

**Invitation to Bid for
On-Road Section Chelsea Greenway**

For the City of Chelsea, MA

Contract # 2015-193

May 2015

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LEGAL NOTICE

**CITY OF CHELSEA
INVITATION FOR BIDS
ON-ROAD SECTION OF THE CHELSEA GREENWAY**

Sealed bids to furnish all labor and materials for **ON-ROAD SECTION OF THE CHELSEA GREENWAY** will be received at the Office of the Chief Procurement Officer, City Hall, Room 206, Chelsea, Massachusetts until 11:00 AM on Wednesday, May 20, 2015 immediately after which the bids will be opened and read publicly.

Specifications and contract documents will be available on or after Wednesday, May 6, 2015 at the Office of the Chief Procurement Officer, City Hall, Room 206, Chelsea, Massachusetts.

Bids must be sealed and clearly marked "**ON-ROAD SECTION OF THE CHELSEA GREENWAY**" and submitted to the Office of the Chief Procurement Officer, City Hall, Room 206, Chelsea, Massachusetts no later than 11:00 AM, Wednesday, May 20, 2015.

Each bid must be accompanied by a certified check, issued by a responsible bank or trust company. Or a bid bond duly executed by the bidder as principal and having as surety thereon a surety company approved by the City, all in the amount of 5% of the bid payable to the "City of Chelsea."

The City of Chelsea reserves the right to accept any bid, to reject and/or all bids and to waive minor irregularities and/or formalities as it deems to be in the best interest of the City.

In accordance with our Minority Business Enterprise Plan, we are inviting all qualified women and minority business firms to respond.

The City of Chelsea is an Equal Opportunity Employer.

This invitation for bid is in accordance with M.G.L. Chapter 30, §39M.

Dylan Cook
Chief Procurement Officer

Section 1 PROCUREMENT SCOPE

1.1 Authority

Invitation to Bid Procedures and award of the Contract shall be in accordance with Massachusetts General Law, Chapter 30 39M, plus all applicable Federal, State and Local laws and regulations.

1.2 Withdraw, Modify, And Amend Bids

Bidders who wish to withdraw, modify or amend their bid must do so in writing utilizing electronic mail to the City of Chelsea Chief Procurement Officer at dcook@chelseama.gov or via fax at 617-466-4225, no later than the time and date set forth herein for the receipt of the Bid for **On-Road Section Chelsea Greenway**. All such withdrawals, modifications or amendments must so state in the subject line of the email correspondence. Any withdrawal, modification or amendment arriving after the date and time set forth for accepting bids will not be considered. After the opening of the bids, a bidder may not change any provision of the bid in a manner prejudicial to the interests of the City of Chelsea or fair competition. Minor informalities will be waived at the discretion of the City of Chelsea.

1.3 Bid Bond

Each bid must be accompanied by a certified check: of the bidder or a bid bond duly executed by the bidder as principal and having as surety thereon a surety company approved by the City, in the amount of 5% of the bid, payable to the "City of Chelsea" and must be filed with the original bid.

1.4 Payment & Performance Bonds

The successful bidder is required to furnish performance bonds and payment bonds in the contract amount and with surety satisfaction to the City, in an award form this Invitation for Bids. The Bidder must pay all costs. The Performance Bond shall be in the sum of **100%** of the contract price. The Payment Bond shall be in the sum of **100%** of the contract price. The bonds shall be provided by the successful bidder to the City within five business days of the contract award.

1.5 Familiarity With Requirements

Bidders are to thoroughly familiarize themselves with the requirements of this Invitation for Bids. Ignorance of the requirements will not relieve the bidder from any obligations or liabilities of any contract(s) issued as a result of this Invitation for Bids.

1.6 Independent Party

Under this Invitation for Bids, the successful bidder declares itself to be at all times acting and performing as an independent party and nothing in this request for bid or any subsequent

contract(s) is intended to constitute a partnership or joint venture between the bidder and the City of Chelsea.

1.7 Conflict of Interest

No officer or employee of the City of Chelsea shall participate in any decision relating to any contract which would affect their financial or personal interest or the interest of any corporation, partnership, sole proprietorship or association in which they are directly or indirectly interested.

1.8 Political Activity Prohibited

None of the services to be provided by any bidder shall be used for any partisan political activity or to further the election of any candidate for public office.

1.9 Assignment by Contractor

The successful bidder or contractor shall not assign in whole or in part or otherwise transfer any interest in any contract without the written consent of the City of Chelsea, provided however, that the present and prospective claims for money due owing to the Contractor from the City of Chelsea or any other Buyer may be assigned to a bank or trust company or to a financial institution insured by the Federal Deposit Insurance Corporation (FDIC) without such consent so long as notice of such assignment is promptly furnished to the City of Chelsea. Any complete or partial assignment of the contractor's or successful bidder's interest in any such contract shall require the assignee, at the City of Chelsea's discretion, to supply such further information as the City of Chelsea deems necessary to comply with the City of Chelsea rules and regulations governing contracts for services. Any such assignment, in whole or in part, shall also be expressly made subject to all defenses, set-offs or counter claims which would have been made available to the City of Chelsea against the successful bidder in the absence of such assignment.

1.10 Subcontracting

None of the services to be provided by the contractor pursuant to any contract shall be subcontracted or delegated in whole or in part to any other organization, association, individual, corporation, partnership, or any other such entity without the prior written approval of the City of Chelsea. All intended subcontracts must be in writing. All intended subcontracts shall be provisions, which are functionally identical to and consistent with the language of this Invitation for Bids.

1.11 Choice of Law

Any contracts awarded as a result of this Invitation for Bids shall be construed under the laws of the Commonwealth of Massachusetts. The successful bidder and agents thereof agree to bring any federal or state legal proceedings arising from any such contract in which the City of Chelsea is a party in a court of competent jurisdiction within the Commonwealth of Massachusetts. This section shall not be construed to limit any rights any party may have to intervene in any action in any court or wherever pending in which the other is a party.

1.12 Notices

Unless otherwise specified, any notice hereunder shall be in writing and shall be deemed delivered when sent via electronic mail (e-mail), given in person to either party or deposited in the U.S. Mail, postage prepaid and addressed to the persons indicated in any contract or as specified by any amendment hereto.

1.13 Severable Sections Do Not Affect Entire Contract

If any provision of the Invitation for Bids or any subsequent contract is declared or found to be illegal, unenforceable or void, then both parties shall be relieved of all obligations under the provision. The remainder of the Invitation for Bids and any subsequent contract shall remain in full force and effect and enforceable to the fullest extent provided by law.

1.14 Liquidated Damages for Failure to Enter Into Contract

The successful Responder, upon its failure or refusal to execute and deliver the Contract, Bond and Certificates of Insurance required within ten days after receipt of notice of the acceptance of the bid, shall forfeit to the City of Chelsea, as liquidated damages for such failure or refusal, the security deposited with its bid, provided that the amount forfeited shall not exceed the difference between its bid price and the bid price of the next lowest responsive and responsible Responder. In case of death, disability, bona fide clerical or mechanical error of a substantial nature or similar unforeseen circumstances affecting the Responder, its bid deposit shall be returned.

1.15 Liquidated Damages for Failure to Perform Under Terms of the Contract

Should the successful Responder fail to commence or diligently perform according to the terms of the contract, the successful Responder agrees to pay to the City of Chelsea, as liquidated damages, Two Hundred Fifty Dollars (\$250.00) per calendar day that the successful Responder fails to commence or diligently perform the work in accordance with the contract documents and/or is in violation of the contract. Liquidated damages assessed under this provision shall be deducted from any payment(s) due to the successful Responder.

1.16 Contract Performance

The failure of any party to insist in any one or more situations, upon performance of any of the terms or provisions of any part of this Invitation for Bids or resulting contract shall not be considered as a waiver or relinquishment of the right of either party to future performance of any such term or provision, and the rights and obligations of the parties to such future performance shall continue in full force and effect.

1.17 Prevailing/Minimum Wages

Prevailing/Minimum Wage Rates as determined by the Commissioner of the Division of Occupational Safety of the Executive Office of Labor and Workforce Development under the provisions of Massachusetts General Laws Chapter 149, Section 26 to 27D, as amended, apply to this project. It is the responsibility of the Bidder, before the bid opening, to request, if necessary,

any additional information on Prevailing/Minimum Wage Rates for those trades' people who may be employed for the proposed work under this contract.

1.18 Funding & Fiscal Year Appropriation

Appropriations for expenditures by the City of Chelsea and authorizations to spend for a particular purpose are ordinarily made on a fiscal year basis. The fiscal year for the City of Chelsea, MA begins on July 1st and ends June 30th of the following year. The obligations of the City of Chelsea under any contract resulting from this Invitation for Bids for any subsequent fiscal year following the fiscal year in which the initial contract is awarded is subject to the appropriations to the City of Chelsea of funds sufficient to discharge its obligations, which accrue in such subsequent fiscal year, and to the authorization to spend such funds for the purposes of this Invitation for Bids. In the absence of such appropriation or authorization, any contract resulting from this Invitation for Bids shall be terminated immediately without liability for damages, penalties or other charges arising from early termination. Expenditures for contracted services, which will extend beyond a single fiscal year shall not exceed in any fiscal year the amount appropriated and authorized for the said fiscal year.

1.19 Procurement Calendar

The City of Chelsea invites bids that will result in a contract. The IFB schedule of events for this solicitation, subject to amendment by the City of Chelsea is:

EVENT	DATE
IFB Released	5/6/2015
Deadline for Written Inquiries	5/14/2015
Response to Written Inquiries	5/18/2015
Due Date for Responses	5/20/2015 at 11:00am

1.20 Duration of Contract

The contract term will commence upon signature of agreement and work must be completed by June 30, 2015.

Section 2 General Bid Information

2.1 Required IFB Sections

The Responder must provide, in its bid, a reply to the particular specifications included in the Invitation for Bids.

2.2 Minority or Woman Business Enterprise Participation

In accordance with the Minority Business Enterprise Plan for the City of Chelsea, all qualified Minority-Owned Business Enterprises (MBE) or Woman-Owned Business Enterprises (WBE) are strongly encouraged to submit bids in response to this Invitation for Bids. For the purpose of this IFB, the term MBE or WBE shall mean a vendor who is certified as a minority business enterprise by the State Office of Minority and Women-Owned Business Assistance (SOMWBA), and who is certified at the time the vendor's bid is submitted.

All minority owned businesses are encouraged to apply for SOMWBA certification. For further information on SOMWBA qualifications or access to SOMWBA vendor lists, contact the Supplier Diversity Office, Commonwealth of Massachusetts Operational Services Division at 617-720-3300.

2.3 The Contract Award

Based upon the bids received, the contract will be awarded to the lowest responsive and eligible Bidder.

2.4 ADA, Regulatory, Compliance and Standards

Responders are expected to provide services and commodities that are in compliance with Section 504 of the Federal Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Telecommunications Act of 1996, and all successor federal and related legislation throughout the term of any contract resulting from this solicitation.

2.5 Indemnification

Any successor in exchange for entering into an agreement or contract resulting from this Invitation for Bids shall indemnify and hold harmless the City of Chelsea and all persons acting for or on behalf of either of them from all suits and claims against them, or either of them, arising from or occasioned by the use of any service, material, equipment or apparatus, or any part thereof, which infringes or is alleged to infringe on any patent rights. In case such service, material, equipment or apparatus, or any part thereof in any suit is held to constitute infringement, the successful Responder, within a reasonable time, will at its expense, and as the City of Chelsea may elect, replace such material, equipment or apparatus with non-infringing material, equipment or apparatus or remove the material, equipment or apparatus and refund the amounts paid therefore. Said indemnification includes reasonable attorney's fees related thereto.

Furthermore, any successful Responder in exchange for entering into any agreement or contract resulting from this Invitation for Bids agrees to indemnify and hold harmless, release and forever discharge the City of Chelsea as well as their officers, agents and employees as well as their successors and assigns from any and all manner of actions, suits, claims, demands, judgments, damages and liability in law and in equity which may arise or result from performance under this contract. This includes any discrimination, labor or employment claims against the successful Responder and the City of Chelsea and any and all manners of legal action brought against the successful Responder and /or the City of Chelsea. Said indemnification includes reasonable attorney's fees related thereto.

2.6 Federal, State and Local Laws

The successful Responder will comply with all applicable Federal, State and Local laws and regulations.

2.7 Tax Exempt

Purchases made by municipalities and government are exempt from Federal Excise Taxes and Massachusetts Sales Taxes and bid prices must show the exclusion of such taxes. Tax exemption certificates will be furnished as required.

2.8 Insurance

The successful Responder in addition to any insurance required by State or Local Law, shall maintain in force during the term of any contract(s) issued as a result of this Invitation for Bids, the following insurance issued by an insurance company licensed to do business in the Commonwealth of Massachusetts. Failure to provide or maintain such insurance shall be grounds to reject a bid or execute a contract.

- a. Public Commercial Liability coverage in the amount of \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate. Automobile Liability Insurance coverage in the amount of \$500,000.00 per person, \$1,000,000.00 per occurrence. Property damage Insurance in the amount of \$250,000.00.
- b. Worker's Compensation Insurance in the amounts required by Massachusetts Law.
- c. Evidence of such insurance must name the City of Chelsea as the named insured as well as the successful Responder.
- d. An Insurance Certificate giving evidence of the insurance must be delivered to the City of Chelsea within 10 days by the successful Responder receiving the award of this Invitation for Bids.

2.9 Confidentiality

The successful Responder will comply with all provisions of Executive Order No. 11246 of September 24, 1975 and the successful Responder acknowledges that in performance of any contract resulting from the Invitation for Bids it may require or have access to “personal data” and become a “holder” of personal data as defined by M.G. L. c. 66A. The successful Responder shall comply with all laws and regulations relating to confidentiality and privacy, including but not limited to any rules and regulations of the City of Chelsea. The successful Responder shall at all times recognize the City of Chelsea’s ownership of personal data and the exclusive right and jurisdiction of the City, and “data subjects” (as defined in chapter 66A) to control the use of personal data. The successful Responder shall immediately notify the City of Chelsea both orally and in writing if any personal data in its possession is subpoenaed, improperly used, copied or removed by anyone except an authorized representative of the City of Chelsea. The successful Responder shall cooperate with the City of Chelsea in taking all steps it deems advisable to enjoin, misuse, regain possession and/or otherwise protect the City of Chelsea’s rights and data subject’s privacy. The successful Responder shall allow access to any personal data held in their possession solely to those employees of the City of Chelsea who require such information in the performance of their occupational responsibilities. All personal data held by the successful Responder shall be delivered to the City of Chelsea within 14 calendar days after termination of any contract resulting from this Invitation for Bids. The successful Responder agrees to take reasonable steps to insure the physical security of such data under its control, including but not limited to fire protection, protection against smoke and water damage, alarm system, locked removal of manually held data, passwords, access logs, badges or other methods reasonably expected to prevent loss or unauthorized access to electronically or mechanically held data, limited terminal access, access to electronically or mechanically held data, limited terminal access, access to input documents and design provisions to limit use of personal data. The successful Responder agrees that it will inform each of its employees having any involvement with their personal data or confidentiality. The City of Chelsea shall have access at all times to any data maintained pursuant to any contract resulting from this Invitation for Bids, without the consent of the data subject. The successful Responder shall use personal data, and material derived from such data, only as necessary for the performance of the subject contract. Failure of the successful Responder to comply with the requirements of this section may be grounds for terminating any contract resulting from this Invitation for Bids.

2.10 Force Majeure

Neither the City of Chelsea nor the successful Responder shall be liable to the other, nor deemed to be in breach of any contract resulting from this Invitation for Bids for failure or delay in rendering performance rising out of causes factually beyond its control and without its fault or negligence. Such causes may include, but are not limited to, Acts of God or the public enemy, wars, fires, flood, epidemics, quarantine restrictions, strikes, unforeseen freight embargos or unusually severe weather. Dates of times of performance shall be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other party promptly of the existence and nature of such a delay. It is agreed that since the performance dates of the subject contract are of the essence and important to the implementation of essential City of Chelsea work, continued failure to perform for periods aggregating 45 or more calendar days, even for causes beyond the control of the successful Responder, shall afford

the City of Chelsea the right to terminate any contract resulting from this Invitation for Bids without assessment of termination costs or penalties.

2.11 Equal Opportunity

During the performance of this contract, the successful Responder agrees as follows:

- a. The successful Responder will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin, sexual orientation, which shall not include persons whose sexual orientation involves minor children as the sex object, genetic information or ancestry. The successful Responder will take affirmative action to ensure that applicants are employed and that the employees are treated during employment without regard to their race, religion, color, sex, nation origin or sexual orientation, which shall not include persons whose sexual orientation involves minor children as the sex object, genetic information or ancestry.
- b. The successful Responder will comply with all provisions of Executive Order No. 11246 of September 24, 1975 and all of the rules, regulations and relevant orders of the Secretary of Labor.

2.12 Termination

The Responders for this Invitation for Bids should note that the City of Chelsea reserves the right to terminate any contract resulting from this Invitation for Bids in whole or in part, by written notice:

- **Without cause:** Either party may terminate the subject contract by giving written notice to the other party at least 60 calendar days prior to the normal contractual effective date of termination as stated or such other period as is mutually agreed upon in advance by the parties
- **For cause:** If, in the opinion of the City of Chelsea, the successful Responder fails to fulfill its obligations, the City of Chelsea may terminate any contract resulting from this Invitation for Bids by giving 30 days written notice to the successful Responder at any time. The subject contract shall be terminated immediately in the event of fraud or program abuse.
- **Emergency:** The City of Chelsea may terminate or suspend any contract resulting from this Invitation for Bids up to 60 calendar days by providing written notice to the successful Responder, stating the grounds for the City of Chelsea's action, in the form of U.S. Mail, hand-carried letter, or other appropriate written means, if the City of Chelsea determines that immediate action is necessary to protect City, State and/or Federal funds or property, or to protect persons from injury. Such termination or suspension shall be effective upon receipt of notice of either suspension or termination by the successful Responder. In the case of a suspension under this paragraph, the notice of suspension shall be accompanied by instructions from the City of Chelsea specifying requisite actions by the successful Responder to remove the suspension, proposed timetable for meeting those requirements and a description by the City of Chelsea of allowable activities and costs, if any, during the suspension period. Failure by the successful

Responder to remedy the stated deficiencies according to the timetable prescribed by the City of Chelsea shall be cause for immediate termination.

- **Elimination or Reduction of Funding:** In the event of a reduction of funding for any reason, the City of Chelsea may terminate any contract resulting from this Invitation for Bids by providing notice of termination in a reasonable time. The City of Chelsea may provide a conditional notice of termination with a proposed amendment to the subject contract. Any such notice shall provide that the subject contract will terminate automatically 30 calendar days after the date of the conditional notice of termination unless the successful Responder submits to the City of Chelsea a properly signed copy of the amendment, or such modification form of amendment as may be agreeable to the City of Chelsea, within 20 calendar days after the date of the conditional notice of termination, or such other time as it is otherwise specified in the conditional notice.
- **Office's Remedies:** Upon Termination for Cause or for Emergencies: Notwithstanding the terms contained in this section, in the event of termination, the successful Responder shall not be relieved of liability to the City of Chelsea by virtue of any breach of any contract resulting from this Invitation for Bids by the successful Responder. In the event of termination pursuant to this section, the City of Chelsea may withhold any payments to the successful Responder for the purpose of set-off until such time as the exact amount of damages due to the City of Chelsea from the successful Responder is determined. In addition to and notwithstanding the above, the successful Responder covenants and agrees that in the event of termination of any contract resulting from this Invitation for Bids the successful Responder shall pay to the City of Chelsea as damages: (a) such sum as, at the time of termination, the City of Chelsea reasonably determines that is, shall require to compensate a subsequent contractor to complete the delivery of service, and (b) the sum, reasonably determined by the City of Chelsea, which will compensate the City of Chelsea for all the direct and indirect costs resulting from delay in the delivery of services upon the successful Responder's default. The successful Responder further covenants and agrees with the City of Chelsea that the successful Responder shall pay all of the City of Chelsea's costs and expenses (including attorney's fees) incurred or paid in obtaining and enforcing any court order favorable to the City of Chelsea for any obligation of the successful Responder under any contract resulting from this Invitation for Bids.

2.13 Obligation in the Event of Termination

Upon termination of any contract resulting from this Invitation for Bids, all documents finished or unfinished, data, studies and reports prepared by the successful Responder pursuant to the subject contract shall become the property of the City of Chelsea. Copies of finished and unfinished documents, data, studies and reports generated as a necessary part of performing the subject contract shall be delivered to the City of Chelsea upon reasonable request and shall be retained by the successful Responder for future use. The City of Chelsea shall promptly pay the successful Responder for all services performed and for all costs and un-cancelable commitments reasonably incurred in performance of the subject contract to the effective date of termination, provided the successful Responder is not in default of the terms of the subject contract and submits to the City of Chelsea properly completed invoices with supporting documentation

covering such services no later than 45 days after the effective date of termination, and that the successful Responder make every reasonable effort to minimize or recover costs incurred.

2.14 Ownership of Furnishings & Equipment

Unless otherwise provided by law or a federal grant award, title to all furnishings and equipment provided by the City of Chelsea or that the awarded Responder provides under the terms of this Invitation for Bids and paid for with public funds, shall vest in and be retained by the City of Chelsea. Upon completion of performance of the awarded Responder's contract, the awarded Responder shall return such furnishings and equipment in its possession in the same condition as at the commencement of any contract resulting from this Invitation for Bids, normal wear and tear excepted.

2.15 Anti-Boycott Warranty

During the term of any contract resulting from this Invitation for Bids, neither the successful Responder nor any "affiliated company" as hereafter described, shall participate in or cooperate with an international boycott, as defined in section 999(b) (3) and (4) of the Internal revenue Code of 1954, as amended by the Tax Reform Act of 1986, or engage on conduct declared to be unlawful by sections 2 and 4 of Chapter 151E of The Massachusetts General Laws. As used herein, an "affiliated company" shall be any business entity or which at least 51% of the ownership interests are directly or indirectly owned by the successful responder or by a person or persons or business entity or entities which directly own at least 51% of the ownership interest of the successful Responder.

2.16 Tied Bids

In the event that there is a tie bid between two (2) responsive and responsible bidders, the award of the contract will be determined by a coin toss. The bidder's whose submission was received earliest shall be assigned "Heads" in the coin toss. In the event that there is a tie bid with three (3) or more responsive and responsible bidders, the award shall be made by a draw by lot limited to those bidders. The coin toss/draw by lot shall be scheduled within two (2) business days from when it was determined by the Town to be a tie bid. The bidders involved shall be given an opportunity to attend. The coin toss/drawing shall be witnessed by at least three (3) Town officials. The tie breaker event shall be held at Chelsea City Hall during regular business hours.

2.17 Unexpected Closures or Delays

If, at the time of the scheduled bid submission deadline, the designated location for delivery of the bid is closed due to uncontrolled events such as fire, snow, ice, wind, building evacuation or other, the deadline will be postponed until 11:00 a.m. on the next normal business day. Bids will be accepted at the same location until that date and time.

End of Section

Section 3 Responder's Bid Information

3.1 Bidder Communications

Responders are prohibited from communicating directly with any employee of the Purchasing Department and any other member of the City of Chelsea except as specified in this Invitation for Bids, and no other individual City of Chelsea employee or representative is authorized to provide any information or respond to any question or inquiry concerning this Invitation for Bids. Responders may contact the person identified on the cover sheet of this Invitation for Bids in the event this Invitation for Bids is incomplete.

3.2 Reasonable Accommodation

Responders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of the Invitation for Bids information in an alternative format, must communicate such requests in writing, via electronic mail (e-mail) to the contact person. Requests for accommodation will be addressed on a case by case basis. A Responder requesting accommodation must submit a written statement, via e-mail which describes the responder's disability and the requested accommodation to the contact person for the Invitation for Bids. The City of Chelsea reserves the right to reject unreasonable request.

3.3 Public Records

All bids and information submitted in response to this Invitation for Bids are subject to the Massachusetts Public Record Law, M.G.L., Chapter 66, Section 10, and to Chapter 4, Section 2, and Subsection 26. Any statements in the Responder's bid inconsistent with these statutes will be disregarded.

3.4 Brand Name or Equal

Unless otherwise specified in this Invitation for Bids, any reference to a particular trademark, trade name, patent, design, type, specification, producer or supplier is not intended to restrict this Invitation for Bids to any manufacturer or proprietor or to constitute an endorsement of any good or service, and the City of Chelsea must consider clearly identified offers if substantially equivalent goods and services submitted in response to such reference.

3.5 Publicity

Any Responder awarded a contract under this Invitation for Bids is prohibited from selling or distributing any information collected or derived from the contract, including lists of participating or eligible departments, employee names, telephone numbers, e-mail addresses, addresses or any other reports or information except as specifically authorized under this contract.

3.6 Costs

Costs for services that are not specifically identified in the Responder's response and identified as part of a contract, will not be compensated under any contract awarded pursuant to this Invitation for Bids.

The City of Chelsea will not be responsible for any costs or expenses incurred by responders responding to this Invitation for Bids.

3.7 Required Contract Attachments

All Responders are required to complete, sign and return at minimum the following documents:

- 1.) **Bid Pricing Forms** - Signature required
- 2.) **Bid Information**- to be included as cover page of bid
- 3.) **Certificate of Non-Collusion**- Signature required
- 4.) **Statement of Corporate Authority (If Responder is a Corporation)** - If the Responder is a Corporation, a vote of the Corporation approving participation in this Invitation for Bids process must be signed by the corporate officers with the Corporate Seal Affixed and attached to the original Invitation for Bids.

If the Responder is a Corporation, the names and addresses of the corporate Officers and the state and date of incorporation must be included. The Responder must state if the Corporation is publicly held or privately held. If the Corporation is publicly held, the exchange on which it is traded and the symbol under which it is traded is required.

Sole Proprietorship (If Responder is a Sole Proprietorship)- If the Responder is a Sole Proprietorship, a partnership or any other legal business entity, the names and addresses of the officers must be included, the parent state of business and the numbers of years this entity has been in business. In short, a complete business profile must be included in the bid.

- 5.) **Reference Form**- To include three current contract references, at least one of which is a government agency that can be contacted during the IFB process. Two of the references must be customers for which the Responder is or has provided services similar to those outlined in the Scope of Services of the IFB. Include customer name, contact person, his/her title, address and telephone number.

Do not use the names of relatives or City Employees as references. Do not use any previous City contracts as a source of project reference information. You may use previous City contracts as a record of your experience only

- 6.) **OSHA Compliance Certification** - Signature required

3.8 Submitted Responses

The City of Chelsea shall be under no obligation to return any responses or materials submitted by the Responder in response to this Invitation for Bids. All materials submitted by Responders become the property of the City of Chelsea and will not be returned to the Responder. The City

of Chelsea has the right to use any ideas, concepts or configurations that are presented in the Responder's bid whether or not the bid is selected for contract award.

3.9 Clarification of Response

The City of Chelsea is not required to seek clarification of responses; therefore, the responder should be as clear as possible in all of its responses to this Invitation for Bids.

3.10 Evaluation and Award of Contract

All pricing must remain constant for the entire term of the contract, as well as any possible extension offered. Bids will be evaluated and awarded based upon the lowest, responsive and eligible bid.

3.11 Rejection of Responder's Bid

A Responder's bid may be rejected by the City of Chelsea if the Responder's bid:

- Fails to adhere to one or more of the requirements
- Fails to submit its bid to the required address on or before the Invitation for Bid responses due date
- Fails to submit a bid in accordance to the format and instructions specified or to supply the minimum information requested in this Invitation for Bids.
- Fails to meet unconditionally or is unable to demonstrate competence to meet the requirements of this Invitation for Bids.
- Misrepresents its equipment, systems or services or provides demonstrably false information in its response or fails to provide material information.
- Violates the restrictions on contacts with the City of Chelsea employees and representatives
- Refuses, is unable to, or fails to provide clarification requested by the City of Chelsea in a reasonable time frame.

3.12 Invitation for Bids Cancellation

The City of Chelsea retains the right to cancel this Invitation for Bids, or any portion thereof, at any time prior to the execution and approval of a contract. If this Invitation for Bids is cancelled, all responses received to this Invitation for Bids will be rejected. All expenses related to the preparation of responses to this Invitation for Bids remain the responsibility of the Responder.

3.13 No Guarantee of Purchase

The City of Chelsea makes no guarantee that any purchase shall take place from any contract resulting from this Invitation for Bids nor does the City of Chelsea guarantee any minimum quantity of purchases from any contract resulting from this Invitation for Bids. Any estimated or past procurement volumes referenced in this Invitation for Bids are included only for the convenience of the Responders, and not to be relied upon as any indication of future purchases.

The Responder may not place, as a condition for providing the cost levels proposed, any minimum purchase requirements.

3.14 Prime Contractors and Subcontractors

Prior approval of the eligible entity is required for any subcontracted service of the contract. Contractors are responsible for the satisfactory performance and adequate oversight of its subcontractors. Subcontractors are required to meet the same state and federal financial program and reporting requirements and are held to the same reimbursable cost standards as the successful Responder.

The City of Chelsea requires a single point of contact for any contract resulting from this Invitation for Bids. Subcontractors may be used, but the successful Responder, as prime contractors, shall be responsible for meeting all of the terms of any contract resulting from this Invitation for Bids and must accept full responsibility for any subcontractor's performance.

Responders must provide a list of subcontractors, a description of each subcontractor's responsibility in regards to this contract and signed letters of agreement between the Responder as the prime contractor, and its subcontractor(s) identifying their responsibilities and their relationship to the prime contractor. The prime contractor must notify each individual account (eligible entity) in writing; the name of their subcontractor both initially and when a subcontractor is changed. If a subcontractor has filed for Chapter 11 Bankruptcy or Chapter 7 Bankruptcy, the prime contractor also must notify the City of Chelsea. The notification must be written and must be within one week of the events noted above.

3.15 Written Inquiries

Responders may submit written inquiries concerning any part or attachment of this Invitation for Bids. Written inquiries regarding issues outside of the scope of this Invitation for Bids will not be considered.

All inquiries must be submitted by the required date and time, to the contact listed on the cover page of this Invitation for Bids.

All written inquiries must be submitted via electronic mail (email) only. No other manner of submission will be accepted.

Any change to this submission date and/or time will be made by a notice sent electronically to all Responders. The Responder is responsible for confirming receipt of written inquiries with Dylan Cook, Chief Procurement Officer, and City of Chelsea at dcook@chelseama.gov.

The City of Chelsea will provide written responses via electronic mail (e-mail) to all written inquiries received by the required due date. Responses will not identify the inquiry by Responder.

3.16 Instructions for Submission of IFB Responses

Each Invitation for Bid Response must be sealed, labeled and submitted to the address listed on the cover page of this document.

Paper Submission- the Responder must submit one (1) original response to the Invitation for Bids marked "ORIGINAL" The Envelope must be clearly marked "**ON-ROAD SECTION OF THE CHELSEA GREENWAY**".

3.17 Deadline for Submission

All responses to this Invitation for Bids are due at the address listed on the cover page and no later than the date and time listed in the Procurement Calendar.

End of Section

Section 4 - TECHNICAL SPECIFICATIONS

PROJECT SITE AND SCOPE OF WORK

The project site is located within the City of Chelsea, Massachusetts. The work to be done shall include: the construction of the on-road bicycle facilities, installation of new signage, installation of new pavement markings, installation of imprint pavement, and the construction of new wheelchair ramps.

The Contractor shall furnish all necessary labor, materials, tools and equipment necessary to construct the project as shown including, but not limited to: excavation, removal and disposal of excavated materials; saw cutting bituminous and cement concrete pavements; construction of new cement concrete sidewalks and wheelchair ramps; furnishing and setting of granite curb; resetting of existing curb; removing and discarding existing granite curb; providing and installing signs; application of pavement markings; installation of imprint pavement; and completing all appurtenant work, all in accordance with the details shown on the Contract Drawings, as specified herein, and as directed by the Engineer, all within the City of Chelsea.

MATERIALS AND WORKMANSHIP

Unless otherwise specified in the TECHNICAL SPECIFICATIONS for this Contract, all materials, workmanship, methods, practices, etc., shall conform to the requirements of the Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges, 1988 Edition, also referred to as the "MassDOT Standard Specifications", including all amendments and addenda thereto.

TIME FOR COMPLETION AND SEQUENCE OF WORK

Work on this project is restricted between 7:00 AM and 6:00 PM, Monday through Saturday, with the Prime Contractor and all Subcontractors working on the same shift. Work conducted before 7:00 AM or after 6:00 PM requires the permission from the Director of Inspectional Services. Work on Sundays and Legal Holidays is allowed with the permission of the Police Chief. Work which requires the closure of a travel lane on any City street shall not be performed between the hours of 7:00 AM and 9:00 AM and between 3:30 PM and 6:00 PM. No work will be permitted outside of the prescribed hours, except in the case of an emergency or with the approval of both the City of Chelsea Fire and Police Departments, the Engineer, and the Director of Public Works. Set-up and removal of all equipment and materials for

construction and/or traffic maintenance shall be done during the prescribed work hours. The roadway shall be free of the Contractor's personnel and operations during the restricted hours.

The Contractor shall give notice to both the Department of Public Works and the Engineer at least 48 hours in advance of beginning any work affecting the maintenance of traffic and shall not proceed with paving or surfacing operations, including pavement markings and the installation of imprint pavement, without specific notice to, and the approval of, the Engineer.

Working on Sundays and legal holidays will be permitted provided the Contractor can acquire the necessary approvals and permits from the various City agencies.

Prior to the start of the work under this contract and within ten (10) days of contract execution, the Contractor shall be responsible for submitting to the Engineer for approval a plan, detailing the sequence of work schedule. The progress schedule shall state the method and shall forecast the dates for carrying out each portion of the work to be done. Parking restrictions shall be shown on this plan. Parking restrictions will only be allowed as permitted by the City of Chelsea Department of Public Works (temporary signage notifying of the upcoming restrictions will be provided by the DPW and must be posted by the Contractor 24 hours before any parking restriction takes place). The schedule shall be reviewed by the Engineer and appropriate City officials.

No cement concrete sidewalks or sidewalk patches will be allowed to be constructed between November 15th and April 1st, unless approved otherwise by the Engineer.

The number of locations being worked on at any one time and the order of doing the work shall be approved by the City of Chelsea Department of Public Works and the Engineer. The City reserves its right to prioritize the work locations and will coordinate its priorities with the Contractor subsequent to award of Contract. Before beginning any portion of the work, the Contractor shall give the Engineer due notice and ample time for making his necessary preparations.

RESPONSIBILITY OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents and Technical Specifications, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees or other expenses, and all other services and facilities of every nature whatsoever necessary for the performance of

the Contract, and deliver all improvements embraced in this Contract complete in every respect within the specified time.

CONTRACTOR TO PROPERLY ARRANGE HIS FORCES

The Contractor shall so arrange his forces and regulate his operations that, while complying with the provisions of any labor laws applicable to this work, he shall leave his work at the end of working periods in a condition satisfactory to the Engineer.

SUPERINTENDENCE, SKILLED LABOR AND EMPLOYEES

The Contractor shall employ a suitable superintendent and foremen to represent him at all the several parts of the work and they shall be present at all times while the work entrusted to them is in progress, and shall be informed thoroughly regarding it. The foremen, mechanics, and others employed by the Contractor shall be skilled and experienced in the particular work which is given them to do.

The Contractor shall furnish the Engineer such information relating to the employees upon the work as the Engineer may from time to time request. If any person employed on the work by the Contractor is insubordinate or appears to the Engineer to be incompetent, unfaithful or disorderly, he shall be discharged immediately on the demand of the Engineer and shall not be again employed on the work without the approval of the Engineer.

COOPERATION

The Contractor shall allow the City of Chelsea, its agents, and other Contractors, and public service corporations, or their agents, to enter upon the work for the purpose of construction, maintaining, repairing, removing, altering, or replacing such pipes, sewers, conduits, manholes, wires, poles or other structures and appliances as are now located or as may be required or permitted at or on the work by the Engineer.

The Contractor shall cooperate with all the aforesaid parties and shall allow reasonable facilities for the prosecution of any other work of the City of Chelsea or others to be done in connection with this work. Care shall be taken at all times to inconvenience abutters as little as possible.

The Contractor's attention is directed to the fact that it is likely that other construction projects may be occurring adjacent to the limits defined in this contract, including, but not limited to, the Silver Line / Bus Rapid Transit Project in Chelsea. The Contractor shall cooperate with MassDOT, the City and other

Contractors working on adjacent contracts as required and shall conduct his/her work as outlined in Section 5.06 of the MassDOT Standard Specifications.

Immediately after award of the Contract, the Contractor shall contact, in writing, any agency or utility company with facilities or interests within the project corridor and establish a liaison between his firm and these agencies and/or utility companies. Following are the names of owners and representatives of the principal utilities affected, but completeness of this list is not guaranteed by the City:

Mr. Andrew DeSantis
Chelsea Department of Public Works
500 Broadway
Chelsea, MA 02150
Tel.: (617) 466-4206

Raymond Gelinis
Chelsea Water & Sewer Dept.
380 Beacham Street
Chelsea, MA 02150
Tel.: (617) 466-4310

Ralph Francesconi
MWRA – Water
2 Griffin Way
Chelsea, MA 02150
Tel.: (617) 305-5827

Kevin McKenna
MWRA - Sewer
2 Griffin Way
Chelsea, MA 02150
Tel.: (617) 305-5956

John Quatieri
Chelsea Fire Alarm
307 Chestnut Street
Chelsea, MA 02150
Tel.: (617) 466-4620

Chelsea Police Dept.
19 Park Street
Chelsea, MA 02150
Tel.: (617) 466-4855

Jean MacLaren
Comcast
P O Box 6505
Chelmsford, MA 01824
Tel.: (978) 848-5165

John Marinello
Crown Castle
131-05 14th Avenue
College Point, NY 11356
email: john.marinello@crowncastle.com

Melissa Owens
National Grid Gas
40 Sylvan Road
Waltham, MA 02451
Tel.: (781) 907-2845

Emergency Management
(Emergency Operations Center)
Tel.: (617) 466-4660

Steve Owens
NStar Electric
One NStar Way-SUM SE 310
Westwood, MA 02090
Tel.: (781) 441-5881

Karen Nunes
Verizon
385 Myles Standish Blvd.
Taunton, MA 02780
Tel.: (508) 828-6437

DESIGNER/PROJECT MANAGER

City Project Manager

John DePriest, AICP, Project Manager
Director of Planning & Development
Chelsea City Hall
500 Broadway, Room #101
Chelsea, MA 02150
Tel: (617) 466-4180

Engineer

Jennifer Ducey, P.E., Project Manager
Fay, Spofford & Thorndike
5 Burlington Woods
Burlington, MA 01803
Tel: (781) 221-1031

Landscape Architect

Clarissa Rowe, Landscape Architect
Brown, Richardson & Rowe
Landscape Architects and Planners
3 Post Office Square, 3rd Floor
Boston, MA 02110
Tel: (617) 542-8552

REPLACEMENT OF PARKING METER HEAD

The existing double parking meter head will be removed and stored by the Parking Enforcement Contractor working through the City Clerk's Office. The new single parking meter head will be furnished and installed by the Parking Enforcement Contractor.

JOB OFFICES

The Contractor and his subcontractors may maintain such office and storage facilities on the site as are necessary for the street improvements. These shall be located so as to cause no interference to any work to be performed on the site. The City of Chelsea shall be consulted with regard to locations.

Upon completion of the street improvements or as directed by the Engineer, the Contractor shall remove all such temporary structures and facilities from the Project Site, same to become his property, and leave the premises in the condition required by the Contract Documents.

TELEPHONE SERVICE

An emergency telephone number shall be furnished in writing to the City of Chelsea Department of Public Works, the Engineer, the Chelsea Fire Department, the Chelsea Police Station, Emergency Operations Center, and all other interested parties for use after hours in the event of any emergency affecting the work of the Contractor.

EMERGENCY WORK FORCE

During days when inclement weather prevents scheduled work from being accomplished, or in the event of any emergency resulting from the Contractor's operation, the Contractor shall have available, an emergency work force whose purpose will be to maintain the construction site in a safe, passable condition and to protect the works from damage, as directed by the Engineer.

DISPOSAL OF EXCAVATED MATERIAL

Surplus materials obtained from any type of excavation, and not needed for further use as determined by the Engineer shall become the property of the Contractor and shall be disposed of by her/him outside the location subject to the regulations and requirements of local authorities governing disposal of such materials, at no additional compensation.

GATE VALVE OPERATION

During the construction, the operation of all existing gate valves and existing fire hydrants, where necessary, shall be the responsibility of the City of Chelsea Water Department personnel. The Contractor shall not operate any existing gate valve or existing fire hydrant except in case of emergencies.

MEASUREMENT OF QUANTITIES OF WORK

Unless otherwise provided for in the measurement and payment clauses of the Specifications, the method of measurement of the work shall be that determined by the Engineer. In the case of earth excavation and rock excavation, unless otherwise determined by the Contractor and approved by the Engineer, the method of measurement of quantities will consist of cross sections measured in the field at intervals determined by the Engineer and computations of volume by the method of average end areas.

In the case of quantities paid for on an area basis, unless otherwise provided for, the area to be paid for shall be actual area; that is, the measurements used in determining the area are to be parallel to the surface in question. For the computation of quantities where geometric methods would be laborious, it is understood and agreed that the "Planimeter" shall be considered an instrument of precision acceptable for the measurement of such quantities.

ACCESS TO THE WORKS

The Contractor shall keep open at all times pedestrian access to the properties abutting the streets and emergency access by vehicular and pedestrian traffic over, through or around the works with the maximum safety and practicable convenience to such traffic.

The Contractor shall plan his work so that at the end of the working day all open excavations shall be temporarily covered. All excavated material shall be removed from within the limits of streets and sidewalks and stockpiled at a location approved by the Engineer. Access to abutting property shall be maintained at all times of the day and night. Streets under construction may be temporarily closed to ordinary vehicular traffic or as the City of Chelsea may allow during the working day but an emergency vehicle lane must be left open at all times. **The Contractor shall perform work within Fay Square only in sections approved by the Engineer and the Chelsea Fire Department, so as not to impede access to the Chelsea Fire Station.**

GENERAL PROTECTION

The Contractor shall, at his own expense, protect existing structures and all work completed under this Contract, shall provide watchmen, lights and barriers, and take all other precautions that may be necessary to protect life and all property. Wherever a trench crosses a traveled way or an entrance to private property, the Contractor shall, if required by the Engineer, construct a suitable bridge. The Contractor shall be responsible for all damages resulting from any neglect or failure on his part.

