 (General Terms and Conditions of the Contract).

DETOURS

1. If approved by the City and/or Engineer, construct and maintain detours around the work to maintain traffic over any construction work in a public street, road, or highway where traffic cannot be maintained on alignment of original roadbed or pavement
2. When detours are allowed, the Contractor shall provide all detour signs approved by the City and/or Engineer with directional arrows. Signs shall be placed at all streets and intersections to provide required direction to allow motorists to return to the street location beyond the detour. The Contractor must submit a written detour plan for the City and/or Engineer's approval prior to implementation of the detour.
3. The Contractor is responsible for the notification of any parties affected by the detour, including, but not limited to Cambridge Fire Alarm, Cambridge Police, State Police, MBTA, DCR, Cambridge Traffic Department, and abutting property owners.

SPECIAL REQUIREMENTS

1. The Contractor shall provide necessary access for fire apparatus and other emergency vehicles through the work zones to abutting properties at all times.
2. Open excavations adjacent to the traveled way or shoulders shall not remain open through non-work hours unless adequately protected by barricades or barriers and specifically authorized by the City.

3. At least one serviceable driveway and sidewalk access to all residences and businesses within the project shall be maintained at all times.
4. The Contractor shall not allow unnecessary idling of trucks and/or equipment throughout the entire project area. The City of Cambridge prohibits idling of trucks and equipment for periods of time exceeding five (5) minutes when not in use.

6. POLICE DETAILS

Scheduling Police Details shall be the responsibility of the Contractor. A Police Detail is to be present during all construction activity. To schedule a detail officer, call (617) 349-3350.

The Cambridge Police Department requires 24-hour advance notice to obtain a Police Detail, except in emergencies and 4-hour advance notice to cancel a detail.

The Contractor must submit all signed detail forms to the project managers or engineer, so that Public Works can pay all submitted and approved Police detail invoices. Any invoices that are not approved will be the responsibility of the contractor to pay.

The City of Cambridge Police Department shall bill the City of Cambridge Department of Public Works or whatever department has oversight of the contract for the services of uniformed police officers provided by the Police department

The Contractor will be required to reimburse Public Works or whatever department has oversight of the contract for Police Details, if the Contractor fails to show for the job or if the Contractor fails to cancel the detail with adequate advance notice.

7. CONSTRUCTION SCHEDULE & PROJECT SEQUENCE

At the time the Contractor receives contract documents for execution, the Contractor must contact the Engineering Division at the Cambridge Department of Public Works relative to scheduling of the work. The Contractor shall submit to the Engineer an estimated construction progress schedule showing the proposed dates of commencement, and completion of each major phase of work. A detail schedule of work to be undertaken within the first three-week period shall also be provided.

The Contractor shall update and submit the “three-week” schedule on a weekly basis, and shall update the overall “Master Schedule” every eight weeks.

8. SUBMITTALS

Before work commences the Contractor shall prepare and submit to the City certifications of materials and equipment called for in the specifications. Such submittals are subject to review

and acceptance by the Engineer. Such acceptance does not relieve the Contractor of performance of work in compliance with plans and specifications.

Unless otherwise specifically directed by the Engineer all samples shall be of the precise article proposed to be furnished. The Engineer will consider proposals for substitutions of materials, equipment and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Engineer to evaluate the proposed substitution.

Do not substitute materials, equipment or methods unless such substitution has been specifically accepted for this work by the Engineer.

9. VIDEOTAPING PRIOR TO CONSTRUCTION

It shall be the Contractor's responsibility to videotape the entire area of construction in advance of the start of work. It is of utmost importance to show the street line as well as all private and public property defects to minimize any claims of private property damage. It shall be the Contractor's responsibility to prove that such a defect existed prior to the start of the work. If the Contractor cannot prove damage to be a pre-existing condition, the necessary repairs shall be made at the expense of the Contractor.

A copy of the videotape and photos must be conveyed to the City and/or Engineer before the start of any work. This work will be considered incidental to the work of this Contract.

