

TOWN OF GREENFIELD
Department of Planning & Development

**Asbestos Abatement & Demolition of 106 1/2 Deerfield Street
and Related Work**



Contract #: 17-02

August 2016

TABLE OF CONTENTS:

| | <u>PAGE #</u> |
|---|--------------------------------|
| ADVERTISEMENT FOR BIDDERS | 2 |
| INFORMATION FOR BIDDERS | 4 |
| FORMS FOR BID | 12 |
| -Form for General Bid | |
| -Certificate of Non-Collusion/Tax Compliance Form | |
| -Non-Discrimination Affirmative Action Certification | |
| -Foreign Corporation Certification | |
| -Equal Employment Opportunity Certification | |
| -Assurance of Compliance (Section 3, HUD Act of 1968) | |
| -Statement of Bidder's Qualifications | |
| -Supplemental Bid Data | |
| -Debarment Statement | |
| -Contractor's/Sub-Contractor's Certification | |
| -OSHA Training Certification | |
| AGREEMENT | 26 |
| -Notice to Proceed | |
| BONDS | 30 |
| SPECIAL CONDITIONS | 38 |
| GENERAL CONDITIONS | 41 |
| TECHNICAL SPECIFICATIONS | 56 |
| APPENDIX A | MASSACHUSETTS STATE WAGE RATES |
| APPENDIX B | AERIAL SITE PHOTO |
| APPENDIX C | ASSESSOR'S CARD |

ADVERTISEMENT FOR BIDDERS
DEPARTMENT OF PLANNING & DEVELOPMENT
14 Court Square
Greenfield, MA 01301

Sealed Proposals addressed to the Department of Planning and Development, 14 Court Square, Greenfield, Massachusetts and endorsed "Proposal for Asbestos Abatement & Demolition of 106 ½ Deerfield Street" will be accepted by the Department of Planning and Development at 114 Main Street. Bids will be accepted until 2:00 p.m. on Wednesday, August 24, 2016, at which time said bids will be publicly opened and read aloud at 114 Main Street.

Sealed mailed bids shall be mailed to: Eric Twarog, AICP
Director of Planning & Development
14 Court Square
Greenfield, MA 01301

Sealed hand delivered bids shall be delivered to: Eric Twarog, AICP
Director of Planning & Development
114 Main Street
Greenfield, MA 01301

The work consists of asbestos abatement within and the demolition of a derelict single family residential structure at 106 ½ Deerfield Street, Greenfield, MA and related work.

Plans, specifications, and proposal forms will be emailed upon request by contacting EricT@greenfield-ma.gov. Plans and Specifications will be available after August 3, 2016.

The Bid Security from the Contractor in the form of cash, certified check, treasurer's check, or cashier's check, drawn upon a responsible bank in the Commonwealth of Massachusetts or a bid bond in the amount of five percent (5%) of the bid shall be made payable to the Town of Greenfield, Massachusetts and shall be enclosed with the bid.

A Performance Bond and a Labor and Materials Bond in the full amount of the contract, will be required of the successful bidder.

Attention is called to the following:

- A. Bids for this project are subject to the provisions of the Massachusetts General Laws Chapter 30, Section 39M as amended.
- B. Wages are subject to Massachusetts minimum wage rates as per M.G.L. Chapter 149, Section 26 to 27H inclusive, and federal minimum wage rates pursuant to the Davis-Bacon Act, whichever pays more.
- C. All pertinent regulations ordinances and statutes of the City of Greenfield, the State of Massachusetts, and the U.S. Department of Housing & Urban Development will be rigidly enforced.

D. The successful bidder must comply with Chapter 151B as amended, of the Massachusetts General Laws and with the provisions of Executive Order No. 74, as amended by Executive Order No. 116 dated May 1, 1975 pertaining to Equal Opportunity Anti-Discrimination and Affirmative Action.

A mandatory pre-bid site visit is scheduled for Thursday, August 11, 2016 at 10:00 a.m. at 106 ½ Deerfield Street, Greenfield, MA.

The lowest qualified and most responsible bidder shall be awarded the project subject to the availability of funding. The City of Greenfield reserves the right to reject any or all bids or to waive any informalities in the bidding.

This project is being funded by the Community Development Block Grant Program, through the Massachusetts Department of Housing & Community Development.

The Contract/Bid/Proposal awarding authority is:

City of Greenfield
Department of Planning and Development
Greenfield, Massachusetts

INFORMATION FOR BIDDERS

INFORMATION FOR BIDDERS

1.1 **Location and work to be done:**

The work herein specified to be done (herein sometimes referred to as the “Work”) consists of asbestos abatement within and the demolition of 106 ½ Deerfield Street and related work.

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

The Work to be done and paid for shall not be limited to the extent mentioned or described, but shall include all incidental work necessary or customarily done for the completion of the work.

- 1.2 **Questions Regarding Drawings and Documents.** In general, no answers will be given to prospective bidders in reply to an oral question if the question involves an interpretation of the intent or meaning of the Drawings or other Contract Documents, or the equality or use of products or methods other than those designated or described on the drawings or in the specifications. Any information given to bidders other than by means of the Drawings and other Contract Documents, including Addenda, as described below, is given informally, for information and the convenience of the bidder only and is not guaranteed. The bidder agrees that such information shall not be used as the basis of nor shall the giving of any such information entitle the bidder to assert any claim or demand against the owner or the engineer on account thereof.

To receive consideration, such questions shall be submitted in writing to the Town at least 7 days before the established date for receipt of bids. If the question involves the equality or use of products or methods it must be accompanied by drawings, specifications or other data in sufficient detail to enable the Town to determine the equality or suitability of the product or method. In general, the Town will neither approve nor disapprove particular products prior to the opening of Bids; such products will be considered when offered by the Contractor for incorporation into the Work.

The Town will set forth as Addenda, which shall become a part of the Contract Documents, such questions received as above provided as in his sole judgment are appropriate or necessary and his decision regarding each. At least three days prior to the receipt of Bids, he will send a copy of these Addenda to those prospective bidders known to have taken out sets of the Drawings and other Contract Documents.

The Contractor agrees to use the products and methods designated or described in the Specifications as amended by the Addenda.

- 1.3 **Bidders to Investigate.** Bidders are required to submit their Bids upon the following express conditions which shall apply to and be deemed a part of every Bid received, viz:

Bidders must satisfy themselves by personal examinations of the site of the work and by such other means as they may wish, as to the actual conditions there existing, the character and requirements of the Work, the difficulties attendant upon its execution, and the accuracy of all estimated quantities stated in the Bid.

- 1.4 **Information not Guaranteed.** All information given on the Drawings or in the Contract Documents relating to sub-surface and other conditions, natural phenomena, existing pipes and other structures is from the best sources at present available to the Town. All such information is furnished only for the information and convenience of bidders and is not guaranteed.

It is agreed and understood that the Town does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes or other structures encountered during construction, will be the same as those indicated on the Drawings or in the other Contract Documents.

It is agreed further and understood that no bidder or contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Town, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other conditions, natural phenomena, existing pipes or other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

- 1.5 **Submitting Bids.** All Bids must be upon the blank form for Bid annexed hereto, state the proposed price of each item of the Work, both in words and in figures, and be signed by the Bidder with his business address and place of residence. The Bid Security shall be enclosed with the Bid.

Bidders shall not remove and submit the Bid pages separate from the volume of Contract Documents, but shall submit their Bids bound with the complete volume of attached Contract Documents, including all pages correctly assembled.

Each bid shall be submitted to the Town in a sealed envelope. On the outside of the envelope shall be written the bidder's name and address and the name of and description of the project for which the Bid is submitted.

If forwarded by mail, the sealed envelope containing the Bid and marked as directed above, must be enclosed in another envelope addressed to the Town.

- 1.6 **Time for Completion.** The successful bidder will be required to substantially complete the Work within twenty-one (21) consecutive calendar days from the Notice To Proceed.

It is the intention of the Town of Greenfield to complete this work at the soonest possible date therefore; the successful contractor will be required to execute the contract within five (5) days of award. A preconstruction meeting will be held, a notice to proceed will be given, and the contractor is to start the Work immediately.

- 1.7 **Withdrawal of Bids.** Except as hereinafter in this subsection otherwise expressly provided, once his Bid is submitted and received by the Town for consideration and comparison with other bid similarly submitted, the bidder agrees that he may not and will not withdraw it within 40 (forty) consecutive calendar days after the actual date of the opening of Bids.

Upon proper written request and identifications, Bids may be withdrawn as follows:

1. At any time prior to the designated time for the opening of Bids.
2. Provided the Bid has not therefore been accepted by the Town at any time subsequent to the expiration of the period during which the bidder has agreed not to withdraw his Bid. Unless a Bid is withdrawn as provided above, the Bidder agrees that it shall be deemed open for acceptance until the Town notifies a Bidder in writing that his Bid is rejected or that the Town does not intend to accept it. Notice of acceptance of a Bid shall not constitute rejection of any Bid.

- 1.8 **Ability and Experience of Bidder.** No award will be made to any Bidder who cannot satisfy the Town that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the Work successfully within the time named. The Town decision or judgment on these matters shall be final, conclusive, and binding.

The Bidder is to submit a list of comparable projects with the list of references.

The Town may make such investigations as it deems necessary, and the Bidder shall furnish to the Town, under oath if so required, all such information, and data for this purpose as the Town may request.

- 1.9 **Bids.** The Town may reject Bids which in its sole judgment are either incomplete, conditional, obscure or not responsive or which contain additions not called for, erasures not properly initialed, alterations, or similar irregularities, or the Town may waive such omissions, conditions or irregularities.
- 1.10 **Right to Reject Bids.** The Town reserves the right to reject any or all Bids, or alternative Bid Items should the Town deem it to be in the public interest to do so.
- 1.11 **Execution of Agreement.** The Bidder whose bid is accepted will be required and agrees to duly execute the AGREEMENT, after notification that the AGREEMENT is ready for signature.

1.12 **Insurance Certificates.** The Contractor will not be permitted to start any construction work until he has submitted certificates covering all insurance called for, and has obtained approval in writing of such certificates from the Town.

Before starting, and until completion of the guarantee period, the Contractor shall procure, deposit, and maintain with the Town, insurance satisfactory to the Town as follows:

- A. Workmen’s Compensation and Employer’s Liability Insurance as required by the Workmen’s Compensation Laws of the Commonwealth of Massachusetts.
- B. Comprehensive Commercial Liability Insurance covering Bodily Injury and Property Damage (Broad Form) as follows:

| | |
|----------------------|-----------------------------|
| Limits of Liability* | \$1,000,000 each occurrence |
| | \$2,000,000 aggregate |

* or \$1,000,000 single limit combined Bodily Injury and Property Damage.

The Comprehensive Commercial Liability Policy shall provide insurance for the Contractor for Bodily Injury and Property Damage to third persons arising out of:

- 1. Work performed by the Contractor himself with his own employees, called “premises operations.”
- 2. Work performed by his subcontractors, called “sublet work” or Independent Contractors (this is referred to as Contractor’s Protective Liability).
- 3. The Contractor’s liability assumed under this contract, called “Hold Harmless” clauses or indemnity agreement. (This is referred to as Contractual Liability Insurance).
- 4. Products liability coverage covering the completed building or installation or products furnished. (This is called Products Liability Insurance for the manufacturer and Complete Operations Liability Insurance for the Contractor).
- 5. If any work is to be performed below the surface of the ground, the coverage shall be extended to include protection against property damage caused by explosion (including blasting), collapse of structures and damage to underground pipes and utilities. (This is known as “XCU” coverage).

- C. Comprehensive Automobile Liability Insurance covering Bodily Injury and Property Damage, as follows:

Limits of Liability

| | |
|---------------|---------------------------|
| Bodily Injury | \$500,000 each person |
| | \$1,000,000 each accident |

Property Damage

\$1,000,000 each accident

* or \$500,000 single limit combined Bodily Injury and Property Damage.

This insurance is to apply with respect to all owned or hired vehicles of the Contractor and non-ownership protection for all employees of the Contractor engaged in the performance of this contract.

D. All policies shall be so written that the Town will be notified of cancellation or restrictive amendment at least 30 days prior to the effective date of such cancellation or amendment. Certificates from the insurance carrier stating the limits of liability and expiration date shall be filed in triplicate with the Town before operations are begun. Such certificates not only shall name the types of policy provided, but also shall refer specifically to this Contract* and article and the above paragraphs in accordance with which insurance is being furnished and shall state that such insurance is as required by such paragraphs of this Contract and shall be sufficiently comprehensive as to permit the owner to determine that the required insurance coverage has been provided without the necessity of examining the individual insurance policies.

If the initial insurance expires prior to completion of the Work, renewal certificates shall be furnished by the date of expiration.

* If blanket coverage is furnished, this particular Contract need not be referred to.

E. The Contractor shall require each of his sub-contractors to procure and maintain until the completion of that sub-contractor's work, insurance of the types and to the limits specified in paragraphs A to C, inclusive, above. It shall be the responsibility of the Contractor to insure that all his sub-contractors comply with all of the insurance requirements contained herein relating to such sub-contractors.

No insurances required or furnished hereunder shall, in any way, relieve the contractor of, or diminish any of his responsibilities, obligations and liabilities under the Contract.

1.13 **Comparison of Bids.** Bids will be compared on the basis of lump-sum or unit prices stated in the BID.

In the event that there is a discrepancy in the Bid between the lump-sum or unit prices written in words and figures, the prices written in words shall govern.

The Town agrees to examine and consider each Bid submitted in consideration of the Bidder's agreements, as hereinabove set forth and as set forth in the BID.

1.14 **Bid Security.** The Bid Security from the contractor in the form of cash, certified

check or treasurer's or cashier's check drawn upon a responsible bank in the Commonwealth of Massachusetts or a bid bond in the amount of five percent (5%) of the bid shall be made payable to the Town of Greenfield, Massachusetts and shall be enclosed with the bid.

Each such check may be held by the Town as security for the fulfillment the bidder's agreements as hereinabove set forth and as set forth in the BID. Should the bidder fail to fulfill such agreements, his bid check shall become the property of the Town as liquidated damages; otherwise, the bid check shall be returned to the bidder as hereinafter provided.

Bid checks will be returned to all except the three lowest bidders within three days, Sundays and legal holidays excluded, after the owner and the accepted bidder have executed the AGREEMENT. In the event that the AGREEMENT has not been executed by both the accepted bidder and the owner within 40 consecutive calendar days after the opening of bids, the bid check will be returned promptly upon demand of any bidder who has not been notified of the acceptance of his bid.

None of the three lowest bids shall be deemed rejected, notwithstanding acceptance of any bid, until the AGREEMENT has been executed by both the Town and the accepted bidder.

The bid deposit must be enclosed in the sealed envelope containing the bid.

- 1.15 **Disputes.** In the event of any dispute as to any of the terms and conditions of this contract, it shall be determined in accord with the laws of the Commonwealth of Massachusetts and the Courts of the Commonwealth of Massachusetts shall have exclusive jurisdiction of the same.
- 1.16 **Addenda.** This bid includes addenda number/numbers _____.
- 1.17 **Minimum Wage Rates.** In the employment of mechanics, teamsters, chauffeurs, and laborers in the construction of the public work projects, the Minimum Wage rates shall be paid as issued by the Commissioner of Labor and Industries of Massachusetts, in accordance with Sections 26 and 27 of Chapter 149, of the General Laws, as amended.
- 1.18 **Equal Employment Opportunity Anti-Discrimination and Affirmative Action.** The successful bidder must comply with Chapter 151B as amended, of the Massachusetts General Laws and with the provisions of Executive Order No. 74, as amended by Executive Order No. 116 dated May 1, 1975 pertaining to Equal Opportunity Anti-Discrimination and Affirmative Action.
- 1.19 **Notice to Proceed and Pre-Construction Conference.** A written Notice to Proceed shall be issued to the Contractor after receipt of the following: proof of required insurance, an EEO poster has been posted in a conspicuous place at the job site, the Contractor has designated an EEO Coordinator, the Contractor's Certification Concerning Labor Standards and Prevailing Wage Requirements has been submitted to the project manager. No work shall be performed by the Contractor until he has received the Notice to Proceed.

Prior to the start of construction, the Contractor, all subcontractors, the project manager, and the owner shall attend a pre-construction conference. The conference will serve to acquaint the participants with the general plan of contract administration and requirements under which the construction operation is to proceed, and will inform the Contractor, in detail, of the obligations imposed on him and his subcontractors by the Executive Orders concerning Equal Employment Opportunity.