The Contractor shall furnish and maintain suitable detour signs and fencing during the course of the work as necessary to protect the public or as required by the Engineer and the City of Chelsea.

The Contractor shall protect all fences, trees, shrubbery and the like. No trees or shrubs shall be cut or trimmed or otherwise disturbed unless authorized by the Engineer. Damage to trees and shrubs shall be repaired by an experienced forester. Shrubs or trees which are seriously damaged shall be replaced if so ordered by the Engineer.

Wherever work is done on private property or within an easement, the Contractor shall exercise particular care and shall see to it that no damage is done to any building or buildings, and that as little damage as possible is done to lawns, shrubs, trees, gardens, walks, drives, walls, fences, and other appurtenances.

After work is done on private property or within an easement, the premises shall be left in as good condition as they were before the work was started, including the restoration of walls, fences, drives, walks, lawns, trees and shrubs, etc.

The Contractor shall furnish all the necessary labor, materials, and equipment; shall take all necessary precautions; and shall assume the entire cost of handling all water resulting from intense storms or floods which may be encountered at any time during the construction of the work.

The manner of providing against any damage to the work during construction from such causes shall be left to the discretion of the Contractor; and the cost of all work to prevent such damage, or to replace work damaged to the satisfaction of the Engineer, shall be included in the unit prices stated for the various items in the Schedule of Prices. The Contractor shall maintain existing sewerage, drainage and water services during construction.

MAINTENANCE AND PROTECTION OF TRAFFIC

The Contractor shall conduct his work so as to interfere with traffic as little as possible and shall safeguard all highways and traffic thereon. The construction equipment and materials shall be so placed as not to endanger the work or to obstruct traffic, except as permitted by the City of Chelsea. Safe and reasonable means of access to and egress from abutting property, private ways and alleys shall be provided by the Contractor.

The Contractor shall be required to furnish all labor, materials and equipment necessary to maintain and protect vehicular and pedestrian traffic within the project area.

The Contractor shall at all times, until final acceptance of the physical work by the City of Chelsea, be responsible for the protection of the work and shall take all precautions for preventing injuries to persons or damage to property on or about the work.

The decision for routing traffic through or around the work and provisions for the control of same shall be made after a written plan is submitted and approved by the Chelsea Traffic Commission for consideration. Roads shall be closed to travel only as authorized by the City of Chelsea or their agent.

The Contractor shall schedule the temporary closing of roadways to travel only after consultation with the Police Chief, the Fire Chief and Director of Public Works. The temporary closing of any traveled way shall be kept to a minimum.

All detours and/or closing of streets shall be reviewed and approved by the Engineer and the Chelsea Traffic Commission.

Where the new construction coincides with the present traveled way, the Contractor shall carry on his work in a manner acceptable to the Engineer so that a reasonably safe uninterrupted traffic flow is maintained through the project during the entire construction period over traffic lane patterns approved by the Police Chief of the City of Chelsea or his agent. The Contractor shall provide and maintain in a reasonably safe condition the temporary approaches and the crossings of intersecting roadways. In existing roadways, trenches will not be allowed to remain open overnight or for any extended period of time during daylight hours. Trenches shall either be backfilled or protected with steel plates.

Steel plates will have a minimum thickness of 1 inch and shall weigh not less than 1000 pounds. The plates shall extend a minimum of 18 inches beyond all edges of the excavation. The steel plates shall be fastened to the existing pavement by means of removable spikes with heads driven flush or slightly below the top of the plates, or some other fastener suitable to prevent movement of the plates due to vibration caused by heavy moving vehicles. The difference between the top of the plate and the street surface shall be ramped with bituminous concrete.

At the end of each day's activities, the Contractor shall leave the streets in a condition such that each abutter has vehicular access to their driveways.

Every reasonable effort shall be made to reduce to a minimum, interference with and inconvenience to business concerns and other abutters on account of the construction work. Excavated material shall be trucked away and returned if the Engineer deems it necessary and practicable as a means for avoiding serious interference with and inconvenience to business concerns and abutters.

The use of private property shall not be interfered with except insofar as necessary, as determined by the Engineer, provided that practical construction methods are being used and reasonable precautions against unnecessary interferences are being taken.

The Contractor, as directed, shall at all times, so conduct the work that the abutters shall have reasonable access to their property. When public or private property is isolated by the temporary closure of a road or driveway, the Contractor shall be responsible for providing such reasonably safe means of access to a public way or private property as the Engineer deems essential.

Streets wholly or partly closed to traffic and all open trenches shall be protected by suitable barricades, barrier fences, traffic signs and other traffic devices furnished and erected by the Contractor.

The Contractor shall, at his own expense, provide sufficient temporary illuminated traffic signs and devices to afford adequate protection to the traveling public.

When deemed necessary by the Engineer, the Contractor shall also provide reflectorized drums with flashers for additional protection of the traveling public and working personnel during construction operations. The Contractor shall be responsible for furnishing, positioning, repositioning, and maintaining all drums for the duration of the work. The Contractor will be compensated for providing the reflectorized drum based on the number of days, or portion thereof, which these devices are actually used on the project. Provisions for this item of work are contained hereinafter in Section 800 of these Specifications.

In addition to the aforementioned materials, the Contractor shall be required to furnish traffic police when directed by the Engineer.

No separate compensation for any of the above described work or materials will be allowed except as noted for Traffic Police and reflectorized drums with flashers, it being agreed and understood that payment for the above described work and materials shall be included in the prices bid for the items of work in the Schedule of Prices in the Bid for Unit Price Contracts.

SAFETY CONTROLS FOR CONSTRUCTION OPERATIONS

Safety controls for construction operations shall be done in accordance with the relevant provisions of Section 850 of the MassDOT Standard Specifications, the latest Manual on Uniform Traffic Control Devices with Massachusetts Amendments, and the following:

The providing of safety controls for construction operations shall be considered incidental to this contract and the costs for safety controls shall be included in the unit bid price for those contract items requiring such controls. Positioning, adjusting and re-positioning of all devices such as traffic cones, high level

warning devices, etc., not otherwise classified and paid for under other items in this contract, is considered incidental and no separate payment will be made.

TRAFFIC POLICE

In addition to the furnishing of watchmen which the Contractor is required to furnish at his own expense, the Contractor shall furnish traffic police if and when required by the City ordinances and when directed by the Engineer. The duty of traffic police shall be solely to direct traffic. The Contractor shall pay the amount due directly to the Chelsea Police Department.

After payment for traffic police has been made, the Contractor shall submit to the Engineer a monthly payroll of the police officers used by him, and signed by a representative of the Chelsea Police Department. The Contractor will be reimbursed for the actual payroll amount.

All police details will be paid a minimum of four (4) hours per day.

PRESERVATION OF TREES

All tree work must adhere to the provisions of Massachusetts General Law Chapter 87, Sections 3 & 5 and be approved by the City of Chelsea Tree Warden. Within the actual limits of the work, where trees and/or stumps must, of necessity, be removed and all such removal of trees, including stumps, such work shall be completed as directed by the Engineer. No trees larger than four inches in diameter shall be cut down or otherwise injured by the Contractor except by approval of the Engineer and the City of Chelsea Tree Warden. No trees within the public way larger than one and one-half inches in diameter shall be cut down or otherwise injured by the Contractor except in accordance with the procedures outlined in Massachusetts General Law Chapter 87, Sections 3 and 5. The Contractor shall protect trees and shall furnish guards or other protective devices if required by the Engineer. Damage to trees shall be repaired by an experienced Massachusetts Licensed Arborist hired by the Contractor. Trees which are removed unnecessarily or seriously damaged shall be replaced. The City of Chelsea Tree Warden will schedule public hearings as necessary with the Chelsea Tree Board.

LINES AND GRADES

The Contractor will be required to provide all survey services necessary for the construction of the proposed improvements. The setting of lines, grades and layout of the various components of the project

will be the responsibility of the Contractor, with the Engineer's approval. The Contractor shall furnish such personnel and facilities, including labor and materials for performing the layout of the project components, and maintaining said lines and grades, as the Engineer may require.

The actual field survey work shall be performed by a Registered Land Surveyor (registered in the Commonwealth of Massachusetts). Said Registered Land Surveyor shall be present on the job site at all times, unless otherwise permitted by the Engineer. Prior to the start of construction, the Contractor shall submit the name, address and registration number of said Registered Land Surveyor to the Engineer in writing.

The Contractor shall set the line and grade for each section of work. It shall be the Contractor's responsibility to maintain the lines and grades throughout the work. If, in the Engineer's opinion, the Contractor's forces, including subcontractors, are not taking the necessary precautions for preserving the layout marks, the Engineer has the right to direct the Contractor to reset and maintain the line, grade and layout marks.

No separate or additional compensation will be allowed for any survey work, instruments or personnel therefor, it being agreed and understood that all such cost shall be borne by the Contractor.

MATERIAL SPECIFICATIONS

All material unless otherwise specified shall meet the requirements of the latest specifications of the American Society for Testing and Materials, and shall be subject to the approval of the Engineer.

DEFINITION OF STANDARDS

Wherever in these Specifications the term "ASTM" occurs, it shall be understood to mean the Standard (or Tentative Standard) Specifications or Standard Method of Test of the American Society for Testing and Materials, Serial Designation in effect at the date of receipt of bids for this Contract.

INSPECTIONS AND TESTS

The Contractor shall allow the Engineer ample time and opportunity for inspecting and testing materials to be used in the work; he shall advise the Engineer promptly upon placing orders for materials so that

arrangements may be made, if desired, for its inspection before shipment from the place of manufacture. The Contractor shall at all times furnish the Engineer and his representatives facilities, including labor, and allow proper time for inspecting and testing the work, its materials and workmanship.

The Engineer may decide to have some or all materials tested or inspected as required by the Engineer. The Contractor must anticipate that possible delays may be caused him in the execution of his work due to the necessity of materials being inspected and accepted before use. The Contractor shall furnish at his own expense all samples of material required by the Engineer for testing.

The Engineer, his agent or designee in connection with the work shall at all times have the right to enter the premises upon which any work under the Contract is being done to inspect said work and materials, and the Contractor shall furnish all reasonable facilities and give ample time for such inspection.

The Contractor also shall furnish all reasonable facilities for viewing the work to the City of Chelsea and its representatives and to accredited representatives of authorities having jurisdiction with respect to the work.

All material testing, inclusive of compaction tests, cement concrete and bituminous concrete testing, soils analysis, and all other material testing specified elsewhere herein shall be performed by a qualified Testing Laboratory retained by the Engineer. All material tests specified and/or required by the Engineer shall be at the Owner's expense, except all cost for retesting materials which were found to be not in compliance with the Contract Documents shall be paid for by the Contractor.

IMPERFECT WORK OR MATERIALS

All work shall be done in a workmanlike manner. All materials and workmanship shall be such as to satisfy the Engineer that the intent of this Contract is properly fulfilled.

Any defective or any imperfect work or materials furnished by the Contractor that may be discovered before the final acceptance of the work, as established by the Certificate of Completion, shall be removed immediately even though it had been previously overlooked by the Engineer and estimated for payment. Any materials condemned or rejected by the Engineer shall be marked conspicuously and shall, on demand, be at once removed to a satisfactory distance from the work. Satisfactory work or materials shall be substituted for that rejected. Any omission to disapprove the work at the time of inspection or at the

time of any monthly or other estimate shall not relieve the Contractor of any of his obligations to perform the work as herein prescribed.

SALVAGE

The Contractor shall deliver any property of the City of Chelsea that is uncovered in the course of his excavation, such as gate valves, hydrants and castings, deemed by the Engineer to have value and deliver same to the City of Chelsea DPW. The Contractor shall dispose of all other property not deemed to be of value.

WEATHER CONDITIONS

The Contractor shall take all necessary precautions for conducting the work and keep the materials and the completed work protected from weather conditions. Methods used for protection of work and materials shall meet with the approval of the Engineer.

No concrete, earth backfill or permanent paving shall be placed during freezing weather unless protected in a manner approved by the Engineer. In no event shall any materials be placed on frozen surfaces. In case of severe weather, the City of Chelsea shall have the right to delay or suspend any portion of the work; for such period or periods as may be deemed necessary because of conditions beyond control of the Contractor.

No work shall be suspended or delayed without prior written approval or order of the Engineer. The work shall be resumed when conditions so warrant as ordered in writing by the Engineer. Upon receipt of written order from the Engineer, the Contractor shall immediately delay, suspend or commence the work in accordance with said order. In case of suspension of work, because of winter weather conditions, the Contractor shall leave the project in such condition as approved by the Engineer. If, because of winter shut downs and delays caused by weather conditions, the work lags materially behind schedule, additional crews and additional sections of work shall be started in order to complete the work within the prescribed times.

The Contractor shall not be allotted additional time to complete the work because of non-approved shut-downs caused by winter weather conditions.

If there are delays or interruptions in the work due to weather conditions, the necessary precautions must be taken to bond new work to old.

SUSPENSION OF WORK

The City of Chelsea may delay the commencement of the work, or any part thereof for any reason if the City shall deem it necessary to do so. The Contractor shall have no claim for damages on account of any delay on the part of the City of Chelsea or another contractor in connection with the execution of the work covered by this Contract. The Contractor shall have no claims for damages on account of any delays caused by the work of other contractors of the City of Chelsea now or hereafter doing the work upon the premises covered by this Contract. The City of Chelsea may grant such extensions of time for extra work to the "Time for Completion" as is deemed appropriate.

CLEANING UP

After the completion of the work, the Contractor shall remove all temporary structures and equipment built or furnished by him, all debris, and all surplus materials of all kinds from the site of the work, and shall dispose of them in a manner satisfactory to the Engineer. The premises shall be left clean, presentable and satisfactory. In addition to cleaning up at the end of the project, the Contractor shall be required to keep all streets, easements and haul roads free from dirt, stones, dust and all other foreign materials.

At the close of each work week the Contractor shall be required to clean up each street and easement under construction and each haul road used during the work week and where and if directed by the Engineer sweep these streets, easements and haul roads. If the Contractor does not comply with the foregoing, the City of Chelsea will hire a mechanically powered sweeper and any other equipment and personnel required to render the streets, easements and haul roads clean at the Contractor's expense.

The Contractor shall employ a water wagon on the site of the work and he shall be required to use same during his construction operations in order to keep the dust nuisance to a minimum. The Contractor shall at all times provide adequate freeboard and operate his trucks in such a manner that spillage does not occur on City streets.

If, in the opinion of the City of Chelsea or the Engineer, the Contractor is not taking the necessary precautions to prevent spillage or tracking, the Engineer will order the Contractor to provide a

mechanically powered broom to be on the project full time and at no additional cost to the City of Chelsea. If the Contractor does not comply, the City of Chelsea will hire a mechanically powered sweeper at the Contractor's expense.

No separate compensation for any of the above described work or materials will be allowed, it being agreed and understood that payment for the above described work and materials shall be included in the prices bid for the items of work in the "Schedule of Prices".

SITE CONDITION

The Contractor shall be deemed to have inspected the work site and shall accept the area as he finds it and shall inform himself of the character and the type of work to be performed above and below ground level. The City of Chelsea assumes no responsibility for unforeseen conditions arising during the execution of work under the terms of this contract. In the event that potentially contaminated and/or hazardous materials are encountered during excavation, temporary storage facilities will not be provided by the City of Chelsea. All storage and handling for potentially contaminated and/or hazardous materials is the responsibility of the Contractor.

WHEELCHAIR RAMP STANDARDS

The Contractor is hereby notified that they are ultimately responsible for constructing all project elements in strict compliance with the current AAB/ADA rules, regulations and standards. All construction elements in this project associated with sidewalks, walkways, wheelchair ramps and curb cuts are controlled by 521CMR - Rules and Regulations of the Architectural Access Board (AAB). The AAB Rules and Regulations specify maximum slopes and minimum dimensions required for construction acceptance. There is no tolerance allowed for slopes greater than the maximum slope, nor for dimensions less than the minimum dimensions.

All wheelchair ramps shall be constructed in accordance with the provisions of the latest Massachusetts Department of Transportation, Highway Division, Construction Standard Details, dated 2012, and all Addenda issued thereto. A copy of the Standard Details can be found on the MassDOT website <http://www.massdot.state.ma.us/Highway/>.

The Contractor shall establish grade elevations at all wheelchair ramp locations, and shall set transition lengths according to the appropriate table in the MassDOT Construction Standards. All wheelchair ramp

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

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

The Contractor's attention is directed to the possibility of encountering potentially hazardous materials in certain locations along the trail. It will be necessary for the Contractor to make his own investigation as to the extent of hazardous materials encountered and to assure that the handling and disposal of any materials will be done in accordance with all State and Federal regulations. It is the Contractor's ultimate responsibility to ensure the health and safety of all the Contractor's employees and subcontracting personnel, the Engineer and his representatives, and the public from any on-site chemical contamination.

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

The Contractor shall be required to supply all personnel and materials necessary to comply with this section and to support the anticipated levels of protection and monitoring described.

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

The Contractor shall be required to provide appropriate personnel protective equipment for anyone who is working in an area either containing or suspected of containing a hazardous environment. This work will include both individuals physically working in these areas and those directing the work of same. The protective equipment and its use shall be in strict compliance with all appropriate regulations that address

employee working conditions. The Contractor shall provide to all workers protective clothing appropriate to the hazard level of the work.

The Contractor shall be responsible for providing an environmental professional to evaluate potentially contaminated and/or hazardous materials encountered during construction. The environmental professional shall be responsible for evaluating soil with non-natural discoloration, petroleum or chemical odor, the presence of petroleum liquid or sheening on any water surface or any abnormal gas or materials in the ground which are known or suspected to be contaminated with oil or hazardous materials. In the event that subsurface contamination is discovered during construction, the Contractor's environmental professional shall be present to oversee all handling, storage, sampling, and transport of such contaminated materials.

The Contractor shall be responsible for identifying a disposal/recycling facility and obtaining all permits, approvals, Bill of Lading, etc. prior to the removal of the contaminated soil from the site. Any soils contaminated with hazardous materials that are not of petroleum origin shall be handled on a case-by-case basis. The Contractor shall obtain at least three bids for the handling and disposal of any contaminated material. All manifest, bills of lading, etc. will be the responsibility of the Contractor with copies provided to the Engineer. The Contractor is also responsible for hiring an environmental professional, as needed, for oversight and Bills of Lading, etc.

The Contractor shall be responsible for the proper disposal or recycling of contaminated soils as outlined in this section or as ordered.

SECTION 100

EXCAVATION AND GRADING

EXTENT OF WORK

(1) Description

The items of work covered under this Section consist of furnishing all labor, materials, tools, and equipment required to perform all required excavation and grading operations including: excavation required for the reconstruction and installation of new wheelchair ramps, fine grading and compacting gravel base courses for the placement of finished pavements, sidewalk, and wheelchair ramps, and all other required excavation as required for the construction of the improvements and related construction. All work shall be performed in accordance with these Specifications and in close conformity with the lines, grades, thicknesses, and sections shown in the Contract Drawings or required by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

ITEM 120.

EARTH EXCAVATION

CUBIC YARD

(1) Description

Work shall conform to the relevant provisions of Section 120, Excavation of the MassDOT Standard Specifications and the following:

Earth excavation shall consist of the removal and disposal of all material not being removed under some other item of work which is encountered in excavating to the proposed roadway, parking lot, sidewalk, wheelchair ramp, driveway or walk subgrade and the excavation and backfilling of test pits within the limits of the Contract in accordance with these Specifications and in close conformity with the lines, grades, thicknesses and cross sections shown on the Contract Drawings or established by the Engineer.

(2) Construction Methods

Earth excavation shall include, but not be limited to the removal and disposal of stones or parts of stones less than one cubic yard, brick, reinforced and non-reinforced cement concrete roadway pavements and bases, masonry structures regardless of size and/or materials, patched bituminous concrete pavements, below grade excavation of unsuitable materials, and any other material which interferes with the planned subgrade for roadways and trails.

Unless otherwise permitted by the Engineer, the Contractor shall so prosecute his work so traffic will be maintained over and through the working area with a maximum of safety and convenience in accordance with the provisions of Subsection 7.09, Public Safety and Convenience. Additional requirements regarding maintenance of travel are explained in the aforementioned article.

The Contractor shall be held responsible for notifying the Director of the City of Chelsea Department of Public Works and all non-city owned utilities of his intent to excavate for the proposed construction and for verifying the location and number of all surface and subsurface structures and lines on or adjacent to the proposed construction.

Existing improvements and facilities, adjacent property and trees or plants that are not to be removed shall be protected from injury or damage resulting from the Contractor's operations. Only trees and plants that are designated for removal by the Engineer shall be removed.

Existing curb and sidewalk backing which is to remain shall be protected against displacement, either vertical or horizontal, during the performance of the work.

(3) Measurement

Quantities of earth excavation will be measured in their original position by the cross section method, except as provided in the following paragraph.

Where due to the nature of a particular operation or for any other reason, it is impossible or impractical to measure quantities of excavation by means of the cross section method, the Engineer will compute the quantities of material excavated by a method which in his opinion is best suited to obtain an accurate determination.

(4) Payment

The quantity to be paid for under ITEM 120., EARTH EXCAVATION is the number of cubic yards of material so excavated and measured as provided herein. The price stated is full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in performing the excavation as shown on the Contract Drawings, as specified in these Specifications, and as required by the Engineer.

ITEM 151.

GRAVEL BORROW – TYPE C

CUBIC YARD

(1) Description

Work shall conform to the relevant provisions of Section 150, Embankment of the MassDOT Standard Specifications and the following:

The work shall be as shown on the Contract Drawings and where required by the Engineer, gravel borrow will be provided in locations and depths as shown on the Drawings, and as required by the Engineer.

Gravel Borrow – Type C shall be furnished, spread and compacted as gravel base course material for the construction of the gravel base course for the paved trail, sidewalks, wheelchair ramps, paths and/or drives and unpaved shoulders and slopes, all as required in conjunction with the proposed improvements and shown on the Drawings and elsewhere as specified in these Specifications and as required by the Engineer.

Unless otherwise authorized by the Engineer, all areas of over-depth excavation shall be backfilled to the normal grade line with Gravel Borrow – Type C.

(2) Materials

Gravel Borrow – Type C shall conform to Subsection M1.03.0, Type c, of Division III, Materials, of the “MassDOT Standard Specifications”.

(3) Construction Methods

Gravel Borrow – Type C shall be placed and compacted in conformance with the relevant provisions and requirements of Section 150, Embankment of the MassDOT Standard Specifications, and the following.

Gravel borrow shall be placed in horizontal, uniform layers not exceeding 8 inches in thickness before compaction, except that gravel used as refill for over-depth excavation below normal grade lines shall be placed in layers not exceeding 6 inches.

Gravel borrow material shall be compacted to not less than 95 percent of the maximum dry weight of the material as determined by AASHTO Test Designation T-99, Method C, at optimum moisture content.

(4) Measurement

Measurement of Gravel Borrow – Type C shall be the number of cubic yards, actually placed in accordance with these Specifications and as required by the Engineer.

Only gravel borrow placed within the established pay limits or reasonable limits required to complete the work as established by the Engineer shall be considered for measurement and payment. If, in the opinion of the Engineer, the Contractor has excavated in excess of the planned or authorized cross sections, either through error or for his own convenience, the gravel borrow used for refill, as established by the Engineer, shall be at the Contractors own expense. The Engineer shall determine the gravel borrow placed beyond established pay limits.

(5) Payment

The contract price paid per cubic yard for ITEM 151., GRAVEL BORROW – TYPE C shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete-in-place, as specified in these Specifications and as required by the Engineer. No borrow material will be included for measurement or payment under this item which is required to be placed and compacted under another item of work.

ITEM 170.

FINE GRADING AND COMPACTING

SQUARE YARD

(1) Description

This work shall consist of performing all fine grading and compaction operations involved in the preparation of gravel base course areas prior to placement of pavement for sidewalks, wheelchair ramps, driveways, parking lots and/or roadways.

The work shall be performed in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as required by the Engineer.

(2) Construction Methods

The finished base course and subgrade areas, immediately prior to placing new material thereon, shall have a relative compaction of not less than 95 percent of the maximum dry density for a depth of at least 6 inches. The maximum dry density shall be determined by AASHTO Test Designation: T 99, Method C. The finished base course and subgrade areas shall be smooth and uniform and true to the required grade and cross-section.

The surface of the grading plane at any point shall not vary more than 3/8 inch above or below the grade established by the Engineer and to a maximum irregularity not exceeding 3/8 inch under a 10-foot line longitudinally.

Finished base course and subgrade areas that do not conform to the above requirements shall be reshaped to conform to the specified tolerance and recompact. The Contractor shall repair at his expense any damage to the prepared gravel base course and subgrade caused by his operations or by use of public traffic. No material shall be placed upon the prepared finished gravel base course or subgrade until these areas are in a condition meeting the requirements specified.

All debris and loose rocks larger than 2 inches in maximum dimension shall be removed from the finished areas and disposed of. The trimmed and shaped areas shall be left in a neat and orderly condition.

(3) Measurement

Quantities of fine grading and compacting of gravel base course areas for sidewalks, wheelchair ramps, and drives, and for roadway and parking lot subgrade areas will be determined for payment in square yards by horizontal measurement of the areas actually fine graded and compacted.

The shaping and compacting of the gravel base and subgrade for roadway patches will not be measured for payment under this item of work.

(4) Payment

The contract price paid per square yard for ITEM 170., FINE GRADING AND COMPACTING shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete-in-place, as specified in these Specifications and as required by the Engineer.

Furnishing and applying an adequate supply of water will be considered as incidental to performing the specified work and no additional compensation will be allowed therefor.

SECTION 400

SUB-BASE, BASE COURSES, SHOULDERS, PAVEMENTS AND BERMS

EXTENT OF WORK

(1) Description

The items of work covered under this Section consist of furnishing all labor, materials, tools, and equipment required to construct roadway base courses, sidewalk gravel base courses, roadway pavements and pavement patches complete, including: gravel base course material; water for dust control; and bituminous concrete pavement material; all as required for the construction of the improvements and related construction. All in accordance with these Specifications and in close conformity with the lines, grades, thicknesses, and sections shown on the Contract Drawings or as established by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

ITEM 458.81	HIGH FRICTION SURFACE TREATMENT (GREEN) BIKE LANE	SQUARE FOOT
ITEM 458.82	HIGH FRICTION SURFACE TREATMENT (BRICK RED) MEDIAN	SQUARE FOOT

(1) Description

The work under these Items shall include the application of a high friction surface treatment, at the locations shown on the plans. Samples of color shades shall be submitted to the Engineer for selection of the actual color to be used.

(2) Materials

Material must be specifically designed for application onto asphalt or non-bituminous concrete surfaces such as cement concrete. Material must have a balance of properties that will ensure adhesion and movement on a flexible pavement, while providing excellent durability and color stability. Key properties include wear and crack resistance, color retention, adhesion, minimal water absorption and increased friction properties.

The material shall be a durable, colorized, slip resistant and skid resistant coating suitable for delineating areas for preferential use, such as bicycle lanes, bus lanes and other vehicular or pedestrian traffic uses.

A Certificate of Analysis from an independent recognized testing laboratory confirming performance as outlined above shall be made available upon request.

The Contractor shall install the high friction surface treatment in accordance with all manufacturers' installation and materials specifications. Copies of the manufacturer's installation procedures and materials specifications shall be provided to the Engineer for approval before placement of the surface treatment is allowed.

The high friction surface treatment must be composed of a two component, epoxy-modified, acrylic, waterborne coating specifically designed for application onto asphalt or non-bituminous concrete surfaces such as cement concrete, and is specially formulated to provide a safe, durable, long lasting color and texture to the pavement surface.

Table 1: Typical Properties of coating		
Characteristic	Test Specification	Coating
Solids by volume	ASTM D 2697	55%
Solids by weight	ATSM D 2369	68.90%
Density	ASTM D 1475	13.34 lbs/gal (1.599 kg/gal)

Material must be environmentally safe and meet EPA requirements for Volatile Organic Compounds (VOC).

The material shall be applied to the pavement surface using the method outlined in the product Application Instructions.

The pavement surface shall be dry and free from all foreign matter. Material shall be applied with a minimum of 4 spray passes.

Thickness (approx.)				
Spray Passes	Wet		Dry	
	mm	mil	mm	mil
4	0.87	34.3	0.48	18.9

Each coating application shall be spray applied and broomed to work the material into the surface. Subsequent layers shall be sprayed and rolled, using a 1in. to 1.5 in. nap roller or sprayed and broomed.

Each additional layer of coating material shall be the same color as the first and shall be allowed to dry completely before applying the next layer.

One container of coating will yield one layer covering approximately 700 square feet. See table below.

Spray Passes	Approx. coverage per unit	Approx. coverage per layer	Recommendation
4	175 ft ² (16.3 m ²)	700 ft ² (65.1 m ²)	Coating subjected to vehicular traffic

High friction surface treatment shall be applied only when the surface is dry and when the surface temperature is above 45 degrees F and rising. A lower temperature based on manufacturer's printed recommendations may be permitted when approved by the Engineer.

Coating must be 100% dry before opening to traffic. Air temperature, relative humidity and time will affect dry time. Substrate temperature and ambient wind conditions can also affect dry times. Reference the table below for typical dry times.

Coating Dry Times (Typical)		
Air Temperature	Relative Humidity	Time to dry (approx.)
60° F (15°C)	80%	8 hours
81° F (27°C)	57%	4 hours
120° F (49°C)	5%	2 hours

Performance Properties of Coating

Characteristic	Test Specification	Coating	
Dry Time (to record)	ASTM D 5895	35 min	
	23° C; 37% RH		
Taber Wear Abrasion	ASTM D 4060	0.98 g/1000 cycles	
Dry H-10 wheel	1 day cure		
Taber Wear Abrasion	ASTM D 4060	3.4 g/1000 cycles	
Wet H-10 wheel	7 day cure		
Accelerated Weathering Environment	ASTM G 15	ΔE=0.49 (brick color)	
	2,000 hrs (CIE Units)		
Hydrophobicity Water Absorption	ASTM D 570	8.3% (9 days immersion)	
Shore Hardness	ASTM D 2240	63 Type D	
Mandrel Bend	ASTM D 522-93A	¼ in @ 21° C	
Permeance	ASTM D 1653	3.45 g/m ² /hr (52 mils)	
VOC	EPA-24	18.7 g/l	
	ASTM D 3960-05		
Adhesion to Asphalt	ASTM D 4541	Substrate Failure	
Friction Wet	ASTM E 303	WP* coated	64
	British Pendulum Tester	WP* uncoated	57
		AC** coated	73
		AC** uncoated	60

*WP - test conducted on asphalt pavement in wheel path.

**AC - test conducted on asphalt pavement adjacent to curb.

(3) Method of Measurement

Quantities of high friction surface treatment will be determined for payment in square feet by horizontal measurement of High Friction Surface complete in place.

(4) Basis of Payment

The Contractor shall obtain in the name of the City of Chelsea the standard manufacturer's guarantee of all materials furnished under this Section where such guarantees are offered in the manufacturer's published product data.

The work under these items will be paid for at the contract unit price per square foot based on the measurement of the area of High Friction Surface complete in place, as determined by the Engineer.

The contract price shall include all material, labor and equipment required or incidental to the satisfactory completion of work.

ITEM 460.

HOT MIX ASPHALT PAVEMENT

TON

(1) Description

This work shall consist of furnishing, spreading, and compacting a plant-mixed bituminous concrete pavement, consisting of standard binder and top courses, to the thickness and dimensions and at the locations where directed by the Engineer and in accordance with the relevant provisions of Section 460., Class I Bituminous Concrete Pavement Type I-1 of the MassDOT Standard Specifications.

(2) Materials and Construction Methods

Bituminous concrete pavement materials and construction methods shall be in conformance with the requirements of Subsections 460.40 and 460.60 of the MassDOT "Standard Specifications" and the following:

The Contractor, if so directed by the Engineer, shall employ a testing laboratory approved by the Engineer to set the job mix formula, based on a Marshall Stability of 1,000 pounds with 50 blows and a flow of 8/100 to 14/100 inches. Two copies of the laboratory report shall be submitted to the Engineer. Asphalt cement shall have a penetration of 85-100.

Where new pavement ties to the existing pavement, the existing pavement shall be cut and excavated so that the new pavement is keyed to the existing pavement. No feathering of new pavement will be allowed. The method the Contractor uses to key new pavement to the existing pavement must be approved by the Engineer.

Prior to placing each course of the bituminous concrete pavement, an asphalt material shall be painted on all cut edges of the existing pavement.

(3) Measurement

Hot Mix Asphalt Pavement, shall be measured by the ton and shall be the actual and verified tonnage installed, complete-in-place and approved. The number of tons shall be measured by tickets delivered with each load. The tickets shall be signed by a certified weigher and shall be countersigned by the representative of the Engineer. The tickets shall clearly show the total, tare and net weights. Loads represented by tickets not showing the weights as specified shall not be accepted for payment.

(4) Payment

The unit price stated for ITEM 460., Hot Mix Asphalt Pavement shall be full compensation for all materials, equipment, tools, labor and work incidental thereto. No separate payment shall be made for asphalt cement or aggregate. Cutting, removal of existing pavement and painting the joints with an asphalt material at street tie-ins will not be paid for separately, but shall be included in the cost of the paving.

The furnishing of adequate and approved straight edges and labor for testing the finished surface; the furnishing of samples of bituminous mixture; and the labor and the equipment for obtaining samples in the field to be used for density tests shall be considered as incidental to the work and no additional payment will be allowed thereof.

ITEM 472.01

IMPRINT CROSSWALKS

SQUARE FOOT

(1) Description

The work under this item shall conform to the relevant provision of Section 120 of the MassDOT Standard Specifications and the following:

The work shall consist of the furnishing and installing of Imprint Crosswalk materials as part of the crosswalk installations as shown on the Contract Drawings and as required by the Engineer. The paving materials shall be composed of hot applied resin-based compound, formulated with a color stable pigment throughout, which can be surface textured to simulate brick, stone or masonry. The Contractor must be a manufacturer authorized applicator, experienced with this specialized pavement system.

(2) Materials

The Contractor shall obtain in the name of the City of Chelsea the standard manufacturer's guarantee of all materials furnished under this Section where such guarantees are offered in the manufacturer's published product data. These guarantees are in addition to, and not in lieu of, other liabilities which the Contractor may have by law or other provisions of the Contract Documents.

Grade 45	(Light to medium traffic volumes)
Average Temp. Range	25 - 113 degrees F
Wheel Tracking @ 113 F	less than 1 mm/hr
Density	2.12
Cone Flow Test (5 hrs. @ 194 F)	15% maximum
Plane Test (5 hrs. @ 194 F)	5% maximum
Indent @ 104 F	25 dmm maximum
Indent @ 122 F	N/A
Ash Content	90% maximum
Skid Resistance Value	55 – 70

The products used in this surfacing system shall meet the above material specifications and conform to the minimum following physical and performance properties:

Hot-applied resin-based compound developed specifically for use on bituminous or cement concrete, with superior adhesion, flexibility and abrasion resistance characteristics, as well as color stability, chemical resistance and scrub ability.

(3) Construction Methods

Pavement Removal

The work under this Section consists of precutting, removal and disposal of the pavement. This procedure shall be performed in the following general manner:

- The section(s) of pavement to be replaced shall be precut in neat straight lines by approved methods.
- When full depth excavation is not required, the existing pavement surface shall be removed to an approximate uniform depth of 0.75 inches.
- The Contractor will provide police protection when necessary. The contractor will be responsible for furnishing and placing a sufficient number of safety cones to adequately protect all work zones, and to insure the orderly flow of vehicular and pedestrian traffic.
- The Contractor shall immediately remove all residues resulting from this work. All excavated material(s) must be disposed of in a proper manner. There will be no additional compensation for the disposal of excavated materials.
- All work sites must be properly prepared in accordance with the appropriate material manufacturer's requirements.
- All work area(s) where the pavement has been removed must be left in a neat and clean condition, satisfactory to the City.

Texturized Decorative Surfacing

The Contractor shall be responsible for the preparation, placement and patterning of IMPRINT. This synthetic paving material shall be composed of a hot-applied, resin-based compound formulated with a color stable pigment throughout, which can be surface textured to simulate hand laid brick, stone and/or masonry. The contractor will be required to overlay IMPRINT in previously prepared recessed pavement surfaces as described in the Section above.

The contractor must be a manufacturer authorized applicator, experienced with this specialized system satisfactory to the City.

This work shall be performed in the following general manner:

- Using manufacturer prescribed methods and equipment, the contractor shall adequately heat and uniformly mix the IMPRINT material(s) together. Maximum heating temperature of the completed formulation is 440 degrees Fahrenheit.
- Color and pattern shall be as shown on the plans.
- The contractor shall then apply the heated, mixed IMPRINT material to the surface of a hardened, structurally sound bituminous concrete or cement concrete pavement, as directed. The IMPRINT material shall be spread to the desired build thickness (0.75 inches) using specialized ironing tools, heated sufficiently to smooth the surface to a state of readiness for texturizing.
- The color and surface pattern shall be in accordance with the details shown on the plans. Texturizing will begin immediately after leveling has occurred, while the material is still hot enough to allow the mold selected, to adequately penetrate the surface and create the desired pattern or form.
- Once the finished surface has cooled sufficiently, the application area may be opened to vehicular and/or pedestrian traffic.
- Any residue resulting from this work shall be removed and disposed of in a proper manner. The completed work area is to be left in a neat and clean condition, satisfactory to the City.
- The Contractor will provide police protection when necessary. The contractor will be responsible for furnishing and placing a sufficient number of safety cones to adequately protect all work zones, and to insure the orderly flow of vehicular and pedestrian traffic.
- Special care must be exercised by the Contractor during the operation of work to save from harm and injury, any structure, public or private, situated above or below the surface and lying within the scope of the project. If during the execution of the work, the contractor, through willfulness or carelessness, permits or causes any damage, the cost of satisfactory repair or replacement shall be the financial responsibility of the contractor.

Equipment Required

Contractor must possess and be familiar with the specialized machinery necessary to perform the procedures as outlined and contained within this completed technical specification package, including, but

not limited to, appropriate trucks, compressors, miscellaneous asphalt equipment, dispensers, applicators, cutters and/or specialized tools etc.

(4) Method of Measurement

Item 472.01 – Imprint Crosswalks shall be measured for payment per square foot, complete in place.

(5) Basis of Payment

Item 472.01 – Imprint Crosswalks shall be paid at the respective contract unit price bid per square foot, which price shall include all labor, material, equipment, mobilization, mock-up, and incidental costs required to complete the work.

There will be no additional compensation for saw cutting existing pavement, removal of existing pavement, or for the disposal of excavated materials or excess Imprint materials.

No deductions will be made for structures within the work area such as manholes, catch basins, or water covers.

ITEM 482.42

SAWING BRICK SIDEWALK

FOOT

(1) Description

The work under these items shall conform to the relevant provisions of Section 120 of the MassDOT Standard Specifications and the following:

The work shall include the sawcutting of brick sidewalk at the sidewalk limits shown on the plans, and as required by the Engineer.

(2) Construction Methods

The existing brick shall be sawcut through its full depth or to the elevation of the abutting proposed cement concrete sidewalk subgrade, whichever is lesser, where shown on the drawings, to provide a uniform, vertical surface for the proposed cement concrete wheelchair ramp joint with the existing sidewalk.

Sawcut edges which become broken, ragged or undermined as a result of the Contractor's operations shall be re-sawcut prior to the placement of abutting proposed sidewalk at no additional cost to the City.

(3) Measurement

Sawing brick sidewalk will be measured by the foot on the sidewalk surface complete in place.

(4) Basis of Payment

Sawing brick sidewalk will be paid for at the contract unit price per foot which price shall include all labor, materials, equipment and incidental costs required to complete the work.

Sawcutting required as part of the installation of waterworks, storm drains, electrical and traffic conduit, and curb will be included as part of those respective Items and will not be included in the price per foot for this Item.

SECTION 500

CURB

EXTENT OF WORK

(1) Description

The items of work covered under this Section consist of furnishing all labor, materials, tools, and equipment required to install new granite curb, remove and reset granite curb, all as required for the construction of the proposed improvements. All work shall be performed in accordance with these Specifications and in close conformity with the lines, grades, sections and details shown on the Contract Drawings or established by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

ITEM 509.	GRANITE TRANSITION CURB FOR WHEELCHAIR RAMPS - STRAIGHT	FOOT
ITEM 509.1	GRANITE TRANSITION CURB FOR WHEELCHAIR RAMPS - CURVED	FOOT

(1) Description

This work shall consist of furnishing and setting granite transition curb for wheelchair ramps on a gravel foundation in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as directed by the Engineer. The work under these items also includes the cutting and removal of bituminous concrete pavements and base courses, as required; and all other excavation except rock.

(2) Materials

All granite curb shall conform to the requirements of SECTION 501, CURB, CURB INLETS, CURB CORNERS AND EDGING of the "MassDOT Standard Specifications".

(3) Construction Methods

Construction methods for setting new transition curb shall conform to the requirements of Section 501., CURB, CURB INLETS, CURB CORNERS AND EDGING of the "MassDOT Standard Specifications".

All gravel required, whether for foundation or backfilling, and all excavation required, except rock excavation, shall be included in the respective curb item prices. No separate compensation shall be made for earth excavation or gravel base course material.

When setting curb in areas of sidewalk or wheelchair ramp construction, the Contractor shall be required to cut the existing pavement with a mechanical saw or some other method approved by the Engineer. The existing roadway pavement shall be cut in a straight line running parallel to, or concentric with, and a maximum distance of 18 inches from the final location of the curb, unless otherwise shown on the plans.