10. PERMITS

It shall be the responsibility of the Contractor to apply for and receive all necessary permits before the start of work. Copies of all permits **must be on the job site at all times** for inspection (except for emergency repair work). Failure to have the permit available may result in suspension of the rights granted by the permit.

The Massachusetts Department of Conservation and Recreation (DCR) has issued a permit to the City for work which takes place within the DCR's right-of-way at the intersection of Mt. Auburn Street and Fresh Pond Parkway. The Contractor shall be bound by the conditions of the DCR permit, which will be furnished by the City prior to the start of work at this location.

11. POSTING OF TEMPORARY SIGNS: "EMERGENCY, NO PARKING"

Only authorized City of Cambridge "Emergency, No Parking" signs shall be allowed. Signs are available at the Public Works Department.

The Contractor shall pick up the authorized City signs from the Public Works Department after receipt of the appropriate permits. The Contractor shall fill in the date, time and reason where indicated on the sign with a permanent waterproof black marker.

It shall be the responsibility of the Contractor to post an adequate number of signs at the appropriate construction locations at least twenty-four (24) hours prior to needing access to metered parking areas; and at least forty-eight (48) hours prior to needing access to residential parking areas.

When the signs have been posted, the Contractor shall notify the Traffic & Parking Office by e-mail dsoares@cambridgema.gov and specify the streets that have been posted. The Traffic & Parking Office will log the information.

Towing will only be allowed at verified locations after all of the above procedures have been followed. If any vehicle is found to be tagged and/or towed without adequate advance warning, the Contractor shall reimburse the City of Cambridge, Traffic Parking and Transportation Department the cost of the towing charges incurred by the vehicle owner.

Signs shall only be posted for the date and time that actual construction will take place. No signs shall be posted for more than five working days. Signs shall be removed immediately following completion of construction.

Posting of temporary signs shall be considered incidental to the work of this Contract.

12. CATCH BASIN AND MANHOLE PROTECTION

The Contractor shall identify all sewer manholes, storm drain manholes and storm drain catch basins within the proposed construction limits. The Contractor must then take all reasonable precautions to protect these structures during construction.

The Contractor shall line all catch basins with Silt Sacs and other materials necessary for erosion and sedimentation control. Silt Sacs used to line catch basins must be removed prior to any inclement weather and reinstalled at the direction of the City. This work will be considered incidental to the work of the Contract. Filter fabric should not be used to protect catch basins.

Should infiltration of unsuitable material into drainage structures take place, the Contractor shall be responsible for the cleaning of the structure, disposal of material, and a final TV inspection at no cost to the City.

13. USE OF CITY HYDRANT

In accordance with rules and regulations of the Massachusetts Department of Environmental Protection and the City of Cambridge Water Department, the Contractor is required to provide a backflow preventer and to obtain a permit from the Water Department at (617) 349.4770 before using any hydrant within the City.

The City will shut down any jobs violating this provision.

14. WEATHER CONDITIONS

The mixture of cement concrete sidewalk or bituminous concrete shall not be placed when weather conditions of fog or rain prevail or when the pavement surface shows signs of free moisture. In the event of temporary suspension of work or during stormy weather, or whenever the Engineer shall direct, the Contractor shall take all steps necessary to protect their work and materials against damage or injury from the weather and shall direct all subcontractors to do the same.

15. INSPECTION AND TESTING OF MATERIALS

The inspection and sampling of materials will be carried out at the source in accordance with established policies and procedures of the Massachusetts Department of Transportation, Highway Division (MassDOT). The City of Cambridge shall not be responsible or assume any obligation for the inspection and sampling of the materials at the source. The Contractor shall be required, if requested, to provide certification of material compliance with the specification.

All materials and workmanship shall be subject to inspection, examination and testing at all times during or as a result of construction.

The City shall contract with an inspection agency and shall pay for all initial testing and laboratory inspection. The Contractor shall assume all costs for re-testing materials which fail to meet contract requirements City standards as presented in the specifications.