The date, time, and place of the conference will be furnished to the Contractor by the project manager.

- 1.20 **Bonds**. Performance, as well as Labor, and Material Bonds are required in the full amount of the contract.

FORMS FOR BID

FORM FOR GENERAL BID

TO THE AWARDING AUTHORITY

- A. The undersigned proposes to furnish all labor and materials required for asbestos abatement and the demolition of 106 ½ Deerfield Street located in Greenfield, Massachusetts in accordance with the Contract Documents for the contract price specified below, subject to additions and deductions according to the terms of the specifications.

- B. This bid includes addenda number(s) _____.

- C. **The proposed contract price is** _____
_____ dollars \$ _____.

- D. The undersigned agrees that, if selected as general contractor, we will within five days, Saturdays, Sundays, and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a labor and materials or payment bond, of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority, in one half the sum of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

- E. The undersigned hereby certifies that they are able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that they will comply fully with all laws and regulations applicable to awards made subject to M.G.L. c.149 sec.44A-J.

- F. The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. The undersigned further certifies under the penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder. As used in this subsection the work "person" shall mean natural person, joint venture, partnership, corporation or other business or legal entity.

Signature

Name of General Bidder

Signature + Title of Person Signing Bid

Date: _____

Business Address

City and State

CERTIFICATE OF NON-COLLUSION

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

Signature of individual submitting bid or proposal

Name of Business

TAX COMPLIANCE CERTIFICATION

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

Signature of individual submitting bid or proposal

Name of business

**NON-DISCRIMINATION AND
AFFIRMATIVE ACTION CERTIFICATION**

ASBESTOS ABATEMENT AND DEMOLITION OF 106 1/2 DEERFIELD STREET

The Contractor agrees to comply with all applicable Federal and State statutes, rules and regulations prohibiting discrimination in employment, including but not limited to, the American with Disabilities Act 42 USC 12101, 28 CFR Part 356, or as amended; 29 USC S.791 et. seq.; Executive Orders 227, 237, 246; MGL C 151B; and MGL C.272 S. 92A, S98 et. seq., or any amendments to these provisions. Pursuant to Executive Orders 227 and 246, the Contractor is required to take affirmative actions designed to eliminate the patterns and practices of discrimination including providing written notice of its commitment to non-discrimination to any labor association with which it has an employment agreement, and to certified minority and women-owned businesses and organizations or businesses owned by individuals with disabilities. The City of Greenfield shall not be liable for any costs associated with the Contractor's defense of claims of discrimination.

Contractor

By: _____
(Signature of Authorized Representative)

Title

Date

FOREIGN CORPORATION CERTIFICATION

AFFIDAVIT OF COMPLIANCE
FORM AF – 4A 1/78

EXECUTIVE OFFICE FOR
ADMINISTRATION AND FINANCE

The Commonwealth of Massachusetts

_____ MASSACHUSETTS BUSINESS CORPORATION

_____ NON-PROFIT CORPORATION

_____ FOREIGN (non-Massachusetts) CORPORATION

I, _____, President _____ Clerk

of _____ whose principal office is located

do hereby certify that the above named Corporation has filed with the State Secretary all certificates and annual reports required by Chapter 156B, Section 109 (Business Corporation), by Chapter 181, Section 4 (Foreign Corporation), or by Chapter 180, Section 26A (non-profit Corporation) of the Massachusetts General Laws.

SIGNED UNDER THE PENALTIES OF PERJURY THIS _____ day of _____.

Signature of responsible Corporate Officer: _____

**CERTIFICATION OF BIDDER
REGARDING EQUAL EMPLOYMENT OPPORTUNITY**

Instructions

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause, and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

Certification by Bidder

Name and Address of Bidder (include zip code):

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

Yes _____ No _____

2. Compliance reports were required to be filed in connection with such contract or subcontract.

Yes _____ No _____

3. Bidder has filed all compliance reports due under applicable instructions, including Monthly Employment Utilization Report (257).

Yes _____ No _____

- A. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?

Yes _____ No _____

Name and Title of Signer

Signature

Date

ASSURANCE OF COMPLIANCE (SECTION 3, HUD ACT OF 1968)

TRAINING, EMPLOYMENT, AND CONTRACTING OPPORTUNITIES FOR BUSINESS AND LOWER INCOME PERSONS

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from HUD assisted contracts.

- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible
- (i) preference and opportunities for training and employment shall be given to Indians, and
 - (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

Date: _____

Name of Bidder _____

Authorized Signature _____

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered, and the data given must be clear and comprehensive. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder.
2. Permanent main office address.
3. When organized.
4. If a corporation, where incorporated.
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate dates of completion)
7. General character of work performed by your company.
8. Have you ever failed to complete any work awarded to you? If so, where and why?
9. List the more important projects recently completed by your company, stating the approximate cost for each and the month and year completed.
10. Experience in construction work similar in importance to this project.
11. List your major equipment available for this contract.
12. Background and experience of the principal members of your organization, including the officers.
13. Credit available: \$_____.
14. Give bank references: _____
15. Will you, upon request, fill out a detailed financial statement and furnish other information that may be requested by the Owner or the Engineer?
16. The undersigned hereby authorizes and requests a person, firm or corporation to furnish any information requested by the Owner or the Engineer in verification of recitals comprising this Statement of Bidder's Qualifications.

Authorized Signature

SUPPLEMENTAL BID DATA

(MUST BE FILLED IN BY ALL BIDDERS)

I. Pursuant to the Requirements, the Bidder shall provide the following information:

A. All Bidders: Official Post Office Address:

B. Firm, Partnership or Corporation: Title of individual signing Proposal:

1. If Firm or Partnership, names of other members:

2. If Corporation (officers):

II. Proposed Surety:

A. Name:

B. Home Office Address:

C. Agent's Name & Address:

DEBARMENT STATEMENT
(to be used for any public construction project)

Any person or corporation that fails to date, sign with original signature, and submit the following statement shall not be awarded this contract.

DEBARMENT (Chapter 550, Acts of 1991)

The undersigned certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of Section 29F of Chapter 29 of the General Laws, or any other applicable debarment provisions of any other Chapter of the General Laws, or any Rule or Regulation promulgated thereunder.

DATE: _____

Typed or Printed Name of Person Signing

Authorized Official's Signature

Company or Corporation

A. Contractor's Certification

Name of Project _____

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

CONTRACTOR'S CERTIFICATION

_____ certified that:

1. it tends to use the following listed construction trades in the work under the contract _____

and

2. will comply with the minority manpower ration and specific affirmative action steps required by law, and
3. will obtain from each of its Sub-Contractors and submit to the contracting or administering agency prior to the award of any Sub-Contract under this contract the Sub-Contractor certification required by these bid conditions.

Signature of authorized representative
of Contractor.

B. Sub-Contractor's Certification

Name of Project _____

Prior to the award of any sub-contract, regardless of tier, the prospective sub-contractor must execute and submit to the prime contractor the following certification, which will be deemed a part of the resulting sub-contract:

SUB-CONTRACTOR'S CERTIFICATION

_____ certifies that:

1. it tends to use the following listed construction trades in the work under the sub-contract _____

and;

- 2. will comply with the minority manpower ration and specific affirmative action steps required by law; and
- 3. will obtain from each of the sub-contractors prior to the award of any sub-contract under this sub-contractor certification required by these bid conditions.

Signature of Authorized Representative

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

OSHA TRAINING CERTIFICATION

Pursuant to M.G.L. Ch. 30, Sec. 39S(A), I certify under the penalties of perjury to the following:

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

(Signature of authorized representative of Bidder)

(Name of authorized representative of Bidder)

(Name of business)

AGREEMENT

OWNER-CONTRACTOR AGREEMENT

This Agreement made the ____ day of _____, 2016____, by and between the City of Greenfield, hereinafter called the "Owner", and _____ hereinafter called the "Contractor".

Witnesseth, that the Owner and the Contractor, for the consideration hereinunder named, agree as follows:

Article 1. Scope of Work: The Contractor shall perform all Work required by the Contract Documents for **Asbestos Abatement & Demolition of 106 ½ Deerfield Street.**

Article 2. Time of Completion: The Contractor shall commence work under this Contract on the date specified in the written "Notice to Proceed" and shall bring the Work to Substantial Completion within 21 calendar days of said date. Liquidated Damages for in the amount of \$500/per day shall be applicable for each and every day required to complete the project beyond the substantial completion date.

Article 3. Contract Sum: The Owner shall pay the Contractor, in current funds, for the performance of the Work, subject to additions and deductions by Change Order, of the Contract Sum of _____ dollars (\$ _____).

Article 4. The Contract Documents: The following, together with this Agreement, form the Contract and all are as fully a part of the contract as if attached to this Agreement or repeated herein: The Bidding Documents, Contract Forms, Specifications as enumerated in the Table of Contents, the drawings, if applicable, and all Modifications issued after execution of the Contract.

Article 5. REAP Certification: Pursuant to M.G.L. c.62(c), sec.49(a), the individual signing this Contract on behalf of the Contractor, hereby certifies, under the penalties of perjury, that to the best of their knowledge and belief the Contractor has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Article 6. Validation: This Contract will not be valid until signed by the Mayor for the City of Greenfield.

In Witness Whereof, the Parties Hereto Have Caused This Instrument to be Executed Under Seal.

¹ CONTRACTOR

² AWARDING AUTHORITY

Name of Contractor

City of Greenfield

Address

Signature

By: _____
Signature

Title

Witness: _____

¹ If a Corporation, attach a notarized copy of the Corporate Vote authorizing signatory to sign Contract.

Certificate of Acknowledgment of Contractor if a Corporation

For AGREEMENT

State of _____)

SS:

County of _____)

On this _____ day of _____, 20____,

before me personally came _____

to me known, who being by me duly sworn, did depose and say as follows:

That he resides at _____

and is the _____

of _____

the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he signed thereto his name and official designation.

Notary Public (Seal)

My commission expires: _____

NOTICE TO PROCEED

Date: _____

Project: Asbestos Abatement & Demolition of 106 ½ Deerfield Street and Related Work

Owner: Town of Greenfield, MA

Owner's Contract No.: N/A

Contract: Asbestos Abatement & Demolition of 106 ½ Deerfield Street and Related Work

Contractor:

Contractor's Address: *[send Certified Mail, Return Receipt Requested]*

You are notified that the Contract Times under the above Contract will commence to run on _____. On or before that date, you are to start performing your obligations under the Contract Documents and must be substantially complete within 21 consecutive calendar days.

Before Contractor may start any Work at the Site, Contractor must provide certificates of insurance required to be purchased and maintained in accordance with the Contract Documents.

Owner

Given by:

Authorized Signature

Title

Date

Copy to Engineer

BONDS

PERFORMANCE BOND

(NOTE: This Bond is issued simultaneously with the attached Labor and Materials Bond in favor of the Owner.)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____

(an individual, a partnership, a corporation)

duly organized under the Laws of the State (or Commonwealth) of _____,

and having a usual place of business at _____, as

Principal, and _____, a corporation duly

organized under the Laws of the State (or Commonwealth) of _____, and

having a usual place of business at _____,

as Surety, are holden and stand firmly bound and obligated unto the Town of Greenfield,

Massachusetts, as obligee, in the sum of _____,

lawful money of the United States of America to and for the true payment whereof we bind ourselves

and, each of us, our heirs, executors, administrators, successors, and assigns, jointly and severally,

firmly by these presents.

WHEREAS, the Principal, by means of a written AGREEMENT (which together with the Contract Documents in said AGREEMENT referred to are collectively sometimes referred to as the "Contract") dated _____.

Has entered into a contract with the said obligee for _____

a copy of which AGREEMENT is attached hereto and by reference made a part hereof.

NOW THEREFORE, THE CONDITION of this obligation is such that if the Principal shall well and truly keep and fully and faithfully perform all of the terms and conditions of said AGREEMENT and of the "Contract Documents" referred to in said AGREEMENT (which collectively are hereinafter and in said AGREEMENT sometimes referred to as the "Contract") and all modifications thereof on the Principal's part to be performed, this obligation shall be void; otherwise it shall remain in full force and effect.

Whenever the said Principal shall be, and declared by the Town to be in default under the said Contract, the Town having performed the Town's obligations thereunder, the Surety, for value received, shall promptly remedy the default, or, at the option of the Town, shall promptly

- (a) Complete the said AGREEMENT and/or Contract in accordance with its terms and conditions, or
- (b) Obtain a bid or bids for submission to and the approval of the Town for completing the said AGREEMENT and/or Contract and any modifications thereof in accordance with the terms and condition thereof, and upon determination by the Town and the Surety of the lowest responsible and acceptable bidder, arrange for a contract between such bidder and the Town, and make available to the Town as the Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less a sum that shall be equal to the difference between the Contract price as fixed and provided in said AGREEMENT and/or Contract price as fixed and provided thereof to be paid thereunder to the Principal and the amount previously paid by the Town to and/or for the account of and/or chargeable against the Principal, but not exceeding (including other costs and damages for which the Surety may be liable hereunder) the amount set forth in the first paragraph hereof.

The Surety, for value received, agrees further that no changes in, omissions from, or alteration, modifications or additions to the terms and provisions of said AGREEMENT, and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in any way affect the Surety's obligations on this Bond, and the Surety hereby waives notice of any such changes, omissions, alteration, modification, additions or extensions.

IN WITNESS WHEREOF, we have hereunto set our hands and seals to _____
counterparts of this Bond, this _____ day of _____
in the year Two Thousand and Sixteen.

Principal (Seal)

Principal (Seal)

Principal (Seal)

Surety (Seal)

Surety (Seal)

Surety (Seal)

(NOTE: If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officers.

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.)

LABOR AND MATERIALS (PAYMENT) BOND

(NOTE: This Bond is issued simultaneously with the attached Performance Bond in favor of the Town.)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____

(an individual, a partnership, a corporation)

duly organized under the Laws of the State (or Commonwealth) of _____,

and having a usual place of business at _____, as

Principal, and _____, a corporation duly

organized under the Laws of the State (or Commonwealth) of _____, and

having a usual place of business at _____,

as Surety, are holden and stand firmly bound and obligated unto the Town of Greenfield,

Massachusetts, as obligee, in the sum of _____,

lawful money of the United States of America to and for the true payment whereof we bind ourselves

and, each of us, our heirs, executors, administrators, successors, and assigns, jointly and severally,

firmly by these presents.

WHEREAS, the Principal, by means of a written AGREEMENT (which together with the Contract Documents in said AGREEMENT referred to are collectively sometimes referred to as the "Contract") dated _____.

Has entered into a contract with the said obligee for _____

_____ a copy of which AGREEMENT is attached hereto and by reference made a part hereof.

NOW, THEREFORE, THE CONDITION of this obligation is such that if the Principal shall promptly make payments to all claimants as hereinafter defined, for all labor performed or furnished and for all materials and equipment furnished for or used or in connection with the Work called for by said AGREEMENT and/or Contract and any modifications thereof, including lumber used, but not incorporated in said Work, and for the rental or hire of vehicles, tools and other appliances and equipment furnished for or used in connection with said Work, this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, materials, and/or equipment used or reasonably required for use in the performance of the said Work, labor and materials, being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the said AGREEMENT and/or Contract and any modifications thereof.
2. The above named Principal and Surety hereby jointly and severally agree with the Town that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials or equipment were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Town shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by a claimant,
 - (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The Principal, the Town or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials or equipment for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials or equipment were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Town, or Surety at any place where an office is regularly maintained for the transaction of business, or served in the state in which the said Work is located, save that such service need not be made by a public officer;
 - (b) After the expiration of one (1) year following the date on which the Principal ceased work on said AGREEMENT and/or Contract and any modifications thereof, it being understood, however, that if any limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - (c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the said Work, or any part thereof, is situated, or in the United States District Court for the district in which the said Work, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said AGREEMENT and/or Contract or said

Work, whether or not claim for the amount of such lien be presented under and against this bond.

The Surety, for value received, agrees further that no changes in, omissions from, or alterations, modifications or additions to the terms and provisions of said AGREEMENT and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in any way affect the Surety's obligations on this Bond, and the Surety hereby waives notice of any such changes, omissions, alterations, modifications, additions or extensions.

IN WITNESS WHEREOF, we have hereunto set our hands and seals to _____ counterparts of this Bond, this _____ day of _____ in the year Two Thousand and Sixteen.

(NOTE:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

_____(Seal)
Principal

_____(Seal)
Principal

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officer or officers.

_____(Seal)
Principal

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

_____(Seal)
Surety

_____(Seal)
Surety

There should be executed an appropriate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.)