After the curb has been set on the required foundation, the Contractor shall be required to backfill the complete width of the trench on the roadway side of the curbstone with gravel base course material. The gravel backfill shall be placed and compacted in a manner approved by the Engineer. Unless otherwise

shown on the Contract Drawings, on top of the gravel shall be 3-1/2 inches below, and parallel to, the adjoining roadway surface.

(4) Measurement

GRANITE TRANSITION CURB FOR WHEELCHAIR RAMPS – STRAIGHT and GRANITE TRANSITION CURB FOR WHEELCHAIR RAMPS - CURVED will be measured, complete-in-place, by the foot, in accordance with the Contract Drawings, Standard Specifications, directions from the Engineer, and as specified herein.

(5) Payment

The unit prices stated shall be full compensation for furnishing and setting transition curb including cutting of existing pavement as required; for all excavation including pavement and cobblestones; for all trimming and cutting of tree roots; for furnishing and placing all gravel required to set curb, curb corners, curb inlets and transition curb; and for furnishing all labor, tools and any other equipment necessary to complete the work.

(1) Description

This work shall consist of removing granite curb of any type from its present location and/or grade and resetting it, and in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as required by the Engineer. The work under these items also includes the cutting and removal of bituminous concrete pavements and base courses, as required, and all other excavation except unclassified excavation.

(2) Construction Methods

Construction methods for curbing, including curb inlets and curb corners, removed and reset shall conform to the requirements of Section 580., Curb or Edging Removed and Reset or Removed and Stacked of the "Standard Specifications."

Minor tree roots and branches, less than 1-inch in diameter, interfering with setting or resetting of curbing, shall be carefully hand-pruned, trimmed or cut by the Contractor under the supervision of the Engineer or his designated representative.

Larger tree roots and branches, 1-inch in diameter and over, interfering with the setting or resetting of curbing shall be hand-pruned, trimmed or cut only by or under the direct supervision of a Massachusetts Licensed Arborist hired or employed by the Contractor. If more than 1/4 of the root zone of a tree is lost to construction, the Contractor shall consult with the arborist for a determination of the stability of the tree and report said determination immediately to the Engineer.

All gravel required, whether for foundation or backfilling, and all excavation required except rock excavation, shall be included in the respective curb item prices. No separate compensation shall be made for earth excavation or gravel base course.

When resetting curb in areas of sidewalk construction or reconstruction and existing roadway pavement that will be retained, the Contractor shall be required to cut the existing pavement with a mechanical saw or some other method approved by the Engineer. The existing roadway pavement shall be cut in a straight line running parallel to or concentric with, and according to the contract drawings.

After the curb has been reset on the required foundation, the Contractor shall be required to backfill the complete width of the trench on the roadway side of the curbstone with gravel base course material. The gravel backfill shall be placed and compacted in a manner approved by the Engineer.

Unless otherwise shown on the Contract Drawings, on top of the gravel shall be 3-1/2 inches below, and parallel to, the adjoining roadway surface.

(3) Measurement

Existing granite curb, removed and reset and/or removed, relocated and reset or transported and set, will be measured, complete-in-place, by the foot, in accordance with the "Standard Specifications", Contract Drawings, directions from the Engineer, and as specified herein.

(4) Payment

The prices stated shall be full compensation for the satisfactory removal and resetting (curved or straight, existing curb inlets, and existing curb corners), of granite curb to the proper line and grade, including cutting and removal of existing bituminous concrete pavements and bituminous concrete or cement concrete bases as required; for all excavation, except rock, but including all pavements, bases and cobblestones; for all trimming and cutting of tree roots; for furnishing and placing all gravel required; and for all other labor, tools and equipment that may be necessary to complete the work.

Cement concrete used where required and/or permitted by the Engineer in connection with the resetting of granite curbing will be considered incidental to this item.

Separate payment for removing and resetting and/or removing, relocating, and resetting of granite curb, or transporting and setting granite curb, will be made under these items, as follows:

ITEM 580. Granite Curb, Removed and Reset

(1) Description

This work shall consist of removing granite curb of any type from its present location and/or grade and discarding it, as shown on the Contract Drawings, as specified in these Specifications and as required by the Engineer. The work under this item also includes any excavation, as required to remove curb, except as included under ITEM 120., Earth Excavation.

(2) Construction Methods

Construction methods for curbing removed and discarded shall conform to the requirements of Section 580., Curb or Edging Removed and Reset; or Removed and Stacked or Removed and Discarded of the "MassDOT Standard Specifications."

All gravel required, whether for foundation or backfilling, and all excavation required except rock excavation, shall be included in the respective curb item price. No separate compensation shall be made for earth excavation or gravel base course.

(3) Measurement

Existing granite curb removed and discarded will be measured, complete-in-place, by the foot, in accordance with the "MassDOT Standard Specifications", Contract Drawings, directions from the Engineer, and as specified herein.

(4) Payment

The price stated per foot, shall be full compensation for the satisfactory removal and discarding (curved or straight, existing curb inlets, and existing curb corners), of granite curb, including cutting and removal of existing bituminous concrete pavements and bituminous concrete or cement concrete bases as required; for all excavation, except rock, but including all pavements, bases and cobblestones; for all trimming and

cutting of tree roots; for furnishing and placing all gravel required; and for all other labor, tools and equipment that may be required to complete the work.

SECTION 600

HIGHWAY GUARD, FENCES AND WALLS

EXTENT OF WORK

(1) Description

The work to be done under this Section requires that the Contractor furnish all labor, materials, tools, equipment and all other incidentals required for the construction of signage. All work shall be performed in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as required by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

ITEM 655.31

TRAIL MARKER

EACH

(1) Description

General

The work of this Section consists of all site signage and related items as indicated on the Drawings and/or as specified herein, and includes, but is not limited to, the following items:

A. Trail Marker Signs

Submittals

Product Literature and Shop Drawings: Prior to ordering the below listed materials, submit shop drawings and/or product literature to Landscape Architect for approval as follows. Do not order materials until Landscape Architect's approval has been obtained. Delivered materials shall closely match the approved shop drawings. Contractor shall submit complete shop drawings of each custom fabricated item and drawings indicating setting for all landscape signs in this Section. Include dimensioned drawings and schedules of all components with dimensions verified in the field where appropriate. Drawings shall show size and thickness of each member, type of material, method of connection and assembly, fabrication and erection tolerances for all connections, cuts, holes, bolts, and painting, and relation to finished grade along bottom of item.

Product Literature: Submit manufacturer's cut sheets with descriptive technical data for the following:

Exterior Signage Graphics: Exterior signage schedule in electronic media with spread sheet format. Spreadsheet shall include sign location, sign type, and message. The Landscape Architect will provide electronic graphic files to the fabricator at their request for use for required submittals and final construction.

Exterior Signage panel/product composition:

Manufacturer's installation instructions and cleaning instructions

Product Literature for Factory-Applied Metal Coatings: Submit galvanizer's product literature for coatings specified in this Section including test data.

Verification Samples for Factory-Applied Metal Coatings: Submit two 3 inch by 6 inch samples of factory-applied coatings and colors proposed for use for approval prior to coating application

Substitutions: If substitutions or other products are proposed, submit this specification signed by the firm proposing the other products, indication line-by-line comparison of the proposed substitution or equal product with test results. Substitutions proposed without comparison test results will not be accepted.

Certificate of Conformance: Provide certificate verifying that each item was prepared, coated, inspected, and repairs made in accordance with this specification.

Certificate of Compliance: That sign materials and fabrication in final constructed signs will meet the requirements of Massachusetts Building Code CMR 780 1611.0, 789 1611.12.2 Wind Load Requirements for Exterior Signs.

Shop Drawings: Approved Detail Drawings: At least 30 days prior to intended use, Contractor shall provide Drawings showing elevations of each type of sign; dimensions, details, and methods of mounting or anchoring; shape and thickness of materials; and details of construction and if one or two sided graphic panels. A schedule showing the location, each sign type, and message shall be included.

Provide fully realized (actual size) shop drawings for typical graphic sign types as shown on the Drawings. Shop drawings shall be full size color representations of the graphic signage designs as provided by the Landscape Architect for each sign to be manufactured. Submitted shop drawings shall be fully dimensioned showing materials, design, layout, and installation for review and approval of the following items:

Trail Marker Signs (blue)
Trail Marker Signs (green)

Samples

Provide the following sign material and framing samples for review and approval before construction.

Trail Marker Signs: (2) two 6" inch x 6" inch portion of painted metal sign panel: one in green, one in blue matching electronic graphic file provided by the Landscape Architect, finished with reflective film finish expected in final sign construction; (1) one 6" inch long portion of post with fasteners.

Replace samples as many times as necessary for approval before fabrication of remainder of exterior signage of each mounting/location type.

Referenced Standards

Where references are made in these Specifications or manufacturer's specifications to standard specifications, codes, etc., of the U.S. Government, State or local authorities, or professional and industrial societies and associations, the applicable portions thereof shall govern as fully as if they were printed in their entirety, herein, and shall include all revisions thereto issued as of the date of the Notice to Contractors pertaining hereto. Comply with the requirements of the following codes and industry standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern. The following references herein are made in accordance with the following abbreviations and all work under this Section shall conform to the latest editions as applicable:

ALUMINUM ASSOCIATION (AA)
AA DAF-45 (2003): Designation System for Aluminum Finishes

AMERICAN WELDING SOCIETY (AWS)
AWS C1.1M/C1.1 (2000): R 2006) Resistance Welding

AWS D1.1/D1.1M (2008): Structural Welding Code – Steel

ASTM INTERNATIONAL (ASTM):

ASTM A 1011/A 1011M (2008): Standard Specification for Steel, Sheet, and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

ASTM A 123/A 123M (2008): Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 36/A 36M (2008): Standard Specification for Carbon Structural Steel

ASTM A 653/A 653M (2008): Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM A 924/A 924M (2008a): Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process

ASTM B 209 (2007): Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

ASTM D 3841 (1997e1; R 2008): Standard Specification for Glass Fiber-Reinforced Polyester Plastic Panels

AASHTO: American Association of State Highway and Transportation Officials

CMR 780 Section 16100.0: Massachusetts State Board of Building Regulations and Standards - Wind Load.

The Standard Specifications: The Massachusetts Standards for Highways and Bridges, latest Edition and Amendments.

Qualifications of Manufacturers and Fabricators

Contractor shall submit verification to the Landscape Architect, which states that all proposed manufacturers of site furnishings have produced products of a similar nature and quality to that which is specified and that each manufacturer is capable of producing the quantity of site furnishings required by the contract within the time allocated in the project schedule.

Signage of the type specified shall be the standard product of a manufacturer regularly engaged in the manufacture of the products. Items of equipment shall essentially duplicate equipment that has been in satisfactory use at least 5 years prior to bid opening.

Metal Fabricator shall have a minimum of five years of experience in successfully producing metal fabrications similar to the specified items in comparable projects.

Welders shall be certified and shall have passed the AWS Qualification Test within the past 12 months.

Quality Assurance for Metal Work

Quality assurances for metal materials and construction methods:

Workmanship and finish shall be equal to the best practice of modern shops for each item of work. Exposed surfaces shall have smooth finish and sharp, well defined lines and arrises. Sections shall be well formed to shape and size with sharp lines and angles; curved work shall be sprung evenly to

dimensioned radii curves. Welding shall be in accordance with the Welding Code of the AWS. All welding, except as otherwise indicated, shall extend the entire length of joints. All welded face joints shall be ground and smooth. All welds shall be watertight. Ornamental metalwork shall be cut, drilled, countersunk, drain holes provided, and tapped as required for the attachment of other work where shown on the drawings or when instructions for such work are given on the shop drawings. Ornamental metalwork to be built in with concrete or masonry shall be of the form required for anchorage, or shall be provided with suitable anchors or expansion shields.

Quality assurances for factory-applied metal coatings:

Factory-applied metal coatings shall be performed in a facility acceptable to the coating manufacturer.

Submit samples of factory-applied coatings and colors proposed for use for approval prior to coating application as indicated in the Submittals section of this specification.

Substitution requests shall be accompanied by samples and coating manufacturer's written certification that coatings proposed for use will have the same appearance and service life as the specified coatings.

Handle and install materials with factory-applied coatings as recommended by coating manufacturer to prevent damage to coatings prior to and after installation.

Touch-up factory-applied metal coatings as recommended by coating manufacturer.

Coatings not matching approved submittals shall be removed and replaced at no additional expense to the Owner.

Performance Requirements

Structural Performance:

Provide completed assemblies which, when installed, comply with the following minimum requirements for structural performance without exceeding the allowable design working stress of the materials involved, including anchors and connections. Apply each load to produce the maximum stress in each respective component of each metal fabrication and record testing data.

Sign panels, posts and attachments for all signs including Trail Markers shall withstand wind load requirements per Massachusetts Building Code article CMR 780.1611.0 for Exposure B, Zone 3 (Chelsea, MA), 1611.12.2.

Trail Marker Sign Post Connection: Ensure that side rail/flange assembly provides maximum support (overlap) at post sleeves and still allow for line and grade adjustments at joint during field assembly.

The Contractor is encouraged to submit any proposed alterations to the structural design or operating durability of the metal elements for approval by the Landscape Architect.

Quality Assurance

Contractor shall demonstrate a minimum of five successful years experience in similar work and shall attend a pre-landscape construction conference at Project site with the Landscape Architect, Field Engineer and Owner in order to review landscape construction procedures, site conditions, and submittal

requirements required in the Work of this Section, before any products are submitted for review and approval, or landscape construction commences.

Product Handling and Storage

Deliver exterior signage in original sealed containers marked with name of manufacturer and identification of contents. After delivery store materials under waterproof covers on planking clear of ground and protect from handling damage dirt, stain, water and wind.

Take all necessary precautions to protect all items from moisture, chipping, cracking, or other damage, during the transportation of these materials to the project, unloading and storage on the site. After delivery take all necessary precautions to prevent all items from chipping, cracking, construction dust and debris, or damage of any kind. Damaged units will not be allowed to be installed and should any damage units be found in constructed work, such units shall be removed immediately and replaced with new units, and the Contractor shall assume all expenses incurred.

Stored materials shall be adequately protected against moisture by (1) stacking in such a manner as to allow a complete circulation of air under each stack, and (2) covering each stack, top and sides with a waterproof paper or membrane. Coverings shall remain in place at all times, when not working from the particular stack.

Warranty

Manufacturer's standard performance guarantees or warranties warrants that under normal wear and use the workmanship and materials used in the exterior signage purchased from the Manufacturer will meet the standards set forth on the applicable specification materials and that the product will not delaminate, peel, blister, crack or fade and sign posts, fasteners and other attachments shall perform as specified for a period ten (10) full years from the date of purchase.

In the event that the exterior signage product does not perform as warranted:

Manufacturer shall be allowed to conduct an on-site inspection and investigation, or be provided digital images of defects

Manufacturer shall work directly with the end-user to resolve any warranty matter,

The sole remedy will be the repair or replacement of the defective product at the sole discretion of the Manufacturer, and/or

The repair or replacement by Manufacturer shall be limited to the remanufacture and shipment of the replacement or repaired product to the site of the end-user's product.

Provide warranty that all materials furnished and work executed under this item shall comply with Specifications and authorized changes.

(2) Materials

Aluminum Trail Marker Sign

Chelsea Greenway Trail Marker Sign dimensions, details, materials, message content, color, and design of signage shall be as shown on the Drawings.

All signs shall be fabricated from a 12 Gauge (0.080”), 18” diameter (circular), 6061 T-6, painted Aluminum.

Front of sign shall have a high-reflective, prismatic sheet manufactured by 3M or approved matching equal, applied to face per manufacturer’s instructions. Rear of sign shall be painted in solid color to match front sign color.

Trail Marker Sign Posts and Foundations shall be installed in accordance with Item 847.1, Sign Support (Not Guide) and Route Marker with 1 Breakaway Post Assembly – Steel.

Trail Marker Sign Fixing: Signs shall be fixed to posts at top and bottom of sign using and Stainless Steel Bolt, Nuts, and Neoprene Washers. Bolt head shall be located on front of sign.

(3) Execution

Inspections

Contractor shall request that Landscape Architect inspect construction with 48 hours notice for the following items:

Site samples and/or field mock-ups of site improvements

All concrete footings,

Prepared sub-grade and base course limits, and elevations

Layout of all Site Signs.

(4) General Requirements

All site furnishings shall be fabricated and fastened in accordance with existing fabrications and fastenings or as indicated on the Drawings. All site furnishings shall be installed in a level, plumb condition, true to the lines and grades shown on the Drawings.

All welding procedures shall conform to the current standards of the AWS. All welds shall be as designated on the Drawings and shall be ground smooth and flush to a neat finish. All welds shall be watertight and care shall be taken to minimize distortion due to heat. Metal shall not be galvanized nor color finished prior to completing all welding and grinding of welds.

The Contractor shall be responsible for timing the delivery of all items so as to minimize on-site storage time prior to installation. All stored materials and items must be protected from weather, careless handling and vandalism.

Shim all bolt connections as necessary and secure bolts. Exposed bolts shall be fastened with an accepted semi-permanent adhesive to protect against vandalism.

Contractor shall handle, pack, and ship items in such a manner as to minimize damage to the finish. Upon arrival at job site it is the Contractor's responsibility to take equal precautions. Since some surface

damage may occur, suitable touch-up material shall be readily available to repair any damage immediately.

Steel fabrication shall be accomplished using the highest standards of workmanship. Individual steel pieces to be welded shall be saw cut and carefully fitted together. All connections shall be full welded and ground flush and smooth. All fabricated steel items shall be fine sanded throughout prior to finishing to produce a high standard of surface smoothness. All surfaces and connections shall be without visible grinding marks, surface differentiation or variation.

Gravel borrow base and backfill for site furnishings shall be installed according the Drawings and in conformance with the construction methods SITE PAVING and EXCAVATION and this Section.

All existing surface material shall be replaced by the contractor after sign installation at no additional cost. Restoration of existing surface is incidental to sign installation.

(5) Measurement

Measurement of all Signs - Sign Panels, Painted and Attachments shall be per EACH Sign (including replacement of existing surface material), complete in place.

Measurement for Trail Marker Sign Posts will be included under Item 847.1, Sign Support (Not Guide) and Route Marker with 1 Breakaway Post Assembly – Steel.

Excavation, base materials, spreading and backfill operations required to install site improvements will be measured incidental to each item and will not be separately measured.

TRAIL MARKER SIGN shall be measured per EACH and shall include all materials, transportation and labor required to install signs complete in place.

(6) Payment

Work of this Section will be paid for at the respective Contract Unit Prices at the quantities indicated and will be full compensation for all labor, materials, equipment and miscellaneous items necessary to complete the Work in a satisfactory manner.

Posts for Item 655.31, Trail Marker, will be paid for under Item 847.1, Sign Support (Not Guide) and Route Marker with 1 Breakaway Post Assembly – Steel.

SECTION 700

SIDEWALK PAVEMENTS AND INCIDENTAL WORK

EXTENT OF WORK

(1) Description

The work to be done under this Section requires that the Contractor furnish all labor, materials, tools, equipment and all other incidentals required for the construction of cement concrete sidewalks and wheelchair ramps. All work shall be performed in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as required by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

ITEM 701.2

CEMENT CONCRETE WHEELCHAIR RAMP

SQUARE YARD

(1) Description

This work shall consist of constructing cement concrete wheelchair ramps on suitably prepared gravel base course in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as directed by the Engineer.

(2) Materials and Construction Methods

Materials and construction methods for proposed cement concrete wheelchair ramps shall be in accordance with relevant provisions and requirements of Section 701., SIDEWALKS, WHEELCHAIR RAMPS AND DRIVEWAYS of the "MassDOT Standard Specifications" and the following. Cement for concrete shall be Type II as specified in Section M4.02.01 of the "MassDOT Standard Specifications". Cement concrete for sidewalks shall be air-entrained 4,000 psi, 3/4", 610, as specified in Section M4.02.00 of the "MassDOT Standard Specifications". Detectable warning panels shall be installed in accordance with MassDOT Construction Standard Drawing E 107.6.5R dated March 2012. All detectable warning panels shall be installed with a concrete base.

Detectable warning panels shall be "brick red" color and shall be approved by the City of Chelsea and the Engineer prior to installation.

The proposed cement concrete wheelchair ramps shall be 4 inches thick. Forms for backing of cement concrete sidewalks shall not be less than 2" x 4" lumber and shall be removed after the sidewalk has set.

Preformed expansion joint filler shall be placed adjacent to or around all structures as directed by the Engineer.

The Contractor shall excavate the materials in the sidewalk areas to a depth of four inches below the finished grade of the proposed sidewalks. If the Engineer deems the material below the above specified depths suitable for a sidewalk base, then the Contractor shall grade and compact the wheelchair ramp areas 4 inches below, and parallel to, the finished grade of the ramps.

If the Engineer deems the materials below the above specified depths unsuitable for sidewalk base, then the Contractor shall excavate to the depth directed by the Engineer. The unsuitable materials removed shall be replaced with gravel base course material.

The top of the compacted gravel base course materials shall be 4 inches below and parallel to the finished grades of the proposed wheelchair ramps.

Minor tree roots and branches, less than 1-inch in diameter, interfering with the construction of sidewalks and wheelchair ramps, shall be carefully hand-pruned, trimmed or cut by the Contractor under the supervision of the Engineer or his designated representative.

Larger tree roots and branches, 1-inch in diameter and over, interfering with the construction of sidewalks and wheelchair ramps, shall be hand-pruned, trimmed or cut only by or under the direct supervision of a Massachusetts Licensed Arborist hired or employed by the Contractor. If more than 1/4 of the root zone of a tree is lost to construction, the Contractor shall consult with the arborist for a determination of the stability of the tree and report said determination immediately to the Engineer.

Excavation of existing bituminous concrete, brick, and cement concrete sidewalks and driveways which are being replaced by cement concrete wheelchair ramps shall be measured and paid for under ITEM 120., EARTH EXCAVATION.

Any other excavation in the areas of proposed cement concrete sidewalks shall be measured and paid for under ITEM 120., EARTH EXCAVATION.

(3) Measurement

Quantities of cement concrete wheelchair ramps will be measured in square yards as the horizontal surface area of sidewalk constructed, complete-in-place.

(4) Payment

The unit price per square yard for ITEM 701.2, CEMENT CONCRETE WHEELCHAIR RAMP shall be full compensation for furnishing, placing and curing the cement concrete; installation of detectable

warning panels; for constructing joints as required by the Engineer; and for furnishing all labor, materials and incidentals required to place and cure the cement concrete.

Excavation shall be paid for as described hereinbefore and Section 100 of these Specifications.

Gravel required for base, or gravel required to backfill areas where unsuitable materials have been removed, shall be paid for under ITEM 151., GRAVEL BORROW – TYPE C.

Grading, shaping and compacting the surface of the base course material for the construction of wheelchair ramps shall be measured and paid for as provided under ITEM 170., FINE GRADING AND COMPACTING.

Detectable warning panels are considered incidental to the construction of new wheelchair ramps as part of Item 701.2 in which they are being installed and no additional payment shall be made therefore.

Compensation for this item shall be paid for at the contract unit price per square yard. Price shall include all labor, materials, equipment, transportation and incidental cost necessary to complete the work to the satisfaction of the Engineer.

SECTION 800

TRAFFIC CONTROL DEVICES

EXTENT OF WORK

(1) Description

The items of work covered under this Section consist of furnishing all labor, materials, tools, and equipment required to furnish and apply thermoplastic reflectorized pavement markings, to furnish and install regulatory and warning signs and posts, to furnish and install a High Visibility Flashing Warning System, all at the locations shown on the Contract Drawings and as designated by the Engineer. All excavation, fine grading, gravel, compaction, material disposal and safety controls is included in the noted work description. All work shall be done in accordance with these Specifications or as required by the Engineer.

Unless otherwise amended by these Technical Specifications or the Contract Drawings, all work shall conform to the requirements of the applicable "Sections" of The Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Highways and Bridges, 1988 Edition, including any and all amendments or addenda thereto, hereinafter referred to as the "MassDOT Standard Specifications".

(1) Description

The work to be done under this Item consists of furnishing and installing a Fire Station Confirmation Strobe System at the Fire Station located at the intersection of Fay Square/ Chestnut Street.

The work will consist of the installation of two red flashing strobes on the exterior of the fire department, on either side of the garage doors. The strobes shall be located approximately 7 feet above the sidewalk. The strobe will be activated by a push button located within the fire station. The activation button will be located at a location to be determined by the Chelsea Fire Department. The Contractor shall coordinate all work with both the Chelsea Fire Department and the Chelsea Department of Public Works to ensure that the work does not impact Fire Station operations. All necessary permits, including permits from the Electrical Inspector in the Inspectional Services Department, will be secured by the Contractor and will be considered incidental to this item.

The electrical work for the powering and wiring of the two red flashing strobes shall consist of the following:

1. In the existing electrical panel provide a new single phase, 20 ampere trip, 120v circuit breaker.
2. Provide three number 10 AWG THHN conductors in a 3/4 inch Electrical Metallic Tubing (EMT) from the electrical panel to a push button and strobe control box. The length of the conduit run is approximately 150 feet.
3. Provide three number 10 AWG THHN conductors in a 3/4 inch EMT conduit from the control box to the two strobes. The length of the conduit run is approximately 200 feet and run internal to station.
4. Where the raceways penetrate the exterior walls, seal the penetrations watertight.
5. Mount strobes on electrical boxes recommended by the strobe manufacturer.

(2) Materials and Construction Methods

Within 30 days following execution of the Contract, the Contractor shall submit shop drawings, a list of equipment, and manufacturer's equipment specifications to the Engineer and the City of Chelsea Fire Department.

No work shall be commenced by the Contractor 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 to the Engineer a certificate of compliance by the manufacturer for all materials purchased from the manufacturer.

Preemption Confirmation Light

Two confirmation lights shall be provided and mounted on either side of the Fire Station garage doors. It should be located approximately 7 feet above the sidewalk. The light shall be weather tight and consist of a double flash clear (red) strobe which shall be illuminated for a predetermined period of time following activation. The indicator light shall meet NEMA and IMSA standards. It shall be capable of flashing at a rate of 60 to 75 flashes per minute. Candela intensity shall be a minimum of 1,000 for clear lenses.

Regulations and Code

All electrical equipment shall conform to the standards of the NEMA and U.L. wherever applicable. In addition to the requirements of the Contract Drawings, "MassDOT Standard Specifications", and these Technical Specifications, all materials and workmanship shall conform to the requirements of the NEC, ASTM, OSHA and/or ANSI, all applicable State and Local codes and Department of Public Safety regulations.

Optical and Light Output Requirements

The minimum luminous intensity values and light output shall be maintained within the rated input voltage of 117 Volts AC.

Fine Tuning, Adjustment and Testing Period

After the Contractor has finished installing all associated equipment, the fine tuning, adjusting and testing period shall begin. During this period, the Contractor, will make necessary adjustments and conduct tests to ensure safe and efficient operation of the equipment. This period shall not last for more than 30 days. No request for final acceptance will be considered until successful completion of the testing period.

Guarantees of the Confirmation Strobe System

The Contractor shall diagnose (troubleshoot) the system and, at no additional charge to owner, replace any part of the confirmation strobe system equipment installed by the Contractor that is found to be

defective in workmanship, material, or manner of functioning within six months from date of final acceptance of the installation under this Contract.

Warranty

All components of the preemption system specified herein, shall be warranted by the manufacturer to be free of defects in materials and workmanship for a period of two years from the date of delivery or one year from the date of installation, whichever occurs first.

The Contractor shall repair or replace, free of charge to the City of Chelsea, any part that fails in any manner during the warranty period, and six months after final acceptance of the project by the Owner.

(3) Measurement and Payment

Fire Station Confirmation Strobe System shall be measured per lump sum per location. Fire Station Confirmation Strobe System will be paid for at the Contract Lump Sum price for Item 819.53, which price shall include all labor, materials, conduit, wire, fittings, breaker, supports, electrical boxes, strobes, control box, push button, testing, equipment, securing necessary permits, and incidental costs to complete the work.

(1) Description

The work included under this Item consists of removing existing light pole and luminaire and resetting the light pole and luminaire at the new finished elevation of the reconstructed sidewalk as required by the Engineer. All conduit and wiring connecting to the light pole base or existing foundation shall be carefully protected during the work and relocated as required. Gravel backfill shall be placed as required to adjust the foundation to the new elevation or backfill the new foundation if necessary. A new pull box will be installed for connecting the light to the electrical distribution system in accordance with City Standards. All necessary permits, including permits from the Electrical Inspector in the Inspectional Services Department, will be secured by the Contractor and will be considered incidental to this item.

(2) Materials and Construction Methods

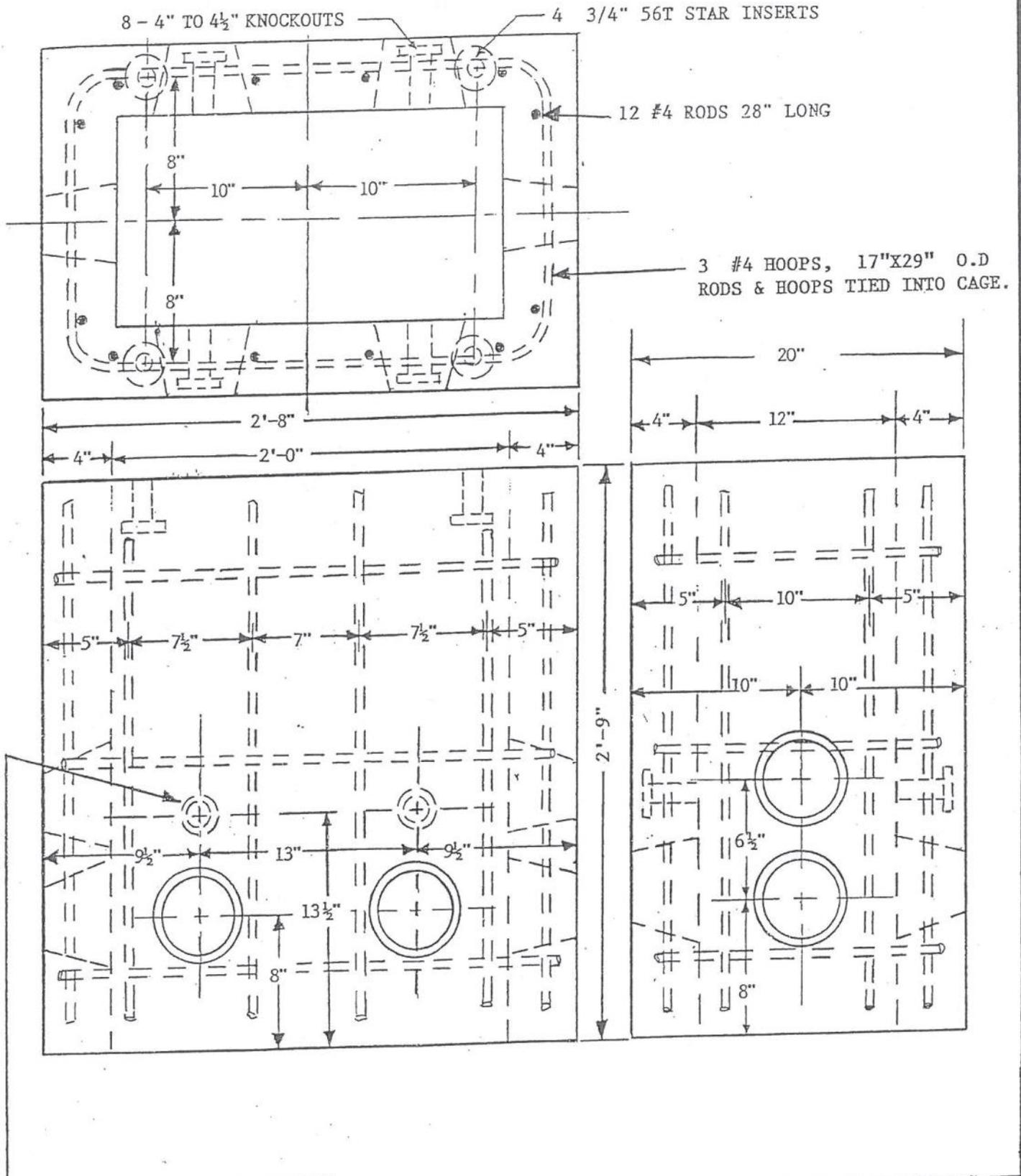
The Contractor shall be responsible for becoming familiar with the existing lighting equipment, foundation, and installation and shall document it prior to removing. The lighting pole and luminaire shall be reset using the same type of installation as the existing lighting pole. At the Contractor's option, the foundation for the lighting pole can be reused or replaced, but whichever is chosen the same type of foundation shall be used in the new installation.

The Contractor will handle the lighting pole and luminaire with care to avoid causing any damage to it. The pole and luminaire shall be stored in a secure location and be protected from damage.

(3) Measurement and Payment

The unit price stated for ITEM 823.72., LIGHTING POLE AND LUMINAIRE ADJUSTED, is full compensation for all labor, excavation, gravel, material, new pull box, wiring, backfilling, equipment, securing necessary permits, and incidental costs required to complete the work.

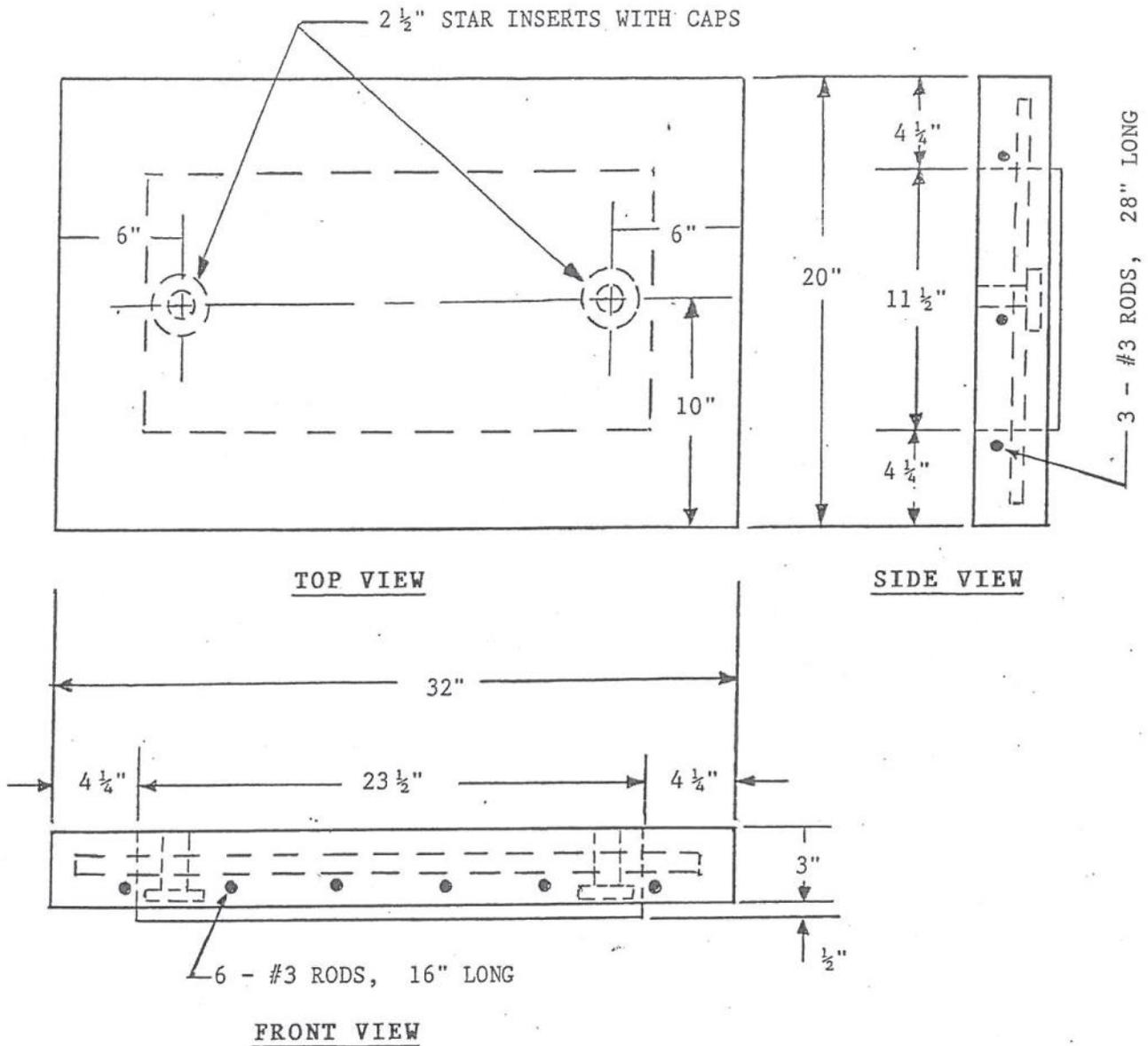
MATERIAL SPECIFICATION



4 3/4" 55 T STAR INSERTS
1 OVER EACH KNOCKOUT ON LONG SIDE

MATERIAL SPECIFICATION
PULLBOX PRE-CAST CONCRETE
REGULAR DEPTH.
SPEC.# PBPCRD-200
Date: November 2007

MATERIAL SPECIFICATION



NOTE: NOT TO SCALE

THIS DRAWING IS FOR GENERAL PURPOSE ONLY, NOT FOR MANUFACTURING PURPOSES.

MATERIAL SPECIFICATION
PRE-CAST CONCRETE PULLBOX COVER
SPEC.# GPCPB
Date: November 2007

ITEM 832. WARNING-REGULATORY AND ROUTE MARKER- SQUARE FOOT
ALUMINUM PANEL (TYPE A)

(1) Description

The work to be done under this item consists of furnishing and installing warning and regulatory signs at the locations and in accordance with the details shown on the Contract Drawings, as specified in these Specifications and as directed by the Engineer.

(2) Materials, Fabrication and Erection

Materials, fabrication and erection of sign panels shall conform to the relevant provisions and requirements of SECTION 828, TRAFFIC SIGNS of the "MassDOT Standard Specifications", and the following:

Warning and regulatory signs shall be aluminum panel, Type A.

Sign Panels

- All sign panels shall have "High Intensity Encapsulated lens Reflective Sheeting" in accordance with Subsection M9.30.2.
- Aluminum alloy 6061-T6 panels with a thickness of 0.08 inches shall be used for all sign panels up to 20 square feet in area.
- Aluminum alloy 5052-H-38 with a thickness of 0.08 inch is an acceptable alternative to alloy 6061-T6, if it meets the flatness tolerance of the 6061-T6 alloy.

Hardware

Mount signs on P5 post (ITEM 847.1) with appropriate hardware. Bands, bolts, nuts and washers shall be galvanized steel or 18/8 stainless steel.

(3) Measurement and Payment

Quantities of warning and regulatory signs furnished and erected, complete-in-place, will be measured by the square foot of sign panel.

The unit price stated for ITEM 832., WARNING-REGULATORY AND ROUTE MARKER-ALUM. PANEL (TYPE A), is full compensation for fabricating, furnishing, erecting, and attaching the sign panels, including all labor, materials (inclusive of mounting hardware), tools and equipment incidental to completing of the signs as specified.

ITEM 852.

SAFETY SIGNING FOR TRAFFIC MANAGEMENT

SQUARE FOOT

(1) Description

Safety Signing for Traffic Management consists of furnishing, positioning, repositioning, maintaining and removing as needed and/or as required: regulatory, warning, and guide signs together with their supports.

(2) Materials and Construction Methods

The materials and construction methods used for Safety Signing for Traffic Management shall be in conformance with the requirements of Subsections 850.40, 850.42, and 850.62 of Section 850, Traffic Controls for Construction and Maintenance Operations of the "MassDOT Standard Specifications".

(3) Measurement and Payment

The work shall be measured and paid on a square foot basis, in conformance with the requirements of Subsections 850.80 and 850.81 of Section 850, Traffic Controls for Construction and Maintenance Operations of the "MassDOT Standard Specifications". The price per square foot shall include full compensation for all labor, equipment, tools, and other incidentals required for the satisfactory completion of the work as outlined in these Specifications.

ITEM 853.1

PORTABLE BARRICADE TYPE III

EACH

(1) Description

The work shall consist of furnishing, installing, moving, maintaining, and removing portable barricades type III where indicated on the plans and as required by the Engineer.

(2) Materials and Construction Methods

The materials and construction methods used for safety signing for construction operations shall be in conformance with the requirements of Subsections 850.40, 850.50 and 850.63 of Section 850, Traffic Controls for Construction and Maintenance Operations of the "MassDOT Standard Specifications".

(3) Measurement and Payment

The work shall be measured and paid for per each item based on actual count, in conformance with the requirements of Subsections 850.80 and 850.81 of Section 850, Traffic Controls for Construction and Maintenance Operations of the "MassDOT Standard Specifications". The price per each item shall include full compensation for all labor, equipment, tools, and other incidentals required for the satisfactory completion of the work as outlined in these Specifications.

(1) Description

Pavement Marking Removal consists of removing existing pavement markings as required or as requested by the Engineer.

(2) Construction Methods

Pavement marking removal methods shall not cause damage to the pavement or cause drastic change in texture, which could be construed as delineation at night, and shall be approved by the engineer.

Pavement Markings shall be removed to the fullest extent possible by an approved method. Any damage to the pavement or surfacing caused by pavement marking removal shall be repaired by the Contractor at his expense by methods acceptable to the Engineer. Approved methods include but are not limited to:

- Sand blasting using air or water
- High pressure water
- Steam or superheated water
- Mechanical devices such as grinders, sanders, scrapers, scarifiers and wire brushes.

Painting over a pavement marking line by use of asphaltic liquids or paints will not be permitted.

Pavement markings shall be removed before any change is made in the traffic pattern.

Material deposited on the pavement as a result of removing markings shall be removed as the work progresses. Accumulations of sand or other material which might interfere with drainage or could constitute a hazard to traffic will not be permitted.

Where blast cleaning is used for the removal of pavement markings and such removal operation is being performed within 10 feet of a lane occupied by traffic, the residue including dust shall be removed immediately after contact between the sand and the surface being treated. Such removal shall be by a vacuum attachment operating concurrently with the blast cleaning operation, or by other methods approved by the Engineer.