16. SITE CLEAN-UP

The Contractor shall perform work in a manner to minimize dust and collection of debris. The actual work area shall be minimized and maintained daily. The Contractor shall sweep the work area and remove and legally dispose of surplus excavated material and debris during the progress of the work and at the close of each day. **Particular attention shall be paid to daily clean-up on residential properties which abut the work zone.**

Upon completion of the work, the Contractor shall remove debris and unused materials and perform procedures necessary to leave the project area and adjacent affected areas in a neat and clean condition.

17. STORAGE OF EQUIPMENT/MATERIALS

The Contractor shall procure and maintain, at its own expense, a staging area for general construction materials within fifteen (15) miles of Cambridge City limits. Work may not begin on this Contract until after the staging area is identified and approved by the Engineer.

No equipment shall be stored within the limit of the roadway or sidewalk without the permission of the Commissioner of Public Works.

The Contractor will not store more material on site than will be used in one week. Any equipment or material stored on site shall be properly secured and located outside pedestrian or vehicular travel lanes.

The Contractor shall pay particular attention to ensuring that no equipment or materials is stored on private property abutting the City's right-of-way.

18. ESTIMATES AND PAYMENTS

On a monthly basis or as directed by the Engineer, the Engineer and the Contractor shall agree upon a time to meet on site, verify quantities, and prepare an estimate for payment request.

The Contractor shall submit all certified copies of paid invoices to the Engineer. A 5% retainage will be held from each payment request.

Upon satisfactory completion of the work, the retainage shall be released to the Contractor. Partial release of retainage may take place at the discretion of the Engineer.

19. TREE PROTECTION DURING CONSTRUCTION

NOTE: Requirements for Tree Protection may be found in the Section 900 Technical Specifications.

20. GRADING

During the course of construction, adjacent travel lanes with greater than 1" difference in grade shall be appropriately separated with barrels and signage in conformance with Part VI of the MUTCD. At the end of each work day, all grade transitions and utility structures shall be feathered with asphalt or, with the Engineer's approval, protected with reflectorized drums with flashers and appropriate signage.

Prior to the start of construction, the Contractor shall review grading requirements and provide a detailed excavation and pavement reconstruction schedule with specific work procedures to maintain safety at all times for vehicles, bicycles and pedestrians and also maintain drainage.

21. DRAINAGE

During construction, drainage shall be maintained at all times by the Contractor. Catch basin relocations and installations shall be accomplished in coordination with the installation of curb.

22. WATER LINES

Any damage done to City water lines, hydrants, structures or private services will be repaired in accordance with the Cambridge Water Department specifications. If a City Representative determines the damages occurred due to Contractor negligence, such as tapping a service or a water main with a backhoe or operating a hydrant incorrectly, the contractor shall repair the

damage at no additional expense to the City.

23. JOB-SITE SAFETY

All construction activity shall conform to the latest OSHA standards and other applicable safety standards.

At all times during the course of the work and especially after hours and on weekends, the Contractor shall adequately secure the site to the satisfaction of the City and/or engineer.

No debris, materials, vehicles, equipment, etc. shall be left or stored on the job site overnight unless approved by the owner and/or Engineer. Any equipment or material permitted to be stored on-site shall be properly secured and located outside pedestrian or vehicular travel lanes.

24. RODENT CONTROL

The Contractor shall be required to provide the services of a Massachusetts state licensed experienced rodent control person whose duties shall be to identify rodent activity or infestation resulting from the construction activity under this contract and to take approved and professionally acceptable remedial action, including baiting, elimination of sources of harborage and making recommendations that may be necessary in controlling and/or eliminating rodent activity. The licensed person shall maintain a close liaison with the City and/or Engineer for the duration of construction. The rodent control person employed by the Contractor shall keep careful records of his/her activity; these shall be transmitted through the Contractor to the City and/or Engineer.

25. PROGRESS MEETINGS

The Contractor shall be available for all meetings required by the City and/or Engineer to coordinate the successful completion of the Contract.