_____(Seal)
Surety

Certificate of Acknowledgment of Contractor if a Corporation

For CONTRACT BONDS

State of _____)

SS:

County of _____)

On this _____ day of _____, 20____,

before me personally came _____

to me known, who being by me duly sworn, did depose and say as follows:

That he resides at _____

and is the _____

of _____

the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he signed thereto his name and official designation.

Notary Public (Seal)

My commission expires: _____

SPECIAL CONDITIONS

SPECIAL CONDITIONS

TITLE

- 1.1 Construction Warning Signs
- 1.2 Traffic Control
- 1.3 Access to Property
- 1.4 Conflict or Inconsistency
- 1.5 Percentage of Progress Payments to be Retained
- 1.6 Liquidated Damages

1.1 **Construction Warning Signs.** All construction warning signs shall be erected in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways. All construction warning signs shall be erected and maintained by the Contractor at their own expense.

1.2 **Traffic Control.** For control of moderate traffic, the Contractor shall provide an adequate number of flagmen employed at his own expense.

Whenever and wherever, in the opinion of the Engineer, traffic is sufficiently congested or public safety is endangered, the Owner will furnish uniformed special officers to direct traffic and to keep traffic off the highway area affected by construction operations. Such officers shall be in addition to the watchmen, required under other provisions of the contract.

The employment or presence of traffic flagmen, special officers, or police shall, in no way, relieve the Contractor of any responsibility or liability, which is his under the terms of the Contract.

1.3 **Access to Property.** The Contractor shall maintain access to all properties whether over sidewalks or driveways through the use of ramps, bridges, or steel plating. Bridging is required for all properties where handicap accessibility must be maintained.

Temporary handicap ramps shall be constructed according to the Commonwealth of Massachusetts Architectural Barrier Board Regulations 521 CMR.

1.4 **Conflict or Inconsistency.** If there be any conflict or inconsistency between the provisions of the SPECIAL CONDITIONS and the provisions of the other Contract Documents, the provision of the SPECIAL CONDITIONS shall prevail. If there be any conflict or inconsistency between the provisions of the AGREEMENT and the provisions of any of the Contract Documents other than the SPECIAL CONDITIONS, the provisions of the AGREEMENT shall prevail.

1.5 **Percentage of Progress Payments to be Retained.** The percentage of value to be retained under that Subsection of the GENERAL CONDITIONS, entitled "Progress Payments," shall be 5 percent.

- 1.6 **Liquidated Damages.** The Contractor and Owner recognize that time is of the essence and that the Owner will suffer financial loss if the Work is not completed within the times specified. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), the Contractor shall pay the Owner \$1,000 for each day that expires after the time specified.

GENERAL CONDITIONS

GENERAL CONDITIONS

| | <u>TITLE</u> | <u>PAGE</u> |
|------|--|-------------|
| 1.1 | Definitions | 42 |
| 1.2 | The Contract Documents | 42 |
| 1.3 | Obligation and Liability of Contractor | 42 |
| 1.4 | Supervision of Work | 44 |
| 1.5 | Patents | 44 |
| 1.6 | Compliance with Laws | 44 |
| 1.7 | Provisions Required by Law Deemed Inserted | 45 |
| 1.8 | Permits | 45 |
| 1.9 | Not to Sublet or Assign | 45 |
| 1.10 | Delay by Town | 45 |
| 1.11 | Time for Completion | 45 |
| 1.12 | Liquidated Damages | 46 |
| 1.13 | Employ Sufficient Labor and Equipment | 46 |
| 1.14 | Intoxicating Liquors | 46 |
| 1.15 | Access to Work | 46 |
| 1.16 | Examination and Inspection of Work | 46 |
| 1.17 | Defective Work, Etc. | 47 |
| 1.18 | Protection Against Water and Storm | 47 |
| 1.19 | Right to Materials | 47 |
| 1.20 | Changes | 47 |
| 1.21 | Extra Work | 48 |
| 1.22 | Extension of Time on Account of Extra Work | 49 |
| 1.23 | Change Not to Affect Bonds | 49 |
| 1.24 | Claims for Damages | 49 |
| 1.25 | Abandonment of Work or Other Default | 49 |
| 1.26 | Prices for Work | 50 |
| 1.27 | Monies May Be Retained | 50 |
| 1.28 | Formal Acceptance | 50 |
| 1.29 | Progress Estimates | 50 |
| 1.30 | Partial Acceptance | 51 |
| 1.31 | Final Estimate and Payment | 51 |
| 1.32 | Liens | 52 |
| 1.33 | Claims | 52 |
| 1.34 | Application of Monies Retained | 52 |
| 1.35 | No Waiver | 52 |
| 1.36 | Liability of Town | 53 |
| 1.37 | Guarantee | 53 |
| 1.38 | Retain Money for Repairs | 53 |
| 1.39 | Cleaning Up | 53 |
| 1.40 | Legal Address of Contractor | 54 |
| 1.41 | Modification of Termination | 54 |

- 1.1 **Definitions.** Wherever the words hereinafter defined or pronouns used in their stead occur in the Contract Documents, they shall have the following meanings:

The word "Owner" shall mean the Town of Greenfield.

The word "Contractor" shall mean the party of the second part above designated.

The word "Specifications" when used herein shall be deemed to refer to both the General and Detail Specifications.

The words "herein," "hereinafter," "hereunder," and words of like import shall be deemed to refer to the Contract Documents.

- 1.2 **The Contract Documents.** The AGREEMENT, the INFORMATION FOR BIDDERS, the Contractor's BID as accepted by the Town, the SPECIAL CONDITIONS, the GENERAL CONDITIONS, the TECHNICAL SPECIFICATIONS, the DRAWINGS, and all ADDENDA and AMENDMENTS to any of the foregoing collectively constitute the Contract Documents, and are sometimes herein referred to as the "Contract."

The Contract Documents are complementary, and what is called for by anyone shall be as binding as if called for by all. In the event of any conflict or inconsistency between the provisions of the SPECIAL CONDITIONS and the provisions of any of the other Contract Documents, the provisions of the SPECIAL CONDITIONS shall prevail. In the event of conflict or inconsistency between the provisions of the GENERAL CONDITIONS and the provisions of the Contract Documents other than the SPECIAL CONDITIONS, the provisions of the GENERAL CONDITIONS shall prevail.

- 1.3 **Obligations and Liability of Contractor.** The Contractor shall do all work and perform and furnish all the labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things (except as otherwise expressly provided herein) necessary and as herein specified for the proper performance and completion of the Work in the manner and within the time hereinafter specified, in strict accordance with the Drawings, Specifications and other Contract Documents, in conformity with the directions and to the satisfaction of the Town, and at prices herein agreed upon therefor.

All parts of the Work and all fixtures, equipment, apparatus and other items indicated on the Drawings and not mentioned in the Specifications, or vice versa, and all work and material usual and necessary to make the work complete in all its parts, including all incidental work necessary to make it complete and satisfactory and ready for use and operation, whether or not they are indicated on the Drawings or mentioned in the Specifications, shall be furnished and executed the same as if they were called for both by the Drawings and by the Specifications.

The Contractor shall coordinate his operations with those of any other contractors who may be employed on other work of the Town, shall avoid interference therewith, and shall cooperate in the arrangements for storage of materials and equipment.

The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel. Wherever and whenever necessary or required, he shall

maintain fences, furnish watchmen, maintain lights, and take such other precautions as may be necessary to protect life and property.

The Contractor shall indemnify and save harmless the Town and its officers, agents, servants, and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, cost and expenses, including attorneys' fees, on account of bodily injury, sickness, disease or death sustained by any person or persons or injury or damage to or destruction of any property, directly or indirectly arising out of, relating to or in connection with the Work, whether or not due or claimed to be due in whole or in part to the active, passive or concurrent negligence or fault of the Contractor, his officers, agents, servants or employees, any of his subcontractors, the Town or any of its respective officers, agents, servants or employees and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false or fraudulent; and the Contractor shall and does hereby assume and agrees to pay for the defense of all such claims, demands, suit and proceedings.

The Contractor shall have complete responsibility for the Work and the protection thereof, and for preventing injuries to persons and damage to the Work and property and utilities on or about the Work, until final completion and final acceptance thereof. He shall, in no way, be relieved of his responsibility by any right of the Town to give permission or directions relating to any part of the Work, by any such permission or directions given, or by failure of the Town to give such permission or directions. The Contractor shall bear all costs, expenses, losses and damages on account of the quantity or character of the Work or the nature of the land (including but not limited to subsurface conditions) in or under or on which the Work is done being different from the indicated or shown in the Contract Documents or from what was estimated or expected, or on account of the weather, elements, or other causes.

The Contractor shall conduct his operations so as not to damage existing structures or work installed either by him or by other contractors. In case of any such damage resulting from his operations, he shall repair and make good as new the damaged portions at his own expense with the consent of the damaged party. In the event that consent is not given, the Contractor shall continue liable for the damage caused.

The Contractor shall be as fully responsible to the Town for the acts and omissions of his subcontractors, their officers, agents, servants and employees as he is for his own acts and omissions and those of his own officers, agents, servants and employees.

Should the Contractor sustain any loss, damage or delay through any act or omission of any other contractor or any subcontractor of any such other contractor, the Contractor shall have no claim against the Town therefor, other than for any extension of time, but shall have recourse solely to such other contractor or subcontractor.

If any other contractor or any subcontractor of any such other contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the contractor or of any of his subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other contractor or subcontractor for such loss or damage. The Contractor agrees to and does hereby indemnify and save harmless

the Town from and against any and all claims by such other contractors or subcontractors alleging such loss, damage or delay and from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, cost and expenses, including attorneys' fees, arising out of, relating to or resulting for such claims.

The Contractor shall promptly pay all federal, state and local taxes which may be assessed against him in connection with the Work or his operations under the Contract, including, but not limited to, taxes attributable to the purchase of material and equipment, to the performance of services, and the employment of persons in the prosecution of the Work.

- 1.4 **Supervision of Work.** The Contractor shall be solely responsible for supervision of the Work, shall give the Work the constant attention necessary to ensure the expeditious and orderly progress thereof, and shall cooperate with the Town in every possible way.

At all times, the Contractor shall have as his agent on the Work a competent superintendent capable of reading and thoroughly understanding the Drawings and Specifications, with full authority to execute the directions of the Town, without delay, and to supply promptly such labor, services, materials, equipment, plant, apparatus, appliances, tools, supplies and other items as may be required. Such superintendent shall not be removed from the Work without the prior written consent of the Town. If, in the opinion of the Town, the superintendent or any successor proves incompetent, the contractor shall replace him with another person approved by the Town; such approval, however, shall, in no way, relieve or diminish the contractor's responsibility for supervision of Work.

Whenever the Contractor or his agent or superintendent is not present on any part of the Work where it may be necessary to give directions or instructions with respect to such work, such directions or instruction may be given by the Town to, and shall be received and obeyed by the foreman or any other person in charge of the particular work involved.

- 1.5 **Patents.** The Contractor shall indemnify and save harmless the Town and all persons acting for or on behalf of the Town from all claims and liability of any nature or kind, and all damages, cost and expenses, including attorneys' fees arising from or occasioned by an infringement or alleged infringement of any patents or patent rights on any invention, process, material, equipment, article or apparatus, or any part thereof, furnished and installed by the contractor, or arising from or occasioned by the use or manufacture thereof, including their use by the Town.

- 1.6 **Compliance with Laws.** The Contractor shall keep himself fully informed of all existing and future federal, state, and local laws, ordinances, rules, and regulations affecting those engaged or employed on the Work, the materials and equipment used in the Work or the conduct of the Work, and of all orders, decrees and other requirements of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the Drawings, Specifications or other Contract Documents in relation to any such law, ordinance rule, regulation, order, decree, or other requirement, the Contractor shall forthwith report the same to the Town in writing. The Contractor shall, at all times, observe and comply with, and cause all his agents, servants,

employees and subcontractors to observe and comply with all such existing and future laws, ordinances, rules, regulations, orders, decrees and other requirements, and he shall protect, indemnify and save harmless the Town, its officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, penalties, losses, damages, costs and expenses, including attorneys' fees, arising from or based upon any violation or claimed violation of any such law, ordinance, rule, regulation, order, decree or other requirement, whether committed by the Contractor or any of his agents, servants, employees or subcontractors.

- 1.7 **Provisions Required by Law Deemed Inserted.** Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though they were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be physically amended to make such insertion.
- 1.8 **Permits.** The Contractor shall, at his own expense, take out and maintain all necessary permits from the county, municipal, or other public authorities; shall give all notices required by law; and shall post all bonds and pay all fees and charges incident to the due and lawful prosecution of the Work.
- 1.9 **Not to Sublet or Assign.** The Contractor shall constantly give his personal attention to the faithful prosecution of the Work, shall keep the same under his personal control, shall not assign the Contract or sublet the work or any part thereof without the previous written consent of the Town, and shall not assign any of the monies payable under the Contract, or his claim thereto, unless by and with the like written consent of the Town and the Surety on the Contract Bonds. Any assignment or subletting in violation hereof shall be void and unenforceable.
- 1.10 **Delay by Town.** The Town may delay the beginning of the Work or any part thereof if the necessary lands or rights of way for such work shall not have been obtained. The Contractor shall have no claim for additional compensation or damages on account of such delay, but shall be entitled only to an extension of time as hereinafter provided.
- 1.11 **Time for Completion.** The rate of progress shall be such that the Work shall be performed and completed in accordance with the Contract before the expiration of the time limit stipulated under INFORMATION FOR BIDDERS, except as otherwise expressly provided herein.

It is agreed that the rate of progress herein required has been purposely made low enough to allow for the ordinary and foreseeable delays incident to construction work of this character. No extension of time will be given for ordinary or foreseeable delays, inclement weather, or accidents, and the occurrence of such will not relieve the Contractor from the necessity of maintaining this rate of progress and completing the Work within the stipulated time limit.

If delays are caused by acts of God, acts of Government, unavoidable strikes, extra work, or other causes or contingencies clearly beyond the control or responsibility of the

Contractor, the Contractor may be entitled to additional time to perform and complete the Work, be entitled to additional time to perform and complete the Work, provided that the Contractor shall, within ten (10) days from the beginning of such delay notify the Town, in writing, of the cause and particulars of the delay. Upon receipt of such notification, the Town shall review and evaluate the cause and extent of the delay. If, under the terms of the GENERAL CONDITIONS, the delays properly excusable, the Town will, in writing, appropriately extend the time for completion of the Work. The Contractor agrees that he shall not have or assert any claim for nor shall he be entitled to any additional compensation or damages on account of such delays. The time in which the Work is to be performed and completed is of the essence of this Contract.

- 1.12 **Liquidated Damages.** In case the Contractor fails to complete the Work satisfactorily on or before the date of completion fixed herein or as duly extended as hereinbefore provided, the Contractor agrees that the Town shall deduct from the payments due the Contractor each month, the sum set forth under the SPECIAL CONDITIONS for each calendar day of delay, which sum is agreed upon not as a penalty but as fixed and liquidated damages for each day of such delay. If the payments due the Contractor are less than the amount of such liquidated damages, said damages shall be deducted from any other monies due or to become due the Contractor, and, in case such damages shall exceed the amount of all monies due or to become due the Contractor, the Contractor or his Surety shall pay the balance to the Owner.
- 1.13 **Employ Sufficient Labor and Equipment.** If, in the sole judgment of the Town, the Contractor is not employing sufficient labor, plant, equipment or other means to complete the Work within the time specified, the Town may, after giving written notice, require the Contractor to employ such additional labor, plant, equipment and other means as the Town deems necessary to enable the Work to progress properly.
- 1.14 **Intoxicating Liquors.** The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating liquors upon or about the Work.
- 1.15 **Access to Work.** The Town and its officers, agents, servants and employees may at any and all times and for any and all purposes, enter upon the Work and the site thereof and the premises used by the Contractor, and the Contractor shall at all times provide safe and proper facilities therefor.
- 1.16 **Examination and Inspection of Work.** The Town shall be furnished by the Contractor with every reasonable facility for examining and inspecting the Work and for ascertaining that the Work is being performed in accordance with the requirements and intent of the Contract, even to the extent of requiring the uncovering or taking down portions of finished work by the Contractor.

Should the Work thus uncovered or taken down prove satisfactory, the cost of uncovering or taking down and the replacement thereof shall be considered as extra work unless the original work was done in violation of the Contract in point of time or in the absence of the Engineer or his inspector and without his written authorization, in which case said cost shall be borne by the Contractor. Should the work uncovered or taken down prove unsatisfactory, said cost shall likewise be borne by the Contractor.