(3) Measurement and Payment

The work shall be measured and paid on a square foot basis, in conformance with the requirements of Subsections 850.80 and 850.81 of Section 850, Traffic Controls for Construction and Maintenance Operations of the "MassDOT Standard Specifications". The price per square foot shall include full compensation for all labor, equipment, tools, and other incidentals required for the satisfactory completion of the work as outlined in these Specifications.

ITEM 859.

REFLECTORIZED DRUM

DAY

(1) Description

The work to be done under this item will conform to the relevant provisions of Section 850 of the Standard Specifications and the following:

Only plastic drums will be utilized on this project. Plastic drums shall not be less than 18" in any diameter transverse to the direction of traffic flow, nor less than 14" in any diameter with one flat surface for resistance to roll.

Use of flexible reflective sheeting is required on all plastic drums as per the Massachusetts Standard Drawings for Signs and Supports, 1990, as shown on page 52, and as shown in these Specifications.

Drums shall conform to the requirements of NCHRP 350.

(2) Measurement and Payment

Reflectorized Drums, with or without lights, will be paid for at the Contract bid price per Drum-Day. Payment will be made at the unit price for any portion of a day which these devices were actually used on the project.

ITEM 864.04	PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC)	SQUARE FOOT
ITEM 865.1	CROSSWALKS AND STOP LINES REFLECTORIZED WHITE (THERMOPLASTIC)	SQUARE FOOT
ITEM 866.04	4 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FOOT
ITEM 867.04	4 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)	FOOT

(1) Description

This work shall consist of furnishing materials and application of reflectorized thermoplastic pavement markings in accordance with the Contract Drawings, as specified in these Specifications, and where required by the Engineer. The materials for, and the application of reflectorized thermoplastic pavement markings shall be in conformance with the applicable provisions and requirements of Section 860., ReflectORIZED Pavement Markings of the "MassDOT Standard Specifications", except as amended herein.

(2) Construction Methods

Pavement markings installed within the roadway shall be reflectorized thermoplastic markings.

(3) Measurement and Payment

Pavement marking lines are to be paid for based on the actual length of lines or area of markings applied in accordance with the Contract Drawings and as specified herein under the various items of the Contract. The length of lines and areas of markings will be obtained in accordance with the relevant provisions of Subsection 860.80 of the " MassDOT Standard Specifications".

(1) Description

The work to be done under this item consists of the dismantling, removing, transporting and stacking of existing warning and regulatory sign panels.

(2) Construction Methods

The sign panels shall be removed, transported, and stacked where directed by the Engineer at the City Yard of the Chelsea DPW located in Chelsea, MA.

Incidental to this item shall be the removal and disposal of the sign post as directed by the Engineer.

The existing signs shall not be removed until the new signs and structures replacing them are ready for traffic, unless otherwise directed by the Engineer.

The Contractor will be held responsible for any damage to the sign panels during his operations.

(3) Measurement and Payment

The contract price bid for ITEM 874.4, TRAFFIC SIGNS REMOVED AND STACKED, shall include full compensation for dismantling, removing, transporting, and stacking of the sign panels, and the furnishing of all labor, materials, tools, equipment and incidentals for the removing and stacking of traffic signs including the removing and disposal of sign posts as required or directed.

ITEM 877.1

SIGN POST REMOVED AND DISCARDED

EACH

(1) Description

The work to be done under this item consists of the dismantling, removing, and disposing of existing sign posts, where indicated on the Contract Drawings or required by the Engineer.

(2) Construction Methods

Removal of sign posts will include any required excavation and or saw-cutting of the existing sidewalk required to remove the post. Once the post is removed, the remaining void will be backfilled with gravel and, if in the existing sidewalk, will be repaired with 4" cement concrete as required by the Engineer.

(3) Measurement and Payment

The contract price bid for ITEM 877.1, SIGN POST REMOVED AND DISCARDED, shall include full compensation for dismantling, removing, and disposing of the sign post, and the furnishing of all labor, materials, tools, equipment and incidentals for excavation, saw-cutting, and concrete sidewalk repairs as required to remove the sign post.

SCHEDULE OF PRICES
 CITY OF CHELSEA / CHELSEA, MASSACHUSETTS
 CONSTRUCTION OF THE CHELSEA GREENWAY ON-ROAD IMPROVEMENTS

Item No.	Approx. Quantity	Item with Unit Bid Price Written in Words	Unit Price		Amount	
			Dollars	Cents	Dollars	Cents
120.	13	Earth Excavation, at _____ Per Cubic Yard				
151.	9	Gravel Borrow – Type C, at _____ Per Cubic Yard				
170.	40	Fine Grading and Compacting, at _____ Per Square Yard				
458.81	2,800	High Friction Surface Treatment (Green) Bike Lane, at _____ Per Square Foot				
458.82	3,500	High Friction Surface Treatment (Brick Red) Median, at _____ Per Square Foot				
460.	3	Hot Mix Asphalt Pavement, at _____ Per Ton				
472.01	1,800	Imprint Crosswalks, at _____ Per Square Foot				
<i>CARRIED FORWARD</i>						

SCHEDULE OF PRICES
 CITY OF CHELSEA / CHELSEA, MASSACHUSETTS
 CONSTRUCTION OF THE CHELSEA GREENWAY ON-ROAD IMPROVEMENTS

Item No.	Approx. Quantity	Item with Unit Bid Price Written in Words	Unit Price		Amount	
			Dollars	Cents	Dollars	Cents
482.42	16	Sawing Brick Sidewalk, at _____ _____ Per Foot				
509.	21	Granite Transition Curb for Wheelchair Ramps - Straight, at _____ _____ Per Foot				
509.1	5	Granite Transition Curb for Wheelchair Ramps - Curved, at _____ _____ Per Foot				
580.	12	Granite Curb, Removed and Reset, at _____ _____ Per Foot				
594.	35	Curb Removed and Discarded, at _____ _____ Per Foot				
655.31	28	Trail Marker, at _____ _____ Per Each				
701.2	30	Cement Concrete Wheelchair Ramp, at _____ _____ Per Square Yard				
<i>CARRIED FORWARD</i>						

SCHEDULE OF PRICES
 CITY OF CHELSEA / CHELSEA, MASSACHUSETTS
 CONSTRUCTION OF THE CHELSEA GREENWAY ON-ROAD IMPROVEMENTS

Item No.	Approx. Quantity	Item with Unit Bid Price Written in Words	Unit Price		Amount	
			Dollars	Cents	Dollars	Cents
819.53	1	Fire Station Confirmation Strobe System, at _____ _____ Per Lump Sum				
823.72	1	Lighting Pole and Luminaire Adjusted, at _____ _____ Per Each				
832.	295	Warning-Regulatory and Route Marker – Alum. Panel (Type A), at _____ _____ Per Square Foot				
847.1	44	Sign SUP (N/ Guide)+RTE MKR w/ 1 BRKWAY Post Assembly - Steel, at _____ _____ Per Each				
852.	360	Safety Signing for Traffic Management, at _____ _____ Per Square Foot				
853.1	5	Portable Barricade Type III, at _____ _____ Per Each				
854.1	1,550	Pavement Marking Removal, at _____ _____ Per Square Foot				
859.	840	Reflectorized Drum, at _____ _____ Per Day				
<i>CARRIED FORWARD</i>						

SCHEDULE OF PRICES
 CITY OF CHELSEA / CHELSEA, MASSACHUSETTS
 CONSTRUCTION OF THE CHELSEA GREENWAY ON-ROAD IMPROVEMENTS

Item No.	Approx. Quantity	Item with Unit Bid Price Written in Words	Unit Price		Amount	
			Dollars	Cents	Dollars	Cents
864.04	1,845	Pavement Arrows and Legends Reflectorized White (Thermoplastic), at _____ _____ Per Square Foot				
865.1	555	Crosswalks and Stop Lines Reflectorized White (Thermoplastic), at _____ _____ Per Square Foot				
866.04	3,350	4 Inch Reflectorized White Line (Thermoplastic), at _____ _____ Per Foot				
867.04	1,550	4 Inch Reflectorized Yellow Line (Thermoplastic), at _____ _____ Per Foot				
874.4	14	Traffic Sign Removed and Stacked, at _____ _____ Per Each				
877.1	4	Sign Post Removed and Discarded, at _____ _____ Per Each				
<i>ESTIMATED TOTAL CONTRACT PRICE</i>						

Bidder Information Form

Bid for **ON-ROAD SECTION OF THE CHELSEA GREENWAY**
(To be first page of Bid)

Name of Company:

Address:

Telephone #:

Fax #:

Email Contact:

Is the Company a:

Corporation ____

Partnership ____

Sole Proprietorship ____

Publicly Held ____

Privately Held ____

Names and address of the Principals, Owners, Directors, Officers:

This Response includes addenda number(s) _____.

Signature of authorizing party

CITY OF CHELSEA

REQUIRED BID SUBMITTAL FORM

Certificate of Non-Collusion

The undersigned certifies under the penalties of perjury that this 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

Date

Name (Please Print)

Title

Company

Address

Contact Number

CITY OF CHELSEA

REQUIRED BID SUBMITTAL FORM

STATEMENT OF CORPORATE AUTHORITY

REQUIRED (IF CORPORATION) IF A CORPORATION, COMPLTE BELOW OR ATTACH TO EACH SIGNED COPYOF THE BID A NOTORIZED COPY OF VOTE OF CORPORATION AUTHORIZING THE SIGNATORY TO SIGN THIS CONTRACT. IF ATTESTING CLERK IS THE SAME PERSON AS THE INDIVIDUAL EXECUTING THIS CONTRACT, HAVE SIGNATURE NOTORIZED ABOVE.

At a duly authorized meeting of the Board of Directors of _____ held
on _____ Date Name of Corporation

at which time all voted that _____
Name Officer

of this Company, be and hereby is authorized to execute contracts and bonds in the name and behalf of said Company, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this Company's name on its behalf by such person _____ under seal of the Company, shall be valid and binding upon this company.

A TRUE COPY,

ATTEST: _____
Clerk

PLACE OF BUSINESS: _____

DATE OF THIS BID: _____

I hereby certify that I am the Clerk of the _____

_____ and that _____ is

duly elected _____ of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

(Clerk's Signature)

(CORPORATE SEAL)

On this _____ day of _____, 2015, before me, the undersigned notary public, personally appeared _____, proved to me through satisfactory evidence of identification, which were _____ to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public - My Commission Expires:

CITY OF CHELSEA
REQUIRED BID SUBMITTAL FORM
REFERENCE FORM

Bidder: _____

Title of Bid: **ON-ROAD SECTION OF THE CHELSEA GREENWAY**

Bidder must provide references for:

All contracts performed within the past five years of similar size and scope to this contract

- Reference: _____
- Address: _____
- Contact: _____
- Phone: _____
- Fax: _____
- Description and date(s) of services provided:

- Reference: _____
- Address: _____
- Contact: _____
- Phone: _____
- Fax: _____
- Description and date(s) of services provided:

- Reference: _____
- Address: _____
- Contact: _____
- Phone: _____
- Fax: _____
- Description and date(s) of services provided:

CITY OF CHELSEA

REQUIRED BID SUBMITTAL FORM

OSHA COMPLIANCE CERTIFICATION

Any person submitting a bid for, signing a contract to work on, the construction, reconstruction, alteration, remodeling or repair of any building or public works project undertaken by a public awarding authority in Massachusetts and estimated to cost more than \$10,000 must certify on the bid or contract, under penalties of perjury, as follows:

1. That he is able to furnish labor than can work in harmony with all other elements of labor employed or to be employed at the work
2. All employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration 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
3. That all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration. (MGL. c. 30, Section 39S (a))

Pursuant to M.G.L. c. 30, Section 39M and M.G.L. c. 149, I certify under penalties of perjury that, to the best of my Knowledge and belief, I am in compliance with the OSHA requirements as stated above.

Dated _____

Name of Company or Corporation

Authorized Official's Signature

BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED

CONTRACT NO. _____

**CITY OF CHELSEA
CONTRACT FOR SERVICES
over \$10,000**

This agreement (the "Agreement") is made and entered into by and between the City of Chelsea (hereinafter the CITY), a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, and

[NAME]
[ADDRESS]
(hereinafter the CONTRACTOR)

For mutual consideration the Parties hereby agree as follows:

ARTICLE 1. DEFINITION.

This CONTRACT as used herein shall consist of this Agreement, and the "contract documents" which include but are not limited to the following identified items and all documents, and forms submitted therewith, or attached hereby.

- Attachment A: Scope of Services, and/or other bid package materials
- Attachment B: Additional Contract Terms and Conditions
- Attachment C: Certificate of Non-Collusion, Tax Compliance Certification, Statement of Corporate Authority
- Attachment D: Summaries of Laws Regarding State Ethics - Acknowledgment of Receipt
- Addenda through #

ARTICLE II. AMOUNT AND TERM.

Pursuant to the terms and conditions stated in the Contract, this CITY agrees to pay an amount not to exceed \$ _____, and the Contractor agrees to perform the services detailed in the Contract. The Contract shall commence on or about _____ (the "Commencing Date") unless earlier terminated pursuant to Article IV, Termination and shall terminate no later than _____, unless a written amendment to renew or extend this contract is executed in accordance with the provisions of this CONTRACT.

ARTICLE III. PERFORMANCE.

The Contractor agrees to provide all goods and/or services set forth in the Invitation for Bid/Request for Proposal Documents, Scope of Service, the Contractor's proposal for " _____ ", and/or as outlined in ATTACHMENT A - SCOPE OF SERVICES.

ARTICLE IV. TERMINATION.

i) Without Cause. The CITY may terminate this CONTRACT on sixty (60) calendar day's notice, or may suspend this CONTRACT for up to sixty (60) calendar days upon receipt of notice, when in the best interests of the CITY, by providing notice to the CONTRACTOR, which shall be in writing and shall be deemed delivered and received when given in person to the CONTRACTOR, or when received by fax, express mail, certified mail return receipt requested,

regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CONTRACTOR.

ii) For Cause. If the CONTRACTOR is determined by the CITY to be in default of any term or condition of CONTRACT, the CITY may terminate this contract on thirty (30) day's notice by providing notice to the CONTRACTOR, which shall be in writing and shall be deemed delivered and received when given in person to the CONTRACTOR, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CONTRACTOR. If the CITY is determined by the CONTRACTOR to be in default of any term or condition of this CONTRACT the CONTRACTOR may terminate this contract on thirty (30) day's notice by providing notice to the CITY, which shall be in writing and shall be deemed delivered and received when given in person to the CITY, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CITY.

iii) Default. Events of default under this CONTRACT shall include, but are not limited to the following: a) any material misrepresentation made by the CONTRACTOR to the CITY, b) any failure to perform any of its obligations under this CONTRACT including, but not limited to the following: (i) failure to commence performance of this CONTRACT at the time specified in this CONTRACT due to a reason or circumstance within the CONTRACTOR'S reasonable control, (ii) failure to perform this CONTRACT with sufficient personnel and equipment or with sufficient material to ensure the completion of this CONTRACT within the specified time due to a reason or circumstance within the CONTRACTOR'S reasonable control, (iii) failure to perform this CONTRACT in a manner reasonably satisfactory to the CITY, (iv) failure to promptly re-perform with reasonable time the services that were rejected by the CITY as unsatisfactory, or erroneous, (v) discontinuance of the services for reasons not beyond the CONTRACTOR'S reasonable control, (vi) failure to comply with a material term of this CONTRACT, including, but not limited to, the provision of insurance or failure to comply with nondiscrimination provisions, and (vii) any other acts specifically and expressly stated in this CONTRACT as constituting a basis for termination of this CONTRACT, and (viii) failure to comply with any and all requirements of state law, and/or regulations, and City ordinances, and/or regulations.

ARTICLE V. REMEDIES OF THE CITY.

The City hereby retains all remedies in law and equity, including but not limited to, the right to deduct the cost of any substitute contract or performance for expenses, losses, and all damages and the right to withhold from payment, any amounts for expenses, losses, and damages from sums due, or which become due.

ARTICLE VI. REMEDIES OF THE CONTRACTOR.

If the Contractor, due to any act or omission for which the City is legally responsible, sustains damages, other than loss, non-conformance, or non-performance, the Contractor may request, within 30 days of the alleged act or omission from the City, a sum equal to the amount of such damages sustained by the Contractor, which amount may be determined by the City in writing, at the City 's sole discretion, provided that the Contractor has provided to all signatories of this Agreement, a detailed, written statement of such damages and cause thereof within said 30 day period.

ARTICLE VII. ASSIGNABILITY.

The CONTRACTOR shall not assign, subcontract or in any way transfer any interest, rights or obligations in this CONTRACT without the prior written consent of the City Manager. In the

event of such assignment the CITY reserves the right to deal with any assignee subcontractor or transferee directly and the CONTRACTOR agrees to remain bound by all terms and conditions of this CONTRACT in accordance with its original tenor and in no way shall the CONTRACTOR be relieved of its responsibilities and obligations under this CONTRACT. The provisions of this CONTRACT shall be binding upon, and shall inure to the benefit of, the successors and assigns of the CONTRACTOR and any public body or bodies succeeding the interests of the CITY.

ARTICLE VIII. INDEMNIFICATION.

The CONTRACTOR shall assume the defense, indemnify and hold harmless the CITY, the CITY'S agents and employees, from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against them by reason of acts, in actions, omissions, negligence, reckless or intentional misconduct of the said CONTRACTOR, its agent(s), officers, employees, or subcontractors; in the execution of the work or in guarding the same. Unless otherwise provided by law, the CITY may elect, at its sole discretion, to indemnify the CONTRACTOR for claims arising in tort if it is determined that the CONTRACTOR performed its obligations under this CONTRACT pursuant to the direct supervision and control of the CITY or its designated agent(s).

ARTICLE IX. WORKER'S COMPENSATION AND OTHER INSURANCE.

The CONTRACTOR shall provide insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws of Massachusetts (The Worker's Compensation Act) to all employees of the CONTRACTOR who are subject to the provisions of Chapter 152 of the General Laws of Massachusetts.

Failure to provide and continue in force such insurance during the period of this contract shall be deemed a material breach of this contract, shall operate as an immediate termination thereof, and CONTRACTOR shall indemnify the CITY for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

The Contractor shall furnish to the CITY evidence of such insurance prior to the execution of this contract and before the same shall be binding on the parties thereto, except if specifically waived in Attachment B.

Prior to commencement of any work and until completion of its work under this CONTRACT, the CONTRACTOR shall maintain the following insurance coverage, at its cost, from insurance acceptable to the CITY, giving evidence of such coverage to the CITY prior to execution of this CONTRACT, a copy of such insurance coverage to be attached herewith:

1. Comprehensive Automobile Liability Insurance covering the use of all owned, non-owned and hired automobiles in connection with its operations with a combined single limit of \$1,000,000. The comprehensive Automobile Liability insurance may be provided through primary and excess or umbrella insurance policies.
2. CONTRACTOR'S Equipment Coverage (or a certification of self-insurance satisfactory to the CITY) must be provided on an "All Risks" basis, covering physical damage to all tools and equipment, including automotive equipment owned, rented, or used by the CONTRACTOR.
3. Commercial General Liability Insurance coverage which may be provided through primary and excess or umbrella liability policies for limits of \$1,000,000 general aggregate, and \$500,000 per occurrence.

All required insurance must be endorsed to name the CITY as Additional Insured. All required insurance shall be endorsed to waive the insurer's rights of subrogation against the City. All policies and certificates of insurance must contain language that the insurance shall not be canceled, materially changed or non-renewed without at least thirty (30) days advance written notice to the CITY. The CONTRACTOR under this CONTRACT shall not allow its subcontractors to begin work until similar insurance has been so obtained and certificates of insurance approved by the CONTRACTOR.

ARTICLE X. CORPORATE CONTRACTOR.

If CONTRACTOR is a corporation, CONTRACTOR shall endorse the Certificate of Corporate Authority for the CONTRACTORS' signatory (Exhibit C), or shall otherwise provide a form similar in nature and substance acceptable to the CITY at the City's sole discretion.

If CONTRACTOR is a non-profit corporation, CONTRACTOR shall provide satisfactory proof of present status as a non-profit corporation. Such proof shall be in the form of a certification from the Massachusetts Secretary of State's office and/or from the Internal Revenue Service and shall provide the Federal Tax Identification Number of the non-profit corporation. This CONTRACT shall not be enforceable against the CITY unless and until the CONTRACTOR complies with this Article. Failure to inform the CITY in writing of revocation, or other loss of non-profit status shall be deemed a material breach of this contract and operate as an immediate termination thereof.

ARTICLE XI. SUBJECT TO APPROPRIATION.

The obligations of the CITY under this CONTRACT shall be subject to appropriation. In the absence of appropriation this CONTRACT shall be immediately terminated without liability for damages, penalties, or other charges.

In the event any portion of this Agreement is to be funded with alternate funding including but not limited to state, local, federal or private grant funding. In the requisite circumstances, the obligations of the CITY under this CONTRACT shall be subject to the formal award of such state, local, federal or private grant.

ARTICLE XII. DOCUMENTS, MATERIALS, ETC.

Any materials, reports, information, data, etc. given to or prepared or assembled by the CONTRACTOR under this CONTRACT are to be kept confidential and shall not be made available to any individual or organization by the CONTRACTOR (except agents, servants, or employees of the CONTRACTOR) without the prior written approval of the CITY. The CONTRACTOR understands that he/she/it may acquire or have access to "personal data" otherwise kept by the CITY. The CONTRACTOR shall comply with the provisions Chapter 66A of the General Laws of Massachusetts as it relates to public documents, and all other state and federal laws and regulations relating to confidentiality, security, privacy and use of confidential data.

Any materials produced in whole or in part under this CONTRACT shall not be subject to copyright, except by the CITY, in the United States or any other country. The CITY shall have unrestricted authority to, without payment of any royalty, commission, or additional fee of any type or nature, publicly disclose, reproduce, distribute and otherwise use, and authorize other to use, in whole or in part, any reports, data or other materials prepared under this CONTRACT.

All data, reports, programs, software, equipment, furnishings, and any other documentation or product paid for by the CITY shall vest in the CITY at the termination of this CONTRACT. The CONTRACTOR shall at all times, during or after termination of this CONTRACT, obtain the prior written approval of the CITY before making any statement bearing on the work performed or data collected under this CONTRACT to the press or issues any material for publication through any medium.

ARTICLE XIII. AUDIT, INSPECTION, RECORDKEEPING.

At any time during normal business hours, and as often as the CITY may deem it reasonably necessary, there shall be made available in the office of the CONTRACTOR for the purpose of audit, examination, and/or to make excerpts or transcripts, all records, contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this agreement.

Further the CONTRACTOR agrees to make its work papers, records and other evidence of audit available to the CITY for a period of three years after final payment under his CONTRACT. The CITY shall be entitled to reproduce any or all such documents at its own expense, for which provision shall be made at such time.

ARTICLE XIV. WEEKLY PAYROLL RECORDS REPORT.

In accordance with Massachusetts General Law c. 149, s. 27B, a true and accurate record must be kept of all individuals employed on a public works construction project for which prevailing wage rates are applicable.

In addition, every contractor and subcontractor is required to submit, on a weekly basis, a copy of their weekly payroll records to the awarding authority. Once collected, the awarding authority is also required to preserve those records for three years.

ARTICLE XV. CONFLICT OF INTEREST.

i) CITY. No officer, member or employee of the CITY and no members of its governing body who exercise any function or responsibility in review or approval of the undertaking or carrying out of this CONTRACT shall participate in any decision relating to the CONTRACT which affects his/her personal interests or the interest of any corporation, partnership, or association in which he/she has a direct or indirect pecuniary interest. None of the services to be provided by the CONTRACTOR shall be used for any partisan political activity or further the election or defeat of any candidate for political office in the CITY. Compliance with this section shall be material to the CONTRACT.

ii) CONTRACTOR. CONTRACTOR agrees that his/her/its agents, servants, and employees have neither presently nor during the period of this CONTRACT any interest direct or indirect which would impair, detract, or conflict in any manner or degree with the performance of services required under this CONTRACT. The CONTRACTOR, his/her/its agents, servants and employees further stipulate that in the performance of this CONTRACT, no person having any such interest shall be employed. Conflicts of Interest include but are not limited to (a) immediate family relationships with officials of the CITY, (b) instances where the CONTRACTOR, his/her/its agents, servants or employees during the period of this CONTRACT was connected as an officer, employee or member of the governing body of the CITY, and (c) instances where the CONTRACTOR has an interest in any CITY department, its agents, servants or employees or parcels of land within the CITY. Compliance with this section shall be material to the CONTRACT. The CONTRACTOR, his/her/its agents, servants and employees must disclose any and all such interests in writing to the CITY.

ARTICLE XVI. PAYMENT.

The City agrees to make all reasonable efforts to pay to the CONTRACTOR the sum set forth any invoice which has been approved by the City Manager or his authorized designee within thirty (30) days of receipt of such invoice at the Office of the City Auditor. Each invoice shall detail the work completed.

Subject to pending statutory appeal rights, the City hereby reserves the right and the CONTRACTOR hereby agrees that the City may deduct from the sum(s) otherwise payable under this CONTRACT any outstanding taxes, fines, fees and/or other municipal charges prior to disbursement to the CONTRACTOR.

ARTICLE XVII. CONFLICT.

In the event there is a conflict between these Articles and Attachment A, Attachment A shall supersede these Articles.

ARTICLE XVIII. WAIVER AND AMENDMENT.

The provisions contained in this CONTRACT may be modified only by the express written consent of the Parties. Any amendments, must be made only by written amendment executed by all signatories to the original agreement, prior to the effective date of the amendment.

The failure of any party to insist on the strict performance of any term, covenant or condition to this CONTRACT, at anytime, or in any one or more instances, or its failure to take advantage of any of its rights, or any course of conduct or dealing, shall not be construed as a waiver or a relinquishment of any such rights or conditions at any future time and shall, in no way act, as a wavier by any party of a breach of another party or have any affect on the continuance of or the full force and affect of any or all of the provisions of this Contract. The waiver of any provisions must be in writing and executed by all signatories to this Agreement prior to the force and effect of any such waiver.

Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any manner limit the legal or equitable remedies available to that party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach of a similar or different matter.

ARTICLE XIX. CERTIFICATION.

IN WITNESS WHEREOF, THE CONTRACTOR CERTIFIES, UNDER THE PAINS AND PENALTIES OF PERJURY, THAT THE CONTRACTOR IS IN COMPLIANCE WITH EACH OF THE FOLLOWING:

- a. TAXES. PURSUANT to M.G.L. c. 62C, s. 49A, the CONTRACTOR has filed all state tax returns and complied with all laws of the Commonwealth relating to taxes.
- b. DEBARMENT. The CONTRACTOR is not currently debarred or suspended by the Commonwealth of Massachusetts, or any of its entities or subdivisions.
- c. AMERICANS WITH DISABILITIES ACT. The CONTRACTOR is aware of the Americans with Disabilities Act which prohibits discrimination based upon disability and shall meet any relevant standards, and/or conditions set out in the bid/proposal documents, bid/proposal specifications, and/or ATTACHMENT A - SCOPE OF SERVICES.

ARTICLE XX. FORUM AND CHOICE OF LAW

This CONTRACT and any performance herein shall be governed by and be construed in accordance with the laws of Commonwealth of Massachusetts, exclusive of its conflicts of law provisions. Any and all proceedings or actions relating to subject matter herein shall be brought and maintained in the courts of the Commonwealth of Massachusetts or the federal district court sitting in the Commonwealth of Massachusetts, which shall have exclusive jurisdiction thereof. Each of the Parties hereto irrevocably consents to and waives any objection to the exercise of personal jurisdiction by the state and federal courts of the Commonwealth of Massachusetts. This paragraph shall not be construed to limit any other legal rights of the parties.

ARTICLE XXI. TAXES

CONTRACTOR shall be solely responsible for the payment of any taxes, levies, betterments or assessments, fees or charges, whether in existence on the date hereof or becoming applicable pursuant to this Contract, which may be assessed against the CONTRACTOR or the CITY which are directly attributable to CONTRACTOR'S activities under this CONTRACT (the "Taxes"). CONTRACTOR shall pay all Taxes directly to the taxing authority before delinquency and before any fine, interest or penalty shall become due or be imposed by operation of law for their nonpayment.

ARTICLE XXII. NOTICES

All notices, demands, requests, consents, approvals and other instruments required or permitted to be given pursuant to the terms hereof (hereinafter "Notice"), shall be in writing and shall be deemed to have been properly given when delivered in hand or deposited in registered or certified United States mail, postage prepaid, return receipt requested, addressed, as described herein or when delivered by messenger or overnight mail service to the correct addressee. Unless otherwise specified, Notice shall be deemed received when actually received or when the proffered Notice has been refused by the Addressee. The signature of an employee, servant or agent of the Addressee shall be determinative on the issue of actual receipt.

All notices shall be sent to the persons and addresses listed below. CONTRACTOR and the CITY shall, at any time and from time to time, have the right to specify as their proper addresses for purposes of this CONTRACT any other address or addresses giving fifteen (15) days' written notice thereof to the other party.

All Notices shall be forwarded to:

FOR THE CITY
Edward Keefe, Acting City Manager
500 Broadway
City Hall
Chelsea, MA 02150

With a Copy to:
Cheryl Anne Watson
City Solicitor
Law Department, Room 307
500 Broadway
Chelsea, MA 02150

FOR THE CONTRACTOR:
[NAME]
[ADDRESS]

ARTICLE XXIII. CONSIDERATION

The Parties mutually agree to enter into this CONTRACT for good and valuable consideration.

ARTICLE XXIV. REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR

The CONTRACTOR represents and warrants (i) the CONTRACTOR has all requisite corporate power and authority to enter into this CONTRACT and to perform the obligations of the CONTRACTOR; (ii) that this CONTRACT has been duly and validly authorized, executed and delivered by the CONTRACTOR; (iii) the execution and delivery of this CONTRACT does not violate or conflict with any other agreement, license or obligation; (iv) the CONTRACTOR is duly organized, legal and validly existing and in good standing in the Commonwealth of Massachusetts; (v) that the CONTRACTOR is duly qualified and authorized to do business in the Commonwealth of Massachusetts; (vi) the CONTRACTOR is in compliance and is current with any payments under all federal, state and local tax laws; (vii) the CONTRACTOR will obtain any and all permits which may be necessary to perform the obligations of this CONTRACT; (viii) the CONTRACTOR will timely perform its obligations required by this CONTRACT.

ARTICLE XXV. THIRD PARTY BENEFICIARIES

This CONTRACT shall not be construed to create any third party beneficiary rights in favor of any other parties or any right or privilege for the benefit of any other parties.

ARTICLE XXVI. ENTIRE CONTRACT

This CONTRACT constitutes the entire Agreement of the parties hereto with respect to the subject matter hereof, and no representations, inducements, promises, or agreements, oral or otherwise, between the parties hereto with respect to the subject matter hereof not embodied herein shall be of any force or effect.

ARTICLE XXVII. LIABILITY OF MUNICIPALITY

The CITY shall not be liable to CONTRACTOR for any loss of business or any indirect, incidental, special, consequential or exemplary damages or lost profits unless expressly specified herein.

ARTICLE XXVIII. HEADINGS

Heading used in this Agreement are for convenience of reference only and shall not be construed as altering the meaning of this CONTRACT or any of its provisions.

ARTICLE XXIX. DAYS

Any reference to "days" in this CONTRACT, shall be deemed to mean business days (Monday through Friday, excluding generally recognized holidays) except where specific reference is made to calendar days.

ARTICLE XXX. SURVIVAL

The parties agree that the provisions of ARTICLE II – AMOUNT AND TERM; ARTICLE III – PERFORMANCE; ARTICLE V- REMEDIES OF THE CITY; ARTICLE VI- REMEDIES OF THE CONTRACTOR. ARTICLE VII – ASSIGNABILITY; ARTICLE VIII – INDEMNIFICATION; ARTICLE IX- WORKER’S COMPENSATION AND OTHER INSURANCE; ARTICLE XI-SUBJECT TO APPROPRIATION; ARTICLE XII – DOCUMENTS, MATERIALS, ETC; ARTICLE XIII – AUDIT, INSPECTION, RECORDKEEPING; ARTICLE XIV- WEEKLY PAYROLL RECORDS REPORT; ARTICLE XVI – PAYMENT; ARTICLE XVIII – WAIVER AND AMENDMENT; ARTICLE XIX –

CERTIFICATION; ARTICLE XX- FORUM AND CHOICE OF LAW; ARTICLE XXI – TAXES; ARTICLE XXIV- REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR; ARTICLE XXVII- LIABILITY OF THE MUNICIPALITY; ARTICLE XXX – SURVIVAL; and ARTICLE XXXI - SEVERABILITY shall survive the expiration or any earlier termination of this CONTRACT.

ARTICLE XXXI. SEVERABILITY

If any provision of this CONTRACT is held to be illegal, invalid or unenforceable, the remaining terms shall not be affected and shall remain in full force and effect. The Agreement shall be interpreted as if the illegal, invalid or unenforceable provision had not been included in it and the invalid or unenforceable provision shall be stricken and shall be replaced by a mutually acceptable provision which being valid and enforceable comes closest to the intention of the parties with respect to the invalid or unenforceable provision.

ARTICLE XXXII. ADVICE AND COUNSEL

The CONTRACTOR hereby acknowledges and agrees that CONTRACTOR has read this Agreement in its entirety and that CONTRACTOR has had the opportunity to consult legal and financial advisors of their choosing regarding the execution, delivery and performance of their obligations, hereunder.

ARTICLE XXXIII. COUNTERPARTS

This CONTRACT may be executed in counterpart.

THE REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK

IN WITNESS WHEREOF the parties have hereto and to three other identical instruments set forth their hands the day and year first above written.

THE CONTRACTOR

CITY MANAGER

Company Name

Edward Keefe, Acting City Manager

Status (Corporation/Non-corporate)

Signature & Title

Please Print Name & Title

Dylan Cook
Chief Procurement Officer

Date

Taxpayer Identification Number

APPROVED AS TO FORM:

Cheryl Watson Fisher
City Solicitor

Approved as to Contract Manager:

I CERTIFY THAT FUNDS HAVE BEEN
ENCUMBERED IN THE AMOUNT OF
\$_____ FOR THIS CONTRACT
Appropriation Number:

Department Head Name
Department Name
City of Chelsea

Edward M. Dunn
City Auditor

ATTACHMENT A

SCOPE OF SERVICES

INSTRUCTIONS FOR DEPARTMENT AND CONTRACTOR: Please attach for reference purposes a copy of all bid/proposal documents, including but not limited to (i) invitations/instructions for bidders (ii) invitation/instructions for proposers, (iii) general and specific conditions, and please provide a detailed description of all types of goods and/or services that will be provided pursuant to this CONTRACT, not otherwise provided in any bid/proposal instructions, specifications, conditions or other documents.

ATTACHMENT B

ADDITIONAL CONTRACT TERMS AND CONDITIONS

INSTRUCTIONS FOR DEPARTMENTS: Please specify any additions or modifications to the terms and conditions (not to conflict with the public procurement laws or City ordinances or regulations:

ATTACHMENT C

CERTIFICATE OF NON-COLLUSION

TAX COMPLIANCE CERTIFICATION

STATEMENT OF CORPORATE AUTHORITY

CERTIFICATE OF NON-COLLUSION
MANDATORY

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.

Dated: _____

Name of Company or Corporation

Authorized Official's Signature

BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED.

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, Section 49A, I certify under penalties of perjury that I, to my best knowledge and belief, have filed all Massachusetts tax returns and paid all Massachusetts taxes required under law, as well as paid all contributions and payments in lieu of contributions pursuant to M.G.L., c. 151A, Section 19A(b).

I further certify that I have complied with all federal, state and local laws relating to taxes, including but not limited to the withholding and reporting of any income taxes for employees and contractors, and the withholding and remittance of child support.

Signature

Social Security or Federal ID No.

Date

BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED.

STATEMENT OF CORPORATE AUTHORITY

At a duly authorized meeting of the Board of Directors of _____

held on _____ at which time all voted that _____

of this Company, be and hereby is authorized to execute contracts and bonds in the name and on behalf of said Company, and affix its Corporate seal thereto, and such execution of any contract

of obligation in this Company's name on its behalf by such person _____ under seal of the Company, shall be valid and binding upon this Company.

A TRUE COPY,
ATTEST:

PLACE OF BUSINESS:

DATE OF THIS CONTRACT:

I hereby certify that I am Clerk of _____ and that

_____ is duly elected _____

of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

(Clerk's Signature)

(CORPORATE SEAL)

ATTACHMENT D

City of Chelsea
Conflict of Interest Law
Compliance Statement and Requirements for Vendors

On July 1, 2009, the Legislature enacted Chapter 28 of the Acts of 2009 which made changes to Mass. General Laws c. 268A and c. 268B, the Massachusetts' Conflict of Interest Law. On November 9, 2009, the Chelsea City Council designated the Chelsea City Solicitor as the Municipal Liaison to the State Ethics Commission and responsible for the facilitation of Chelsea's obligation to comply with the changes in the law.

The City has a requirement for compliance, which is to make sure that all municipal elected officials, board and commission members, and employees **including vendors** are provided copies of the Summaries of the Ethics Laws.

Enclosed is a packet that should be copied and provide to each one of your employees who are assigned to work in Chelsea; including yourself. At the end of the summary is an acknowledgement of receipt of the summary. The acknowledgments must be submitted along with any purchase order or contract with the City of Chelsea. All documents pursuant to this new law will be kept on file in the City Clerk's Office

The Procurement Officer will contact you directly, if there is a determination that you or your staff should undergo the Conflict of Interest Online Training Program.

If you have any questions, feel free to contact the Chelsea City Solicitor at 617-466-4150 as soon as possible.

Summary of the Conflict of Interest Law for Municipal Employees

This summary of the conflict of interest law, General Laws chapter 268A, is intended to help municipal employees understand how that law applies to them. This summary is not a substitute for legal advice, nor does it mention every aspect of the law that may apply in a particular situation. Municipal employees can obtain free confidential advice about the conflict of interest law from the Commission's Legal Division at our website, phone number, and address above. Municipal counsel may also provide advice.

The conflict of interest law seeks to prevent conflicts between private interests and public duties, foster integrity in public service, and promote the public's trust and confidence in that service by placing restrictions on what municipal employees may do on the job, after hours, and after leaving public service, as described below. The sections referenced below are sections of G.L. c. 268A.

When the Commission determines that the conflict of interest law has been violated, it can impose a civil penalty of up to \$10,000 (\$25,000 for bribery cases) for each violation. In addition, the Commission can order the violator to repay any economic advantage he gained by the violation, and to make restitution to injured third parties. Violations of the conflict of interest law can also be prosecuted criminally.

I. Are you a municipal employee for conflict of interest law purposes?

You do not have to be a full-time, paid municipal employee to be considered a municipal employee for conflict of interest purposes. Anyone performing services for a city or town or holding a municipal position, whether paid or unpaid, including full- and part-time municipal employees, elected officials, volunteers, and consultants, is a municipal employee under the conflict of interest law. An employee of a private firm can also be a municipal employee, if the private firm has a contract with the city or town and the employee is a "key employee" under the contract, meaning the town has specifically contracted for her services. The law also covers private parties who engage in impermissible dealings with municipal employees, such as offering bribes or illegal gifts.

II. On-the-job restrictions.

(a) Bribes. Asking for and taking bribes is prohibited. (See Section 2)

A bribe is anything of value corruptly received by a municipal employee in exchange for the employee being influenced in his official actions. Giving, offering, receiving, or asking for a bribe is illegal.

Bribes are more serious than illegal gifts because they involve corrupt intent. In other words, the municipal employee intends to sell his office by agreeing to do or not do some official act, and the giver intends to influence him to do so. Bribes of any value are illegal.

(b) Gifts and gratuities. Asking for or accepting a gift because of your official position, or because of something you can do or have done in your official position, is prohibited. (See Sections 3, 23(b)(2), and 26)

Municipal employees may not accept gifts and gratuities valued at \$50 or more given to influence their official actions or because of their official position. Accepting a gift intended to reward past official action or to bring about future official action is illegal, as is giving such gifts. Accepting a gift given to you because of the municipal position you hold is also illegal. Meals, entertainment event tickets, golf, gift baskets, and payment of travel expenses can all be illegal gifts if given in connection with official action or position, as can anything worth \$50 or more. A number of smaller gifts together worth \$50 or more may also violate these sections.

Example of violation : A town administrator accepts reduced rental payments from developers.

Example of violation : A developer offers a ski trip to a school district employee who oversees the developer's work for the school district.

Regulatory exemptions . There are situations in which a municipal employee's receipt of a gift does not present a genuine risk of a conflict of interest, and may in fact advance the public interest. The Commission has created exemptions permitting giving and receiving gifts in these situations. One commonly used exemption permits municipal employees to accept payment of travel-related expenses when doing so advances a public purpose. Another commonly used exemption permits municipal employees to accept payment of costs involved in attendance at educational and training programs. Other exemptions are listed on the Commission's website.

Example where there is no violation : A fire truck manufacturer offers to pay the travel expenses of a fire chief to a trade show where the chief can examine various kinds of fire-fighting equipment that the town may purchase. The chief fills out a disclosure form and obtains prior approval from his appointing authority.

Example where there is no violation : A town treasurer attends a two-day annual school featuring multiple substantive seminars on issues relevant to treasurers. The annual school is paid for in part by banks that do business with town treasurers. The treasurer is only required to make a disclosure if one of the sponsoring banks has official business before her in the six months before or after the annual school.

(c) Misuse of position. Using your official position to get something you are not entitled to, or to get someone else something they are not entitled to, is prohibited. Causing someone else to do these things is also prohibited. (See Sections 23(b)(2) and 26)

A municipal employee may not use her official position to get something worth \$50 or more that would not be properly available to other similarly situated individuals. Similarly, a municipal employee may not use her official position to get something worth \$50 or more for someone else

that would not be properly available to other similarly situated individuals. Causing someone else to do these things is also prohibited.

Example of violation : A full-time town employee writes a novel on work time, using her office computer, and directing her secretary to proofread the draft.

Example of violation : A city councilor directs subordinates to drive the councilor's wife to and from the grocery store.

Example of violation : A mayor avoids a speeding ticket by asking the police officer who stops him, "Do you know who I am?" and showing his municipal I.D.