The Contractor must attend the Department of Public Works (DPW) weekly construction meetings every Monday at 9:00 A.M. at DPW offices or as rescheduled by the City Engineer. The Contractor's representative at this meeting must be intimately familiar with the contract work and be capable of answering detailed questions regarding the contract work.

26. UTILITY COORDINATION

The Contractor shall contact Dig Safe to mark out all utilities in the area of the proposed work. It shall be the Contractor's responsibility to contact utility companies that may have conflicts with the proposed work and arrange for assistance prior to excavation in a timely manner. **Utility conflicts will likely be encountered during construction, and the City will not process Contractor delay claims which result from Contractor delays in coordinating with utility companies.**

It shall be the Contractor's responsibility to obtain locations for all types of utility structures within the area to be affected by the work and to protect them from being covered by the placement of roadway or sidewalk surfacing materials.

Utility structures not correctly adjusted to the proper grade prior to paving or sidewalk installation or buried during the construction shall be uncovered, repaired if necessary, and re-set at the Contractor's expense.

26A. COORDINATION WITH WORK BY OTHERS

The Contractor shall be solely responsible for coordinating with construction projects and activities which may be occurring within, and/or adjacent to, the Project Limit of Work during the term of this Contract.

The schedule for the project will need to be coordinated with the work above. Some streets may not be immediately available for the contractor.

27. QUANTITIES AND LOCATIONS

All quantities are approximate, and the City reserves the right to increase or decrease quantities and change limits or locations.

28. WARRANTY OF WORK

All finished work shall be covered by a one-year warranty from any defects in quality, with the exception of permanent street restoration, which shall be warranted for one (1) years. If, at any time within one year after the completion of the contract, any defective work should appear, which in the opinion of the City is due to inferior materials or workmanship, the City will notify the Contractor in writing of the defects and repairs to be made. The Contractor shall begin the repairs within a mutually agreed time frame and shall do whatever is necessary to remedy the defects without cost to the City.

Warranty dates shall begin upon the presentation of written acceptance of a given location by the City and/or Engineer to the Contractor

29. LAWS AND REGULATIONS

The bidder's attention is directed to the following list which enumerates the jurisdictions applicable to this job under Section 15 of the Instructions to Bidders, p. 100-3, entitled Laws and Regulations:

- AASHTO American Association of State Highway and Transportation Officials
- ADA Americans with Disabilities Act

ASTM	American Society of Testing Materials
DOT	Department of Transportation (Federal)
EOTC	Executive Office of Transportation and Construction (Comm. of Massachusetts)
MUTCD	Manual of Uniform Traffic Control Devices
MAAB	Massachusetts Architectural Access Board
MHD	Massachusetts Highway Department

30. MASSACHUSETTS GENERAL LAWS

The following specific sections of the Massachusetts General Laws (MGL) are hereby incorporated into this Contract:

Ch. 30 §39F (§§ a - h)	Ch. 30 §39L	Ch. 30 §39P	Ch. 149 §34
Ch. 30 §39I	Ch. 30 §39M	Ch. 30 §39Q	
Ch. 30 §39J	Ch. 30 §39N	Ch. 30 §39R	
Ch. 30 §39K	Ch. 30 §39O	Ch. 82 §40	

521 CMR Rules and Regulations of the Architectural Access Board

31. RECORD DRAWINGS

During the course of the work, a survey shall be performed by a Registered Land Surveyor (RLS) registered in the Commonwealth of Massachusetts. At the completion of the work, a final Record Drawing, signed and sealed by the RLS, shall be provided by the Contractor which includes the following information:

- Location of all project boundaries.
- The location and elevation of utility cutoff and capping performed by the Contractor.
- Locations and elevations of all new utilities installed.
- Elevations of sidewalks and curb cuts.

The Record Drawings shall be professionally drafted on 24" x 36" sheets, using a scale of 1" = 20', and shall be based on the Massachusetts Coordinate System Horizontal Datum and Cambridge City Base Vertical Datum. The Contractor shall submit the record drawing in both paper form, as specified above, and as an electronic AutoCAD file (latest version).