Examination or inspection of the Work shall not relieve the Contractor of any of his obligations to perform and complete the Work as required by the Contract.

- 1.17 **Defective Work, Etc.** Until acceptance and during the applicable guarantee period thereafter, the Contractor shall promptly, without charge, repair, correct or replace work, equipment, materials, apparatus or parts thereof which are defective, damaged or unsuitable or which in any way fail to comply with or be in strict accordance with the provisions and requirements of the Contract or applicable guarantee and shall pay to the Town all resulting costs, expenses, losses, or damages suffered by the Town.

If any material, equipment, apparatus or other items brought upon the site for use or incorporation in the Work or selected for the same, is rejected by the Town as unsuitable or not in conformity with the Specifications or any of the other contract Documents, the Contractor shall forthwith remove such materials, equipment, apparatus and other items from the site of the Work and shall at his own cost and expense make good and replace the same.

- 1.18 **Protection Against Water and Storm.** The Contractor shall take all precautions necessary to prevent damage to the Work by storms or by water entering the site of the Work directly or through the ground. In case of damage by storm or water, the Contractor shall at his own cost and expense make such repairs or replacements or rebuild such parts of the Work as the Town may require in order that the finished Work may be completed as required by the Contract.

- 1.19 **Right to Materials.** Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials, equipment, apparatus and other items furnished after they have been installed or incorporated in or attached or affixed to the Work or the site, but all such materials, equipment, apparatus and other items shall, upon being so installed, incorporated, attached or affixed, become the property of the Town. Nothing in this subsection shall relieve the Contractor of his duty to protect and maintain all such materials, equipment, apparatus and other items.

- 1.20 **Changes.** The Town may make changes in the Work and in the Drawings and Specifications therefor by making alterations therein, additions thereto or omissions therefrom. All work resulting from such changes shall be performed and furnished under and pursuant to the terms and conditions of the Contract. If such changes result in an increase or decrease in the Work to be done hereunder, or increase or decrease the quantities thereof, adjustment in compensation shall be made therefor at the unit prices stipulated in the Contract for such work, except that if unit prices are not stipulated for such work, compensation for additional or increased work shall be made as provided hereinafter under the subsection titled "Extra Work;" and for eliminated or decreased work the Contractor shall allow the owner a reasonable credit.

Except in an emergency endangering life or property, no change shall be made unless in pursuance of a written order from the Town authorizing the change, and no claim for additional compensation shall be valid unless the change is so ordered.

The Contractor agrees that he shall neither have nor assert any claim for or be entitled to any additional compensation for damages or for loss of anticipated profits on work that is eliminated.

- 1.21 **Extra Work.** The Contractor shall perform any extra work (work in connection with the Contract but not provided for herein) when and as ordered in writing by the Town, at the unit prices stipulated in the Contract for such work or, if none are so stipulated, either (a) at the price agreed upon before such work is commenced and named in the written order for such work, or (b) if the Town so elects, for the actual cost of such work, as determined by the Contractor and approved by the Town, plus a percentage of such cost, as set forth below. No extra work shall be paid unless specifically ordered as such in writing by the Town.

The cost of extra work done under (b) above shall include the actual cost to the Contractor of materials used and equipment installed, common and skilled labor, and foremen, and the fair rental of all machinery and equipment used on the extra work for the period of such use.

At the request of the Town, the Contractor shall furnish an itemized statement of the cost of the extra work ordered as above and give the Town access to all records, accounts, bills and vouchers and correspondence relating thereto.

The Contractor may include in the cost of extra work the amounts of additional premiums, if any, (other than premiums on bonds) paid on the required insurance on account of such extra work, of Social Security or other direct assessments upon the Contractor's payroll by Federal or other properly authorized public agencies, and of other approved assessments when such assessments are not normally included in payments made by the Contractor directly to his employees, but in fact, are, and are customarily recognized as, part of the cost of doing work.

The fair rental for all machinery and equipment shall be based upon the most recent edition of "Compilation of Rental Rates for Construction Equipment," published by the Associated Equipment Distributors, or a similar publication approved by the Town. Rental for machinery and equipment shall be based upon an appropriate fraction of the approved monthly rate schedule. If said extra work requires the use of machinery or equipment not already on the site of the Work, the cost of transportation, not exceeding a distance of 100 miles, of such machinery or equipment to and from the Work shall be added to the fair monthly rental; provided however, that this shall not apply to machinery or equipment already required to be furnished under the terms of the Contract.

The Contractor shall not include in the cost of extra work any cost or rental of small tools, building, or any portion of the time of the Contractor, his superintendent, or his office and engineering staff.

To the cost of extra work done by the Contractor's own forces under (b) above (determined as stated above), the Contractor shall add 15 percent to cover his overhead, use of capital, the premium on the Bonds as assessed upon the amount of this extra work, and profit.

In the case of extra work done under (b) above by a subcontractor, the subcontractor shall compute, as above, his cost for the extra work, to which he shall add 15 percent as in the case of the Contractor, and the Contractor shall be allowed an additional 15 percent of the subcontractor's cost for the extra work to cover the costs of the Contractor's overhead, use of capital, the premium on the Bonds as assessed upon the amount of this extra work, and profit. Said subcontractor's cost must be reasonable and approved by the Town

If extra work is done under (b) above, the Contractor and/or subcontractor shall keep daily records of such extra work. The daily record shall include the names of men employed, the nature of the work performed, and hours worked, materials and equipment incorporated, and machinery or equipment used, if any, in the prosecution of such extra work. This daily record, to constitute verification that the work was done, must be signed both the Contractor's authorized representative and by the Town. A separate daily record shall be submitted for each Extra Work Order.

- 1.22 **Extension of Time on Account of Extra Work.** When extra work is ordered near the completion of the Contract or at any time during the progress of the Work, which unavoidably increases the time for the completion of the Work, an extension of time shall be granted as hereinbefore provided.
- 1.23 **Changes Not to Affect Bonds.** It is distinctly agreed and understood that any changes made in the Work or the drawings or specifications therefor (whether such changes increase or decrease the amount thereof or the time require for its performance) or any changes in the manner or time of payments made by the Town to the Contractor, or any other modifications of the Contract, shall in no way annul, release, diminish or affect the liability of the Surety on the CONTRACT BONDS given by the contractor, it being the intent hereof that notwithstanding such changes the liability of the Surety on said bonds continue and remain in full force and effect.
- 1.24 **Claims for Damages.** If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, he shall, within ten (10) days after occurrence of the alleged breach or within ten (10) days after such damages are alleged to have been sustained, whichever date is the earlier, file with the Town a written, itemized statement in triplicate of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, his claim for damages shall be deemed waived, invalid and unenforceable, and that he shall not be entitle to any compensation for any such alleged damages.
- 1.25 **Abandonment of Work or Other Default.** If the Work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Town, or the Contract or any moneys payable hereunder shall be assigned otherwise than as herein specified, that the conditions herein specified as to rate of progress are not being complied with, or that the Work or any part thereof is being violate or is in default under any of the provisions of the Contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily or involuntarily, or petitions for an arrangement or reorganization under the Bankruptcy Act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitute a default under the Contract, the Town

may notify the Contractor in writing, with a copy of such notice mailed to the Surety, to discontinue such Work or such part thereof as the Town may designate; and the Town may, upon giving such notice by contract or otherwise as it may determine, complete the Work or such part thereof and charge the entire cost and expense of so completing the Work or such part thereof to the Contractor. In addition to the said entire cost and expense of completing the Work, the Town shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Town any losses, damages, costs and expenses, including attorneys' fees, sustained or incurred by the Town by reason of any of the foregoing causes. For the purposes of such completion, the Town may, for itself, or for any contractors employed by the Town, takes possession of an dues or cause to be used any and all materials, equipment, plant, machinery, appliances, tools, supplies and such other items of every description that may be found or located at the site of the Work.

All costs, expenses, losses, damages, attorneys' fees and any and all other charges incurred by the Town under this subsection shall be charged against the Contractor and deducted and/or paid by the Town out of any moneys due or payable or to become due or payable under the Contract to the Contractor; in computing the amounts chargeable to the Contractor, the Town shall not be held to a basis of the lowest prices for which the completion of the Work or any part thereof might have been accomplished, but all sums actually paid or obligated therefor to effect its prompt completion shall be charged to and against the account of the Contractor. In case the costs, expenses, losses, damages, attorneys' fees and other charges together with all payments therefore made to or for the account of the Contractor are less than the sum which would have been payable under the Contract if the Work had been properly performed and completed by the Contractor, the Contractor shall be entitled to receive the difference, and, in case such costs, expenses, losses, damages, attorneys' fees and other charges, together with all payments therefore made to or for the account of the Contractor, shall exceed the said sum, the Contractor shall pay the amount of the excess to the Town.

- 1.26 **Prices For Work.** The Town shall pay and the Contractor shall receive the prices stipulated in the BID made a part hereof as full compensation for everything performed and furnished and for all risks and obligations undertaken by the Contractor under and as required by the Contract.
- 1.27 **Monies May Be Retained.** The Town may at any time refrain from any monies which would otherwise be payable hereunder so much thereof as the Town may deem necessary to complete the Work hereunder and to reimburse it for all costs, expenses, losses, damages and damages chargeable to the Contractor hereunder.
- 1.28 **Formal Acceptance.** The Contract Documents constitute an entire contract for one whole and complete Work or result. Fixing of the date of completion and acceptance of the Work or a specified part thereof shall only be effective when accomplished by a writing specifically so stating and signed by the Town.
- 1.29 **Progress Estimates.** Once a month, except as hereinafter provided, the Town shall make an estimate in writing of the total amount and value of the work done to the first of the month by the Contractor. The Town shall retain a percentage of such estimated value, as set forth under SPECIAL CONDITIONS, as part security for fulfillment of the Contract

by the Contractor and shall deduct from the balance all previous payments made to the Contractor, all sums chargeable against the Contractor and all sums to be retained under the provisions of the Contract. The Town shall pay monthly to the Contractor the balance not deducted and/or retained as aforesaid, except that payment may be withheld at any time, if in the judgment of the Town, the work is not proceeding in accordance with the Contract. If the Town deems it expedient to do so, it may cause estimates and payments to be made more frequently than once in each month. No progress estimate or payment need be made when in the judgment of the Town, the total value of the work done since the last estimate amounts to less than the amount set forth under SPECIAL CONDITIONS.

Estimates of lump-sum items shall be based on a schedule dividing each such item into its appropriate component part, together with a quantity and a unit price for each part so that the sum of the products of prices and quantities will equal the Contract price for the item. This schedule shall be submitted by the Contractor for and must have the approval of the Town before the first estimate becomes due.

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

- 1.30 **Partial Acceptance.** The Town may, at any time, in a written order to the contractor (1) declare that he intends to use a specified part of the Work which, in his opinion, is sufficiently complete, in accordance with the Contract Documents, to permit its use; (2) enclose a tentative list of items remaining to be completed or corrected, and (3) fix the date of acceptance of that specified part of the Work.

Within 45 days after acceptance under this subsection, the Town shall make an estimate, in writing, of the amount and value of the part of the Work, so accepted and shall pay said amount to the Contractor after deducting therefrom all previous payments, all charges against the Contractor as provided for hereunder, and all amounts to be retained under the provisions of the Contract, said payment to be made at the time of the next monthly progress estimate.

Acceptance by the Town under this subsection shall not relieve the Contractor of any obligations under the Contract Documents except to the extent agreed upon in writing between the Town and the Contractor.

The Town shall have the right to exclude the Contractor from any part of the Work which has been accepted, but the Town will allow the Contractor reasonable access thereto to complete or correct items on the tentative lists.

- 1.31 **Final Estimate and Payment.** As soon as practicable (but not more than sixty-

five (65) days) after final completion of the Work, the Town shall make a final estimate, in writing, of the quantity of Work done under the Contract and the amount earned by the Contractor.

The Town shall pay to the Contractor the entire amount found to be earned and due hereunder after deducting there from all previous payments, all charges against the Contractor as provided for hereunder, and all amounts to be retained under the provisions of the Contract. Except as in this subsection otherwise provided such payment shall be made not later than fifteen (15) days after, but in no event before, the expiration of the time within which claims for labor performed or materials or equipment furnished must be filed under the applicable Lien Law, or, if such time is not specified by law, the expiration of thirty (30) days after the completion of the Engineer's final estimate.

All quantities shown on progress estimates and all prior payments shall be subject to correction in the final estimate and payment.

- 1.32 **Liens.** If, at any time, any notices of lien are filed for labor performed or materials or equipment manufactured, furnished, or delivered to or for the Work, the Contractor shall, at its own cost and expense, promptly discharge, remove or otherwise dispose of the same, and until such discharge, removal or disposition, the Town shall have the right to retain from any moneys payable hereunder an amount which, in its sole judgment, it deems necessary to satisfy such liens and pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce the same, or incurred in connection therewith or by reason thereof.
- 1.33 **Claims.** If, at any time, there be any evidence of any claims for which the Contractor is or may be liable or responsible hereunder, the Contractor shall promptly settle or otherwise dispose of the same, and until such claims are settled or disposed of, the Town may retain from any moneys which would otherwise be payable hereunder so much thereof as, in its sole judgment, it may deem necessary to settle or otherwise dispose of such claims and to pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce such claims, or incurred in connection therewith or be reason thereof.
- 1.34 **Application of Monies Retained.** The Town may apply any moneys retained hereunder to reimburse itself for any and all costs, expenses, losses, damage and damages liabilities, suits, judgments and awards incurred, suffered or sustained by the Town and chargeable to the Contractor hereunder or as determined hereunder.
- 1.35 **No Waiver.** Neither the inspection by the Town, nor any order, measurement, approval, determination, decision of certificate by the Town for the payment of money; nor any payment for or use, occupancy, possession or acceptance of the whole or any part of the Work by the Town, nor any extension of time, nor any other act or omission of the Town shall constitute or be deemed to be an acceptance of any defective or improper work, materials, or equipment nor operate as a waiver of any requirement or provision of the Contract, nor of any remedy, power or right of or herein reserved to the Town, nor of any right to damages for breach of contract. Any and all rights and/or remedies provided for in the Contract are intended and shall be construed to be cumulative; and, in addition to

each and every other right and remedy provided for herein or by law, the Town shall be entitled as of right to a writ of injunction against any breach or threatened breach of the Contract by the Contractor, by his subcontractors or by any other person or persons.

- 1.36 **Liability of Town.** No person, firm or corporation, other than the Contractor who signed this Contract as such, shall have any interest herein or right hereunder. No claim shall be made or be valid either against the Town or any agent of the Town and neither the Town nor any agent of the Town shall be liable for or be held to any money, except as herein provided. The acceptance by the Contractor of the payment as fixed in the final estimate shall operate as and shall be a full and complete release of the Town and of very agent of the Town of and from any and all claims, demands, damages and liabilities of, by or to the Contractor for anything done or furnished for or arising out of or relating to or by reason of the Work or on account of any act or neglect of the Town or of any agent of the Town or of any other person, arising out of, relating to or by reason of the Work, except the claim against the Town for the unpaid balance, if any there be, of the amounts retained as herein provided.
- 1.37 **Guarantee.** The Contractor guarantees that the Work and services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same, shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, Specifications, and other Contract Documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the Work as stated in the final estimate. If part of the Work is accepted in accordance with that subsection titled “Partial Acceptance,” the guarantee for that part of the Work shall be for a period of one year from the date fixed for such acceptance.
- 1.38 **Retain Money for Repairs.** The Town may retain out of the moneys otherwise payable to the Contractor hereunder a percentage of the amount thereof as set forth under SPECIAL CONDITIONS, and may expend the same, in the manner hereinafter provided in making such repairs, corrections or replacements in the Work as the Town, in its sole judgment, may deem necessary.

If, at any time within the said period of guarantee, any part of the Work requires repairing, correction or replacement, the Town may notify the Contractor in writing to make the required repairs, correction replacements. If the Contractor neglects to commence making such repairs, correction, or replacements to the satisfaction of the Town within three (3) days from the date of receipt of such notice, or having commenced fails to prosecute such work with diligence, the Town may employ other persons to make the same. The Town shall pay the cost and expense of the same out of the amounts retained for that purpose. Upon the expiration of the said period of guarantee, provided that the Work at that time is in good order the Contractor will be entitled to receive the whole or such part of the sum last aforesaid, if any, as may remain after the cost and expense of making said repairs, correction or replacements, in the manner aforesaid, have been paid there from.