(d) Self-dealing and nepotism. Participating as a municipal employee in a matter in which you, your immediate family, your business organization, or your future employer has a financial interest is prohibited. (See Section 19)

A municipal employee may not participate in any particular matter in which he or a member of his immediate family (parents, children, siblings, spouse, and spouse's parents, children, and siblings) has a financial interest. He also may not participate in any particular matter in which a prospective employer, or a business organization of which he is a director, officer, trustee, or employee has a financial interest. Participation includes discussing as well as voting on a matter, and delegating a matter to someone else.

A financial interest may create a conflict of interest whether it is large or small, and positive or negative. In other words, it does not matter if a lot of money is involved or only a little. It also does not matter if you are putting money into your pocket or taking it out. If you, your immediate family, your business, or your employer have or has a financial interest in a matter, you may not participate. The financial interest must be direct and immediate or reasonably foreseeable to create a conflict. Financial interests which are remote, speculative or not sufficiently identifiable do not create conflicts.

Example of violation : A school committee member's wife is a teacher in the town's public schools. The school committee member votes on the budget line item for teachers' salaries.

Example of violation : A member of a town affordable housing committee is also the director of a non-profit housing development corporation. The non-profit makes an application to the committee, and the member/director participates in the discussion.

Example : A planning board member lives next door to property where a developer plans to construct a new building. Because the planning board member owns abutting property, he is presumed to have a financial interest in the matter. He cannot participate unless he provides the

State Ethics Commission with an opinion from a qualified independent appraiser that the new construction will not affect his financial interest.

In many cases, where not otherwise required to participate, a municipal employee may comply with the law by simply not participating in the particular matter in which she has a financial interest. She need not give a reason for not participating.

There are several exemptions to this section of the law. An appointed municipal employee may file a written disclosure about the financial interest with his appointing authority, and seek permission to participate notwithstanding the conflict. The appointing authority may grant written permission if she determines that the financial interest in question is not so substantial that it is likely to affect the integrity of his services to the municipality. Participating without disclosing the financial interest is a violation. Elected employees cannot use the disclosure procedure because they have no appointing authority.

Example where there is no violation : An appointed member of the town zoning advisory committee, which will review and recommend changes to the town's by-laws with regard to a commercial district, is a partner at a company that owns commercial property in the district. Prior to participating in any committee discussions, the member files a disclosure with the zoning board of appeals that appointed him to his position, and that board gives him a written determination authorizing his participation, despite his company's financial interest. There is no violation.

There is also an exemption for both appointed and elected employees where the employee's task is to address a matter of general policy and the employee's financial interest is shared with a substantial portion (generally 10% or more) of the town's population, such as, for instance, a financial interest in real estate tax rates or municipal utility rates.

(e) False claims. Presenting a false claim to your employer for a payment or benefit is prohibited, and causing someone else to do so is also prohibited. (See Sections 23(b)(4) and 26)

A municipal employee may not present a false or fraudulent claim to his employer for any payment or benefit worth \$50 or more, or cause another person to do so.

Example of violation : A public works director directs his secretary to fill out time sheets to show him as present at work on days when he was skiing.

(f) Appearance of conflict. Acting in a manner that would make a reasonable person think you can be improperly influenced is prohibited. (See Section 23(b)(3))

A municipal employee may not act in a manner that would cause a reasonable person to think that she would show favor toward someone or that she can be improperly influenced. Section 23(b)(3) requires a municipal employee to consider whether her relationships and affiliations could prevent her from acting fairly and objectively when she performs her duties for a city or town. If she cannot be fair and objective because of a relationship or affiliation, she should not perform her duties. However, a municipal employee, whether elected or appointed, can avoid violating this provision by making a public disclosure of the facts. An appointed employee must make the disclosure in writing to his appointing official.

Example where there is no violation : A developer who is the cousin of the chair of the conservation commission has filed an application with the commission. A reasonable person could conclude that the chair might favor her cousin. The chair files a written disclosure with her appointing authority explaining her relationship with her cousin prior to the meeting at which the application will be considered. There is no violation of Sec. 23(b)(3).

(g) Confidential information. Improperly disclosing or personally using confidential information obtained through your job is prohibited. (See Section 23(c))

Municipal employees may not improperly disclose confidential information, or make personal use of non-public information they acquired in the course of their official duties to further their personal interests.

III. After-hours restrictions.

(a) Taking a second paid job that conflicts with the duties of your municipal job is prohibited. (See Section 23(b)(1))

A municipal employee may not accept other paid employment if the responsibilities of the second job are incompatible with his or her municipal job.

Example : A police officer may not work as a paid private security guard in the town where he serves because the demands of his private employment would conflict with his duties as a police officer.

(b) Divided loyalties. Receiving pay from anyone other than the city or town to work on a matter involving the city or town is prohibited. Acting as agent or attorney for anyone other

than the city or town in a matter involving the city or town is also prohibited whether or not you are paid. (See Sec. 17)

Because cities and towns are entitled to the undivided loyalty of their employees, a municipal employee may not be paid by other people and organizations in relation to a matter if the city or town has an interest in the matter. In addition, a municipal employee may not act on behalf of other people and organizations or act as an attorney for other people and organizations in which the town has an interest. Acting as agent includes contacting the municipality in person, by phone, or in writing; acting as a liaison; providing documents to the city or town; and serving as spokesman.

A municipal employee may always represent his own personal interests, even before his own municipal agency or board, on the same terms and conditions that other similarly situated members of the public would be allowed to do so. A municipal employee may also apply for building and related permits on behalf of someone else and be paid for doing so, unless he works for the permitting agency, or an agency which regulates the permitting agency.

Example of violation : A full-time health agent submits a septic system plan that she has prepared for a private client to the town's board of health.

Example of violation : A planning board member represents a private client before the board of selectmen on a request that town meeting consider rezoning the client's property.

While many municipal employees earn their livelihood in municipal jobs, some municipal employees volunteer their time to provide services to the town or receive small stipends. Others, such as a private attorney who provides legal services to a town as needed, may serve in a position in which they may have other personal or private employment during normal working hours. In recognition of the need not to unduly restrict the ability of town volunteers and part-time employees to earn a living, the law is less restrictive for "special" municipal employees than for other municipal employees.

The status of "special" municipal employee has to be assigned to a municipal position by vote of the board of selectmen, city council, or similar body. A position is eligible to be designated as "special" if it is unpaid, or if it is part-time and the employee is allowed to have another job during normal working hours, or if the employee was not paid for working more than 800 hours during the preceding 365 days. It is the position that is designated as "special" and not the person or persons holding the position. Selectmen in towns of 10,000 or fewer are automatically "special"; selectman in larger towns cannot be "specials."

If a municipal position has been designated as "special," an employee holding that position may be paid by others, act on behalf of others, and act as attorney for others with respect to matters before municipal boards other than his own, provided that he has not officially participated in the

matter, and the matter is not now, and has not within the past year been, under his official responsibility.

Example : A school committee member who has been designated as a special municipal employee appears before the board of health on behalf of a client of his private law practice, on a matter that he has not participated in or had responsibility for as a school committee member. There is no conflict. However, he may not appear before the school committee, or the school department, on behalf of a client because he has official responsibility for any matter that comes before the school committee. This is still the case even if he has recused himself from participating in the matter in his official capacity.

Example : A member who sits as an alternate on the conservation commission is a special municipal employee. Under town by-laws, he only has official responsibility for matters assigned to him. He may represent a resident who wants to file an application with the conservation commission as long as the matter is not assigned to him and he will not participate in it.

(c) Inside track. Being paid by your city or town, directly or indirectly, under some second arrangement in addition to your job is prohibited, unless an exemption applies. (See Section 20)

A municipal employee generally may not have a financial interest in a municipal contract, including a second municipal job. A municipal employee is also generally prohibited from having an indirect financial interest in a contract that the city or town has with someone else. This provision is intended to prevent municipal employees from having an "inside track" to further financial opportunities.

Example of violation : Legal counsel to the town housing authority becomes the acting executive director of the authority, and is paid in both positions.

Example of violation : A selectman buys a surplus truck from the town DPW.

Example of violation : A full-time secretary for the board of health wants to have a second paid job working part-time for the town library. She will violate Section 20 unless she can meet the requirements of an exemption.

Example of violation : A city councilor wants to work for a non-profit that receives funding under a contract with her city. Unless she can satisfy the requirements of an exemption under Section 20, she cannot take the job.

There are numerous exemptions. A municipal employee may hold multiple unpaid or elected positions. Some exemptions apply only to special municipal employees. Specific exemptions may cover serving as an unpaid volunteer in a second town position, housing-related benefits, public safety positions, certain elected positions, small towns, and other specific situations. Please call the Ethics Commission's Legal Division for advice about a specific situation.

IV. After you leave municipal employment. (See Section 18)

(a) Forever ban. After you leave your municipal job, you may never work for anyone other than the municipality on a matter that you worked on as a municipal employee.

If you participated in a matter as a municipal employee, you cannot ever be paid to work on that same matter for anyone other than the municipality, nor may you act for someone else, whether paid or not. The purpose of this restriction is to bar former employees from selling to private interests their familiarity with the facts of particular matters that are of continuing concern to their former municipal employer. The restriction does not prohibit former municipal employees from using the expertise acquired in government service in their subsequent private activities.

Example of violation : A former school department employee works for a contractor under a contract that she helped to draft and oversee for the school department.

(b) One year cooling-off period. For one year after you leave your municipal job you may not participate in any matter over which you had official responsibility during your last two years of public service.

Former municipal employees are barred for one year after they leave municipal employment from personally appearing before any agency of the municipality in connection with matters that were under their authority in their prior municipal positions during the two years before they left.

Example : An assistant town manager negotiates a three-year contract with a company. The town manager who supervised the assistant, and had official responsibility for the contract but did not participate in negotiating it, leaves her job to work for the company to which the contract was awarded. The former manager may not call or write the town in connection with the company's work on the contract for one year after leaving the town.

A former municipal employee who participated as such in general legislation on expanded gaming and related matters may not become an officer or employee of, or acquire a financial interest in, an applicant for a gaming license, or a gaming licensee, for one year after his public employment ceases.

(c) Partners. Your partners will be subject to restrictions while you serve as a municipal employee and after your municipal service ends.

Partners of municipal employees and former municipal employees are also subject to restrictions under the conflict of interest law. If a municipal employee participated in a matter, or if he has official responsibility for a matter, then his partner may not act on behalf of anyone other than the municipality or provide services as an attorney to anyone but the city or town in relation to the matter.

Example: While serving on a city's historic district commission, an architect reviewed an application to get landmark status for a building. His partners at his architecture firm may not prepare and sign plans for the owner of the building or otherwise act on the owner's behalf in relation to the application for landmark status. In addition, because the architect has official responsibility as a commissioner for every matter that comes before the commission, his partners may not communicate with the commission or otherwise act on behalf of any client on any matter that comes before the commission during the time that the architect serves on the commission.

Example: A former town counsel joins a law firm as a partner. Because she litigated a lawsuit for the town, her new partners cannot represent any private clients in the lawsuit for one year after her job with the town ended.

* * * * *

This summary is not intended to be legal advice and, because it is a summary, it does not mention every provision of the conflict law that may apply in a particular situation. Our website, <http://www.mass.gov/ethics> contains further information about how the law applies in many situations. You can also contact the Commission's Legal Division via our website, by telephone, or by letter. Our contact information is at the top of this document.

Version 5: Revised December 23, 2011

City of Chelsea
Conflict of Interest Law

Compliance Statement and Requirements for Vendors

ACKNOWLEDGMENT OF RECEIPT

I, _____,
(first and last name)

an employee at _____,
(name of vendor)

Hereby acknowledge that I received a copy of the summary of the conflict of interest law for municipal employees, revised December 23, 2011, on

_____.
(date)

The City has a requirement for compliance, which is to make sure that all **vendors** are provided copies of the Summary of the Conflict of Interest Law for Municipal Employees (including Vendors).

VENDORS should copy the Summary of the Conflict of Interest Law and provide it to each one of the employees who are assigned to work in Chelsea.

Each employee shall complete the "Acknowledgment of Receipt" and the Vendor shall return the acknowledgments-only (not the Summary) to the Chelsea the Chelsea Procurement Office.

The "Acknowledgment of Receipt" must be submitted along with any purchase order or contract with the City of Chelsea



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

RONALD L. WALKER, II
Secretary

JEAN ZEILER
Acting Director

Awarding Authority: City of Chelsea
Contract Number: 2015-193 **City/Town:** CHELSEA
Description of Work: On-Road Section Chelsea Greenway: Various marking and signage for upcoming road project
Job Location: Chelsea, MA 02150

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the “Wage Request Number” on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards (“DLS”) if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **If an apprentice rate is not listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAS, the apprentice must be paid the journeyworker's rate for the trade.**
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F “rental of equipment” contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee’s name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.40	\$9.91	\$9.33	\$0.00	\$51.64
	06/01/2015	\$32.75	\$9.91	\$9.33	\$0.00	\$51.99
	08/01/2015	\$32.75	\$10.41	\$9.33	\$0.00	\$52.49
	12/01/2015	\$32.75	\$10.41	\$10.08	\$0.00	\$53.24
	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
	08/01/2016	\$33.25	\$10.91	\$10.08	\$0.00	\$54.24
	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.47	\$9.91	\$9.33	\$0.00	\$51.71
	06/01/2015	\$32.82	\$9.91	\$9.33	\$0.00	\$52.06
	08/01/2015	\$32.82	\$10.41	\$9.33	\$0.00	\$52.56
	12/01/2015	\$32.82	\$10.41	\$10.08	\$0.00	\$53.31
	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.59	\$9.91	\$9.33	\$0.00	\$51.83
	06/01/2015	\$32.94	\$9.91	\$9.33	\$0.00	\$52.18
	08/01/2015	\$32.94	\$10.41	\$9.33	\$0.00	\$52.68
	12/01/2015	\$32.94	\$10.41	\$10.08	\$0.00	\$53.43
	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54.43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
AIR TRACK OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	12/01/2014	\$32.48	\$10.40	\$5.95	\$0.00	\$48.83
	06/01/2015	\$33.43	\$10.40	\$5.95	\$0.00	\$49.78
	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2010	\$37.70	\$6.97	\$11.18	\$0.00	\$55.85

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2010

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
2	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
3	70	\$26.39	\$6.97	\$11.18	\$0.00	\$44.54
4	75	\$28.28	\$6.97	\$11.18	\$0.00	\$46.43
5	80	\$30.16	\$6.97	\$11.18	\$0.00	\$48.31
6	85	\$32.05	\$6.97	\$11.18	\$0.00	\$50.20
7	90	\$33.93	\$6.97	\$11.18	\$0.00	\$52.08
8	95	\$35.82	\$6.97	\$11.18	\$0.00	\$53.97

Notes:

Apprentice to Journeyworker Ratio:1:5

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) <i>BRICKLAYERS LOCAL 3 (BOSTON)</i>	02/01/2015	\$48.96	\$10.18	\$18.50	\$0.00	\$77.64
	08/01/2015	\$49.86	\$10.18	\$18.57	\$0.00	\$78.61
	02/01/2016	\$50.43	\$10.18	\$18.57	\$0.00	\$79.18
	08/01/2016	\$51.33	\$10.18	\$18.65	\$0.00	\$80.16
	02/01/2017	\$51.90	\$10.18	\$18.65	\$0.00	\$80.73

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Boston

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.48	\$10.18	\$18.50	\$0.00	\$53.16
2	60	\$29.38	\$10.18	\$18.50	\$0.00	\$58.06
3	70	\$34.27	\$10.18	\$18.50	\$0.00	\$62.95
4	80	\$39.17	\$10.18	\$18.50	\$0.00	\$67.85
5	90	\$44.06	\$10.18	\$18.50	\$0.00	\$72.74

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.93	\$10.18	\$18.57	\$0.00	\$53.68
2	60	\$29.92	\$10.18	\$18.57	\$0.00	\$58.67
3	70	\$34.90	\$10.18	\$18.57	\$0.00	\$63.65
4	80	\$39.89	\$10.18	\$18.57	\$0.00	\$68.64
5	90	\$44.87	\$10.18	\$18.57	\$0.00	\$73.62

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN	12/01/2014	\$35.70	\$7.30	\$13.15	\$0.00	\$56.15
<i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2015	\$36.45	\$7.30	\$13.15	\$0.00	\$56.90
	12/01/2015	\$37.20	\$7.30	\$13.15	\$0.00	\$57.65
	06/01/2016	\$37.95	\$7.30	\$13.15	\$0.00	\$58.40
	12/01/2016	\$38.95	\$7.30	\$13.15	\$0.00	\$59.40

For apprentice rates see "Apprentice- LABORER"

CAISSON & UNDERPINNING LABORER	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
<i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

CARPENTER <i>CARPENTERS -ZONE 1 (Metro Boston)</i>	03/01/2015	\$42.30	\$9.80	\$16.48	\$0.00	\$68.58
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Apprentice - CARPENTER - Zone 1 Metro Boston

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.15	\$9.80	\$1.63	\$0.00	\$32.58
2	60	\$25.38	\$9.80	\$1.63	\$0.00	\$36.81
3	70	\$29.61	\$9.80	\$11.59	\$0.00	\$51.00
4	75	\$31.73	\$9.80	\$11.59	\$0.00	\$53.12
5	80	\$33.84	\$9.80	\$13.22	\$0.00	\$56.86
6	80	\$33.84	\$9.80	\$13.22	\$0.00	\$56.86
7	90	\$38.07	\$9.80	\$14.85	\$0.00	\$62.72
8	90	\$38.07	\$9.80	\$14.85	\$0.00	\$62.72

Notes:

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING <i>BRICKLAYERS LOCAL 3 (BOSTON)</i>	01/01/2015	\$44.90	\$10.90	\$18.71	\$1.30	\$75.81
	07/01/2015	\$45.82	\$10.90	\$18.71	\$1.30	\$76.73
	01/01/2016	\$46.44	\$10.90	\$18.71	\$1.30	\$77.35

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Boston)

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.45	\$10.90	\$12.21	\$1.30	\$46.86
2	60	\$26.94	\$10.90	\$13.71	\$1.30	\$52.85
3	65	\$29.19	\$10.90	\$14.71	\$1.30	\$56.10
4	70	\$31.43	\$10.90	\$15.71	\$1.30	\$59.34
5	75	\$33.68	\$10.90	\$16.71	\$1.30	\$62.59
6	80	\$35.92	\$10.90	\$17.71	\$1.30	\$65.83
7	90	\$40.41	\$10.90	\$18.71	\$1.30	\$71.32

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.91	\$10.90	\$12.21	\$1.30	\$47.32
2	60	\$27.49	\$10.90	\$13.71	\$1.30	\$53.40
3	65	\$29.78	\$10.90	\$14.71	\$1.30	\$56.69
4	70	\$32.07	\$10.90	\$15.71	\$1.30	\$59.98
5	75	\$34.37	\$10.90	\$16.71	\$1.30	\$63.28
6	80	\$36.66	\$10.90	\$17.71	\$1.30	\$66.57
7	90	\$41.24	\$10.90	\$18.71	\$1.30	\$72.15

Notes:

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	12/01/2014	\$43.39	\$10.00	\$14.30	\$0.00	\$67.69
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$44.14	\$10.00	\$14.30	\$0.00	\$68.44
	12/01/2015	\$45.39	\$10.00	\$14.30	\$0.00	\$69.69
	06/01/2016	\$46.14	\$10.00	\$14.30	\$0.00	\$70.44
	12/01/2016	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	06/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
	12/01/2017	\$49.39	\$10.00	\$14.30	\$0.00	\$73.69

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
	06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
	12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
	06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
	12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
	06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
	12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 1</i>	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.28	\$7.85	\$0.00	\$0.00	\$32.13
2	55	\$26.71	\$7.85	\$3.66	\$0.00	\$38.22
3	60	\$29.14	\$7.85	\$3.99	\$0.00	\$40.98
4	65	\$31.56	\$7.85	\$4.32	\$0.00	\$43.73
5	70	\$33.99	\$7.85	\$14.11	\$0.00	\$55.95
6	75	\$36.42	\$7.85	\$14.44	\$0.00	\$58.71
7	80	\$38.85	\$7.85	\$14.77	\$0.00	\$61.47
8	90	\$43.70	\$7.85	\$15.44	\$0.00	\$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.75	\$7.30	\$12.95	\$0.00	\$56.00
	06/01/2015	\$36.50	\$7.30	\$12.95	\$0.00	\$56.75
	12/01/2015	\$37.25	\$7.30	\$12.95	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	06/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
	12/01/2015	\$37.00	\$7.30	\$12.95	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.75	\$7.30	\$12.95	\$0.00	\$56.00
	06/01/2015	\$36.50	\$7.30	\$12.95	\$0.00	\$56.75
	12/01/2015	\$37.25	\$7.30	\$12.95	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	06/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
	12/01/2015	\$37.00	\$7.30	\$12.95	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$58.24	\$9.80	\$18.17	\$0.00	\$86.21
	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$62.40	\$9.80	\$18.17	\$0.00	\$90.37
	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
DRAWBRIDGE OPERATOR (Construction) <i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN <i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELECTRICIAN - Local 103

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
2	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
3	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
4	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
5	50	\$22.59	\$13.00	\$11.98	\$0.00	\$47.57
6	55	\$24.84	\$13.00	\$12.33	\$0.00	\$50.17
7	60	\$27.10	\$13.00	\$12.66	\$0.00	\$52.76
8	65	\$29.36	\$13.00	\$13.01	\$0.00	\$55.37
9	70	\$31.62	\$13.00	\$13.35	\$0.00	\$57.97
10	75	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.45	\$13.00	\$0.55	\$0.00	\$32.00
2	40	\$18.45	\$13.00	\$0.55	\$0.00	\$32.00
3	45	\$20.76	\$13.00	\$11.65	\$0.00	\$45.41
4	45	\$20.76	\$13.00	\$11.65	\$0.00	\$45.41
5	50	\$23.07	\$13.00	\$11.99	\$0.00	\$48.06
6	55	\$25.37	\$13.00	\$12.34	\$0.00	\$50.71
7	60	\$27.68	\$13.00	\$12.68	\$0.00	\$53.36
8	65	\$29.98	\$13.00	\$13.03	\$0.00	\$56.01
9	70	\$32.29	\$13.00	\$13.37	\$0.00	\$58.66
10	75	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32

Notes :
 App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2012	\$52.45	\$8.78	\$6.96	\$0.00	\$68.19
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2012

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.23	\$8.78	\$0.00	\$0.00	\$35.01
2	55	\$28.85	\$8.78	\$6.96	\$0.00	\$44.59
3	65	\$34.09	\$8.78	\$6.96	\$0.00	\$49.83
4	70	\$36.72	\$8.78	\$6.96	\$0.00	\$52.46
5	80	\$41.96	\$8.78	\$6.96	\$0.00	\$57.70

Notes:
Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER <i>ELEVATOR CONSTRUCTORS LOCAL 4</i>	01/01/2012	\$38.59	\$8.78	\$6.96	\$0.00	\$54.33
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For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

FENCE & GUARD RAIL ERECTOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2015	\$40.22	\$10.00	\$14.30	\$0.00	\$64.52
	11/01/2015	\$40.80	\$10.00	\$14.30	\$0.00	\$65.10
	05/01/2016	\$41.69	\$10.00	\$14.30	\$0.00	\$65.99
	11/01/2016	\$42.28	\$10.00	\$14.30	\$0.00	\$66.58
	05/01/2017	\$43.16	\$10.00	\$14.30	\$0.00	\$67.46
	11/01/2017	\$43.89	\$10.00	\$14.30	\$0.00	\$68.19
	05/01/2018	\$44.60	\$10.00	\$14.30	\$0.00	\$68.90

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2015	\$41.65	\$10.00	\$14.30	\$0.00	\$65.95
	11/01/2015	\$42.24	\$10.00	\$14.30	\$0.00	\$66.54
	05/01/2016	\$43.13	\$10.00	\$14.30	\$0.00	\$67.43
	11/01/2016	\$43.73	\$10.00	\$14.30	\$0.00	\$68.03
	05/01/2017	\$44.62	\$10.00	\$14.30	\$0.00	\$68.92
	11/01/2017	\$45.35	\$10.00	\$14.30	\$0.00	\$69.65
	05/01/2018	\$46.07	\$10.00	\$14.30	\$0.00	\$70.37

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2015	\$21.68	\$10.00	\$14.30	\$0.00	\$45.98
	11/01/2015	\$22.02	\$10.00	\$14.30	\$0.00	\$46.32
	05/01/2016	\$22.54	\$10.00	\$14.30	\$0.00	\$46.84
	11/01/2016	\$22.89	\$10.00	\$14.30	\$0.00	\$47.19
	05/01/2017	\$23.42	\$10.00	\$14.30	\$0.00	\$47.72
	11/01/2017	\$23.84	\$10.00	\$14.30	\$0.00	\$48.14
	05/01/2018	\$24.27	\$10.00	\$14.30	\$0.00	\$48.57

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING <i>ELECTRICIANS</i> <i>LOCAL 103</i>	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$35.33	\$10.00	\$14.30	\$0.00	\$59.63
	06/01/2015	\$35.95	\$10.00	\$14.30	\$0.00	\$60.25
	12/01/2015	\$37.00	\$10.00	\$14.30	\$0.00	\$61.30
	06/01/2016	\$37.62	\$10.00	\$14.30	\$0.00	\$61.92
	12/01/2016	\$38.66	\$10.00	\$14.30	\$0.00	\$62.96
	06/01/2017	\$39.50	\$10.00	\$14.30	\$0.00	\$63.80
	12/01/2017	\$40.33	\$10.00	\$14.30	\$0.00	\$64.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE 1</i>	12/01/2014	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	06/01/2015	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	12/01/2015	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	06/01/2016	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
	12/01/2016	\$20.50	\$7.30	\$12.95	\$0.00	\$40.75
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE 1</i>	09/01/2014	\$40.40	\$9.80	\$17.21	\$0.00	\$67.41

Apprentice - FLOORCOVERER - Local 2168 Zone 1

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.20	\$9.80	\$1.79	\$0.00	\$31.79
2	55	\$22.22	\$9.80	\$1.79	\$0.00	\$33.81
3	60	\$24.24	\$9.80	\$11.84	\$0.00	\$45.88
4	65	\$26.26	\$9.80	\$11.84	\$0.00	\$47.90
5	70	\$28.28	\$9.80	\$13.63	\$0.00	\$51.71
6	75	\$30.30	\$9.80	\$13.63	\$0.00	\$53.73
7	80	\$32.32	\$9.80	\$15.42	\$0.00	\$57.54
8	85	\$34.34	\$9.80	\$15.42	\$0.00	\$59.56

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
	06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
	12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
	06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
	12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
	06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
	12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 35 (ZONE 1)</i>	01/01/2015	\$42.95	\$7.85	\$16.10	\$0.00	\$66.90
	07/01/2015	\$43.85	\$7.85	\$16.10	\$0.00	\$67.80
	01/01/2016	\$44.80	\$7.85	\$16.10	\$0.00	\$68.75
	07/01/2016	\$45.75	\$7.85	\$16.10	\$0.00	\$69.70
	01/01/2017	\$46.70	\$7.85	\$16.10	\$0.00	\$70.65

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - GLAZIER - Local 35 Zone 1

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.48	\$7.85	\$0.00	\$0.00	\$29.33
2	55	\$23.62	\$7.85	\$3.66	\$0.00	\$35.13
3	60	\$25.77	\$7.85	\$3.99	\$0.00	\$37.61
4	65	\$27.92	\$7.85	\$4.32	\$0.00	\$40.09
5	70	\$30.07	\$7.85	\$14.11	\$0.00	\$52.03
6	75	\$32.21	\$7.85	\$14.44	\$0.00	\$54.50
7	80	\$34.36	\$7.85	\$14.77	\$0.00	\$56.98
8	90	\$38.66	\$7.85	\$15.44	\$0.00	\$61.95

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.93	\$7.85	\$0.00	\$0.00	\$29.78
2	55	\$24.12	\$7.85	\$3.66	\$0.00	\$35.63
3	60	\$26.31	\$7.85	\$3.99	\$0.00	\$38.15
4	65	\$28.50	\$7.85	\$4.32	\$0.00	\$40.67
5	70	\$30.70	\$7.85	\$14.11	\$0.00	\$52.66
6	75	\$32.89	\$7.85	\$14.44	\$0.00	\$55.18
7	80	\$35.08	\$7.85	\$14.77	\$0.00	\$57.70
8	90	\$39.47	\$7.85	\$15.44	\$0.00	\$62.76

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.31	\$10.00	\$0.00	\$0.00	\$33.31
2	60	\$25.43	\$10.00	\$14.30	\$0.00	\$49.73
3	65	\$27.55	\$10.00	\$14.30	\$0.00	\$51.85
4	70	\$29.67	\$10.00	\$14.30	\$0.00	\$53.97
5	75	\$31.79	\$10.00	\$14.30	\$0.00	\$56.09
6	80	\$33.91	\$10.00	\$14.30	\$0.00	\$58.21
7	85	\$36.03	\$10.00	\$14.30	\$0.00	\$60.33
8	90	\$38.15	\$10.00	\$14.30	\$0.00	\$62.45

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.73	\$10.00	\$0.00	\$0.00	\$33.73
2	60	\$25.88	\$10.00	\$14.30	\$0.00	\$50.18
3	65	\$28.04	\$10.00	\$14.30	\$0.00	\$52.34
4	70	\$30.20	\$10.00	\$14.30	\$0.00	\$54.50
5	75	\$32.36	\$10.00	\$14.30	\$0.00	\$56.66
6	80	\$34.51	\$10.00	\$14.30	\$0.00	\$58.81
7	85	\$36.67	\$10.00	\$14.30	\$0.00	\$60.97
8	90	\$38.83	\$10.00	\$14.30	\$0.00	\$63.13

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) SHEETMETAL WORKERS LOCAL 17 - A	02/01/2015	\$43.28	\$10.20	\$20.54	\$2.22	\$76.24
	08/01/2015	\$44.28	\$10.20	\$20.54	\$2.22	\$77.24
	02/01/2016	\$45.28	\$10.20	\$20.54	\$2.22	\$78.24
	08/01/2016	\$46.43	\$10.20	\$20.54	\$2.22	\$79.39
	02/01/2017	\$47.53	\$10.20	\$20.54	\$2.22	\$80.49
	08/01/2017	\$48.63	\$10.20	\$20.54	\$2.22	\$81.59
	02/01/2018	\$49.78	\$10.20	\$20.54	\$2.22	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) ELECTRICIANS LOCAL 103	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

For apprentice rates see "Apprentice- ELECTRICIAN"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2015	\$43.28	\$10.20	\$20.54	\$2.22	\$76.24
	08/01/2015	\$44.28	\$10.20	\$20.54	\$2.22	\$77.24
	02/01/2016	\$45.28	\$10.20	\$20.54	\$2.22	\$78.24
	08/01/2016	\$46.43	\$10.20	\$20.54	\$2.22	\$79.39
	02/01/2017	\$47.53	\$10.20	\$20.54	\$2.22	\$80.49
	08/01/2017	\$48.63	\$10.20	\$20.54	\$2.22	\$81.59
	02/01/2018	\$49.78	\$10.20	\$20.54	\$2.22	\$82.74
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING - WATER) <i>PIPEFITTERS LOCAL 537</i>	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PIPEFITTERS LOCAL 537</i>	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 1</i>	12/01/2014	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	06/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	12/01/2015	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	06/01/2016	\$37.60	\$7.30	\$12.95	\$0.00	\$57.85
	12/01/2016	\$38.60	\$7.30	\$12.95	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2014	\$43.31	\$11.25	\$12.60	\$0.00	\$67.16

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.66	\$11.25	\$9.35	\$0.00	\$42.26
2	60	\$25.99	\$11.25	\$10.00	\$0.00	\$47.24
3	70	\$30.32	\$11.25	\$10.65	\$0.00	\$52.22
4	80	\$34.65	\$11.25	\$11.30	\$0.00	\$57.20

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (BOSTON AREA)</i>	03/16/2015	\$42.11	\$7.70	\$20.25	\$0.00	\$70.06
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Boston

Effective Date - 03/16/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$25.27	\$7.70	\$20.25	\$0.00	\$53.22
2	70	\$29.48	\$7.70	\$20.25	\$0.00	\$57.43
3	75	\$31.58	\$7.70	\$20.25	\$0.00	\$59.53
4	80	\$33.69	\$7.70	\$20.25	\$0.00	\$61.64
5	85	\$35.79	\$7.70	\$20.25	\$0.00	\$63.74
6	90	\$37.90	\$7.70	\$20.25	\$0.00	\$65.85

Notes:

** Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:**

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS - ZONE 1	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10

Apprentice - LABORER - Zone 1

Effective Date - 12/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.76	\$7.30	\$12.95	\$0.00	\$41.01
2	70	\$24.22	\$7.30	\$12.95	\$0.00	\$44.47
3	80	\$27.68	\$7.30	\$12.95	\$0.00	\$47.93
4	90	\$31.14	\$7.30	\$12.95	\$0.00	\$51.39

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$21.21	\$7.30	\$12.95	\$0.00	\$41.46
2	70	\$24.75	\$7.30	\$12.95	\$0.00	\$45.00
3	80	\$28.28	\$7.30	\$12.95	\$0.00	\$48.53
4	90	\$31.82	\$7.30	\$12.95	\$0.00	\$52.07

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.75	\$7.30	\$12.95	\$0.00	\$55.00
	06/01/2015	\$35.50	\$7.30	\$12.95	\$0.00	\$55.75
	12/01/2015	\$36.25	\$7.30	\$12.95	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2015	\$37.37	\$10.18	\$17.18	\$0.00	\$64.73
	08/01/2015	\$38.08	\$10.18	\$17.25	\$0.00	\$65.51
	02/01/2016	\$38.53	\$10.18	\$17.25	\$0.00	\$65.96
	08/01/2016	\$39.23	\$10.18	\$17.33	\$0.00	\$66.74
	02/01/2017	\$39.69	\$10.18	\$17.33	\$0.00	\$67.20

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.69	\$10.18	\$17.18	\$0.00	\$46.05
2	60	\$22.42	\$10.18	\$17.18	\$0.00	\$49.78
3	70	\$26.16	\$10.18	\$17.18	\$0.00	\$53.52
4	80	\$29.90	\$10.18	\$17.18	\$0.00	\$57.26
5	90	\$33.63	\$10.18	\$17.18	\$0.00	\$60.99

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.04	\$10.18	\$17.25	\$0.00	\$46.47
2	60	\$22.85	\$10.18	\$17.25	\$0.00	\$50.28
3	70	\$26.66	\$10.18	\$17.25	\$0.00	\$54.09
4	80	\$30.46	\$10.18	\$17.25	\$0.00	\$57.89
5	90	\$34.27	\$10.18	\$17.25	\$0.00	\$61.70

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH	02/01/2015	\$49.00	\$10.18	\$18.50	\$0.00	\$77.68
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2015	\$49.90	\$10.18	\$18.57	\$0.00	\$78.65
	02/01/2016	\$50.47	\$10.18	\$18.57	\$0.00	\$79.22
	08/01/2016	\$51.37	\$10.18	\$18.65	\$0.00	\$80.20
	02/01/2017	\$51.94	\$10.18	\$18.65	\$0.00	\$80.77

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.50	\$10.18	\$18.50	\$0.00	\$53.18
2	60	\$29.40	\$10.18	\$18.50	\$0.00	\$58.08
3	70	\$34.30	\$10.18	\$18.50	\$0.00	\$62.98
4	80	\$39.20	\$10.18	\$18.50	\$0.00	\$67.88
5	90	\$44.10	\$10.18	\$18.50	\$0.00	\$72.78

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.95	\$10.18	\$18.57	\$0.00	\$53.70
2	60	\$29.94	\$10.18	\$18.57	\$0.00	\$58.69
3	70	\$34.93	\$10.18	\$18.57	\$0.00	\$63.68
4	80	\$39.92	\$10.18	\$18.57	\$0.00	\$68.67
5	90	\$44.91	\$10.18	\$18.57	\$0.00	\$73.66

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 1) <i>MILLWRIGHTS LOCAL 1121 - Zone 1</i>	04/01/2015	\$37.64	\$9.80	\$16.21	\$0.00	\$63.65
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MILLWRIGHT - Local 1121 Zone 1

Effective Date - 04/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.70	\$9.80	\$4.48	\$0.00	\$34.98
2	65	\$24.47	\$9.80	\$13.36	\$0.00	\$47.63
3	75	\$28.23	\$9.80	\$14.18	\$0.00	\$52.21
4	85	\$31.99	\$9.80	\$14.99	\$0.00	\$56.78

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
<i>LABORERS - ZONE 1</i>	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/01/2014	\$21.90	\$10.00	\$14.30	\$0.00	\$46.20
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2015	\$22.28	\$10.00	\$14.30	\$0.00	\$46.58
	12/01/2015	\$22.93	\$10.00	\$14.30	\$0.00	\$47.23
	06/01/2016	\$23.32	\$10.00	\$14.30	\$0.00	\$47.62
	12/01/2016	\$23.97	\$10.00	\$14.30	\$0.00	\$48.27
	06/01/2017	\$24.48	\$10.00	\$14.30	\$0.00	\$48.78
	12/01/2017	\$25.00	\$10.00	\$14.30	\$0.00	\$49.30

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS)	12/01/2014	\$25.54	\$10.00	\$14.30	\$0.00	\$49.84
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2015	\$25.99	\$10.00	\$14.30	\$0.00	\$50.29
	12/01/2015	\$26.74	\$10.00	\$14.30	\$0.00	\$51.04
	06/01/2016	\$27.20	\$10.00	\$14.30	\$0.00	\$51.50
	12/01/2016	\$27.95	\$10.00	\$14.30	\$0.00	\$52.25
	06/01/2017	\$28.55	\$10.00	\$14.30	\$0.00	\$52.85
	12/01/2017	\$29.16	\$10.00	\$14.30	\$0.00	\$53.46

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 1</i>	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.28	\$7.85	\$0.00	\$0.00	\$32.13
2	55	\$26.71	\$7.85	\$3.66	\$0.00	\$38.22
3	60	\$29.14	\$7.85	\$3.99	\$0.00	\$40.98
4	65	\$31.56	\$7.85	\$4.32	\$0.00	\$43.73
5	70	\$33.99	\$7.85	\$14.11	\$0.00	\$55.95
6	75	\$36.42	\$7.85	\$14.44	\$0.00	\$58.71
7	80	\$38.85	\$7.85	\$14.77	\$0.00	\$61.47
8	90	\$43.70	\$7.85	\$15.44	\$0.00	\$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2015	\$44.35	\$7.85	\$16.10	\$0.00	\$68.30
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 1</i>	07/01/2015	\$45.25	\$7.85	\$16.10	\$0.00	\$69.20
	01/01/2016	\$46.20	\$7.85	\$16.10	\$0.00	\$70.15
	07/01/2016	\$47.15	\$7.85	\$16.10	\$0.00	\$71.10
	01/01/2017	\$48.10	\$7.85	\$16.10	\$0.00	\$72.05

Apprentice - PAINTER Local 35 Zone 1 - Spray/Sandblast - New

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.18	\$7.85	\$0.00	\$0.00	\$30.03
2	55	\$24.39	\$7.85	\$3.66	\$0.00	\$35.90
3	60	\$26.61	\$7.85	\$3.99	\$0.00	\$38.45
4	65	\$28.83	\$7.85	\$4.32	\$0.00	\$41.00
5	70	\$31.05	\$7.85	\$14.11	\$0.00	\$53.01
6	75	\$33.26	\$7.85	\$14.44	\$0.00	\$55.55
7	80	\$35.48	\$7.85	\$14.77	\$0.00	\$58.10
8	90	\$39.92	\$7.85	\$15.44	\$0.00	\$63.21

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.63	\$7.85	\$0.00	\$0.00	\$30.48
2	55	\$24.89	\$7.85	\$3.66	\$0.00	\$36.40
3	60	\$27.15	\$7.85	\$3.99	\$0.00	\$38.99
4	65	\$29.41	\$7.85	\$4.32	\$0.00	\$41.58
5	70	\$31.68	\$7.85	\$14.11	\$0.00	\$53.64
6	75	\$33.94	\$7.85	\$14.44	\$0.00	\$56.23
7	80	\$36.20	\$7.85	\$14.77	\$0.00	\$58.82
8	90	\$40.73	\$7.85	\$15.44	\$0.00	\$64.02

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	01/01/2015	\$42.41	\$7.85	\$16.10	\$0.00	\$66.36
PAINTERS LOCAL 35 - ZONE 1	07/01/2015	\$43.31	\$7.85	\$16.10	\$0.00	\$67.26
	01/01/2016	\$44.26	\$7.85	\$16.10	\$0.00	\$68.21
	07/01/2016	\$45.21	\$7.85	\$16.10	\$0.00	\$69.16
	01/01/2017	\$46.16	\$7.85	\$16.10	\$0.00	\$70.11

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 1 - Spray/Sandblast - Repaint

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.21	\$7.85	\$0.00	\$0.00	\$29.06
2	55	\$23.33	\$7.85	\$3.66	\$0.00	\$34.84
3	60	\$25.45	\$7.85	\$3.99	\$0.00	\$37.29
4	65	\$27.57	\$7.85	\$4.32	\$0.00	\$39.74
5	70	\$29.69	\$7.85	\$14.11	\$0.00	\$51.65
6	75	\$31.81	\$7.85	\$14.44	\$0.00	\$54.10
7	80	\$33.93	\$7.85	\$14.77	\$0.00	\$56.55
8	90	\$38.17	\$7.85	\$15.44	\$0.00	\$61.46

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.66	\$7.85	\$0.00	\$0.00	\$29.51
2	55	\$23.82	\$7.85	\$3.66	\$0.00	\$35.33
3	60	\$25.99	\$7.85	\$3.99	\$0.00	\$37.83
4	65	\$28.15	\$7.85	\$4.32	\$0.00	\$40.32
5	70	\$30.32	\$7.85	\$14.11	\$0.00	\$52.28
6	75	\$32.48	\$7.85	\$14.44	\$0.00	\$54.77
7	80	\$34.65	\$7.85	\$14.77	\$0.00	\$57.27
8	90	\$38.98	\$7.85	\$15.44	\$0.00	\$62.27