- 1.39 **Cleaning Up.** The Contractor, at all times, shall keep the site of the Work free from rubbish and debris caused by his operations under the contract. When the Work has been completed, the Contractor shall remove from the site of the Work all of his plant, machinery, tools, construction equipment, temporary work and surplus materials so as to leave the Work and the site clean and ready for use.
- 1.40 **Legal Address of Contractor.** The Contractor's business address and his office at or near the site of the work are both hereby designated at places to which communications in a postpaid wrapper directed to the contractor's business address in a post office box regularly maintained by the Post Office Department or the delivery at either designated address of any letter, notice, or other communication by mail or otherwise shall be deemed sufficient service thereof upon the contractor, and the date of such service shall be the date of receipt. The first-named address may be changed at any time by an instrument, in writing, executed and acknowledged by the contractor and delivered to the Town. Service of any notice, letter or other communication upon the contractor personally shall likewise be deemed sufficient service.
- 1.41 **Modification or Termination.** Except as otherwise expressly provided herein the contract may not be modified or terminated except in writing signed by the parties hereto.

TECHNICAL SPECIFICATIONS

**ASBESTOS ABATEMENT & DEMOLITION OF 106 ½
DEERFIELD STREET
GREENFIELD, MA 01301**

PROJECT SPECIFICATIONS

OWNER:

*City of Greenfield
Department of Planning & Development
14 Court Square
Greenfield, MA 01301
(413)772-1549*

PROJECT MONITOR:

*Cardno ATC Associates Inc.
73 William Franks Drive
West Springfield, MA 01028
(413) 781-0070*

August 3, 2016

TABLE OF CONTENTS

| | Number of Pages |
|--|------------------------|
| <u>TABLE OF CONTENTS</u> | 1 |
| | |
| <u>SPECIFICATIONS</u> | |
| | |
| DIVISION 1 - GENERAL REQUIREMENTS | |
| Section 01010 - SUMMARY OF WORK | 1 |
| Section 01040 - EXISTING CONDITIONS | 2 |
| Section 01050 - CONDUCT OF THE WORK..... | 2 |
| Section 01300 - SUBMITTALS..... | 1 |
| Section 01500 - TEMPORARY FACILITIES | 2 |
| Section 01510 - PROTECTION..... | 2 |
| Section 01520 - CLEAN UP | 1 |
| | |
| DIVISION 2 – SITE WORK | |
| Section 02080 - ASBESTOS ABATEMENT | 11 |
| Section 02081 - DEMOLITION..... | 5 |
| Section 02082 - SITE RESTORATION | 4 |

SECTION 01010

SUMMARY OF WORK

1. GENERAL SCOPE OF WORK

- A.** The Work under the Contract consists of asbestos abatement within and the demolition of the existing residential structure known as 106 ½ Deerfield Street and site restoration. Refer to Section 02080 for specific requirements.
- B.** All work shall be performed by a qualified and licensed Contractor in accordance provisions outlined herein as well as local, state and federal regulations.
- C.** All costs associated with the above-described work as well as work described under the Contract shall be borne by the Contractor. The City of Greenfield shall not be responsible for any costs associated with this work.
- D.** In addition, the Work under the Contract includes:
 - 1. Work outside the Project Site as called for in the Contract Documents and as required for the performance of the Work.
 - 2. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
 - 3. Providing and restoring, where appropriate, all temporary facilities.

2. TIME OF COMPLETION

- A.** In accordance with the Contract, the Work shall start as stated in the Notice to Proceed and shall be complete within twenty-one (21) consecutive calendar days.

3. WORK UNDER SEPARATE CONTRACT

- A.** Coordination by Owner

The following items shall be provided by others under a separate agreement with the Owner for which the Owner has coordinating responsibility.

- Industrial Hygiene (Asbestos Project Monitoring) services.

END OF SECTION

SECTION 01040
EXISTING CONDITIONS

1. GENERAL PROVISIONS

- A. The Conditions of the Contract apply to this section.

2. EXISTING CONDITIONS

- A. Before submitting a bid, the Contractor shall make a thorough examination of the conditions at the site(s), checking the requirements of the Plans and Specifications with the existing conditions.
- B. No claim for extra compensation or extension of time will be allowed on account of the Contractor's failure to estimate properly the quantities, locations, and measurements of all items required to complete the work which could be discerned from visiting the site(s).
- C. The Contractor shall report any discrepancies to the Owner's Consultant and request an interpretation.
- D. A Pre-Demolition Asbestos Survey for 106 ½ Deerfield Street has been conducted. Refer to Section 02080 for specific requirements.

3. EXISTING BUILDING

- A. Documentation of existing conditions are approximate and are intended for reference purposes only. It is the responsibility of the Contractors to visit the site and familiarize themselves with the spaces to be demolished and disposed. Before performing any work or ordering any materials, verify all measurements and existing building conditions and be responsible for the correctness of same. No extra charge or compensation will be allowed on account of differences between actual dimensions and the measurements indicated on the Drawings or specifications; any difference which may be found shall be submitted to the Consultant in writing for consideration before proceeding with the work.

END OF SECTION

SECTION 01050
CONDUCT OF THE WORK

1. GENERAL PROVISIONS

A. The Conditions of the Contract apply to this section.

2. PROJECT MANAGEMENT

A. The building is unoccupied and deemed safe to access. The Contractor shall be responsible for security of the building and site once possession is granted under the Contract. All entrances shall remain secure as a result of the construction work specified under this Contract.

B. The work must be completed in a continuous uninterrupted operation. The Contractor must use sufficient personnel and adequate equipment to complete all the necessary work requirements within a minimum period of time.

C. Unless specifically authorized by the Owner, in writing, the work shall be conducted between the hours of 7:00 a.m. and 4:30 p.m. on Monday through Friday. No work is to be done on holidays, Saturdays, or Sundays without prior approval of the Owner.

D. Storage of materials, tools, and/or equipment within the site shall be authorized and coordinated through the Owner.

E. Only materials and/or equipment intended and necessary for immediate use shall be brought onto the project sites. At the end of each workday and at the completion of each phase of work, equipment and leftover or unused materials shall be removed from the work areas.

G. Workers shall refrain from smoking while performing work at the project, except for designated areas authorized by the Owner. The Contractor shall remove from the project workers who consistently violate this provision.

H. Contractor shall develop a project schedule indicating time period and sequence for completion of the work. The schedule upon approval shall be adhered to. Any deviations from the schedule could be subject to penalties at the discretion of the Owner. Contractor shall pay special attention to the sequence as follows:

- Site utilities cut and capping
- Demolition of the Structure
- Off-site disposal
- Cleaning of the site
- Final visual inspection and approval
- Restoration of the sites as required by Contract.

The Contractor shall indicate this process in detail in their Plan of Action as required under Section 01300 "Submittal".

3. SHUTDOWN OF SERVICES

A. The existing water and sewer lines have been shut off by the City. The existing electrical service has not been shut off and disconnected by the utility companies.

4. COORDINATION

- A.** The Contractor shall submit for approval to the Owner a detailed operational plan showing the sequence of operations prior to commencement of any work at the sites. Any changes to this operational plan must be approved by the Owner. Refer to Section 01300 Submittals for details.
- B.** The Contractor must retain on the Work during its progress a competent full time representative, satisfactory to the Owner. This representative shall not be changed, except with the consent of the Owner. The representative shall be in full charge of the work and all instructions given to this person by the Consultant shall be binding.
- C.** The Contractor must supply to the Owner the home telephone number of a responsible person who may be contacted during non-work-hours for emergencies on the Project.

END OF SECTION

SECTION 01300

SUBMITTALS - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

1. RELATED DOCUMENTS

- A. This Section supplements the Contract Documents.

2. GENERAL PROCEDURES/REQUIREMENTS FOR SUBMITTALS

- A. Before commencement of the site work, the Contractor shall provide appropriate submittals required this Contract Specification. A total of three (3) copies of each submittal shall be provided to the Consultant for review and approval.
- B. The Contractor shall **NOT** proceed with the work unless all submittals have been received and are approved by the Owner's Consultant. If the Contractor proceeds with the work without approval, he/she does so at their own risk and expense.
- C. The Contractor shall be responsible for all claims and restitution resulting from failure to comply with the submittal requirements. In addition, no claim for extra compensation or extension of time will be allowed on account of the Contractor's failure to comply with this requirement.

3. SUBMITTALS REQUIRED

- A. Consult the individual Sections of the specification for the specific submittals required under those Sections and for further details and description requirements.
- B. As part of the Submittal process, the Contractor shall be required to provide an overall Plan of Action which details the work procedures to be implemented including each phase of operation.

END OF SECTION

SECTION 01500
TEMPORARY FACILITIES

1. GENERAL REQUIREMENTS

- A. The Contractor shall be responsible for providing and maintaining all temporary facilities required to complete the work. Removal of such prior to Substantial Completion must be with the concurrence of the Owner. The Contractor bears full responsibility for re-providing any facility removed prior to Substantial Completion
- B. Removal of all temporary facilities shall be a condition precedent to Substantial Completion unless directed otherwise by the Owner or specifically noted in the specifications.
- C. The Contractor must comply with all safety laws and regulations of the Commonwealth of Massachusetts, the United States Government, and local government agencies applicable to Work under this contract. The Contractor's attention is directed to the Commonwealth of Massachusetts DLS & DEP Regulations.

2. FIELD OFFICES

Not Required.

3. TEMPORARY TELEPHONES

Not Required

4. TEMPORARY TOILETS

- A. Required. The Contractor shall provide temporary toilets as required to accommodate the completion of the work.

5. TEMPORARY WATER

- A. The Contractor may make use of the available water supply at the sites for construction purposes, provided the permission of the Owner is obtained beforehand and only as long as the water is not used wastefully.
- B. The Contractor shall provide all necessary piping and hoses to utilize the available sources of water.
- C. The Contractor shall provide an adequate supply of cool drinking water with individual drinking cups for personnel on the job.
- D. The Contractor's use of the available water supply at the sites shall in no way hamper or affect any existing services relative to fire protection without written approval from the Owner and the City of Greenfield Fire Department.

6. TEMPORARY ELECTRICITY

- A. The Contractor is required to provide all temporary electricity required to complete the work.

- B.** The Contractor shall furnish, install, and maintain lighting required for completion of the work. The Contractor, and each Subcontractor, shall furnish their own extension cords and additional lamps as may be required for their work. Temporary work of a special nature, not otherwise specified hereunder, shall be provided, maintained, and paid for the trade requiring same.

END OF SECTION

SECTION 01510

PROTECTION

1. PROTECTION OF PERSONS & PROPERTIES

- A.** The building is scheduled for demolition. The Contractor shall take all necessary precautions to ensure only authorized personnel have access to site for performance of the work outlined by the Contract. The Contractor shall be responsible for security of the site once possession is granted under the Contract. All entrances shall remain secure as a result of the construction work specified under this Contract.
- B.** Any damage to the roads, (public and private), bituminous concrete areas, fences, lawn areas, trees, shrubbery, poles, underground utilities, etc. shall be made good by and at the Contractor's own expense, all to the satisfaction of the Owner.
- C.** Any damage to adjacent property and/or structures shall be made good by the Contractor at the Contractor's own expense, all to the satisfaction of the Owner.

2. TEMPORARY PROTECTION

- A.** The Contractor shall:
 - (1.)** Protect excavations, trenches, buildings, and materials at all times from rain water, ground water, backing-up, or leakage of sewers, drains, or other piping, or from water damage of any origin. Provide all pumps, piping, coverings, and other materials and equipment as required by job conditions to accomplish this requirement.
 - (2.)** Protect other areas and private property. Any areas damaged by the Contractor shall be restored to the original condition or compensated at the Contractor's expense.
 - (3.)** Protect adjacent buildings and/or property from damage resulting from the work.

3. ACCESS

- A.** The Contractor shall, at all times, leave an unobstructed way along walks and roadways, and shall maintain barriers and lights for the protection of all persons and property in all locations where materials are stored or work is in progress. The Contractor shall coordinate the location of on-site trailers, equipment storage areas and dumpsters with the Owner.

4. SECURITY

- A.** The Contractor shall be responsible for providing all security precautions necessary to protect the Contractor's and Owner's interests.

5. NOISE AND DUST CONTROL

- A.** The Contractor shall take special measures to protect the residents, neighbors, and general public from noise, dust, and other disturbances by:
 - (1.)** Keeping common pedestrian and vehicular circulation areas clean and unobstructed;
 - (2.)** Insulating work area from occupied portions as far as possible; and
 - (3.)** Sealing dust and fumes from contaminating occupied spaces.

6. FIRE PROTECTION

- A. The Contractor shall take necessary precautions to insure against fire during construction. The Contractor shall be responsible to insure that the area within contract limits is kept orderly and clean and that combustible rubbish and construction debris is promptly removed from the site.

END OF SECTION

SECTION 01520

CLEANING UP

1. RELATED DOCUMENTS

- A.** This section supplements the Contract Documents.
- B.** Consult the individual sections of the specifications for cleaning of Work installed under those sections.

2. CLEANING DURING CONSTRUCTION

- A.** Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1.** Do not burn or bury rubbish and waste materials on the site(s).
 - 2.** Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 3.** Do not dispose of wastes into streams or waterways.
- B.** Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C.** Do not allow materials and rubbish to drop free or be thrown from upper floors, but remove by use of a material hoist or rubbish chutes.
- D.** Maintain the Site free from accumulations of waste, debris, and rubbish.
- E.** Provide on-site containers for collection of waste materials and rubbish.
- F.** At the end of each day, remove and legally dispose waste materials and rubbish from site.
- G.** Disposal of materials shall be in compliance as required herein and in accordance with all applicable laws, ordinances, codes, and by-laws.

3. FINAL CLEANING

- A.** Prior to submitting a request to the Owner to certify Substantial Completion of the Work, the Contractor shall inspect the site to verify that all waste materials, rubbish, tools, equipment, machinery, and surplus materials have been removed, and that all sight-exposed surfaces are clean.
- B.** Owner's responsibility for cleaning commences at Substantial Completion.

END OF SECTION

SECTION 02080

ASBESTOS ABATEMENT

PART I - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 DEFINITIONS

- A. The following definitions shall be applicable to this Section:

“*Site*”: Refers to 106 ½ Deerfield Street located in Greenfield, Massachusetts as described by the Contract Documents and Drawings.

“*Owner*”: Refers to the Town of Greenfield and their designated, authorized personnel.

“*Consultant*”: Refers to Cardno ATC, 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.

“*General Contractor*”: Refers to Contractor who has been awarded the overall project for demolition and site restoration under the Contract.

“*Asbestos Abatement Contractor*”: Refers to the Contractor who is performing the asbestos abatement work outlined herein.

1.03 GENERAL REQUIREMENTS/QUALIFICATIONS

- A. All Asbestos Abatement work referenced herein shall be performed by a Massachusetts licensed Asbestos Abatement Contractor in accordance with Massachusetts Department of Labor and Industry (DLS) 453 CMR 6.0 Regulations.
- B. Qualifications of Asbestos Abatement Contractor
 1. Asbestos Abatement Contractor performing the abatement work of this section ("Asbestos Abatement Contractor") shall be an Asbestos Abatement Contractor licensed to perform asbestos operations in the State of Massachusetts. Asbestos Abatement Contractor shall submit license number and proof of licensure.
 2. The Asbestos Abatement Contractor shall also provide the project name, contact person and phone number of three (3) projects which were successfully completed of similar size and scope within the last two (2) years. Each project shall have been completed in good standing and the work performed by the Asbestos Abatement Contractor for each project resulted in no work violations/citations, contract delays, contract extensions/disputes or litigation. Failure to provide this information and/or meet the approval of these qualifications by the Owner may result in rejection of the Asbestos Abatement Contractor.

3. The Owner shall also reserve the right to research and utilized other information received from any other projects completed by the Asbestos Abatement project not provided under 1.03 B (2) above, regardless of the date completed, location or circumstances resulting from the outcome of their work. The Owner shall reserve their right to reject the Asbestos Abatement Contractor based upon this review, for any reason, if found to be in the best interest of the Owner.

NOTE: The Asbestos Abatement Contractor shall not be authorized to begin work until all credentials outlined above are reviewed and approved by the Owner.

1.04 DESCRIPTION OF WORK

- A. Work: This section details all areas where asbestos abatement work is to be performed and lists areas requiring special protection during the abatement work. The Asbestos Abatement Contractor shall furnish all labor, materials, services, training, insurance, and equipment as needed to complete removal of asbestos-containing and asbestos-contaminated materials located as indicated below. The Asbestos Abatement Contractor shall follow all Federal, State and local ordinances, regulations and rules pertaining to asbestos, including its abatement, storage, transportation and disposal.
- B. Quantity estimates have been provided for bidding purposes. However, it shall be the Asbestos Abatement Contractor's responsibility to verify all quantity estimates in preparation of their bids, including the location and conditions of all asbestos-containing materials to be abated under this contract. No additional compensation and/or contract time shall be granted to the Asbestos Abatement Contractor for failure to perform this requirement and no compensation shall be granted for variations in the quantities presented herein. Full access to the site has been granted during the bidding process for this purpose.
- C. The following Scope of Work and Requirements shall be applicable for asbestos abatement work at 106 ½ Deerfield Street. If a specific note for an abatement procedure or requirement is not mentioned herein, the Asbestos Abatement Contractor shall perform the removal of such material in accordance with local, state and federal regulations. The Asbestos Abatement Contractor shall also coordinate all work with the General Contractor.
 1. All Asbestos Abatement work shall take place in accordance with the provisions outlined herein as well as current local, state and federal regulations. No additional compensation shall be granted to the Asbestos Abatement Contractor for compliance with applicable laws when performing the abatement work at the site. This shall include any regulatory requirements that mandate additional or more restrictive containment and abatement procedures than what has been presented herein. It shall be the Asbestos Abatement Contractor's responsibility to comply with such regulations as well as any other additional requirements outlined by this Section.
 2. The Asbestos Abatement Contractor shall be responsible for all demolition work required in order to access all asbestos materials for abatement. All demolition debris shall be disposed of as asbestos (unless otherwise directed by the Consultant).

3. The following requirements shall be adhered to for removal of all interior/exterior caulking and glazing compound at the site:
 - The Asbestos Abatement Contractor shall “regulate” the exterior portion of the building utilizing caution tape and asbestos signs at a sufficient distance to keep non-asbestos personnel out of the work area.
 - A remote three (3) stage decontamination unit shall be established directly adjacent to the Regulated Area.
 - All windows, doors or vents on the same side of the building where active work is taking place (i.e. inside the regulated area) shall be closed.
 - The existing ground surfaces (i.e. grass, soil, tar, concrete, etc.) directly adjacent to the building shall be pre-cleaned of all visible debris utilizing a HEPA vacuum and/or wet methods.
 - Debris located on horizontal surfaces of the building (i.e. window ledges, overhangs, concrete stoops, etc.) shall also be pre-cleaned of all visible debris.
 - A drop-cloth of polyethylene sheeting (or cloth tarp) shall be placed on the ground and secured properly to the foundation. The sheeting shall extend a sufficient distance out from the foundation to encompass all areas where dust, debris or other waste will be generated.
 - All drop-cloths or tarps shall be cleaned of accumulated debris no later than the end of the each work shift.
 - The work area, including the ground covers and equipment shall be cleaned of all visible debris at the end of each work shift.
 - Upon completion of removal, the window/door opening shall be cleaned by HEPA-vacuuming and/or wet wiped with a sponge or cloth. The interior poly barrier shall then be removed and disposed of as ACM
 - All equipment utilized in the work operation shall be cleaned of visible dust and debris by HEPA vacuuming and/or wet wiping prior to removal from the work area.
 - All drop-cloths or tarps shall be cleaned of visible dust and debris by HEPA vacuuming and/or wet wiping. Dry sweeping will NOT be allowed.
 - All caulking, glazing compound and associated debris shall be properly sealed in double six-mil bags and disposed of as asbestos.
 - Upon completion of the work, a visual inspection shall be performed by the Consultant to ensure that the caulking has been removed and no visible debris is present.

4. The following report by Green Environmental Consulting, LLC outlines the summary of asbestos-containing materials to be abated under this project. It shall be the Asbestos Abatement Contractor's responsibility to perform all such abatement of those materials in accordance with this Section as well as applicable local, state and federal regulations.



Green Environmental Consulting, LLC
180 Pleasant Street
2nd Floor - Suite 213
Easthampton, MA 01027

tel/fax 413-341-3418
www.GecEnviro.com

June 14, 2016

MJ Adams, Grants Administrator
Dept. of Planning & Development
Town of Greenfield
114 Main Street
Greenfield, MA 01301

RE: Pre-demolition Asbestos Survey
106 1/2 Deerfield Street
Greenfield, MA

Dear Ms. Adams:

Pursuant to your request, Green Environmental Consulting, LLC (GEC) performed a pre-demolition asbestos survey of the residential building located at 106 1/2 Deerfield Street in Greenfield, Massachusetts (hereafter referenced as the "building").

Fieldwork associated with the project was performed on May 13 and June 1, 2016 by Massachusetts-licensed Asbestos Inspector, Adam Lesko (Lic# AI073071).

Building Description

The building consists of a 2-story, wood framed, residence with a full basement. interior finish materials include floor tile, linoleum sheet flooring, ceiling tile and a combination of plaster and sheetrock/joint compound wall systems. Exterior finish materials include stucco siding, wood windows and slate roofing tiles.

Asbestos Sampling/Results

Forty-six (46) samples of suspect asbestos-containing materials (ACM's) were collected and submitted to an accredited laboratory for analysis using Polarized Light Microscopy (EPA/600/R-93/116). Materials found to contain greater than one percent asbestos are considered to be asbestos-containing materials (ACM's).

The following materials were determined to be asbestos-containing materials (ACMs):

| Table No. 1, Asbestos-containing Materials (ACMs) | | | | |
|---|--|--------------------|----------------------------|-------|
| Material | Location | Estimated Quantity | Reference Sample Number(s) | Notes |
| Black Construction Adhesive | Kitchen (behind wood wall paneling) and Bath (behind chair rail) | 50 Square Feet | 01646-01A, 01B & 01C | |
| Floor Tile Mastic (Black) | Kitchen and Pantry | 145 Square Feet | 01646-05A & 05B | |

The following materials were determined to contain trace or less than one percent asbestos:

| Table No. 2, Materials Containing Trace or less than one percent (<1%) Asbestos | | | |
|---|--|--------------------|---|
| Material | Location | Estimated Quantity | Reference Sample Number(s) |
| Plaster | 1st and 2nd floor (walls and ceilings) | 2,200 Square Feet | 01646- 02A, 02B, 02C, 02D, 02E, 23A, 23B, 23C, 23D, 23E & 23F |

The following materials were sampled and determined not to be asbestos-containing materials:

| Table No. 3, Non-Asbestos Materials | | |
|-------------------------------------|---|----------------------------|
| Material | Location | Reference Sample Number(s) |
| Wood Window Glaze | Exterior-Wood Windows | 01646-03A & 03B |
| 9" Floor Tile (Black and White) | Kitchen | 01646-04A & 04B |
| Black Flooring Paper | Kitchen | 01646-06A & 06B |
| Stucco Siding | Exterior of House, including inside porch | 01646-07A, 07B & 07C |
| Yellow Adhesive | Kitchen-behind teal & black backsplash | 01646-08 |
| White Sink Undercoat | Kitchen | 01646-09 |
| 12" Ceiling Tile | Living Room | 01646-10A & 10B |
| Linoleum w/ pebble design | Living Room and Dining Room - surrounding heat register | 01646-11 |
| Brown Adhesive | Pantry- on countertop | 01646-12A & 12B |
| Yellow Construction Adhesive | Pantry-behind pink plastic wall tile | 01646-13 |
| 12" Self-Adhesive White Floor Tile | 1st Floor-Bath | 01646-14 |
| Paper Subfloor | 1st Floor-under wood subfloor | 01646-15A & 15B |

| Table No. 3, Non-Asbestos Materials | | |
|-------------------------------------|-----------------------------------|----------------------------|
| Material | Location | Reference Sample Number(s) |
| White Cove Base | 1st Floor-Bath | 01646-16 |
| Yellow Construction Adhesive | 1st Floor-Bath (behind paneling) | 01646-17A & 17B |
| Rolled Roofing Shingle | Patch on south side of lower roof | 01646-18 |
| Joint Compound | 1st Floor-Bath | 01646-19A & 19B |
| Tub Caulk | 1st Floor-Bath | 01646-20 |
| Sheetrock | 1st Floor-Bath | 01646-21A & 21B |
| Cove Base Adhesive (Yellow) | 1st Floor-Bath | 01646-22 |

Refer to *Attachment No. 1* for asbestos laboratory results, including detailed descriptions of sampling locations, as well as chain-of custody records for samples collected. Asbestos bulk samples were collected in a statistically random manner, per EPA guidelines.

Limitations

This report is intended for the sole use of the Town of Greenfield. This report is not intended to serve as a bidding document nor as a project specification and actual site conditions and quantities should be field-verified. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document, the findings, conclusions, or recommendations herein is at the risk of said user. Although a reasonable attempt has been made to locate suspect asbestos-containing materials (ACM's) in the areas identified, the inspection techniques used are inherently limited in the sense that only full demolition procedures will reveal all building materials of a structure and, therefore, all areas of potential ACM. Caution should be used during demolition activities.

GEC's inspection did not include the following areas:

- Electrical systems and/or components were not included in GEC's survey due to the safety issues inherent with sampling such systems.

The Massachusetts Department of Environmental Protection (DEP), as well as the U.S. Environmental Protection Agency (EPA) currently recognize Polarized Light Microscopy (PLM) analysis as an acceptable analytical method for determining the Asbestos content in non-friable, organically bound (NOB) materials. However, comparative studies between PLM analysis and Transmission Electron Microscopy (TEM) analysis have shown that PLM analysis may yield false negative analytical results for NOB's such as floor tiles.

GEC recommends that, prior to renovation activities, one sample from each homogeneous area of mastic and other non-friable organically bound (NOB) materials that originally tested negative by PLM undergo confirmatory analysis by TEM, utilizing ELAP-198.4 TEM Method for Identifying and Quantifying Asbestos in NOB bulk samples.

Conclusions/Recommendations

Asbestos-containing materials (ACMs) were identified during GEC's inspection. Identified ACMs should be removed, handled, and disposed of properly, in accordance with applicable state and federal regulations, prior to disturbance.

Plaster walls and ceilings in the building were determined to contain trace or less-than one percent (<1%) asbestos. Although materials that contain <1% asbestos are not by definition asbestos-containing materials, certain regulatory requirements still apply. These requirements include the Occupational Safety and Health Administration's (OSHA) employee exposure requirements and MassDEP regulations for "Asbestos-Containing Waste Material" (ACWM). ACWM is not subject to MassDEP notification requirements, but is required to be managed as prescribed by 310 CMR 7.15(15) through 310 CMR 7.15(18).

Planned activities involving materials containing <1% asbestos should be performed in accordance with the requirements of the OSHA construction standard (29 CFR 1910.1101) and current MassDEP regulations (310 CMR 7.15) including, but not limited to the following:

- use of wet methods, to reduce exposure and prevent asbestos fiber migration and contamination of surfaces in the work area
- Avoid dry sweeping, shoveling, or other dry clean-up methods
- Use of disposable protective clothing and respiratory protection
- Waste containing any amount of asbestos should be kept segregated from demolition debris that does not contain asbestos and must be handled, packaged, labeled and disposed of as ACWM. Solid waste that has been contaminated or mixed with material containing any amount of asbestos cannot be sent to a solid waste facility that accepts construction and demolition debris.

Any suspect asbestos-containing material that is discovered during building renovation/demolition that is not included in this report should be assumed to contain asbestos until further bulk sampling and analysis is performed.

If you have any questions regarding this survey or the sampling and/or analytical techniques employed, please contact us at (413) 341-3418.

Sincerely,

Green Environmental Consulting, LLC



Adam Lesko
President

Attachment No. 1

Laboratory Results/PLM Asbestos



EMSL Analytical, Inc.

7 Constitution Way, Suite 107 Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131602238
Customer ID: GECL78
Customer PO:
Project ID:

Attention: Mary McCarthy
Green Environmental Consulting, LLC
180 Pleasant St
2nd Floor, Suite 213
Easthampton, MA 01027
Project: 01646 / Greenfield Inspection / 106 1/2 Deerfield St Greenfield MA

Phone: (413) 341-3418
Fax: (413) 341-3419
Received Date: 05/17/2016 9:30 AM
Analysis Date: 05/22/2016
Collected Date: 05/13/2016

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|-----------------------------|--|-------------------------------------|--------------|--------------------------|----------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 01646-01A 131602238-0001 | Behind white floral paneling in kitchen - Black Construction Adhesive | Black Non-Fibrous Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| 01646-01B 131602238-0002 | North side of kitchen near entry (wood paneling) - Black Construction Adhesive | Black Non-Fibrous Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| 01646-01C 131602238-0003 | East side of kitchen near entry (wood paneling) - Black Construction Adhesive | Black Non-Fibrous Homogeneous | | 97% Non-fibrous (Other) | 3% Chrysotile |
| 01646-02A 131602238-0004 | First floor dining room east side - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | None Detected |
| 01646-02B 131602238-0005 | Kitchen east side near entry - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | None Detected |
| 01646-02C 131602238-0006 | Southwest bedroom second floor - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | None Detected |
| 01646-02D 131602238-0007 | Northwest bedroom second floor - Plaster | Gray Fibrous Homogeneous | 2% Glass | 98% Non-fibrous (Other) | <1% Chrysotile |
| 01646-02E 131602238-0008 | East bedroom second floor - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | None Detected |
| 01646-03A 131602238-0009 | Kitchen entry door window - Wood Window glaze | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-03B 131602238-0010 | Southwest bedroom second floor - Wood Window glaze | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-04A 131602238-0011 | Kitchen near east entry - 9" floor tile | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-04B 131602238-0012 | Kitchen near north entry - 9" floor tile | Pink Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-05A 131602238-0013 | Kitchen near east entry - Black mastic on floor tile | Black Non-Fibrous Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |
| 01646-05B 131602238-0014 | Kitchen near north entry - Black mastic on floor tile | Black Non-Fibrous Homogeneous | | 96% Non-fibrous (Other) | 4% Chrysotile |

Initial Report From: 05/23/2016 08:23:32



EMSL Analytical, Inc.

7 Constitution Way, Suite 107 Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131602238
Customer ID: GECL78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|---|-------------------------------------|---------------------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 01646-06A <small>131602238-0015</small> | Kitchen near east entry - Black flooring paper | Black Fibrous Homogeneous | 30% Cellulose 2% Hair | 68% Non-fibrous (Other) | None Detected |
| 01646-06B <small>131602238-0016</small> | Kitchen near north entry - Black flooring paper | Black Fibrous Homogeneous | 30% Cellulose 3% Hair | 67% Non-fibrous (Other) | None Detected |
| 01646-07A <small>131602238-0017</small> | South side outside porch - Stucco siding | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-07B <small>131602238-0018</small> | North side of house outside - Stucco siding | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-07C <small>131602238-0019</small> | South side of house inside porch - Stucco siding | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-08 <small>131602238-0020</small> | Behind teal and black backsplash tile in kitchen - Yellow adhesive | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-09 <small>131602238-0021</small> | Under sink in kitchen - sink undercoating, white | White Fibrous Homogeneous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| 01646-10A <small>131602238-0022</small> | East side living room - 12" ceiling tile | Brown/White Fibrous Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 01646-10B <small>131602238-0023</small> | East side living room - 12" ceiling tile | Brown/White Fibrous Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 01646-11 <small>131602238-0024</small> | Living room surrounding heat register - Linoleum w/ pebble design | Gray Fibrous Homogeneous | 40% Cellulose 5% Glass | 55% Non-fibrous (Other) | None Detected |
| 01646-12A <small>131602238-0025</small> | Pantry countertop north side - Brown adhesive | Brown Non-Fibrous Homogeneous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| 01646-12B <small>131602238-0026</small> | Pantry countertop north side - Brown adhesive | Brown Non-Fibrous Homogeneous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| 01646-13 <small>131602238-0027</small> | Pantry behind pink plastic wall tile - Yellow construction adhesive | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-14 <small>131602238-0028</small> | First floor bathroom near door - 12" Self-Adhesive floor tile white | White/Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-15A <small>131602238-0029</small> | North side living room - Paper subfloor | Brown Fibrous Homogeneous | 98% Cellulose | 2% Non-fibrous (Other) | None Detected |
| 01646-15B <small>131602238-0030</small> | North side living room - Paper subfloor | Brown Fibrous Homogeneous | 98% Cellulose | 2% Non-fibrous (Other) | None Detected |
| 01646-16 <small>131602238-0031</small> | Bathroom first floor - White cove base | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Initial Report From: 05/23/2016 08:23:32



EMSL Analytical, Inc.