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS)	12/01/2014	\$34.60	\$7.30	\$12.95	\$0.00	\$54.85
LABORERS - ZONE 1	06/01/2015	\$35.35	\$7.30	\$12.95	\$0.00	\$55.60
	12/01/2015	\$36.10	\$7.30	\$12.95	\$0.00	\$56.35
	06/01/2016	\$36.85	\$7.30	\$12.95	\$0.00	\$57.10
	12/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10

For Apprentice rates see "Apprentice- LABORER"

PAINTER / TAPER (BRUSH, NEW) *	01/01/2015	\$42.95	\$7.85	\$16.10	\$0.00	\$66.90
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 1	07/01/2015	\$43.85	\$7.85	\$16.10	\$0.00	\$67.80
	01/01/2016	\$44.80	\$7.85	\$16.10	\$0.00	\$68.75
	07/01/2016	\$45.75	\$7.85	\$16.10	\$0.00	\$69.70
	01/01/2017	\$46.70	\$7.85	\$16.10	\$0.00	\$70.65

Apprentice - PAINTER - Local 35 Zone 1 - BRUSH NEW

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.48	\$7.85	\$0.00	\$0.00	\$29.33
2	55	\$23.62	\$7.85	\$3.66	\$0.00	\$35.13
3	60	\$25.77	\$7.85	\$3.99	\$0.00	\$37.61
4	65	\$27.92	\$7.85	\$4.32	\$0.00	\$40.09
5	70	\$30.07	\$7.85	\$14.11	\$0.00	\$52.03
6	75	\$32.21	\$7.85	\$14.44	\$0.00	\$54.50
7	80	\$34.36	\$7.85	\$14.77	\$0.00	\$56.98
8	90	\$38.66	\$7.85	\$15.44	\$0.00	\$61.95

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.93	\$7.85	\$0.00	\$0.00	\$29.78
2	55	\$24.12	\$7.85	\$3.66	\$0.00	\$35.63
3	60	\$26.31	\$7.85	\$3.99	\$0.00	\$38.15
4	65	\$28.50	\$7.85	\$4.32	\$0.00	\$40.67
5	70	\$30.70	\$7.85	\$14.11	\$0.00	\$52.66
6	75	\$32.89	\$7.85	\$14.44	\$0.00	\$55.18
7	80	\$35.08	\$7.85	\$14.77	\$0.00	\$57.70
8	90	\$39.47	\$7.85	\$15.44	\$0.00	\$62.76

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	01/01/2015	\$41.01	\$7.85	\$16.10	\$0.00	\$64.96
PAINTERS LOCAL 35 - ZONE 1	07/01/2015	\$41.91	\$7.85	\$16.10	\$0.00	\$65.86
	01/01/2016	\$42.86	\$7.85	\$16.10	\$0.00	\$66.81
	07/01/2016	\$43.81	\$7.85	\$16.10	\$0.00	\$67.76
	01/01/2017	\$44.76	\$7.85	\$16.10	\$0.00	\$68.71

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 1 - BRUSH REPAINT

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.51	\$7.85	\$0.00	\$0.00	\$28.36
2	55	\$22.56	\$7.85	\$3.66	\$0.00	\$34.07
3	60	\$24.61	\$7.85	\$3.99	\$0.00	\$36.45
4	65	\$26.66	\$7.85	\$4.32	\$0.00	\$38.83
5	70	\$28.71	\$7.85	\$14.11	\$0.00	\$50.67
6	75	\$30.76	\$7.85	\$14.44	\$0.00	\$53.05
7	80	\$32.81	\$7.85	\$14.77	\$0.00	\$55.43
8	90	\$36.91	\$7.85	\$15.44	\$0.00	\$60.20

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.96	\$7.85	\$0.00	\$0.00	\$28.81
2	55	\$23.05	\$7.85	\$3.66	\$0.00	\$34.56
3	60	\$25.15	\$7.85	\$3.99	\$0.00	\$36.99
4	65	\$27.24	\$7.85	\$4.32	\$0.00	\$39.41
5	70	\$29.34	\$7.85	\$14.11	\$0.00	\$51.30
6	75	\$31.43	\$7.85	\$14.44	\$0.00	\$53.72
7	80	\$33.53	\$7.85	\$14.77	\$0.00	\$56.15
8	90	\$37.72	\$7.85	\$15.44	\$0.00	\$61.01

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.23	\$9.91	\$9.33	\$0.00	\$51.47
	06/01/2015	\$32.58	\$9.91	\$9.33	\$0.00	\$51.82
	08/01/2015	\$32.58	\$10.41	\$9.33	\$0.00	\$52.32
	12/01/2015	\$32.58	\$10.41	\$10.08	\$0.00	\$53.07
	06/01/2016	\$33.08	\$10.41	\$10.08	\$0.00	\$53.57
	08/01/2016	\$33.08	\$10.91	\$10.08	\$0.00	\$54.07
	12/01/2016	\$33.08	\$10.91	\$10.89	\$0.00	\$54.88
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
PILE DRIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07

Apprentice - PILE DRIVER - Local 56 Zone 1

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$9.80	\$18.17	\$0.00	\$48.77
2	60	\$24.96	\$9.80	\$18.17	\$0.00	\$52.93
3	70	\$29.12	\$9.80	\$18.17	\$0.00	\$57.09
4	75	\$31.20	\$9.80	\$18.17	\$0.00	\$59.17
5	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
6	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
7	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41
8	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.55	\$9.80	\$18.17	\$0.00	\$49.52
2	60	\$25.86	\$9.80	\$18.17	\$0.00	\$53.83
3	70	\$30.17	\$9.80	\$18.17	\$0.00	\$58.14
4	75	\$32.33	\$9.80	\$18.17	\$0.00	\$60.30
5	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
6	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
7	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76
8	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76

Notes:

Apprentice to Journeyworker Ratio:1:3

PIPEFITTER & STEAMFITTER	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
PIPEFITTERS LOCAL 537	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PIPEFITTER - Local 537

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.48	\$9.70	\$7.50	\$0.00	\$36.68
2	45	\$21.91	\$9.70	\$16.89	\$0.00	\$48.50
3	60	\$29.21	\$9.70	\$16.89	\$0.00	\$55.80
4	70	\$34.08	\$9.70	\$16.89	\$0.00	\$60.67
5	80	\$38.95	\$9.70	\$16.89	\$0.00	\$65.54

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.88	\$9.70	\$7.50	\$0.00	\$37.08
2	45	\$22.36	\$9.70	\$16.89	\$0.00	\$48.95
3	60	\$29.81	\$9.70	\$16.89	\$0.00	\$56.40
4	70	\$34.78	\$9.70	\$16.89	\$0.00	\$61.37
5	80	\$39.75	\$9.70	\$16.89	\$0.00	\$66.34

Notes:
 ** 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.
 Refrig/AC Mechanic **1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

Apprentice to Journeyworker Ratio:**

PIPELAYER	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

PLUMBERS & GASFITTERS	03/01/2015	\$50.21	\$10.32	\$14.89	\$0.00	\$75.42
PLUMBERS & GASFITTERS LOCAL 12	09/01/2015	\$51.21	\$10.32	\$14.89	\$0.00	\$76.42
	03/01/2016	\$52.36	\$10.32	\$14.89	\$0.00	\$77.57
	09/01/2016	\$53.41	\$10.32	\$14.89	\$0.00	\$78.62
	03/01/2017	\$54.41	\$10.32	\$14.89	\$0.00	\$79.62

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PLUMBER/GASFITTER - Local 12

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.57	\$10.32	\$5.54	\$0.00	\$33.43
2	40	\$20.08	\$10.32	\$6.27	\$0.00	\$36.67
3	55	\$27.62	\$10.32	\$8.42	\$0.00	\$46.36
4	65	\$32.64	\$10.32	\$9.87	\$0.00	\$52.83
5	75	\$37.66	\$10.32	\$11.30	\$0.00	\$59.28

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.92	\$10.32	\$5.54	\$0.00	\$33.78
2	40	\$20.48	\$10.32	\$6.27	\$0.00	\$37.07
3	55	\$28.17	\$10.32	\$8.42	\$0.00	\$46.91
4	65	\$33.29	\$10.32	\$9.87	\$0.00	\$53.48
5	75	\$38.41	\$10.32	\$11.30	\$0.00	\$60.03

Notes:

** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
Step4 with lic\$56.05 Step5 with lic\$62.48

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.)	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
PIPEFITTERS LOCAL 537	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
LABORERS - ZONE 1	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

POWDERMAN & BLASTER	12/01/2014	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
LABORERS - ZONE 1	06/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	12/01/2015	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	06/01/2016	\$37.85	\$7.30	\$12.95	\$0.00	\$58.10
	12/01/2016	\$38.85	\$7.30	\$12.95	\$0.00	\$59.10

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$29.40	\$10.00	\$14.30	\$0.00	\$53.70
	06/01/2015	\$29.92	\$10.00	\$14.30	\$0.00	\$54.22
	12/01/2015	\$30.79	\$10.00	\$14.30	\$0.00	\$55.09
	06/01/2016	\$31.31	\$10.00	\$14.30	\$0.00	\$55.61
	12/01/2016	\$32.18	\$10.00	\$14.30	\$0.00	\$56.48
	06/01/2017	\$32.87	\$10.00	\$14.30	\$0.00	\$57.17
	12/01/2017	\$33.56	\$10.00	\$14.30	\$0.00	\$57.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 (Drivers Hired After 4/30/2010) <i>TEAMSTERS LOCAL 25c</i>	05/01/2015	\$27.88	\$7.73	\$8.92	\$0.00	\$44.53
	07/01/2015	\$27.88	\$7.98	\$8.92	\$0.00	\$44.78
	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 25c</i>	05/01/2015	\$29.18	\$7.73	\$8.92	\$0.00	\$45.83
	07/01/2015	\$29.18	\$7.98	\$8.92	\$0.00	\$46.08
	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) <i>CARPENTERS -ZONE 2 (Residential Wood)</i>	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. <i>CARPENTERS -ZONE 2 (Residential Wood)</i> As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

Apprentice - CARPENTER (Residential Wood Frame) - Zone 2

Effective Date - 05/01/2011

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20.88
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$27.11
3	65	\$15.76	\$6.34	\$6.23	\$0.00	\$28.33
4	70	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54
5	75	\$18.18	\$6.34	\$6.23	\$0.00	\$30.75
6	80	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96
7	85	\$20.60	\$6.34	\$6.23	\$0.00	\$33.17
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39

Notes:

Apprentice to Journeyworker Ratio:1:5

RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg) <i>ROOFERS LOCAL 33</i>	02/01/2015	\$40.11	\$10.50	\$11.60	\$0.00	\$62.21
	08/01/2015	\$41.01	\$10.50	\$11.60	\$0.00	\$63.11
	02/01/2016	\$41.91	\$10.50	\$11.60	\$0.00	\$64.01

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$10.50	\$3.38	\$0.00	\$33.94
2	60	\$24.07	\$10.50	\$11.60	\$0.00	\$46.17
3	65	\$26.07	\$10.50	\$11.60	\$0.00	\$48.17
4	75	\$30.08	\$10.50	\$11.60	\$0.00	\$52.18
5	85	\$34.09	\$10.50	\$11.60	\$0.00	\$56.19

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.51	\$10.50	\$3.38	\$0.00	\$34.39
2	60	\$24.61	\$10.50	\$11.60	\$0.00	\$46.71
3	65	\$26.66	\$10.50	\$11.60	\$0.00	\$48.76
4	75	\$30.76	\$10.50	\$11.60	\$0.00	\$52.86
5	85	\$34.86	\$10.50	\$11.60	\$0.00	\$56.96

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
 Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE ROOFERS LOCAL 33	02/01/2015	\$40.36	\$10.50	\$11.60	\$0.00	\$62.46
	08/01/2015	\$41.26	\$10.50	\$11.60	\$0.00	\$63.36
	02/01/2016	\$42.16	\$10.50	\$11.60	\$0.00	\$64.26
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER SHEETMETAL WORKERS LOCAL 17 - A	02/01/2015	\$43.28	\$10.20	\$20.54	\$2.22	\$76.24
	08/01/2015	\$44.28	\$10.20	\$20.54	\$2.22	\$77.24
	02/01/2016	\$45.28	\$10.20	\$20.54	\$2.22	\$78.24
	08/01/2016	\$46.43	\$10.20	\$20.54	\$2.22	\$79.39
	02/01/2017	\$47.53	\$10.20	\$20.54	\$2.22	\$80.49
	08/01/2017	\$48.63	\$10.20	\$20.54	\$2.22	\$81.59
	02/01/2018	\$49.78	\$10.20	\$20.54	\$2.22	\$82.74

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 17-A

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.31	\$10.20	\$4.58	\$0.00	\$32.09
2	40	\$17.31	\$10.20	\$4.58	\$0.00	\$32.09
3	45	\$19.48	\$10.20	\$9.09	\$1.16	\$39.93
4	45	\$19.48	\$10.20	\$9.09	\$1.16	\$39.93
5	50	\$21.64	\$10.20	\$9.91	\$1.25	\$43.00
6	50	\$21.64	\$10.20	\$10.16	\$1.26	\$43.26
7	60	\$25.97	\$10.20	\$11.55	\$1.43	\$49.15
8	65	\$28.13	\$10.20	\$12.38	\$1.52	\$52.23
9	75	\$32.46	\$10.20	\$14.02	\$1.70	\$58.38
10	85	\$36.79	\$10.20	\$15.16	\$1.86	\$64.01

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.71	\$10.20	\$4.58	\$0.00	\$32.49
2	40	\$17.71	\$10.20	\$4.58	\$0.00	\$32.49
3	45	\$19.93	\$10.20	\$9.09	\$1.18	\$40.40
4	45	\$19.93	\$10.20	\$9.09	\$1.18	\$40.40
5	50	\$22.14	\$10.20	\$9.91	\$1.27	\$43.52
6	50	\$22.14	\$10.20	\$10.16	\$1.28	\$43.78
7	60	\$26.57	\$10.20	\$11.55	\$1.45	\$49.77
8	65	\$28.78	\$10.20	\$12.38	\$1.54	\$52.90
9	75	\$33.21	\$10.20	\$14.02	\$1.72	\$59.15
10	85	\$37.64	\$10.20	\$15.16	\$1.89	\$64.89

Notes:
Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 1	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SIGN ERECTOR - Local 35 Zone 1

Effective Date - 06/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

Notes:
Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

SPECIALIZED EARTH MOVING EQUIP < 35 TONS		12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
<i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>		06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
		08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
		12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
		06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
		08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
		12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
SPECIALIZED EARTH MOVING EQUIP > 35 TONS		12/01/2014	\$32.98	\$9.91	\$9.33	\$0.00	\$52.22
<i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>		06/01/2015	\$33.33	\$9.91	\$9.33	\$0.00	\$52.57
		08/01/2015	\$33.33	\$10.41	\$9.33	\$0.00	\$53.07
		12/01/2015	\$33.33	\$10.41	\$10.08	\$0.00	\$53.82
		06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
		08/01/2016	\$33.83	\$10.91	\$10.08	\$0.00	\$54.82
		12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63
SPRINKLER FITTER		03/01/2015	\$54.43	\$8.42	\$14.90	\$0.00	\$77.75
<i>SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1</i>		10/01/2015	\$55.58	\$8.42	\$14.90	\$0.00	\$78.90
		01/01/2016	\$55.58	\$8.67	\$15.05	\$0.00	\$79.30
		03/01/2016	\$56.58	\$8.67	\$15.05	\$0.00	\$80.30
		10/01/2016	\$57.73	\$8.67	\$15.05	\$0.00	\$81.45
		03/01/2017	\$58.73	\$8.67	\$15.05	\$0.00	\$82.45

Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.05	\$8.42	\$8.40	\$0.00	\$35.87
2	40	\$21.77	\$8.42	\$8.40	\$0.00	\$38.59
3	45	\$24.49	\$8.42	\$8.40	\$0.00	\$41.31
4	50	\$27.22	\$8.42	\$8.40	\$0.00	\$44.04
5	55	\$29.94	\$8.42	\$8.40	\$0.00	\$46.76
6	60	\$32.66	\$8.42	\$8.40	\$0.00	\$49.48
7	65	\$35.38	\$8.42	\$8.40	\$0.00	\$52.20
8	70	\$38.10	\$8.42	\$8.40	\$0.00	\$54.92
9	75	\$40.82	\$8.42	\$8.40	\$0.00	\$57.64
10	80	\$43.54	\$8.42	\$8.40	\$0.00	\$60.36

Effective Date - 10/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.45	\$8.42	\$8.40	\$0.00	\$36.27
2	40	\$22.23	\$8.42	\$8.40	\$0.00	\$39.05
3	45	\$25.01	\$8.42	\$8.40	\$0.00	\$41.83
4	50	\$27.79	\$8.42	\$8.40	\$0.00	\$44.61
5	55	\$30.57	\$8.42	\$8.40	\$0.00	\$47.39
6	60	\$33.35	\$8.42	\$8.40	\$0.00	\$50.17
7	65	\$36.13	\$8.42	\$8.40	\$0.00	\$52.95
8	70	\$38.91	\$8.42	\$8.40	\$0.00	\$55.73
9	75	\$41.69	\$8.42	\$8.40	\$0.00	\$58.51
10	80	\$44.46	\$8.42	\$8.40	\$0.00	\$61.28

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

STEAM BOILER OPERATOR	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
2	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
3	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
4	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
5	50	\$16.94	\$13.00	\$11.11	\$0.00	\$41.05
6	55	\$18.63	\$13.00	\$11.38	\$0.00	\$43.01
7	60	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
8	65	\$22.02	\$13.00	\$11.89	\$0.00	\$46.91
9	70	\$23.72	\$13.00	\$12.15	\$0.00	\$48.87
10	75	\$25.41	\$13.00	\$12.41	\$0.00	\$50.82

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.84	\$13.00	\$0.42	\$0.00	\$27.26
2	40	\$13.84	\$13.00	\$0.42	\$0.00	\$27.26
3	45	\$15.57	\$13.00	\$10.88	\$0.00	\$39.45
4	45	\$15.57	\$13.00	\$10.88	\$0.00	\$39.45
5	50	\$17.30	\$13.00	\$11.14	\$0.00	\$41.44
6	55	\$19.03	\$13.00	\$11.39	\$0.00	\$43.42
7	60	\$20.76	\$13.00	\$11.65	\$0.00	\$45.41
8	65	\$22.49	\$13.00	\$11.90	\$0.00	\$47.39
9	70	\$24.22	\$13.00	\$12.17	\$0.00	\$49.39
10	75	\$25.95	\$13.00	\$12.43	\$0.00	\$51.38

Notes:

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2015	\$47.90	\$10.18	\$18.50	\$0.00	\$76.58
	08/01/2015	\$48.80	\$10.18	\$18.57	\$0.00	\$77.55
	02/01/2016	\$49.37	\$10.18	\$18.57	\$0.00	\$78.12
	08/01/2016	\$50.27	\$10.18	\$18.65	\$0.00	\$79.10
	02/01/2017	\$50.84	\$10.18	\$18.65	\$0.00	\$79.67

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$10.18	\$18.50	\$0.00	\$52.63
2	60	\$28.74	\$10.18	\$18.50	\$0.00	\$57.42
3	70	\$33.53	\$10.18	\$18.50	\$0.00	\$62.21
4	80	\$38.32	\$10.18	\$18.50	\$0.00	\$67.00
5	90	\$43.11	\$10.18	\$18.50	\$0.00	\$71.79

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.40	\$10.18	\$18.57	\$0.00	\$53.15
2	60	\$29.28	\$10.18	\$18.57	\$0.00	\$58.03
3	70	\$34.16	\$10.18	\$18.57	\$0.00	\$62.91
4	80	\$39.04	\$10.18	\$18.57	\$0.00	\$67.79
5	90	\$43.92	\$10.18	\$18.57	\$0.00	\$72.67

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$35.95	\$7.30	\$13.15	\$0.00	\$56.40
	06/01/2015	\$36.70	\$7.30	\$13.15	\$0.00	\$57.15
	12/01/2015	\$37.45	\$7.30	\$13.15	\$0.00	\$57.90
	06/01/2016	\$38.20	\$7.30	\$13.15	\$0.00	\$58.65
	12/01/2016	\$39.20	\$7.30	\$13.15	\$0.00	\$59.65

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.67	\$7.30	\$13.15	\$0.00	\$55.12
	06/01/2015	\$35.42	\$7.30	\$13.15	\$0.00	\$55.87
	12/01/2015	\$36.17	\$7.30	\$13.15	\$0.00	\$56.62
	06/01/2016	\$36.92	\$7.30	\$13.15	\$0.00	\$57.37
	12/01/2016	\$37.92	\$7.30	\$13.15	\$0.00	\$58.37

For apprentice rates see "Apprentice- LABORER"

TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2014	\$34.55	\$7.30	\$13.15	\$0.00	\$55.00
	06/01/2015	\$35.30	\$7.30	\$13.15	\$0.00	\$55.75
	12/01/2015	\$36.05	\$7.30	\$13.15	\$0.00	\$56.50
	06/01/2016	\$36.80	\$7.30	\$13.15	\$0.00	\$57.25
	12/01/2016	\$37.80	\$7.30	\$13.15	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$41.99	\$10.00	\$14.30	\$0.00	\$66.29
	06/01/2015	\$42.73	\$10.00	\$14.30	\$0.00	\$67.03
	12/01/2015	\$43.97	\$10.00	\$14.30	\$0.00	\$68.27
	06/01/2016	\$44.72	\$10.00	\$14.30	\$0.00	\$69.02
	12/01/2016	\$45.95	\$10.00	\$14.30	\$0.00	\$70.25
	06/01/2017	\$46.94	\$10.00	\$14.30	\$0.00	\$71.24
	12/01/2017	\$47.93	\$10.00	\$14.30	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$33.27	\$9.91	\$9.33	\$0.00	\$52.51
	06/01/2015	\$33.62	\$9.91	\$9.33	\$0.00	\$52.86
	08/01/2015	\$33.62	\$10.41	\$9.33	\$0.00	\$53.36
	12/01/2015	\$33.62	\$10.41	\$10.08	\$0.00	\$54.11
	06/01/2016	\$34.12	\$10.41	\$10.08	\$0.00	\$54.61
	08/01/2016	\$34.12	\$10.91	\$10.08	\$0.00	\$55.11
	12/01/2016	\$34.12	\$10.91	\$10.89	\$0.00	\$55.92
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	12/01/2014	\$46.83	\$7.30	\$13.55	\$0.00	\$67.68
	06/01/2015	\$47.58	\$7.30	\$13.55	\$0.00	\$68.43
	12/01/2015	\$48.33	\$7.30	\$13.55	\$0.00	\$69.18
	06/01/2016	\$49.08	\$7.30	\$13.55	\$0.00	\$69.93
	12/01/2016	\$50.08	\$7.30	\$13.55	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	12/01/2014	\$48.83	\$7.30	\$13.55	\$0.00	\$69.68
	06/01/2015	\$49.58	\$7.30	\$13.55	\$0.00	\$70.43
	12/01/2015	\$50.33	\$7.30	\$13.55	\$0.00	\$71.18
	06/01/2016	\$51.08	\$7.30	\$13.55	\$0.00	\$71.93
	12/01/2016	\$52.08	\$7.30	\$13.55	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2014	\$38.90	\$7.30	\$13.55	\$0.00	\$59.75
	06/01/2015	\$39.65	\$7.30	\$13.55	\$0.00	\$60.50
	12/01/2015	\$40.40	\$7.30	\$13.55	\$0.00	\$61.25
	06/01/2016	\$41.15	\$7.30	\$13.55	\$0.00	\$62.00
	12/01/2016	\$42.15	\$7.30	\$13.55	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2014	\$40.90	\$7.30	\$13.55	\$0.00	\$61.75
	06/01/2015	\$41.65	\$7.30	\$13.55	\$0.00	\$62.50
	12/01/2015	\$42.40	\$7.30	\$13.55	\$0.00	\$63.25
	06/01/2016	\$43.15	\$7.30	\$13.55	\$0.00	\$64.00
	12/01/2016	\$44.15	\$7.30	\$13.55	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WAGON DRILL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2014	\$34.85	\$7.30	\$12.95	\$0.00	\$55.10
	06/01/2015	\$35.60	\$7.30	\$12.95	\$0.00	\$55.85
	12/01/2015	\$36.35	\$7.30	\$12.95	\$0.00	\$56.60
	06/01/2016	\$37.10	\$7.30	\$12.95	\$0.00	\$57.35
	12/01/2016	\$38.10	\$7.30	\$12.95	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2014	\$42.39	\$10.00	\$14.30	\$0.00	\$66.69
	06/01/2015	\$43.14	\$10.00	\$14.30	\$0.00	\$67.44
	12/01/2015	\$44.39	\$10.00	\$14.30	\$0.00	\$68.69
	06/01/2016	\$45.14	\$10.00	\$14.30	\$0.00	\$69.44
	12/01/2016	\$46.39	\$10.00	\$14.30	\$0.00	\$70.69
	06/01/2017	\$47.39	\$10.00	\$14.30	\$0.00	\$71.69
	12/01/2017	\$48.39	\$10.00	\$14.30	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & GASFITTERS LOCAL 12</i>	03/01/2015	\$50.21	\$10.32	\$14.89	\$0.00	\$75.42
	09/01/2015	\$51.21	\$10.32	\$14.89	\$0.00	\$76.42
	03/01/2016	\$52.36	\$10.32	\$14.89	\$0.00	\$77.57
	09/01/2016	\$53.41	\$10.32	\$14.89	\$0.00	\$78.62
	03/01/2017	\$54.41	\$10.32	\$14.89	\$0.00	\$79.62
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

CITY OF CHELSEA

PLAN OF
**CHELSEA GREENWAY
 ON-ROAD IMPROVEMENTS**

IN THE CITY OF
**CHELSEA, MASSACHUSETTS
 SUFFOLK COUNTY**

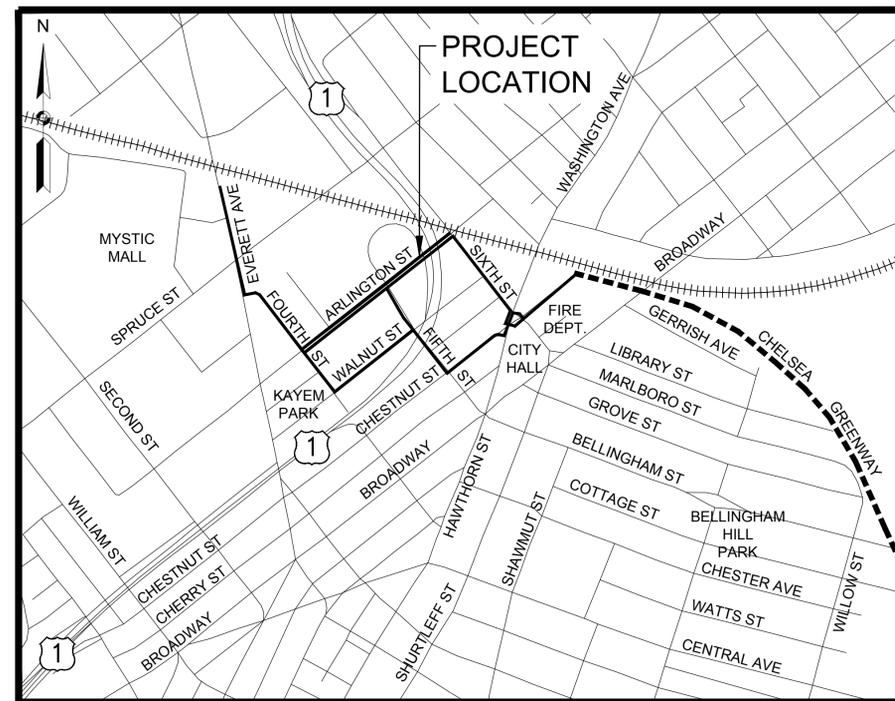
**CHELSEA GREENWAY
 ON-ROAD IMPROVEMENTS**

TITLE SHEET AND INDEX
 SHEET 1 OF 21

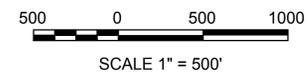
TITLE SHEET.DWG Jan-15

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND INDEX
2	GENERAL NOTES AND ABBREVIATIONS
3	KEY PLAN
4	TYPICAL SECTIONS - PART 1 OF 2
5	TYPICAL SECTIONS - PART 2 OF 2
6	CONSTRUCTION PLANS - CHESTNUT STREET
7	CONSTRUCTION PLANS - FAY SQUARE
8	CONSTRUCTION PLANS - CHESTNUT STREET & FIFTH STREET
9	CONSTRUCTION PLANS - WALNUT STREET
10	CONSTRUCTION PLANS - FOURTH STREET
11	CONSTRUCTION PLANS - ARLINGTON STREET
12	CONSTRUCTION PLANS - SIXTH STREET & ARLINGTON STREET
13	CONSTRUCTION PLANS - EVERETT AVENUE & SPRUCE STREET
14	CONSTRUCTION PLANS - EVERETT AVENUE
15	TIE PLAN - PART 1 OF 2
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18	TRAFFIC SIGN SUMMARY
19	TEMPORARY TRAFFIC CONTROL PLAN
20	CONSTRUCTION DETAILS
21	LANDSCAPE DETAILS - LD-1



LOCUS MAP



LENGTH OF PROJECT (ON-ROAD) = 5,533± FEET = 1.05± MILES

APRIL 16, 2015

PS&E SUBMISSION

REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.

CHELSEA GREENWAY - ON-ROAD IMPROVEMENTS
 CHELSEA, MA

<p>ENGINEERS FST <small>Since 1924</small></p>	<p>FAY, SPOFFORD & THORNDIKE <small>5 BURLINGTON WOODS BURLINGTON, MA 01803</small></p>	<p>BROWN, RICHARDSON ROWE <small>LANDSCAPE ARCHITECTS AND PLANNERS 2000 WASHINGTON STREET, SUITE 200 BOSTON, MA 02118 TEL: 617.552.1748 FAX: 617.552.8817 WWW.BROWNRW.COM</small></p>
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GENERAL NOTES:

- 1A. THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 15, 2012, THE INTERIM SUPPLEMENTAL SPECIFICATIONS DATED DECEMBER 12, 2014, THE 2014 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATES TO TRAFFIC STANDARD DETAILS ONLY), WILL GOVERN.
- 1B. THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, WILL GOVERN.
- 1C. THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK WILL GOVERN.
2. CURB SHALL BE FURNISHED AND SET AT LOCATIONS SHOWN ON THE PLANS AND/OR AS REQUIRED BY THE ENGINEER.
3. CONSTRUCT DRIVEWAYS AND WALKS AS SHOWN ON THE PLANS AND/OR AS REQUIRED BY THE ENGINEER.
4. EXISTING GRANITE CURB AND EDGING SUITABLE FOR REUSE WITHIN THE PROJECT SITE SHALL BE REMOVED AND RESET IN ACCORDANCE WITH THE PLANS AND/OR AS REQUIRED BY THE ENGINEER.
5. SAW CUT EXISTING BITUMINOUS CONCRETE ROADWAYS, CEMENT CONCRETE SIDEWALKS AND BITUMINOUS CONCRETE DRIVEWAYS AS SHOWN ON THE PLANS AND AT THE PROPOSED MATCH LINE.
6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
7. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL RESTORE ANY EXISTING SURFACE PAVEMENTS AND TURF WHICH IS TO REMAIN THAT IS DISTURBED BY THE PROPOSED WORK AND SHALL PATCH ALL HOLES RESULTING FROM THE REMOVAL OF FOUNDATIONS WITH MATERIALS SIMILAR TO THE EXISTING.
9. ALL ACCESSIBLE ROUTES, WALKWAYS, CURB CUTS, RAMPS, SIDEWALKS, DRIVEWAY OPENINGS, CLEARANCES AND SLOPE TOLERANCES SHALL CONFORM TO THE ARCHITECTURAL ACCESS BOARD (AAB), 521 CMR AND MASSDOT CONSTRUCTION AND TRAFFIC STANDARD DRAWINGS.
10. ITEMS LABELED "REM" SHALL BE REMOVED AND DISCARDED BY CONTRACTOR.
11. THE CONTRACTOR SHALL PROTECT EXISTING SURVEY MONUMENTS AND SHALL RESET ANY MONUMENTATION DISTURBED BY HIS OPERATIONS.
12. THE CONTRACTOR SHALL INSTALL OTHER NECESSARY TEMPORARY REGULATORY AND WARNING SIGNS DURING CONSTRUCTION AS REQUIRED BY THE ENGINEER FOR OTHER INCIDENTAL CONSTRUCTION ACTIVITIES. ALL SIGNAGE AND TRAFFIC CONTROL DEVICES USED MUST CONFORM TO THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH MASSACHUSETTS AMMENDMENTS.
13. THE CONTRACTOR SHALL PERFORM HIS WORK IN A MANNER ACCEPTABLE TO THE ENGINEER SO THAT INTERFERENCE WITH AND INCONVENIENCE TO BUSINESS CONCERNS AND ABUTTERS, ON ACCOUNT OF THE CONSTRUCTION WORK, IS KEPT TO A MINIMUM.
14. THE CONTRACTOR SHALL NOT BE ALLOWED TO PARK EQUIPMENT OR STOCKPILE EQUIPMENT OR MATERIAL ON THE TRAVELED WAYS OVERNIGHT OR WHEN NOT IN USE.
15. THE CONTRACTOR SHALL MAINTAIN SAFE AND RESPONSIBLE ACCESS TO AND FROM ABUTTING PROPERTY, PRIVATE WAYS, DRIVEWAYS AND ALL ALLEYS AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
16. THE CONTRACTOR SHALL COORDINATE WORK WITH THE CHELSEA FIRE DEPARTMENT TO ENSURE THAT THE WORK DOES NOT IMPACT FIRE STATION OPERATIONS.
17. WORK IN FAY SQUARE SHALL BE COMPLETED IN PHASES (I.E. PAINT ONE HALF AT A TIME) TO ALLOW FOR CONTINUED AND UNOBSTRUCTED ACCESS TO THE FIRE STATION THROUGHOUT CONSTRUCTION.

SURVEY NOTES:

1. THE EXISTING CONDITIONS SHOWN IS FROM BASEMAPPING COMPLETED FOR MASSDOT PROJECT NUMBER 604428 AS FLOWN ON SATURDAY SEPTEMBER 28, 2013 AND AN ON THE GROUND INSTRUMENT SURVEY PERFORMED BETWEEN OCTOBER 25 2013 AND FEBRUARY 6, 2014 BY GREEN INTERNATIONAL AFFILIATES, INC. PORTIONS OF WASHINGTON AVENUE WERE SURVEYED BY RICHARD F. KAMINSKI & ASSOCIATES, INC. IN MARCH OF 2006. GREEN INTERNATIONAL AFFILIATES, INC. HAS UPDATED THIS INFORMATION TO REFLECT RECONSTRUCTION ON WASHINGTON AVENUE NORTH OF THE RAILROAD CROSSING.
2. THE EXISTING CONDITIONS SHOWN WAS SUPPLEMENTED WITH ADDITIONAL AERIAL FLIGHT SURVEY PROVIDED BY SANBORN MAP COMPANY, INC. THROUGH GREEN INTERNATIONAL AFFILIATES, INC. ON FEBRUARY 12, 2014.
3. HORIZONTAL DATUM IS MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (NAD83) ESTABLISHED BY GPS METHODS. VERTICAL DATUM IS NAVD88 ESTABLISHED BY GPS METHODS.

UTILITY NOTES:

1. THE LOCATIONS OF EXISTING SUBSURFACE STRUCTURES, SUCH AS SEWERS, WATER MAINS, DRAINS AND OTHER UTILITIES ARE APPROXIMATE ONLY AND THE ENGINEER DOES NOT GUARANTEE THEIR NUMBER OR LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE EXCAVATING.
2. LOCATION OF UNDERGROUND UTILITIES HAS NOT BEEN DETERMINED IN ALL AREAS.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE UTILITY COMPANIES DOING WORK IN THE SAME AREA THE CONTRACTOR SHALL ALLOW THE UTILITY COMPANIES AND THEIR REPRESENTATIVES TO ADJUST AND/OR INSTALL THEIR SYSTEMS WITHIN TOWN / STATE OWNED STREETS AND EASEMENTS.
4. LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES OR PROPERTY LINES ARE NOT WARRANTED TO BE EXACT, NOR ARE ALL UNDERGROUND PIPES OR STRUCTURES SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.