7 Constitution Way, Suite 107 Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131602238
Customer ID: GECL78
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|---|--------------------------------------|---------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 01646-17A <small>131602238-0032</small> | First floor bathroom behind paneling - Yellow construction adhesive | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-17B <small>131602238-0033</small> | First floor bathroom behind paneling - Yellow construction adhesive | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-18 <small>131602238-0034</small> | From 6x10ft patch south side of lower roof - Rolled roofing shingle | Black Fibrous Homogeneous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| 01646-19A <small>131602238-0035</small> | First floor bathroom southeast corner - Joint compound | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-19B <small>131602238-0036</small> | First floor bathroom southeast corner - Joint compound | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-20 <small>131602238-0037</small> | First floor bathroom - Tub caulk | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 01646-21A <small>131602238-0038</small> | First floor bathroom behind white floral paneling - Sheetrock | Brown/Gray Fibrous Homogeneous | 12% Cellulose | 88% Non-fibrous (Other) | None Detected |
| 01646-21B <small>131602238-0039</small> | First floor bathroom behind white floral paneling - Sheetrock | Brown/Gray Fibrous Homogeneous | 12% Cellulose | 88% Non-fibrous (Other) | None Detected |
| 01646-22 <small>131602238-0040</small> | Bathroom first floor behind white cove base - Yellow adhesive | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Analyst(s) _____
Michael Mink (40)


Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3, VT AL998919, Maine Bulk Asbestos BA039

Initial Report From: 05/23/2016 08:23:32

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
180 Pleasant Street-Suite 213
Easthampton, MA 01027

| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: Greenfield Inspection | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: 106 1/2 Deerfield St Greenfield MA | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|--|-----------------------------|
| 01646-01A | Behind white floral paneling in kitchen | Black Construction Adhesive |
| 01646-01B | North side of kitchen near entry (wood paneling) | Black Construction Adhesive |
| 01646-01C | East side of kitchen near entry (wood paneling) | Black Construction Adhesive |
| 01646-02A | First floor dining room east side | Plaster |
| 01646-02B | Kitchen east side near entry | Plaster |
| 01646-02C | Southwest bedroom second floor | Plaster |
| 01646-02D | Northwest bedroom second floor | Plaster |
| 01646-02E | East bedroom second floor | Plaster |

| | | | |
|-------------------------------------|---------------------------|--|-------------------------------|
| Sampled By: <i>[Signature]</i> | Date: 5/13/16 | Received By: <i>[Signature]</i> | Date/Time: <i>[Signature]</i> |
| Relinquished By: <i>[Signature]</i> | Date/Time: 5/16/16 @ 1400 | Received in Lab By: <i>[Signature]</i> | Date/Time: 9:30 |



EMSL Fedex 7951 4690 2435

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
 180 Pleasant Street-Suite 213
 Easthampton, MA 01027

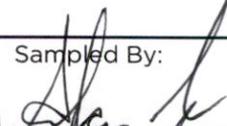
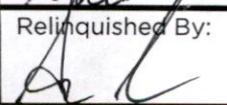
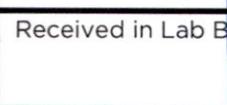
| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: Greenfield Inspection | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: 106 1/2 Deerfield St Greenfield MA | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 |
| | | Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|--------------------------------|----------------------------|
| 01646-03A | Kitchen entry door window | Wood Window glaze |
| 01646-03B | Southwest bedroom second floor | Wood Window glaze |
| 01646-04A | Kitchen near east entry | 9" floor tile |
| 01646-04B | Kitchen near north entry | 9" floor tile |
| 01646-05A | Kitchen near east entry | Black mastic on floor tile |
| 01646-05B | Kitchen near north entry | Black mastic on floor tile |
| 01646-06A | Kitchen near east entry | Black flooring paper |
| 01646-06B | Kitchen near north entry | Black flooring paper |

| | | | |
|--|--------------------|--|--|
| Sampled By:  | Date: 5/8/16 | Received By:  | Date/Time:  |
| Relinquished By:  | Date/Time: 5/16/16 | Received in Lab By:  | Date/Time: 1000 |

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
 180 Pleasant Street-Suite 213
 Easthampton, MA 01027

| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: Greenfield Inspection | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: 106 1/2 Deerfield St Greenfield MA | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 |
| | | Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|--|---------------------------|
| 01646-07A | South side outside porch | Stucco siding |
| 01646-07B | North side of house outside | Stucco siding |
| 01646-07C | South side of house inside porch | Stucco siding |
| 01646-08 | Behind teal and black backsplash tile in kitchen | Yellow adhesive |
| 01646-09 | Under sink in kitchen | sink undercoating, white |
| 01646-10A | East side living room | 12" ceiling tile |
| 01646-10B | East side living room | 12" ceiling tile |
| 01646-11 | Living room surrounding heat register | Linoleum w/ pebble design |

| | | | |
|------------------|---------------------------|---------------------------|------------------|
| Sampled By: | Date: 5/13/16 | Received By: | Date/Time: |
| Relinquished By: | Date/Time: 5/16/16 @ 10ce | Received in Lab By: _____ | Date/Time: _____ |

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
 180 Pleasant Street-Suite 213
 Easthampton, MA 01027

| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: Greenfield Inspection | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: 106 1/2 Deerfield St Greenfield MA | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 |
| | | Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|--------------------------------------|------------------------------------|
| 01646-12A | Pantry countertop north side | Brown adhesive |
| 01646-12B | Pantry countertop north side | Brown adhesive |
| 01646-13 | Pantry behind pink plastic wall tile | Yellow construction adhesive |
| 01646-14 | First floor bathroom near door | 12" Self-Adhesive floor tile white |
| 01646-15A | North side living room | Paper subfloor |
| 01646-15B | North side living room | Paper subfloor |
| 01646-16 | Bathroom first floor | White cove base |
| 01646-17A | First floor bathroom behind paneling | Yellow construction adhesive |

| | | | |
|-------------------------------------|--------------------|--|---|
| Sampled By: <i>[Signature]</i> | Date: 5/17/16 | Received By: <i>[Signature]</i> | Date/Time: RECEIVED MAY 17 2016 |
| Relinquished By: <i>[Signature]</i> | Date/Time: 5/16/16 | Received in Lab By: <i>[Signature]</i> | Date/Time: _____ |

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
 180 Pleasant Street-Suite 213
 Easthampton, MA 01027

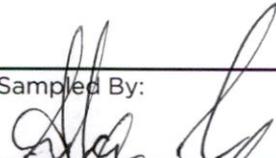
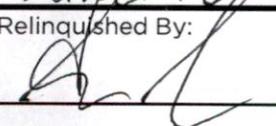
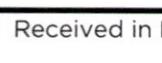
| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: Greenfield Inspection | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: 106 1/2 Deerfield St Greenfield MA | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 |
| | | Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|---|------------------------------|
| 01646-17B | First floor bathroom behind paneling | Yellow construction adhesive |
| 01646-18 | From 6x10ft patch south side of lower roof | Rolled roofing shingle |
| 01646-19A | First floor bathroom southeast corner | Joint compound |
| 01646-19B | First floor bathroom southeast corner | Joint compound |
| 01646-20 | First floor bathroom | Tub caulk |
| 01646-21A | First floor bathroom behind white floral paneling | Sheetrock |
| 01646-21B | First floor bathroom behind white floral paneling | Sheetrock |
| 01646-22 | Bathroom first floor behind white cove base | Yellow adhesive |

| | | | |
|--|---------------------------|---|--|
| Sampled By:  | Date: 5/13/16 | Received By:  | Date/Time:  |
| Relinquished By:  | Date/Time: 5/16/16 @ 1000 | Received in Lab By:  | Date/Time:  |



EMSL Analytical, Inc.

7 Constitution Way, Suite 107 Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131602495
Customer ID: GECL78
Customer PO:
Project ID:

Attention: Mary McCarthy
Green Environmental Consulting, LLC
180 Pleasant St
2nd Floor, Suite 213
Easthampton, MA 01027
Project: 01646 / 106 1/2 Deerfield St, Greenfield, MA

Phone: (413) 341-3418
Fax: (413) 341-3419
Received Date: 06/02/2016 9:33 AM
Analysis Date: 06/08/2016
Collected Date: 06/01/2016

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|--|-----------------------------------|--------------------------------|-------------------------|-------------------------|----------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 01646-23A <small>131602495-0001</small> | First Floor Kitchen - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | <1% Chrysotile |
| 01646-23B <small>131602495-0002</small> | First Floor Dining Room - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | <1% Chrysotile |
| 01646-23C <small>131602495-0003</small> | Second Floor NW Bedroom - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | <1% Chrysotile |
| 01646-23D <small>131602495-0004</small> | First Floor Living Room - Plaster | Gray Fibrous Homogeneous | 2% Cellulose 2% Hair | 96% Non-fibrous (Other) | <1% Chrysotile |
| 01646-23E <small>131602495-0005</small> | Second Floor NE Bedroom - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | <1% Chrysotile |
| 01646-23F <small>131602495-0006</small> | Second Floor SW Bedroom - Plaster | Gray Fibrous Homogeneous | 2% Hair | 98% Non-fibrous (Other) | <1% Chrysotile |

Analyst(s) _____
Kevin Pine (6)


Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3, VT AL998919, Maine Bulk Asbestos BA039

Initial Report From: 06/08/2016 13:30:23

Asbestos Chain of Custody Record



Green Environmental Consulting, LLC
 180 Pleasant Street-Suite 213
 Easthampton, MA 01027

| |
|------------------------------------|
| Analysis Type: PLM |
| Turnaround Time: 96 Hour |

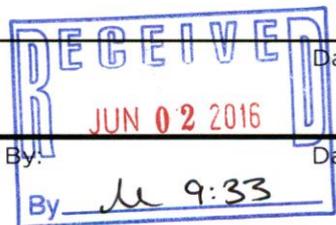
Project Info:

Send Results To:

| | | |
|---|--|--|
| Project Name: 106 1/2 Deerfield St Greenfield MA | Invoice to: Mary McCarthy | Results to: Mary McCarthy |
| Project Number: 01646 | Return Samples?: | Email to: Mary@gecenviro.com |
| Project Description: Pre-demolition Asbestos Inspection | Comments/Special Instructions: Analyze all Samples | Phone: (413) 341-3418 |
| | | Fax: (413) 341-3418 |

| <u>Sample Number</u> | <u>Sample Location</u> | <u>Sample Description</u> |
|----------------------|-------------------------|---------------------------|
| 01646-23A | First Floor Kitchen | Plaster |
| 01646-23B | First Floor Dining Room | Plaster |
| 01646-23C | Second Floor NW Bedroom | Plaster |
| 01646-23D | First Floor Living Room | Plaster |
| 01646-23E | Second Floor NE Bedroom | Plaster |
| 01646-23F | Second Floor SW Bedroom | Plaster |

| | | | |
|---|------------------------------------|--|---------------------------------------|
| Sampled By: <i>[Signature]</i> | Date: 6/1/16 | Received By: <i>[Signature]</i> | Date/Time: JUN 02 2016 9:33 |
| Relinquished By: <i>[Signature]</i> | Date/Time: 6/1/16 @ 1645 | Received in Lab By: <i>[Signature]</i> | Date/Time: |



EMSLFX 7951 54624680

1.05 ALTERNATES

Not Applicable

1.06 SUBMITTALS

A. In addition to items required by other sections of the Project Manual, the following submittals are required for review and approval by the Consultant on/or before the Pre-Construction Meeting:

1. Copy of Massachusetts DLS Asbestos Abatement Contractor's License
2. Copies of certifications, notifications and all applicable licenses
3. Chain-Of-Command list of all personnel on-site and emergency contact person(s)
4. Work plan which dictates all removal procedures to be implemented and projected schedule of completion.

B. In addition to the items required by other sections of the Project Manual, the following submittals are required for final payment

1. Copy of Waste Shipment Records

1.07 CODES AND STANDARDS

A. All work shall conform to the standards set by applicable Federal, State and local laws, regulations, ordinances, and guidelines in such form in which they exist at the time of the work on the contract, and as may be required by subsequent regulations. In addition to any detailed requirements of the Specification, the Asbestos Abatement Contractor shall at his own cost and expense comply with all laws, ordinances, rules and regulations of Federal, State, Regional and Local Authorities regarding handling and storing of asbestos waste material. This includes all applicable OSHA regulations.

B. All regulations and other governing agencies in their most current version are applicable throughout this project. Where there is a conflict between this Specification and the cited State, Federal, or local regulations, the more restrictive or stringent requirements shall prevail. This Section refers to many requirements found in these references, but in no way is it intended to cite or reiterate all provisions therein or elsewhere. It is the Asbestos Abatement Contractor's responsibility to know, understand, and abide by all such regulations and common practices.

1.08 FEES, PERMITS & LICENSES

A. The Asbestos Abatement Contractor shall pay all licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or process in the performance of the work specified in this section. The Asbestos Abatement Contractor shall be solely responsible for costs, damages, or losses resulting from any infringement of these patent rights or copyrights. The Asbestos Abatement Contractor shall hold the Owner and Consultant harmless from any costs, damages, and losses resulting from any infringement of these patent rights or copyrights. If the Contract Specification requests the use of any product, design, invention, or process that requires a licensing, patent or royalty fee for use in the performance of the job, the Asbestos

Abatement Contractor shall be responsible for the fee or royalty fee and shall disclose the existence of such rights.

- B. Asbestos Abatement Contractor shall be responsible for costs for all licensing requirements, where applicable and notification requirements and all other fees related to the Asbestos Abatement Contractors ability to perform the work in this Section.
- C. Secure all necessary permits for work under this Section, including hauling, removal, and disposal, fire, and materials usage, or any other permits required to perform the specified work.

1.09 CLEANING

- A. Maintain the work site in a neat and orderly manner at all times, so as not to interrupt or infringe upon the work of other trades. Perform all final cleaning of abatement work areas as required by this Section and Massachusetts Regulations to the approval of the Owner's Consultant. Upon completion of work in any given area, Asbestos Abatement Contractor shall remove all material and equipment associated with the work, not necessary to complete other phases of the work in that area.
- B. Comply with all requirements for final clearance and release of a work area as described in this Section and required by the Massachusetts Regulations prior to take down of polyethylene and area clean-up.

1.10 COORDINATION

- A. Extend full cooperation to Owner in all matters involving the use of Owner's facilities. At no time shall the Asbestos Abatement Contractor cause or allow to be caused conditions, which may cause risk or hazard to the general public, or conditions that might impair safe use of the facility.
- B. Coordinate the work of this section with that of all other trades at the express consent of the Owner and Consultant. Phasing and scheduling of this project will be subject to the approval of the Owner and Consultant. The work of this Section shall be scheduled and performed so as not to impede the progress of the project as a whole. Work shall not proceed in any area without the express consent of the Owner. The Asbestos Abatement Contractor shall be available within 24 hours notice for additional work if after acceptance of the work it is found that full abatement was not achieved from the initial work effort as determined by the Owner or Consultant.
- C. Complete Asbestos activities in the phases of the final schedule agreed upon by Owner.

1.11 SUBSTITUTION OF MATERIALS OR METHODS

- A. Owner and Consultant approval is required for all modifications to methods, procedures, and design, which may be proposed by the Asbestos Abatement Contractor. It is the intent of these documents to allow the Asbestos Abatement Contractor to present alternative methods to the abatement processes herein, for review by Owner and Consultant. Any such modifications or substitutions to methods, procedures, or design shall comply with applicable regulations. Asbestos Abatement Contractor shall submit

the proposed modification or substitution in accordance with the requirements of the General Conditions, and no later than fifteen (15) working days prior to planned commencement of proposed modification, for review and approval.

- B. Unless requests for modification or substitution are made in accordance with the above instructions and the instruction of the General Conditions, supported by sufficient proof of equality, Asbestos Abatement Contractor shall be required to furnish the specifically named or designed items, methods or procedures designated in this Section.
- C. If the modification or substitution necessitates changes or additional work, same shall be provided and the Asbestos Abatement Contractor shall assume the cost and the entire responsibility thereto unless performed under the approved Change Order Process.
- D. The Owner and Consultant's permission to make such substitution shall not relieve the Asbestos Abatement Contractor from full responsibility for the work.