ABBREVIATIONS:

ADJ	ADJUST
B.O.	BY OTHERS
BWLL	BROKEN WHITE LANE LINE (6", 10' LINE, 30' SPACE)
CD	CHORD DIRECTION
CEM	CEMENT
CONC	CONCRETE
CW	CROSSWALK (12")
DWEL	DOUBLE WHITE EDGE LINE (2-4")
DWLEx	DOTTED WHITE LINE EXTENSION (4", 2' LINE, 6' SPACE)
DWLL	DOTTED WHITE LANE LINE (4", 3' LINE, 9' SPACE)
DYCL	DOUBLE YELLOW CENTER LINE (2-4")
EXIST	EXISTING
L	LENGTH
NO.	NUMBER
PROP	PROPOSED
R	RADIUS
R&D	REMOVE AND DISCARD
R&S	REMOVE AND STACK (SEE SPECIFICATIONS FOR LOCATION)
REM	REMOVE
RET	RETAIN
ROW	RIGHT OF WAY
SL	STOP LINE (12")
SMH	SEWER MANHOLE
SWBL	SOLID WHITE BIKE LANE LINE (4")
SWEL	SOLID WHITE EDGE LINE (4")
SWLL	SOLID WHITE LANE LINE (4")
T	TANGENT
TYP	TYPICAL
WCR	WHEELCHAIR RAMP
WG	WATER GATE
YL	YIELD LINE (SEE FHWA STANDARD HIGHWAY SIGNS TEMPLATE - 36" HEIGHT, 24" BASE, SPACED AT 12")
Δ	DELTA ANGLE

LEGEND:

	SHARED LANE MARKING
	BIKE LANE MARKING
	REMOVE EXISTING PAVEMENT MARKING
	PROPOSED IMPRINT CROSSWALK
	PROPOSED HIGH FRICTION BRICK RED PAINT
	PROPOSED HIGH FRICTION GREEN PAINT
	PROPOSED TRAFFIC / WAYFINDING SIGN
	PROPOSED TRAIL HEAD SIGN (5'x4') ON 2 POSTS
	PROPOSED CROSS STREET ENTRY SIGN (2'x4') ON 2 POSTS
	DIRECTION OF TRAFFIC (ONE-WAY STREETS)
 OR 	APPROXIMATE LOCATION OF PROPOSED TREES (WORK BY OTHERS)

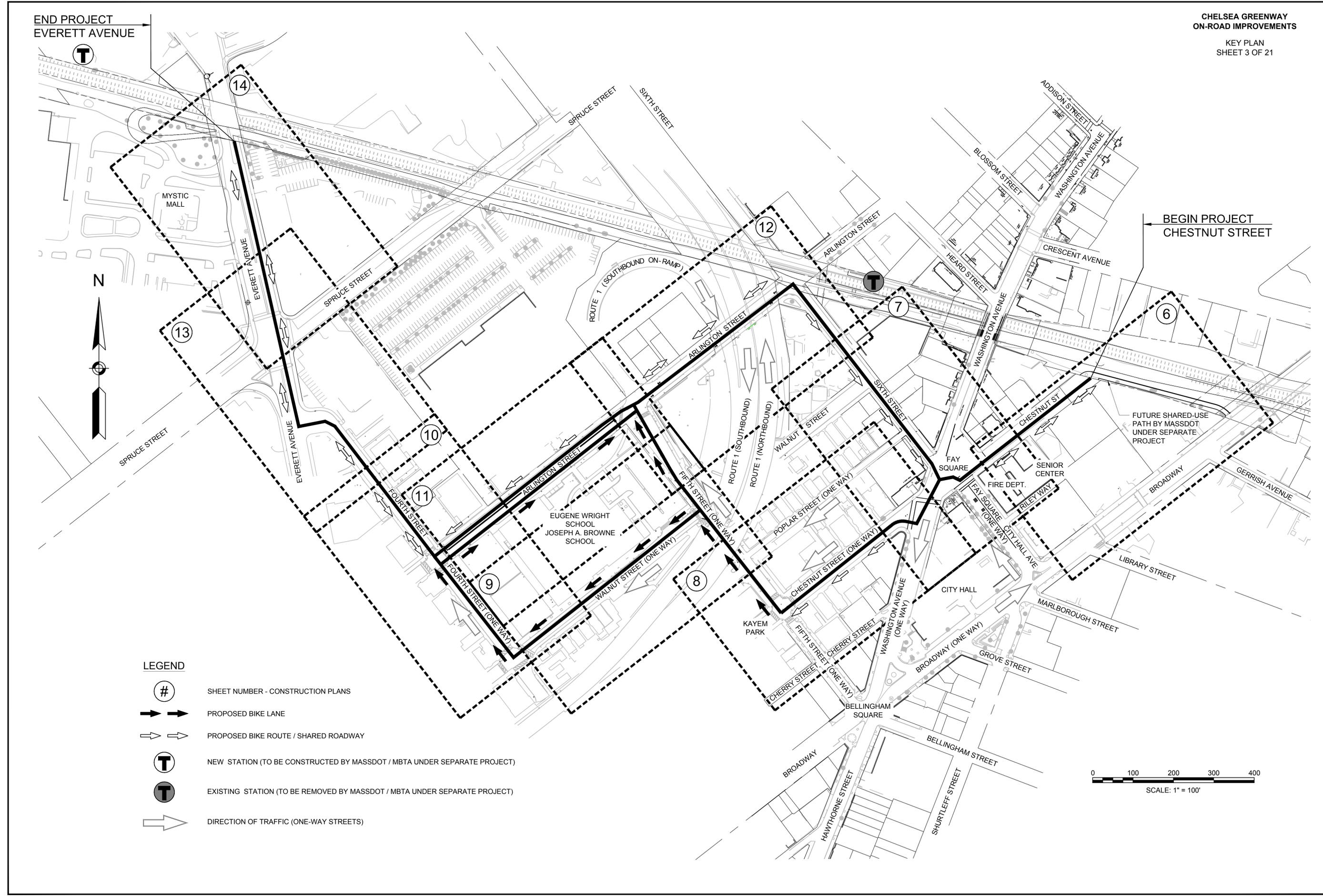
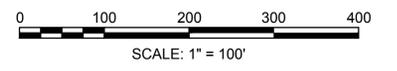
END PROJECT
EVERETT AVENUE

BEGIN PROJECT
CHESTNUT STREET



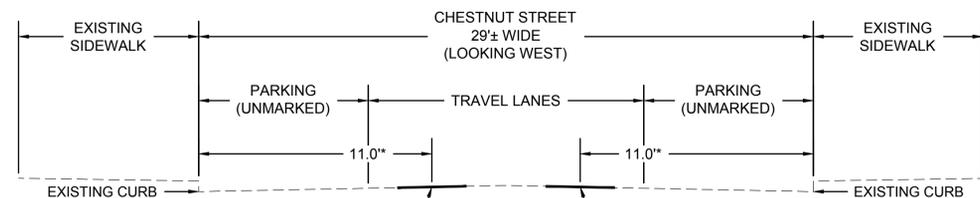
LEGEND

- SHEET NUMBER - CONSTRUCTION PLANS
- PROPOSED BIKE LANE
- PROPOSED BIKE ROUTE / SHARED ROADWAY
- NEW STATION (TO BE CONSTRUCTED BY MASSDOT / MBTA UNDER SEPARATE PROJECT)
- EXISTING STATION (TO BE REMOVED BY MASSDOT / MBTA UNDER SEPARATE PROJECT)
- DIRECTION OF TRAFFIC (ONE-WAY STREETS)



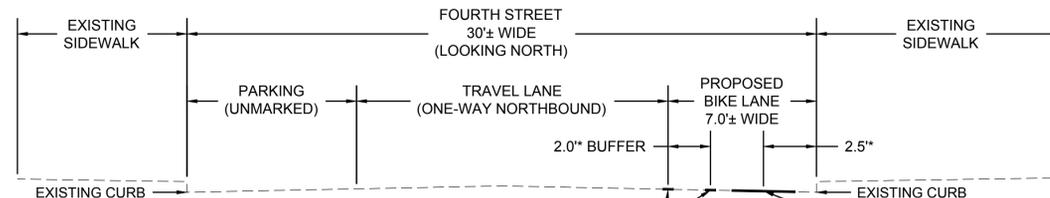
**CHELSEA GREENWAY
ON-ROAD IMPROVEMENTS**
TYPICAL SECTIONS - PART 1 OF 2
SHEET 4 OF 21

TYPICAL SECTIONS.DWG Jan-15



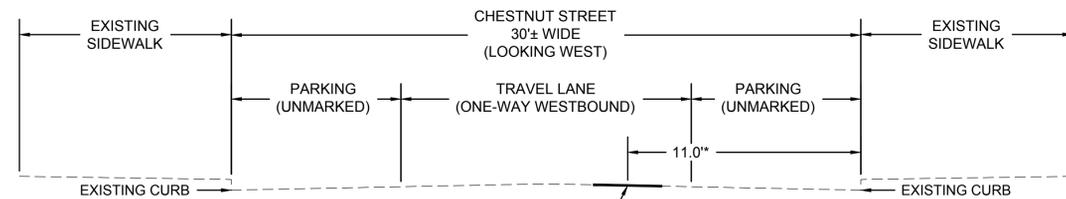
* DIMENSIONS TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
CHESTNUT STREET
(BETWEEN FUTURE SHARED-USE PATH CONNECTION AND FAY SQUARE)
NOT TO SCALE



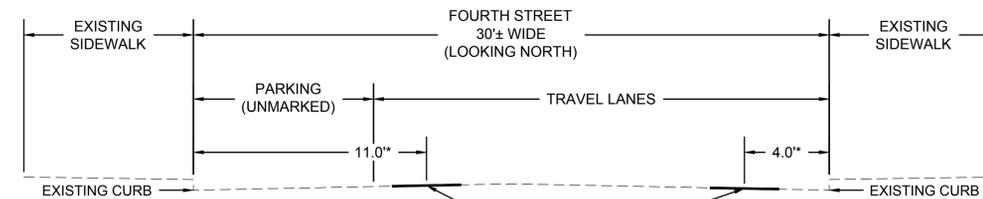
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TYPICAL SECTION
FOURTH STREET
(BETWEEN WALNUT STREET AND ARLINGTON STREET)
NOT TO SCALE



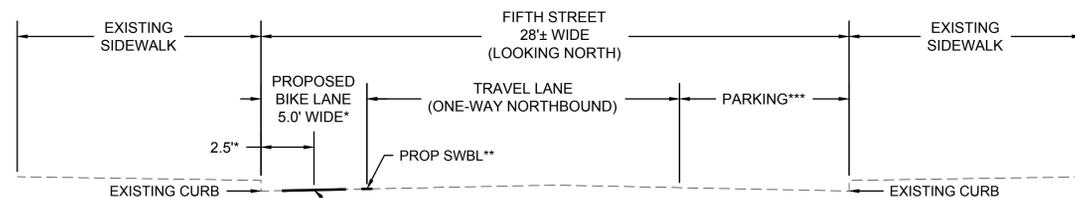
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TYPICAL SECTION
CHESTNUT STREET
(BETWEEN FAY SQUARE AND FIFTH STREET)
NOT TO SCALE



* DIMENSIONS TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
FOURTH STREET
(BETWEEN ARLINGTON STREET AND EVERETT AVENUE)
NOT TO SCALE

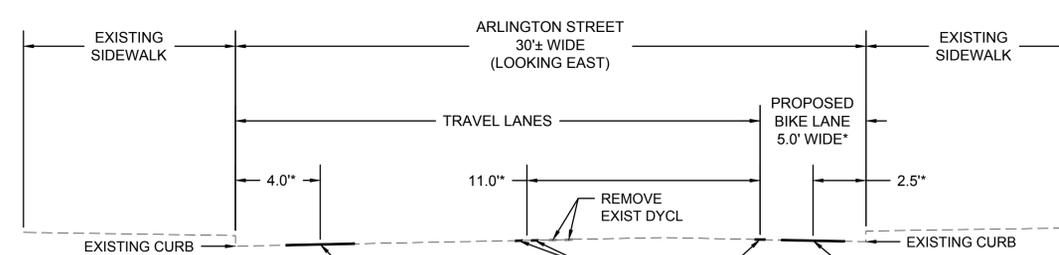


* DIMENSION TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

** DWLEX MARKING TO BE USED AT THE SAME OFFSET, AS SHOWN ON THE PLANS, SEE SHEET NO. 6 - 14

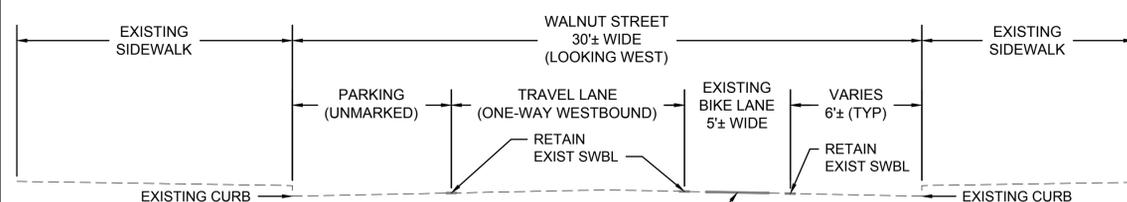
*** PARKING IS MARKED FROM WALNUT STREET TO ARLINGTON STREET

TYPICAL SECTION
FIFTH STREET
(BETWEEN CHESTNUT STREET AND WALNUT STREET)
NOT TO SCALE

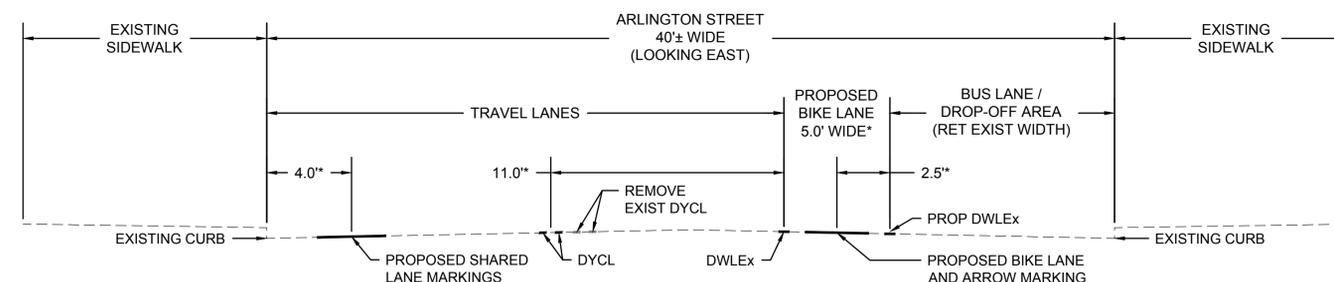


* DIMENSION TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
ARLINGTON STREET
(BETWEEN FOURTH STREET AND EUGENE WRIGHT / JOSEPH A. BROWNE SCHOOL)
NOT TO SCALE

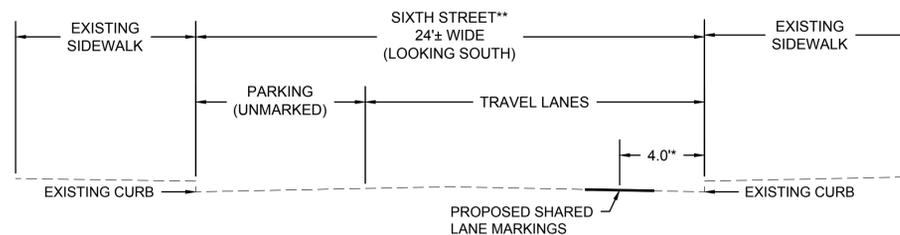


TYPICAL SECTION
WALNUT STREET
(BETWEEN FIFTH STREET AND FOURTH STREET)
NOT TO SCALE



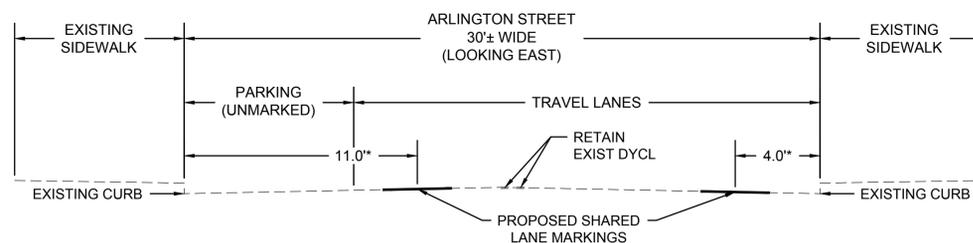
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TYPICAL SECTION
ARLINGTON STREET
(BETWEEN EUGENE WRIGHT / JOSEPH A. BROWNE SCHOOL AND FIFTH STREET)
NOT TO SCALE



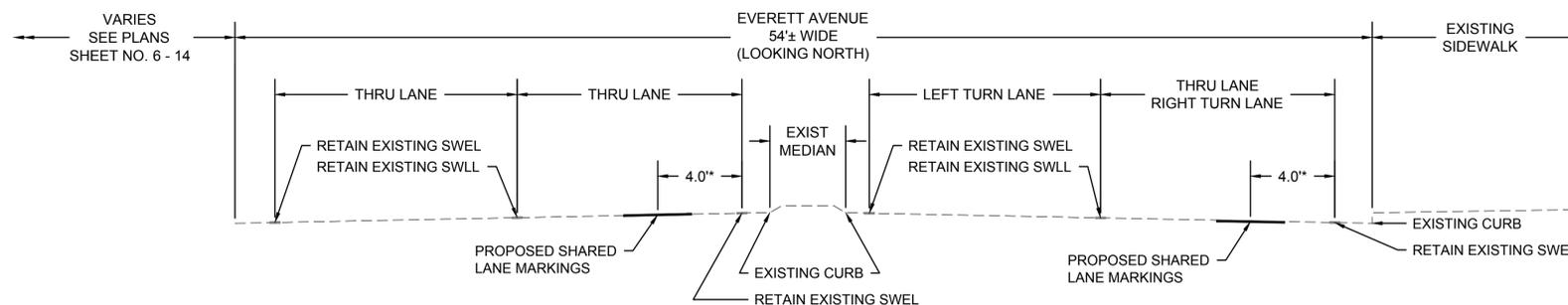
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** SIXTH STREET FUNCTIONS AS A ONE-WAY STREET FOR A MAJORITY OF THIS SEGMENT.

TYPICAL SECTION
SIXTH STREET
(BETWEEN ARLINGTON STREET AND FAY SQUARE)
NOT TO SCALE



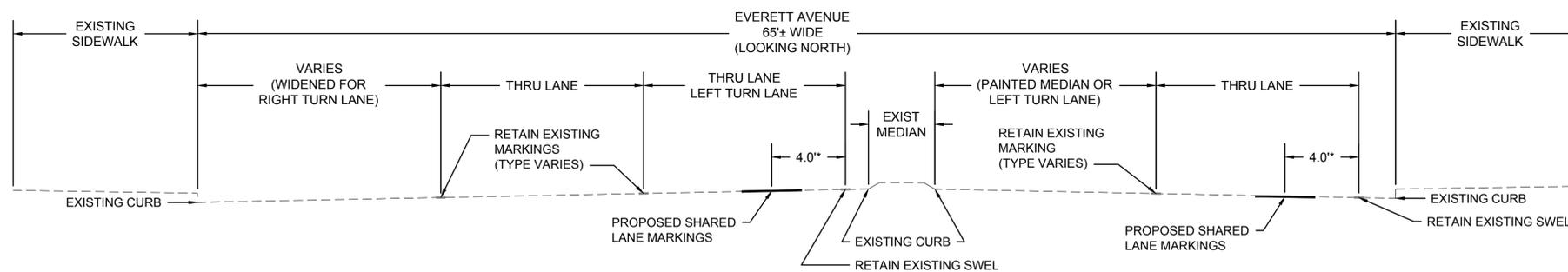
* DIMENSIONS TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
ARLINGTON STREET
(BETWEEN FIFTH STREET AND SIXTH STREET)
NOT TO SCALE



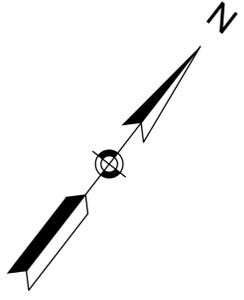
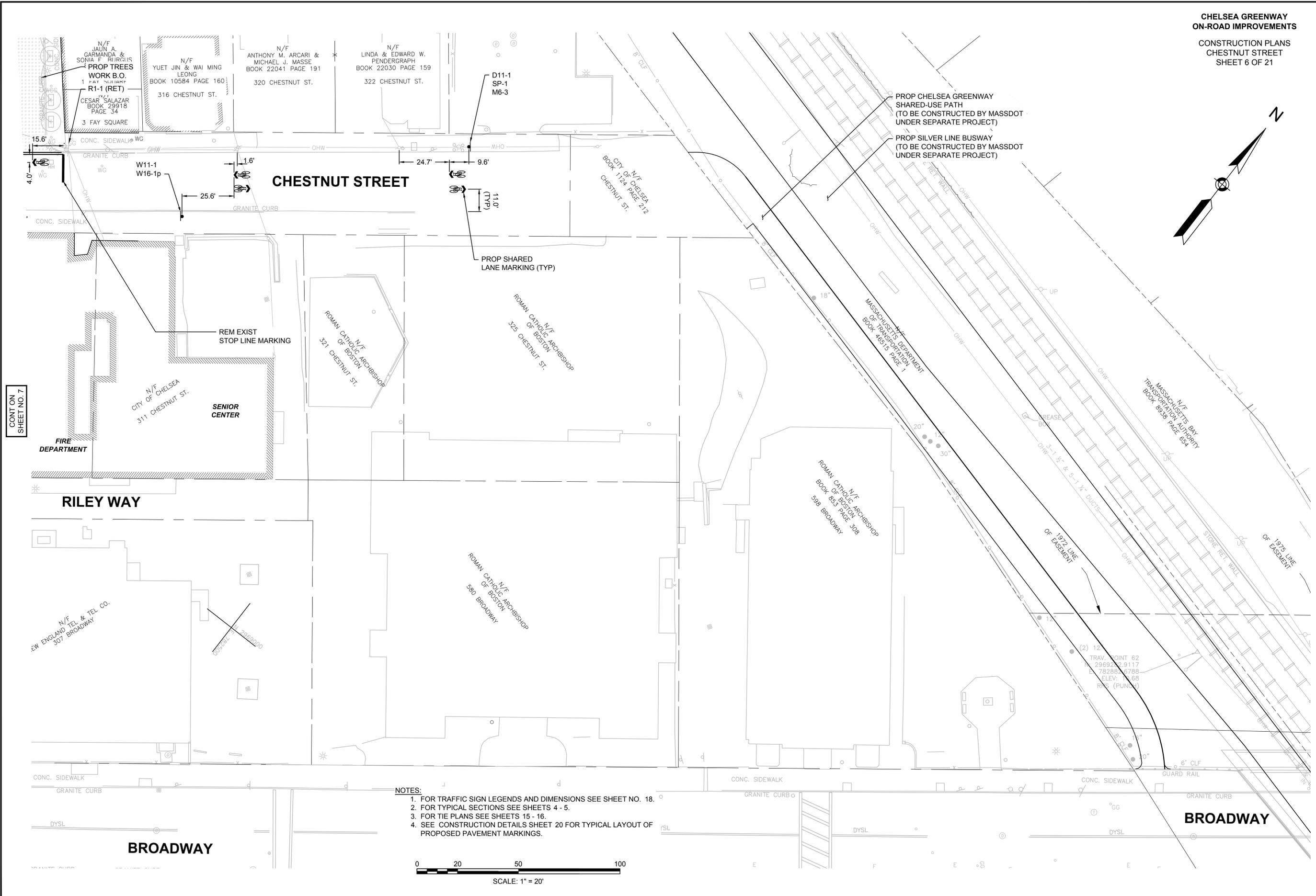
* DIMENSION TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
EVERETT AVENUE
(BETWEEN FOURTH STREET AND SPRUCE STREET)
NOT TO SCALE



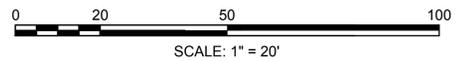
* DIMENSION TO CENTER OF MARKINGS SEE DETAIL SHEET NO. 20

TYPICAL SECTION
EVERETT AVENUE
(BETWEEN SPRUCE STREET AND PROJECT LIMIT)
NOT TO SCALE



CONT ON
SHEET NO. 7

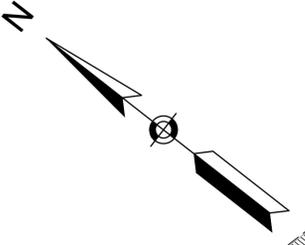
- NOTES:**
1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.



BROADWAY

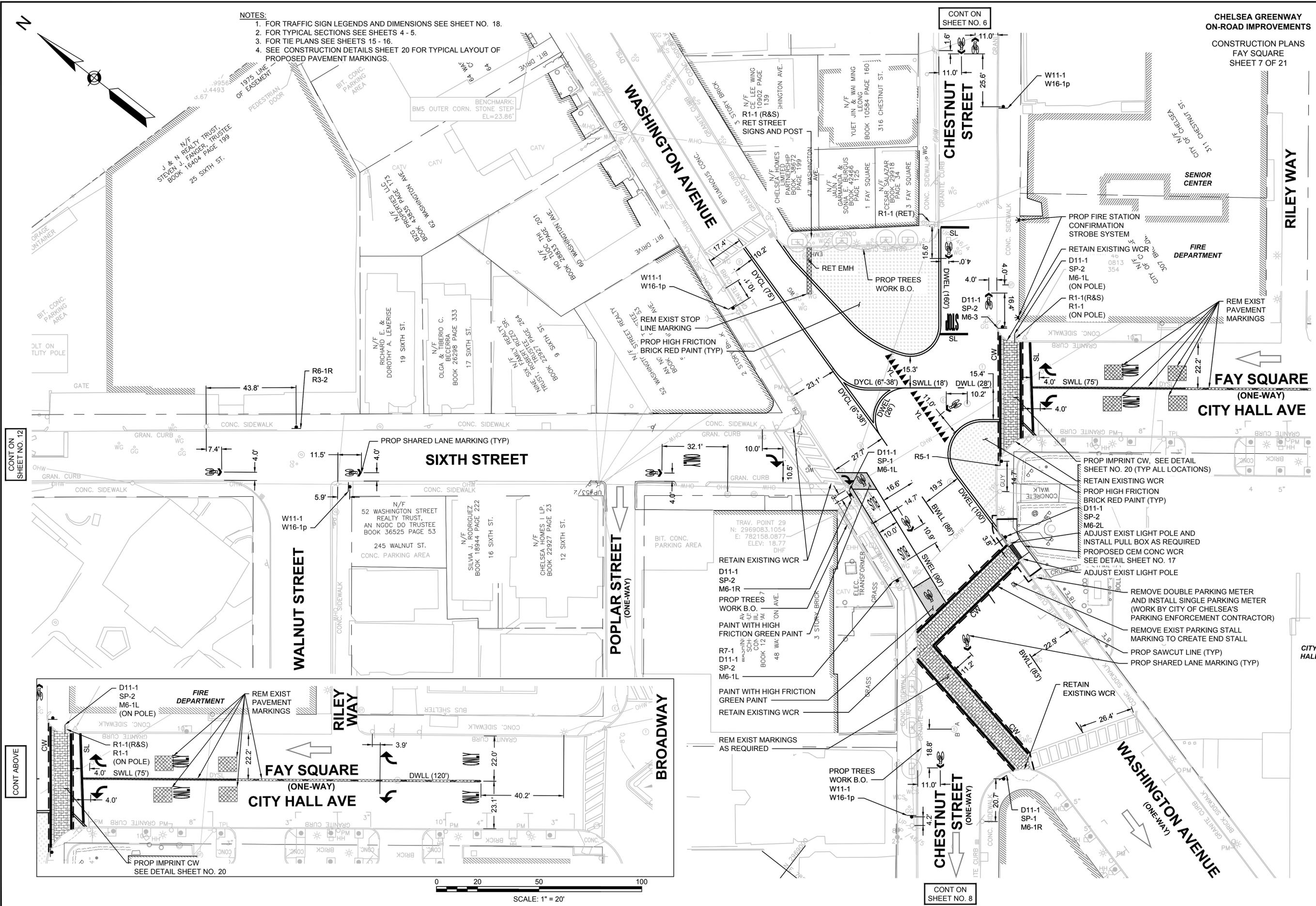
BROADWAY

- NOTES:**
1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.



**CHelsea GREENWAY
ON-ROAD IMPROVEMENTS**

**CONSTRUCTION PLANS
FAY SQUARE
SHEET 7 OF 21**



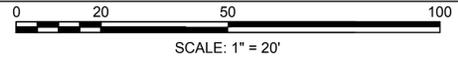
CONT ON SHEET NO. 12

CONT ABOVE

CONT ON SHEET NO. 6

CONT ON SHEET NO. 8

CONT BELOW



CITY HALL

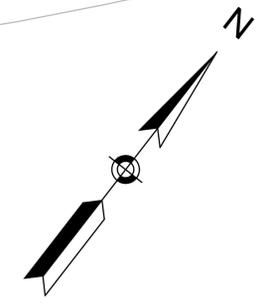
**CHELSEA GREENWAY
ON-ROAD IMPROVEMENTS**
CONSTRUCTION PLANS
CHESTNUT STREET & FIFTH STREET
SHEET 8 OF 21

- NOTES:**
1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.

ROUTE 1 SB

ROUTE 1 NB

- REM EXIST SYEL MARKING (TYP ALONG FIFTH STREET)
- REM EXIST SHARED LANE MARKING (TYP. 3 REQUIRED ALONG FIFTH STREET)
- PROP BIKE LANE & ARROW MARKING (TYP)
- PAINT WITH HIGH FRICTION GREEN PAINT



CONT ON SHEET NO. 9

"RIGHT LANE BIKE ONLY" (R&S SIGN, R&D POST)

**POPLAR STREET
(ONE-WAY)**

5' BIKE LANE
15' TRAVEL LANE
7.7'± PARKING LANE

D11-1 SP-1 M6-3

KAYEM PARK

PROP SHARED LANE MARKING (TYP)

D11-1 SP-1 M5-1R

PAINT WITH HIGH FRICTION GREEN PAINT

RETAIN EXISTING WCR

3 STORY BRICK

GRASS

GRASS

ELEC. TRANSFC

W11-1 W16-1p PROP TREES WORK B.O.

**CHESTNUT STREET
(ONE-WAY)**

CONT ON SHEET NO. 7

GRANITE CURB

CONC. SIDEWALK

20.7'

D11-1 SP-1 M6-1R

N/F BELLINGHAM SQUARE ASSOCIATES BOOK 10103 PAGE 119 28 WASHINGTON AVE.

BWLL (83')

RETAIN EXISTING WCR
PROP IMPRINT CW (TYP)
SEE DETAIL SHEET NO. 20

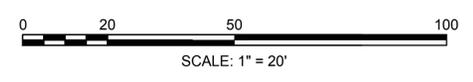
REMOVE EXIST PARKING STALL MARKING TO CREATE END STALL

REM EXIST MARKINGS AS REQUIRED

**FIFTH STREET
(ONE-WAY)**

**CHERRY STREET
(ONE-WAY)**

**WASHINGTON STREET
(ONE-WAY)**



N/F GERALD M. SNEIRSON BOOK 14927 PAGE 313 224 CHERRY ST.

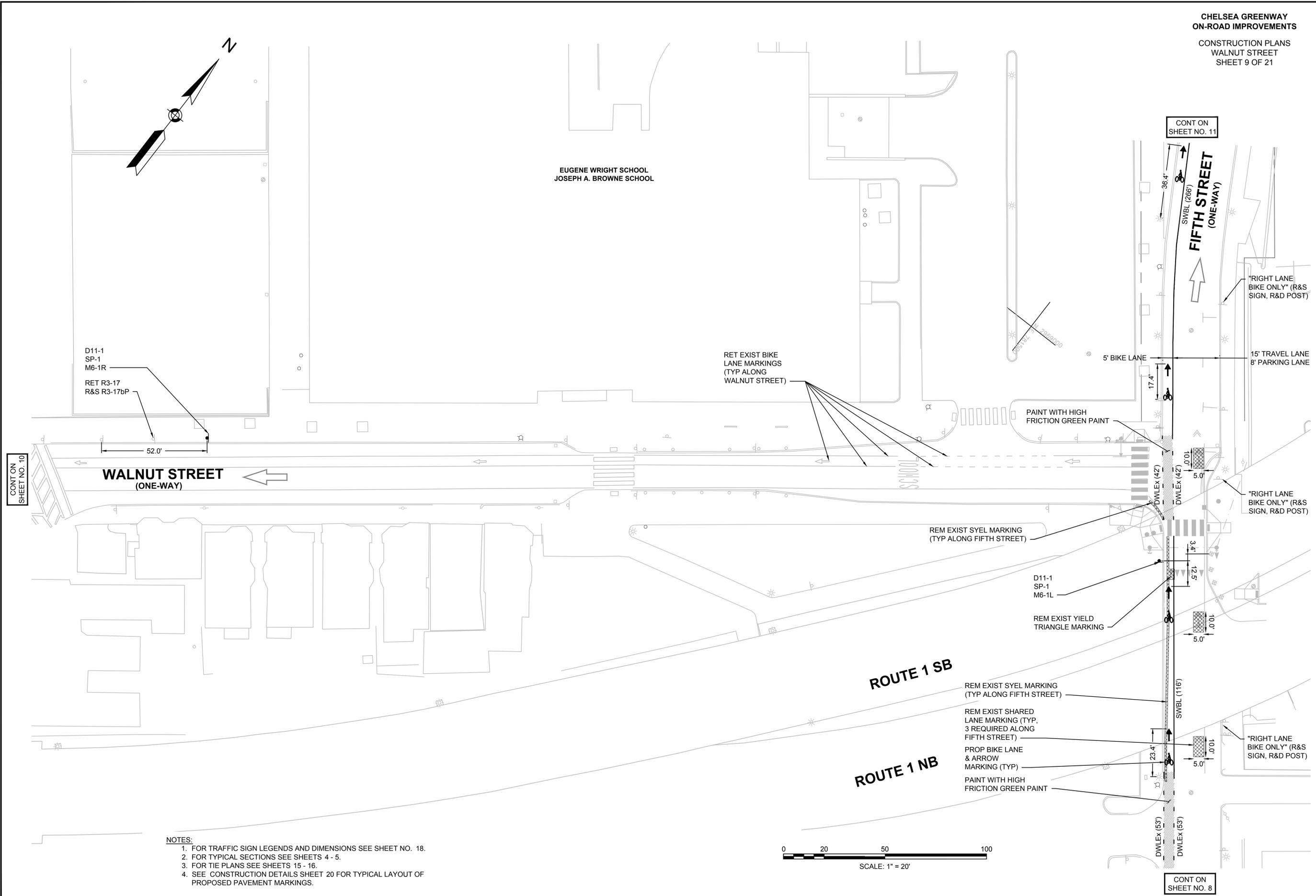
N/F RACHAEL HALEY REALTY, BOOK 34729 PAGE 056 230 CHERRY ST.

N/F EVELYN K. & VIRGINIA DIRAMIAN BOOK 30391 PAGE 038 22 WASHINGTON AVE.

N/F JAMES G. BARDOOSHIAN, JOAN D. BARDOOSHIAN & JAMES BARDOOSHIAN JR. BOOK 38778 PAGE 019 WASHINGTON AVE.

N/F WASHINGTON AVENUE SCHOOLHOUSE CONDOMINIUM BOOK 12134 PAGE 217

TRAV. N: 296 E: 78 EI



D11-1
SP-1
M6-1R
RET R3-17
R&S R3-17bP

EUGENE WRIGHT SCHOOL
JOSEPH A. BROWNE SCHOOL

RET EXIST BIKE
LANE MARKINGS
(TYP ALONG
WALNUT STREET)

PAINT WITH HIGH
FRICTION GREEN PAINT

REM EXIST SYEL MARKING
(TYP ALONG FIFTH STREET)

D11-1
SP-1
M6-1L

REM EXIST YIELD
TRIANGLE MARKING

ROUTE 1 SB

ROUTE 1 NB

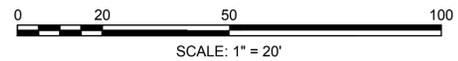
REM EXIST SYEL MARKING
(TYP ALONG FIFTH STREET)

REM EXIST SHARED
LANE MARKING (TYP,
3 REQUIRED ALONG
FIFTH STREET)

PROP BIKE LANE
& ARROW
MARKING (TYP)

PAINT WITH HIGH
FRICTION GREEN PAINT

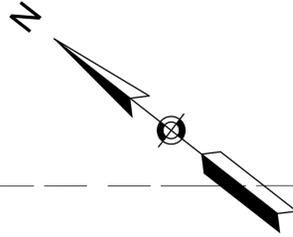
- NOTES:
1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.



CONT ON
SHEET NO. 10

CONT ON
SHEET NO. 11

CONT ON
SHEET NO. 8



CONT ON
SHEET NO. 11

CONT ON
SHEET NO. 9

EUGENE WRIGHT SCHOOL
JOSEPH A. BROWNE SCHOOL

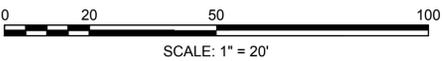
ARLINGTON STREET

WALNUT STREET
(ONE-WAY)

FOURTH STREET

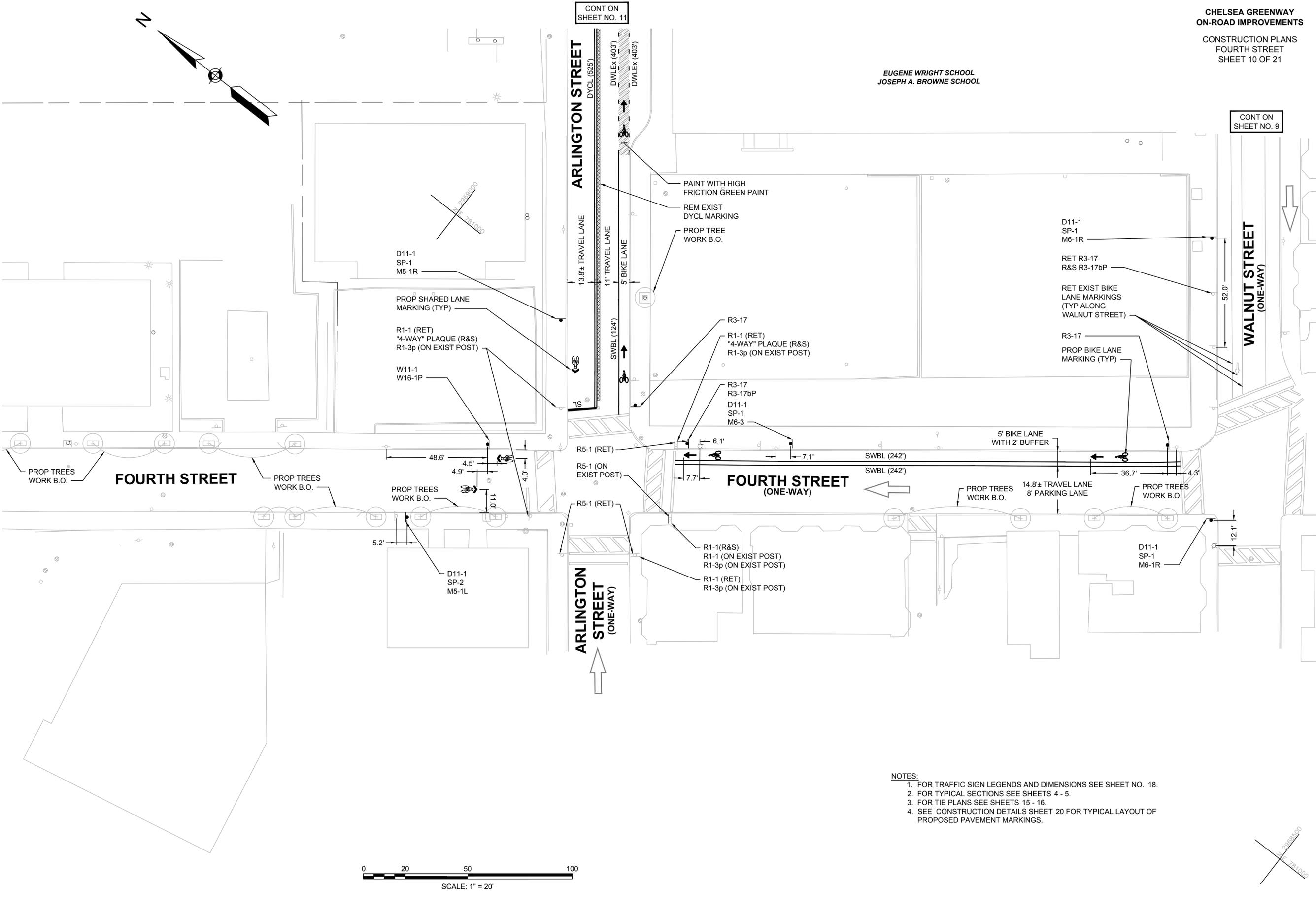
FOURTH STREET
(ONE-WAY)

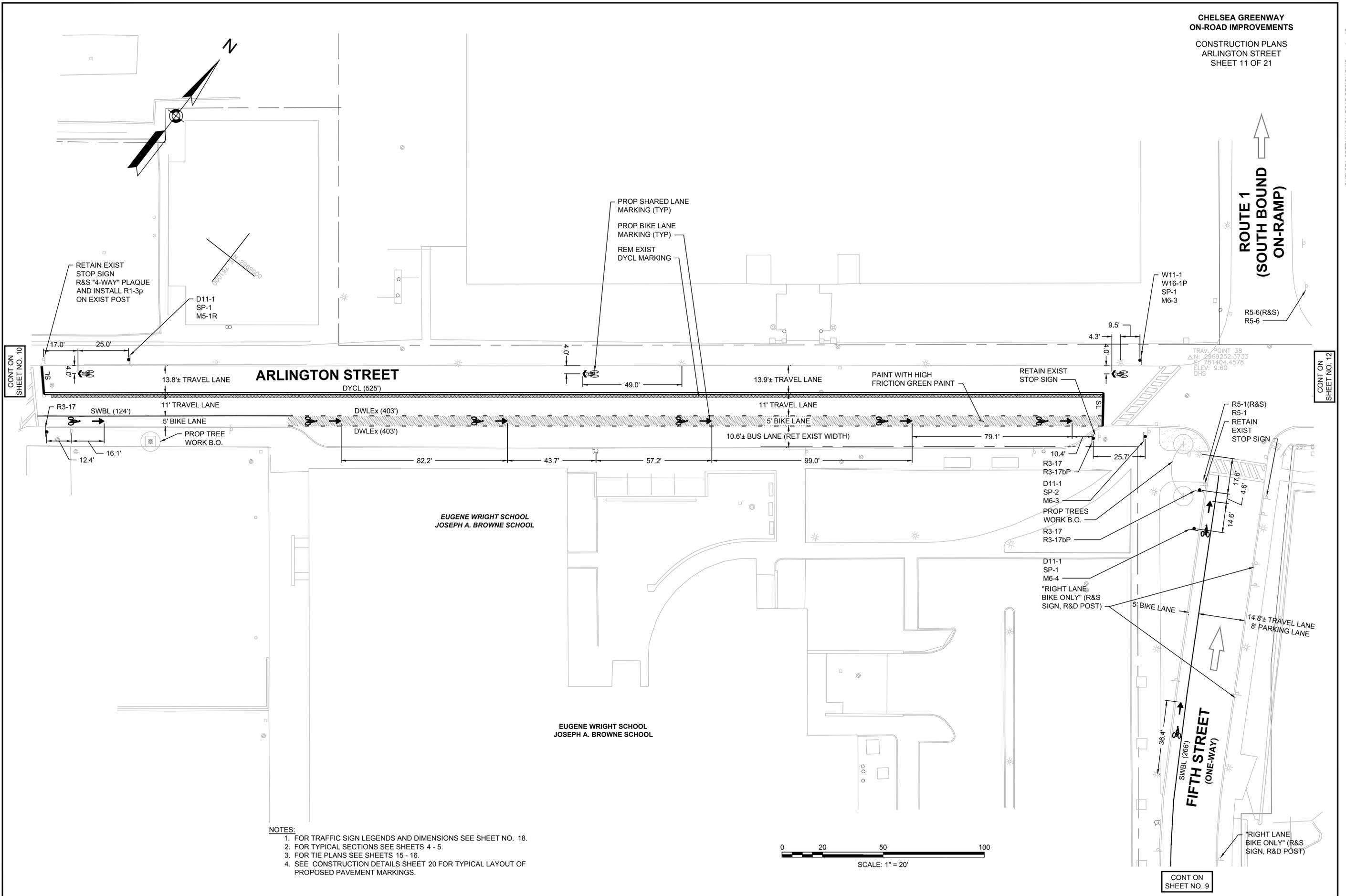
ARLINGTON STREET
(ONE-WAY)



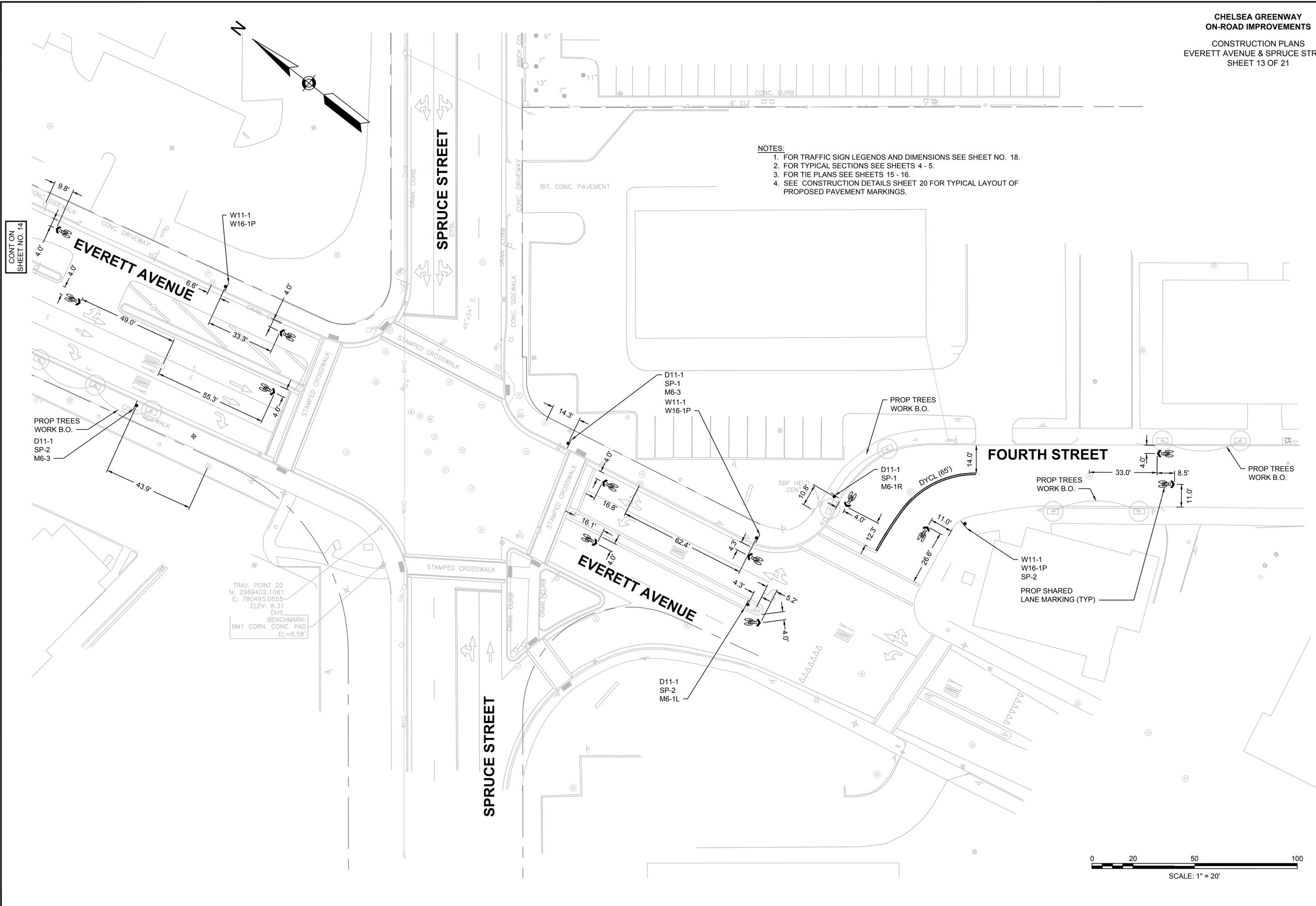
- NOTES:**
- 1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 - 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 - 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 - 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.

CONT ON
SHEET NO. 13





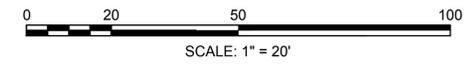
- NOTES:**
1. FOR TRAFFIC SIGN LEGENDS AND DIMENSIONS SEE SHEET NO. 18.
 2. FOR TYPICAL SECTIONS SEE SHEETS 4 - 5.
 3. FOR TIE PLANS SEE SHEETS 15 - 16.
 4. SEE CONSTRUCTION DETAILS SHEET 20 FOR TYPICAL LAYOUT OF PROPOSED PAVEMENT MARKINGS.

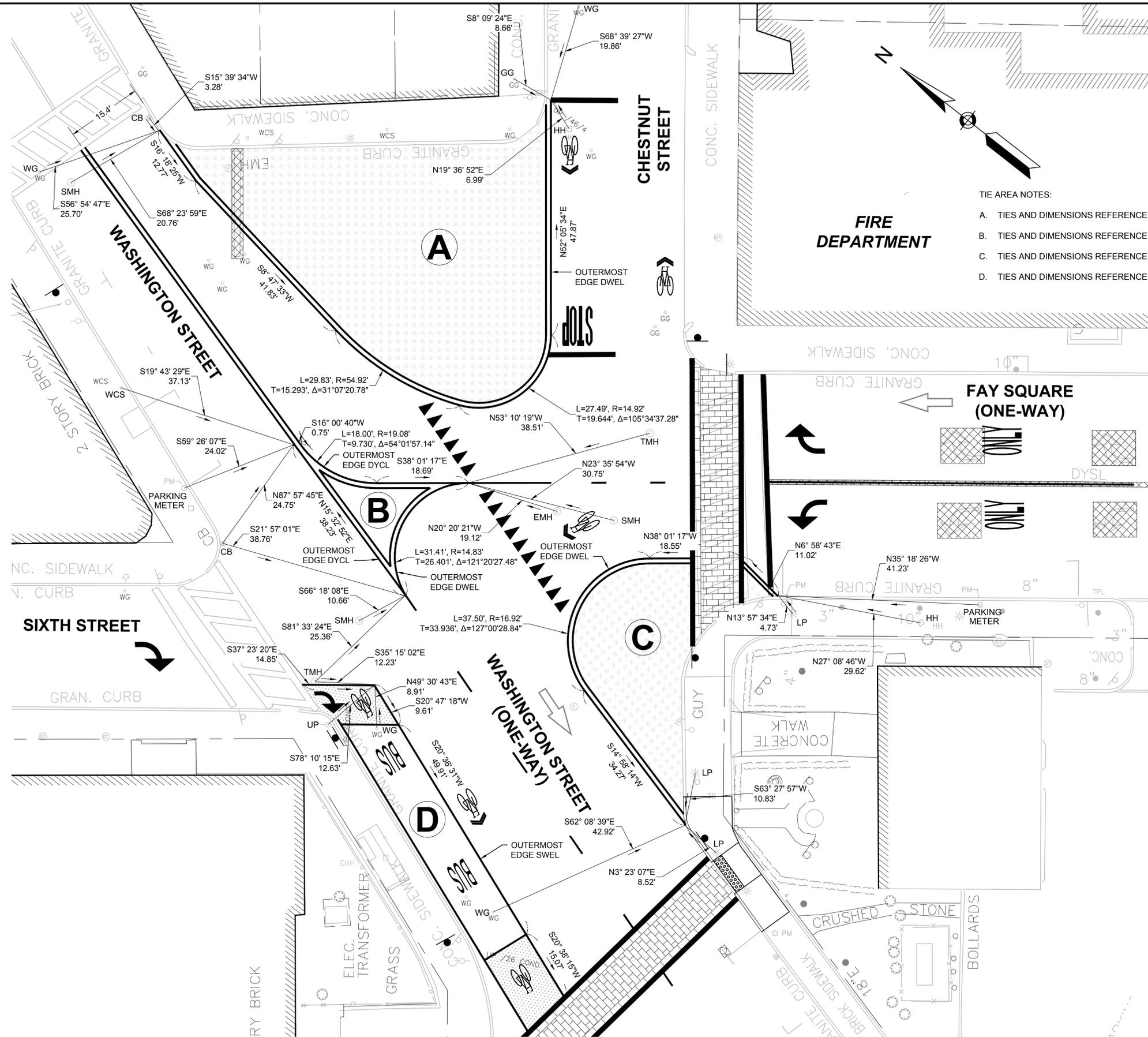


TRAV. POINT 20
N: 2969402.1081
E: 780495.0555
ELEV: 8.31
DHS
BENCHMARK:
BM1 CORN. CONC. PAD
EL=8.58'

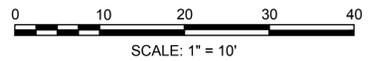
CONT ON
SHEET NO. 14

CONT ON
SHEET NO. 10



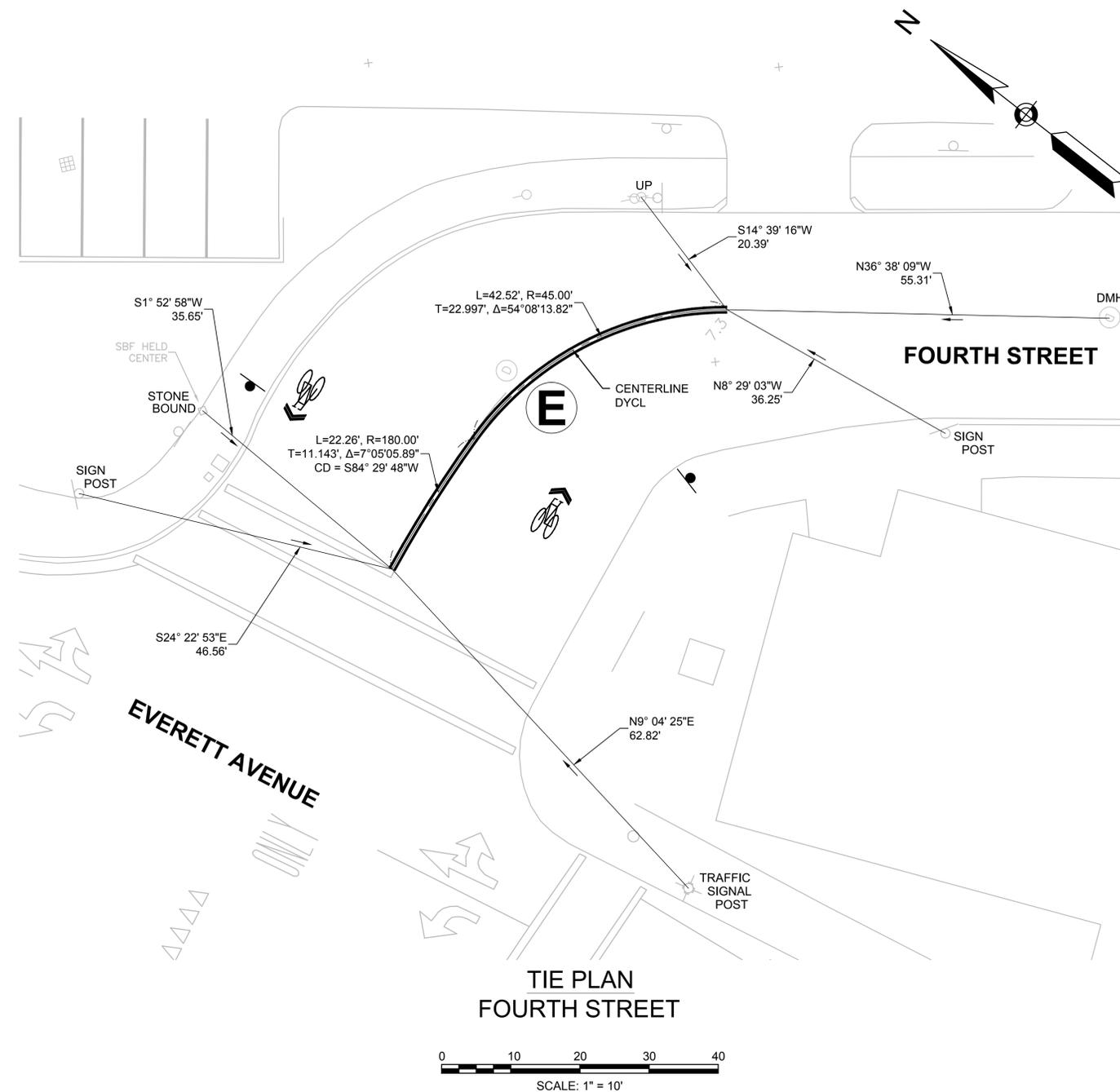


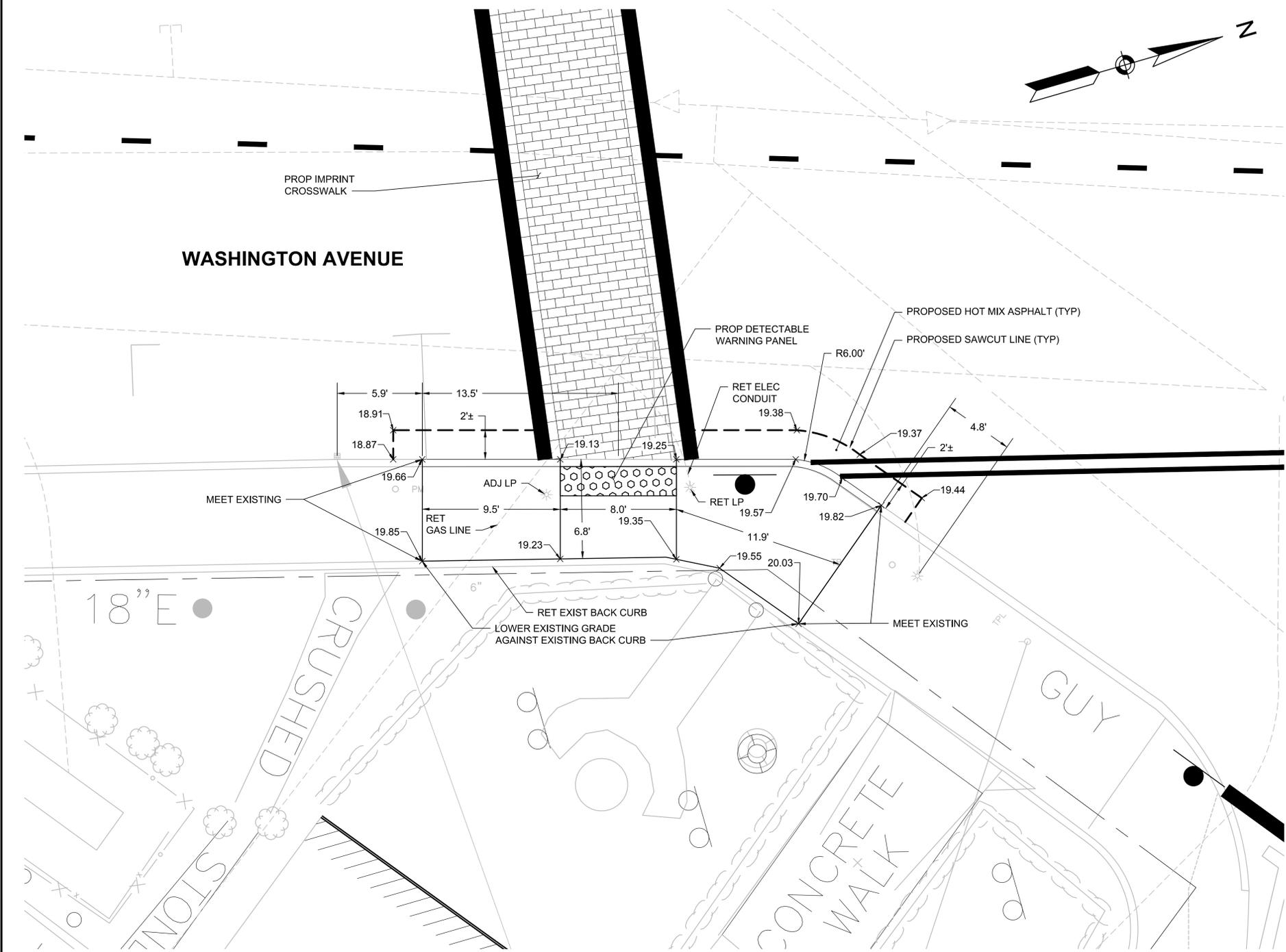
TIE PLAN
FAY SQUARE



TIE AREA NOTES:

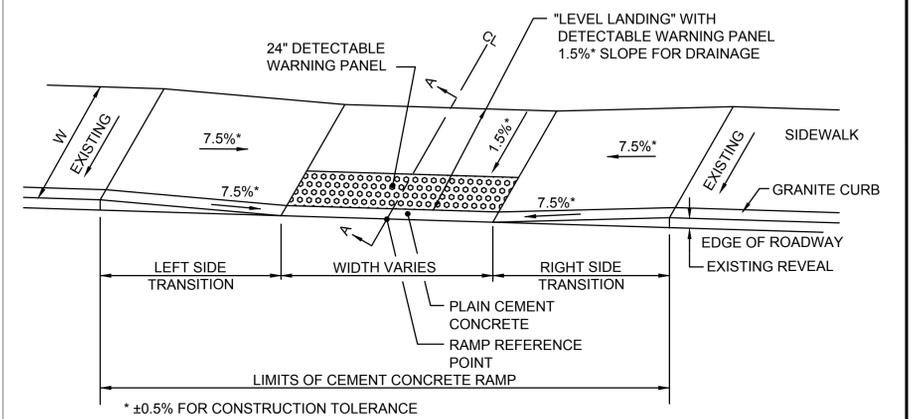
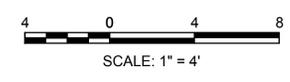
E. TIES AND DIMENSIONS REFERENCE THE CENTERLINE OF THE DYCL.



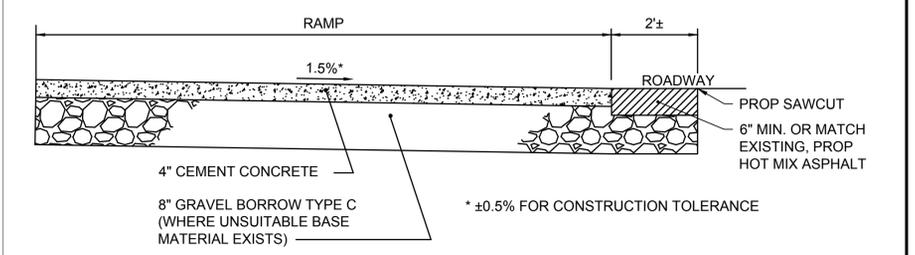


**WHEELCHAIR RAMP GRADING PLAN
WASHINGTON AVENUE - AT FAY SQUARE**

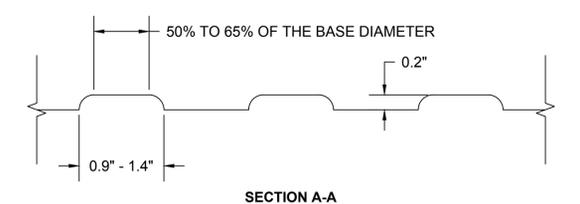
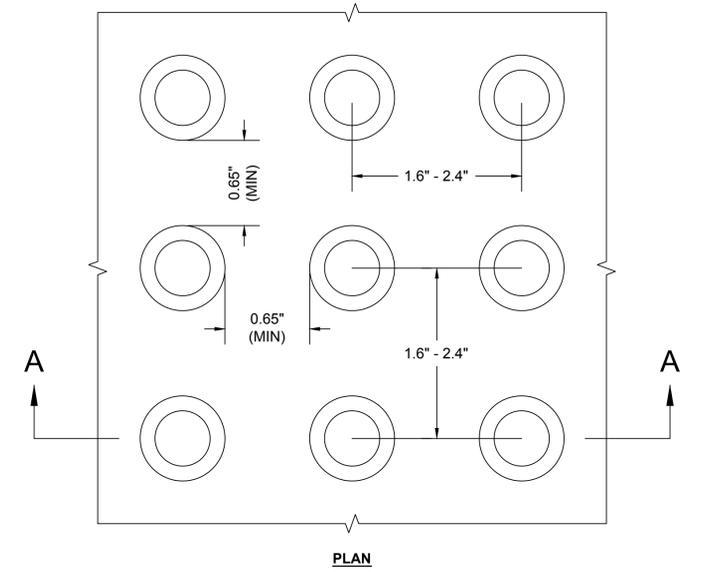
- NOTES:
1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA/ MA AAB & MASSDOT REQUIREMENTS.
 2. DETECTABLE WARNING PANELS ARE REQUIRED ON ALL PROPOSED WHEELCHAIR RAMPS. DETECTABLE WARNING PANELS SHALL BE PLACED PERPENDICULAR TO THE PATH OF TRAVEL AND NOT THE CURB LINE.



WHEELCHAIR RAMP DETAIL - WASHINGTON AVENUE
NOT TO SCALE



WHEELCHAIR RAMP SECTION A-A - WASHINGTON AVENUE
NOT TO SCALE



DETECTABLE WARNING PANEL DETAIL
NOT TO SCALE

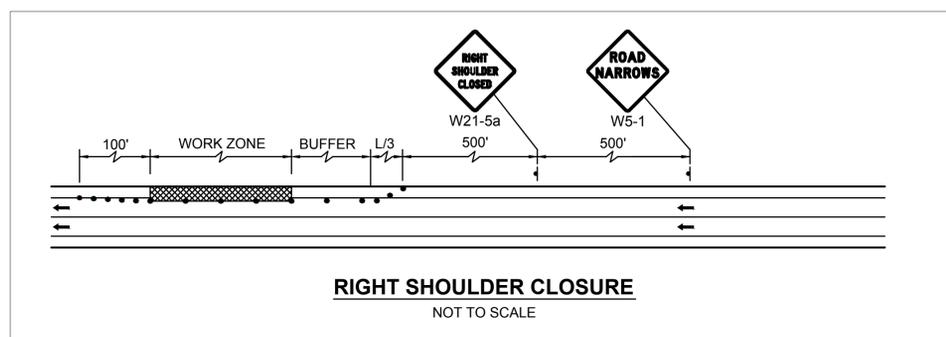
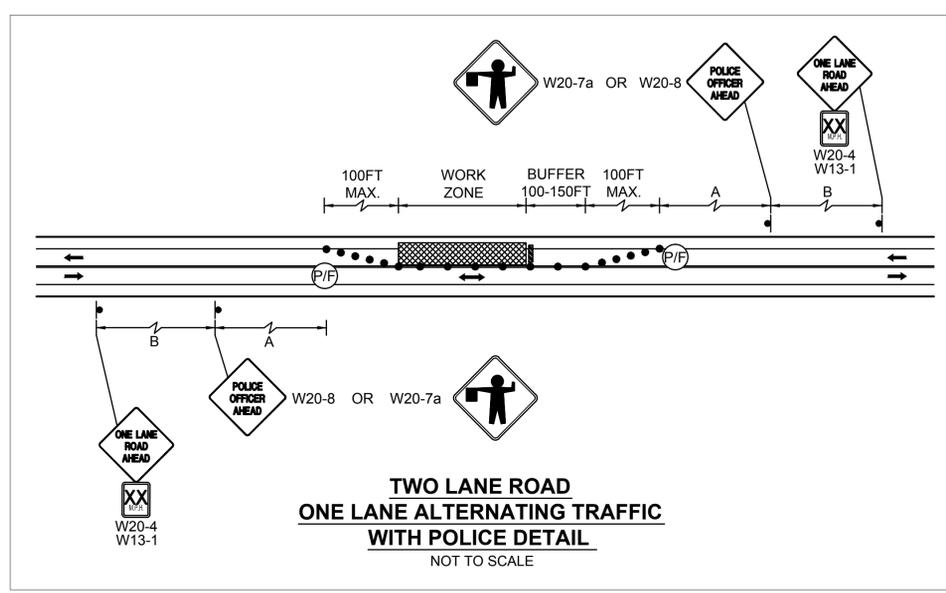
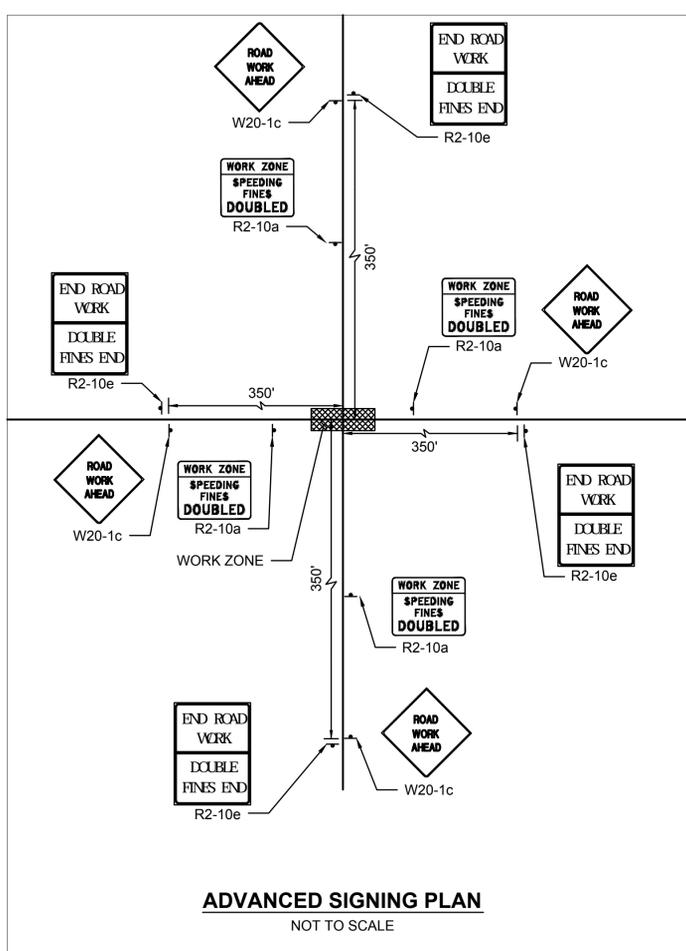
- NOTES:
1. THE MINIMUM MOUNTING HEIGHT OF POST MOUNTED SIGNS, MEASURED FROM THE BOTTOM OF SIGN PANEL TO THE TOP OF SIDEWALK SHALL BE 7 FEET.
2. FOR SPECIAL PROJECT TRAIL MARKER SIGN DETAILS AND SUMMARY, SEE SHEET 21.

TRAFFIC SIGN SUMMARY

TRAFFIC SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER		
D11-1	24"	18"		SEE MUTCD STANDARDS			26	SEE MUTCD STANDARDS			1-P5 24 1 ON BACK OF D11-1 1 ON EXIST POLE	78.00
M4-6	12"	6"					1				WITH D11-1	0.50
M5-1L	12"	9"					1				WITH D11-1	0.75
M5-1R	12"	9"					3				WITH D11-1	2.25
M6-1	12"	9"					10				WITH D11-1	7.50
M6-2L	12"	9"					1				WITH D11-1	0.75
M6-3	12"	9"					10				WITH D11-1	7.50
M6-4	12"	9"					1				WITH D11-1	0.75
R1-1	30"	30"					3				1-P5 1 2 ON EXIST POST	18.75
R1-2	30"	30"					1				1-P5 1	6.25

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER		
R1-3p	18"	6"		SEE MUTCD STANDARDS			5	SEE MUTCD STANDARDS			5 ON EXIST POST	3.75
R3-17	24"	18"					6				1-P5 6	18.00
R3-17bP	24"	8"					3				WITH R3-17	4.00
R3-2	24"	24"					1				WITH R6-1R	4.00
R5-1	30"	30"					4				1-P5 1 1 ON BACK OF R1-2 2 ON EXIST POST	25.00
R5-6	24"	24"					1				1 ON EXIST POST	4.00
R6-1R	36"	12"					1				1-P5 1	3.00
R7-1	12"	18"					1				WITH D11-1	1.50
W11-1	30"	30"					12				1-P5 12	75.00
W16-1P	18"	24"					12				WITH W11-1	36.00



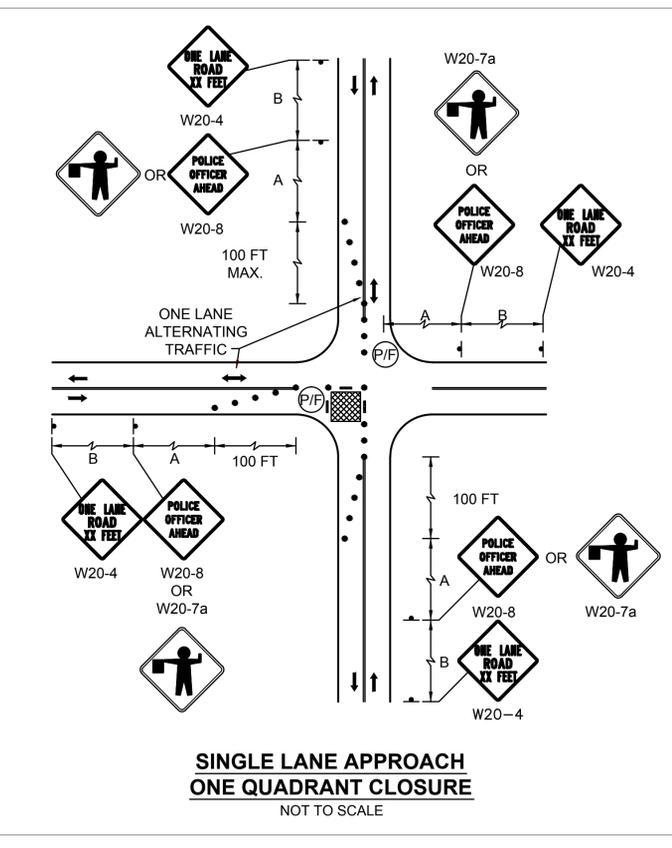
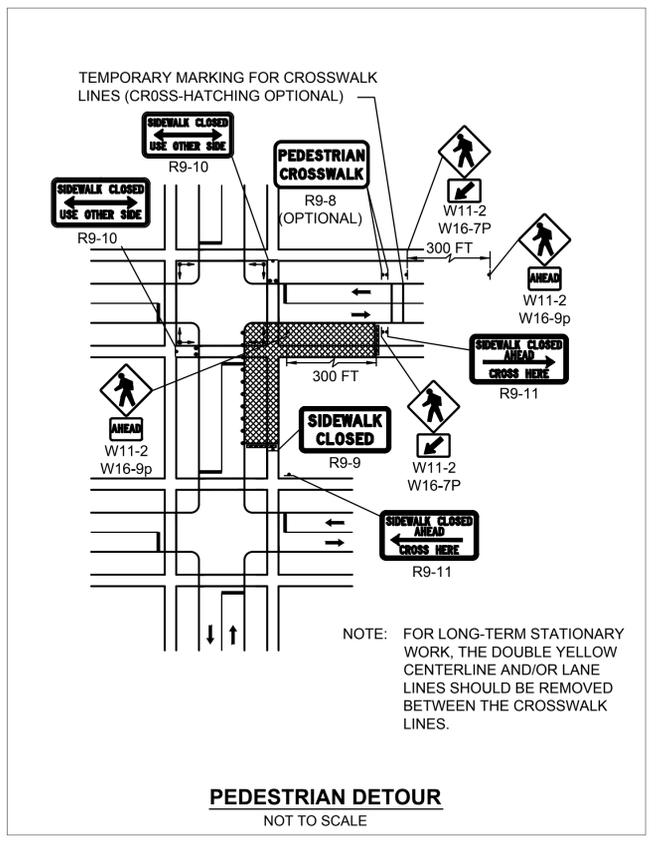
SUGGESTED WORK ZONE WARNING SIGN SPACING

Road Type	Distance Between Signs		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS	350	350	350
MOST OTHER ROADWAYS	500	500	500
FREEWAYS AND EXPRESSWAYS	1,000	1,500	2,640

- NOTES:
- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE 2009 EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL MASSACHUSETTS AMENDMENTS.
 - ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE 2009 MUTCD.
 - TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
 - TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE ROADWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
 - SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, SHALL PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
 - CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.

(CONTINUED BELOW)

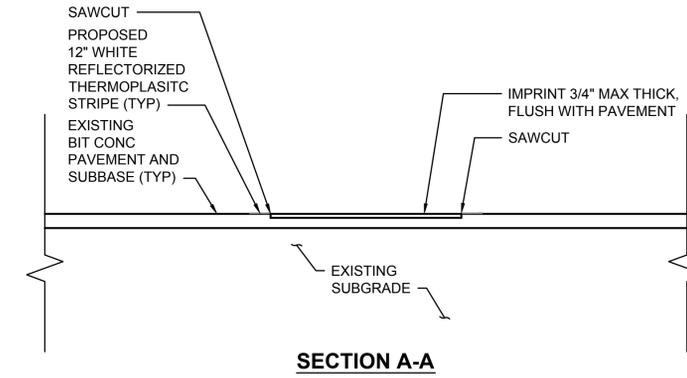
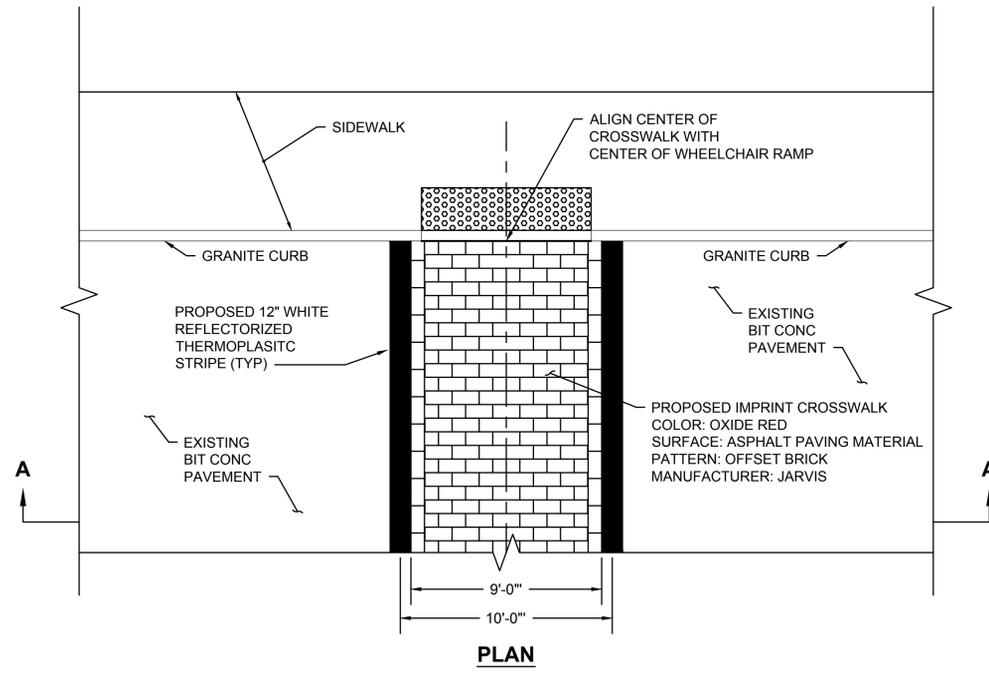
- LEGEND
- REFLECTORIZED DRUM
 - SIGN ON SUPPORT
 - TYPE III BARRICADE WITH WARNING LIGHTS
 - WORK ZONE
 - P/F POLICE OFFICER/FLAGGER



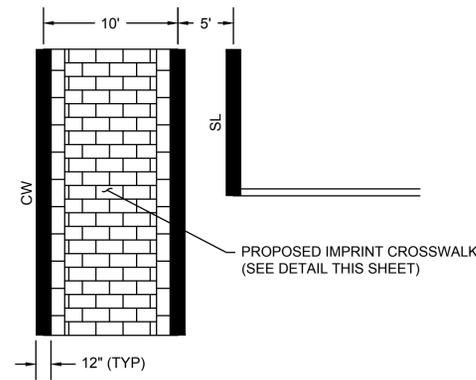
- NOTES (CONTINUED):
- THE FIRST FIVE PLASTIC DRUMS OF A TAPER MUST BE MOUNTED WITH TYPE A LIGHTS.
 - THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE RESIDENT ENGINEER.
 - DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE RESIDENT ENGINEER.
 - MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
 - MINIMUM LANE WIDTH SHALL BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
 - ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
 - ALL TEMPORARY WALKWAYS SHALL MEET ADA/AAB GUIDELINES.
 - WORK HOURS ARE LIMITED TO 7:00AM TO 5:00PM M-F. LANE CLOSURES ARE LIMITED TO 9:00AM TO 3:00PM M-F UNLESS APPROVED BY THE RESIDENT ENGINEER.

TEMPORARY TRAFFIC SIGN SUMMARY

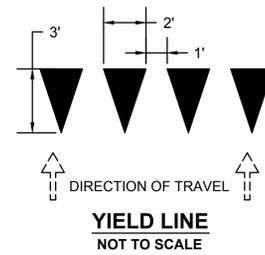
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQ'D	COLOR			AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER	
R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED				4	SEE MASSDOT STANDARDS			48.00
R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				4	FLUOR. ORANGE WHITE	BLACK	BLACK	48.00
R9-9	30"	18"	SIDEWALK CLOSED				2	SEE MASSDOT STANDARDS			7.50
R9-10	48"	24"	SIDEWALK CLOSED USE OTHER SIDE				2				16.00
R9-11R	48"	24"	SIDEWALK CLOSED AHEAD CROSS HERE				1				8.00
R9-11L	48"	24"	SIDEWALK CLOSED AHEAD CROSS HERE				1				8.00
W5-1	36"	36"	ROAD NARROWS				1				9.00
W11-2	30"	30"	PEDESTRIAN CROSSWALK				8				50.00
W13-1	18"	18"	ONE LANE ROAD 11 FEET				2				4.50
W16-7PL	24"	12"	ROAD WORK AHEAD				4				8.00
W16-9P	24"	12"	AHEAD				4				8.00
W20-1c	36"	36"	ROAD WORK AHEAD				4				36.00
W20-4	36"	36"	ONE LANE ROAD 11 FEET				2				18.00
W20-4	36"	36"	ONE LANE ROAD 11 FEET				2				18.00
W20-5R	36"	36"	ROAD WORK AHEAD				1				9.00
W20-8	36"	36"	ROAD WORK AHEAD				4				36.00
W21-5a	36"	36"	RIGHT SHOULDER CLOSED				1				9.00



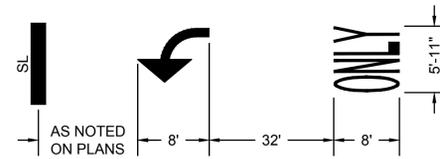
IMPRINT CROSSWALK
NOT TO SCALE



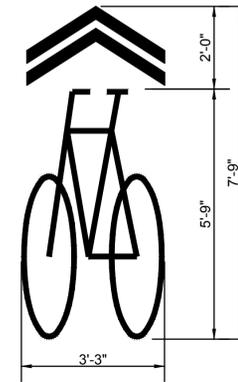
CROSSWALK AND STOP LINE
NOT TO SCALE



YIELD LINE
NOT TO SCALE

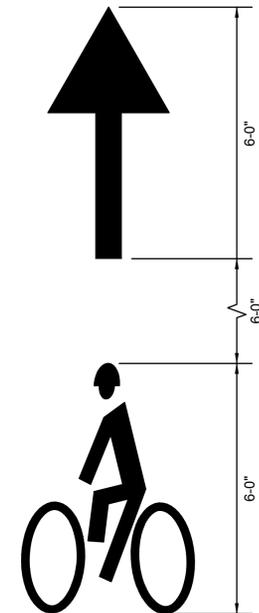


TURN ARROW AND LEGEND
NOT TO SCALE



- NOTES:
1. CENTER OF MARKING TO BE LOCATED A MINIMUM OF 4' FROM THE EDGE OF ROADWAY WHERE THERE IS NO PARKING.
 2. CENTER OF MARKING TO BE LOCATED A MINIMUM OF 11 FEET FROM THE EDGE OF ROADWAY WHERE PARKING IS PRESENT.

SHARED LANE MARKING DETAIL
NOT TO SCALE



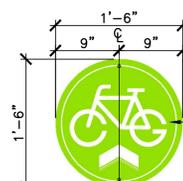
- NOTES:
1. MARKING TO BE LOCATED IN THE CENTER OF PROPOSED BIKE LANES AT THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS, SHEETS 6 TO 14.

BIKE LANE MARKING DETAIL
NOT TO SCALE

TYPE B
(BLUE COLOR)
(SP-2)
TRAIL MARKER SIGN GRAPHIC
VARIES, DETAILING IS TYPICAL.
SEE SITE IMPROVEMENTS PLAN
FOR LOCATIONS



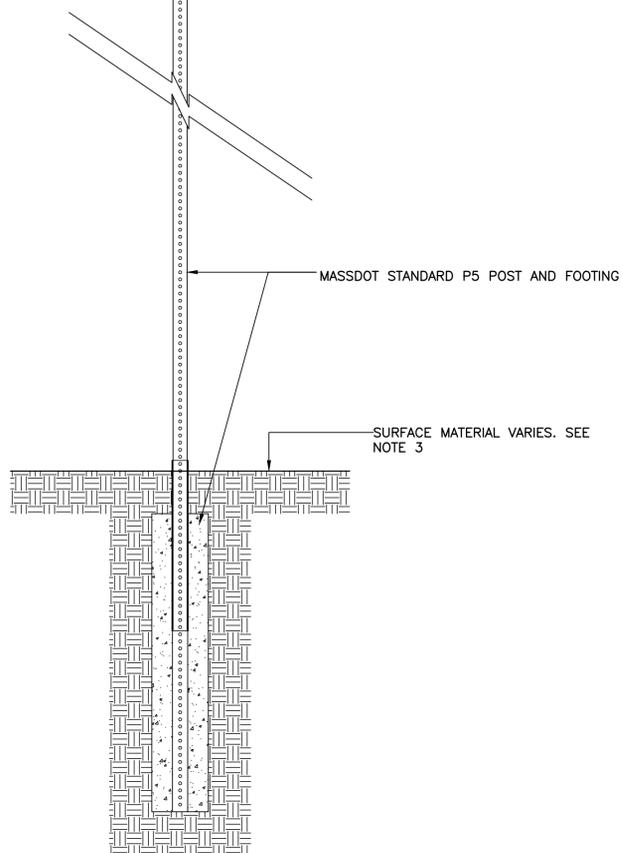
TYPE A
(GREEN COLOR)
(SP-1)



NOTE:
1) DIGITAL VECTOR FORMAT FOR SIGN
GRAPHICS SHALL BE PROVIDED BY LANDSCAPE
ARCHITECT DURING SUBMITTAL PROCESS
2) TRAIL MARKER SIGN COLOR VARIES. SEE
SITE IMPROVEMENTS PLAN FOR LOCATIONS
3) EXISTING SURFACE MATERIAL TO BE
REPLACED BY THE CONTRACTOR AFTER SIGN
INSTALLATION AT NO ADDITIONAL COST.
RESTORATION OF EXISTING SURFACE IS
INCIDENTAL TO SIGN INSTALLATION

TRAIL MARKER SIGN TYPE A (GREEN
COLOR); 12 GAUGE (0.080") 18"Ø
PAINTED 6061 T-6 ALUMINUM SIGN;
FRONT OF SIGN SHALL HAVE 3M HIGH
REFLECTIVE PRISMATIC SHEET APPLIED;
REAR OF SIGN TO BE PAINTED WITH
SOLID COLOR TO MATCH FRONT

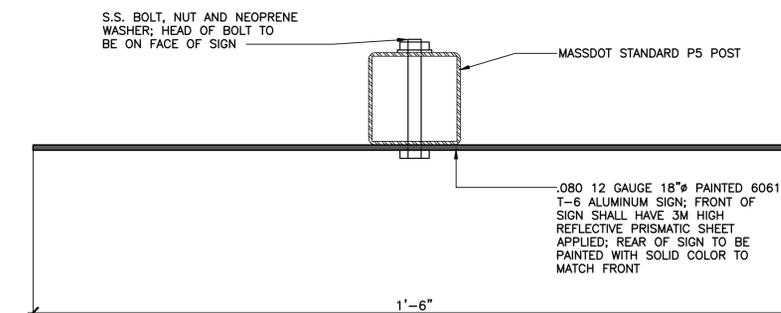
INSTALL SS BOLT, NUT AND NEOPRENE
WASHER ASSEMBLY AT TOP AND BOTTOM
OF SIGN. SEE DETAIL TRAIL MARKER
SIGN-PLAN FOR MORE DETAIL



1 TRAIL MARKER SIGN – ELEVATION
SCALE: 1"=1'-0"

TRAIL MARKER SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK- GROUND	LEGEND	BORDER		
SP-1	1 LDT	1 LDT	 [TYPE A GREEN COLOR]	SEE NOTE 1 -	1 LDT		16	SEE NOTE 1 & 2 -	1 LDT	WITH D11-1	N/A	
SP-2	1 LDT	1 LDT	 [TYPE B BLUE COLOR]				12			WITH D11-1	N/A	



2 TRAIL MARKER SIGN – PLAN OF SIGN POST
SCALE: 6"=1'-0"