1.12 SITE SECURITY

- A. The Asbestos Abatement Contractor is responsible for performing all work under this contract without contaminating the building environment with asbestos fibers. This includes interiors of duct work, outside containment locations, machinery and equipment and any other release into unregulated spaces. The Asbestos Abatement Contractor is responsible for making right and clean-up of any such contamination if found to be present.
- B. The Asbestos Abatement Contractor will be responsible for the security of the abatement area, allowing only authorized personnel into the area, and securing assigned entrances and exits with locked doorways at the end of the work day. Signs will be posted prior to asbestos removal as required in 29 CFR 1926.1101.

1.13 PROJECT MONITOR

- A. The Owner has retained Cardno ATC as their Consultant for technical advisement and project management during the asbestos removal portion of the Project. Cardno ATC will perform on-site asbestos project monitoring services during all phases of asbestos removal. The Asbestos Abatement Contractor shall regard Cardno ATC's direction, as authoritative and binding as provided herein, in matters outlined by this Section. However, all work shall be subject to final approval by the Owner.
- B. Cardno ATC's licensed Project Monitor will perform monitoring of Asbestos Abatement Contractor's work practices and performance, inspection of the worksites, and air sampling and analysis for each phase of the asbestos removal project. Quality control and testing criteria has been established in these specifications, and will be strictly enforced.

1.14 TEMPORARY FACILITIES

- A. Use of Owner provided facilities is specified in Division 1 and shall be coordinated through the Owner.

PART II - PRODUCTS

2.01 MATERIALS

- A. All materials and equipment proposed to be used on this project shall be subject to the acceptance of the Consultant. The Asbestos Abatement Contractor shall comply with local, state and federal regulations pertaining to the selection and use of materials and equipment on this project. The Asbestos Abatement Contractor shall provide a submittal on all materials and equipment to be used for review and approval by the Consultant prior to commencement of the work.

PART III - EXECUTION

3.01 PREPARATION & ABATEMENT

- A. Refer to Part 1.04 C for specific requirements associated with removal and disposal of the window and door units with asbestos caulking and glazing compound. Removal of all roofing material shall be performed as specified under MADEP CMR 7.15 Regulations.
- B. Personal Air Sampling: Daily personal and excursion sampling will be the responsibility of the Contractor to check personal exposure levels versus respiratory protection and to check work practices. At least 25% of the workers in each shift, but not less than 2, shall be sampled. The Contractor is responsible for his own personal sampling as outlined in OSHA Regulation 1926.1101. The Contractor shall post the personal air sample results within 24 hours.
- C. Visual Inspections: Work areas shall pass a visual inspection conducted by the Site Supervisor responsible for the project and the Owner's Project Monitor (i.e. Consultant). The criterion for this inspection will be the absence of visible debris in accordance with ASTM standard E1368-90. A certificate of visual inspection will be signed by the Project Monitor and the Site Supervisor after final inspection clearance. The Contractor will be responsible for the costs of visual inspection and testing required for any work which fails clearance air quality criteria.

3.03 DISPOSAL - ASBESTOS

- A. Packaging: Prior to post-abatement inspection, asbestos- containing waste shall be packaged in sealed double containers and removed from the work area to a specified transportation vehicle or a designated holding area approved by the Owner. At the end of each work day the Asbestos Abatement Contractor shall remove the debris accumulated during that days work activities using procedures outlined in the Specifications. The Asbestos Abatement Contractor shall provide a daily tally of all bags removed.
- B. Temporary Storage of Waste: An area for temporary storage of asbestos waste must be approved by the Owner. Asbestos waste must be stored in a restricted area and must be in an **enclosed container** which is posted and secured whenever not in use. ACM Waste shall NOT be store outside the building on the ground, pavement areas or other non-enclosed area. Asbestos waste material shall be loaded into a waste transportation vehicle/dumpster and hauled away as soon as there is a sufficient quantity available for

direct transportation to the approved disposal site. ACM waste shall **NOT** be transferred back to the Asbestos Abatement Contractor's yard/facility. ACM Waste shall only be stored at:

1. An approved refuse transfer station facility permitted or that is managing such wastes in accordance with 310 CMR 19.061 and/or;
2. The site of generation of the asbestos abatement activity.

All ACM waste shall be shipped from for disposal prior to the Asbestos Abatement Contractor demobilizing from the site.

- C. OSHA/EPA labeling: Asbestos warning labels having permanent adhesive and waterproof print, or being permanently printed on the container, shall be affixed to the outside of all asbestos containers, and each inside bag, except that nonfriable asbestos-containing waste that has not been and does not have a high probability of becoming, crumbled, pulverized, or reduced to powder need not be labeled. Labels will be conspicuous and legible and shall contain the following warning:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

The Asbestos Abatement Contractor is directed to properly label each waste bag in accordance with the latest NESHAP standard, Section 61.150, with the following information:

SITE OWNER'S NAME
SITE NAME

- D. DOT labeling and marking: A DOT "class 9" shipping label and DOT mark shall be applied to or be printed on each packaging of asbestos-containing materials.
- E. Waste Transportation: All ACM waste shall be containerized pursuant to 310 CMR 7.15 (5) prior to being transported. All ACM waste shall be transported in totally enclosed vehicles or containers that are designed, constructed, and operated to prevent spills, leaks or emissions. All ACM waste shall be transported in compliance with 40 CFR Part 61 and applicable Department of Transportation (DOT), OSHA and local regulations. Each vehicle transporting asbestos-containing waste shall be marked with asbestos danger signs during loading and unloading of the waste, in accordance with the NESHAP, 40 CFR 61.150.
- F. Asbestos waste shipment records: The Asbestos Abatement Contractor shall prepare the waste shipment records for disposal of the ACM. The following information shall be included on the waste shipment record for each and every load of ACM transported off-site:
1. The name, address and telephone number of the owner/operator of the facility or dumping ground where asbestos abatement activities have occurred;

2. The quantity and type (friable or non-friable) of the ACWM in cubic meters (cubic yards) and a description of the container used for shipment;
3. The name, address and telephone number of the person who conducted any asbestos abatement activity;
4. The name and telephone number of the disposal site operator;
5. The name and physical location of the disposal site;
6. The date transported;
7. The name, address, and telephone number of the transporter(s);
8. Certification by the owner/operator of the facility or dumping ground where asbestos abatement activities have occurred/where asbestos waste was generated that the contents of each shipment have been characterized, packaged, marked and labeled in accordance with 310 CMR 7.15;
9. Signature of each transporter confirming the contents of each shipment are in all respects in the proper condition for transport according to applicable international, federal, state and local regulations;

10. Signature by the receiving disposal facility confirming that: i) the quantity of ACWM listed on the waste shipment record is the same as the quantity accepted for disposal; and ii) it holds appropriate permits and/or authorizations to accept for disposal ACWM described on waste shipment records.

Note: The final waste shipment records (with signature of acceptance at the landfill) for disposal of ACM from the project site shall be received by the Owner within 45 days of shipment from the site.

3.04 QUALITY CONTROL AND TESTING

- A. The Asbestos Abatement Contractor shall be responsible for achieving acceptable visual for ALL abatement areas as follows:
 - Clearance inspection: ATC's Project Monitor shall inspect the work area and surrounding areas for clearance using visual and physical methods, prior to clearing the project.
 - Post-abatement Clearance Air Monitoring: Will not be required since the work is being performed to the exterior of the building under a Regulated Area and not under containment.

END OF SECTION

SECTION 02081

DEMOLITION

PART 1.0: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 DEFINITIONS

- A. The following definitions shall be applicable to this Section:

“Site”: Refers to 106 ½ Deerfield Street located in Greenfield, Massachusetts as described by the Contract Documents and Drawings.

“Owner”: Refers to the Town of Greenfield and their designated, authorized personnel.

“Consultant”: Refers to Cardno ATC, 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.

“Contractor”: Refers to the Contractor who has been awarded the overall contract for demolition and site restoration work outlined by the Contract Documents.

1.3 DESCRIPTION OF WORK

- A. The Work of this Section includes all labor, materials, tools, and equipment needed to demolish and dispose of the building and associated structures as specified under the Contract.
- B. The Work of this Section includes, but is not limited to:
 - 1. Demolition and removal of all existing construction above grade.
 - 2. Demolition and removal of all existing construction below grade.
 - 3. Sawcutting, demolition, and removal of existing paving, including but not limited to driveways and walkways. All areas where asphalt is removed shall be restored with processed gravel.
 - 4. Demolition of materials unsuitable for completion of site work.
 - 5. Protection of surrounding areas, streets, property, rights of way, wetland resource areas.
 - 6. Removal of all debris and trash located on subject properties. Includes, but is not limited to: concrete rubble, discarded lumber, metal, glass, refuse, garbage, vehicles, equipment and wood.
 - 7. Removal of all trash, debris, furniture, garbage, equipment, etc. located at the interior of the building.
 - 8. Utilize rodent control service treatment prior to demolition or deconstruction. If necessary, utilize insect control services treatment prior to demolition, e.g. bee or

- hornet nests.
9. The Contractor shall secure from and pay the fees or charges for removal of abandoned water taps, sealing of house connection drains, pavement cuts, electrical, plumbing, gas, and sewer permits and demolition permits, necessary under the appropriate regulatory body or any of its agencies.
 10. Where necessary, temporary traffic control by the Town of Greenfield Police Department shall be the responsibility of the Contractor. No public way, private access or pedestrian ways shall be obstructed or closed without written permission from Town of Greenfield officials having jurisdiction over such facilities.
 11. The Contractor shall, at the end of each working day, erect orange colored plastic snow fence around the site structure being demolished or deconstructed in order to protect public health and safety. Snow fence shall be erected, utilizing temporary fence posts, and in a manner which provides the best possible protection of the public by restricting access to the structures being demolished or deconstructed.
 12. All demolition or deconstruction work shall be carried out in a systematic manner to ensure public safety and within the performance time specified. All demolition or deconstruction work shall be conducted in accordance with applicable local, state and federal regulations. The Contractor is responsible for any and all measures to ensure the safety and protection of the public for the duration of the project.
 13. The Contractor shall provide, keep and maintain barriers, fences, warning signs and lights and keep adjacent street clear of dirt, rubbish, ice, snow, and water for the safe and convenient passage of automobiles, delivery trucks and Contractors.

1.4 RELATED WORK

- A. Carefully examine all the Contract Documents for requirements that affect the Work of this Section.
- B. Other Work which directly relate to the Work of this Section include, but are not limited to:
 1. Section 02080 - Asbestos Abatement.
 2. Section 02083 – Site Restoration.

1.5 SUBMITTALS

A. *Permits and Certificates*

1. Permits and notices authorizing building demolition.
2. Certificates of severance of utility services.
3. Permit of transport and legal disposal of debris.

Note: The Contractor shall obtain and pay for all permits required to perform the work as required under this Section. Copies of all such permits shall be provided to the Owner.

- B. *Schedule:* Submit proposed methods and schedule of demolition prior to the start of Work.

1.6 EXISTING CONDITIONS

- A. *Existing Structures:* The Owner and Consultant assume no responsibility nor make any claim regarding the condition or structural adequacy of existing constructions to be demolished.
- B. *Caution:* Maintain extreme caution when working in proximity to adjacent properties not in the Contract. Comply with all applicable city ordinances, laws and regulations.
- C. *Asbestos-Containing Materials:* The Contractor shall refer to Section 02080 – Asbestos Abatement for specific requirements associated with removal of identified asbestos under the Contract.
- D. *Lead-Containing Paint:* The Contractor and all Subcontractors who work on the project shall be made aware that lead-containing paint is present on the painted architectural and structural building components to be disturbed by the demolition work outlined under the Contract. Each Contractor shall be required to comply with all aspects of the Occupational Safety and Health Administration (OSHA) 29 CFR 1926.62 “Lead in Construction Regulations” with regards to disturbance of these materials when performing their work. In addition, each Contractor shall be responsible for proper disposal of the demolition debris in accordance with local, state and federal regulations. Prior to the start of the work, the General Contractor shall be required to provide a written plan that details the means and methods to achieve compliance with the provisions outlined herein for all trades working on the site.

1.7 PROJECT CONDITIONS

- A. *Public Safety:* Ensure the safe passage of persons and traffic on and around the Project site, adjacent properties, and public ways.
- B. *Existing Occupancy:* The building to be demolished under the Contract will be unoccupied. However, adjacent properties to the site will be occupied and special care shall be taken to control dust and noise and to avoid creating a nuisance.
- C. *Explosives:* Do not bring explosives to the site or use explosives.
- D. *Damages:* Report all damages immediately. Promptly repair damages caused by demolition operations at no cost to the Owner.
- E. *Subsurface Conditions:* Subsurface conditions that are detrimental to the Work of this Contract are not anticipated. Unanticipated subsurface conditions of a minor nature, such as boulders, shall not result in any additional compensation. Notify the Consultant immediately in writing if subsurface conditions are significantly deficient for demolition.
- F. *Ground Water:* Dewater, as required, all excavations. Any conditions resulting from high ground water shall not incur additional costs to the Owner.
- G. *Vegetation:* Vegetation exists in close proximity to structures.

PART 2.0: PRODUCTS

- 2.1 *Protections:* Provide miscellaneous protections including, but not limited to dust barriers, plywood panels, and moisture barriers to ensure adjacent properties are protected at all times during demolition.

- 2.2 Shoring: Provide temporary shoring and bracing of adequate size and proper configuration as required.
- 2.3 Utilities Capping: The existing water and sewer lines have been shut off and capped by the Town. The existing electrical and gas services have also been shut off and disconnected by the utility companies.

PART 3.0: EXECUTION

3.1 INSPECTION: Inspect and verify all existing conditions before beginning Work.

3.2 PROTECTION

- A. Ensure safety of persons and property at all times. Provide temporary shoring and bracing as required. Protect openings.
- B. Protect against damage to adjacent properties and areas outside the Contract.
- C. Ensure egress routes are clear at all times. If existing egress routes are disrupted, submit alternative plans for egress for approval by local building inspector, the Owner, and the Consultant.
- D. Ensure silt and sediment resulting from exposed soils does not exit the site. Silt sacks shall be installed on adjacent catch basins as shown on the site plan. Install silt fence or other methods of erosion and sedimentation control as necessary. The silt fence, hay bales and other methods of erosion control shall remain in-place at the site upon completion of the work.
- E. Ensure that silt or sediment is not tracked onto roadways.
- F. The Contractor shall be required to only remove existing trees as needed to properly perform demolition and removal of the site structures.

3.3 DEMOLITION

A. *General* –

- 1. Demolish all existing construction designated to be demolished or removed from the site.
- 2. Demolish and remove existing construction required for the proper completion of site work. Identify and remove all construction that is unsuitable for re-use.
- 3. The existing foundation shall be removed in its entirety. The foundation hole must be clean of any wood or other debris. Concrete from the existing foundation may be broken up and left in place as long as no voids are present. Cellar holes and other depressions shall be filled to uniform grade matching the immediate surrounding terrain with existing site material or new clean fill material.
- 4. All walkways, driveways and other paved or concrete surfaces or structures shall be removed and disposed off site.

5. The Contractor shall avoid damaging existing sidewalks, streets, curbs, pavements, utilities, structures or any other property (not associated with the site property to be demolished). Any damage caused to these structures or utilities shall be repaired and/or replaced by the Contractor at their own expense.
 6. Use demolition methods within the limitations of governing regulations.
 7. Ensure structure and construction is adequately and properly shored and supported before, during, and after demolition.
 8. The Contractor shall request an inspection of the site by the Consultant and the Town of Greenfield Building Department after demolition is complete and prior to backfilling. The Contractor shall be responsible for all costs associated with additional concrete removal and disposal required if the Town of Greenfield Building Department fails to approve the conditions or the work.
- B. *Pollution Controls:* Use water sprinkling, temporary enclosures, and other suitable methods to limit the amount of dust and dirt rising and scattering in the air to the lowest practical level. Comply with governing regulations pertaining to environmental protection. Take necessary measures to prevent silt and soils leaving the site on vehicle tires during demolition activities. Any soils remaining on the public way resulting from demolition activities are to be swept and properly disposed of daily at the Contractor's expense.

3.4 CLEANING AND PROTECTION

- A. *General Cleaning:* Remove protections and clean surfaces of exhibiting dust and dirt from demolition activities.
- B. *Clearing of Vegetation:* Clearing of vegetation is only allowed as necessary to effectively remove a structure.

END OF SECTION

**SECTION 02083
SITE RESTORATION**

PART 1.0: GENERAL

1.1 GENERAL REQUIREMENTS

- A. All of the Contract Documents, including the General and Supplementary Conditions and Division 1 General Requirements, apply to the work of this Section.

1.2 DEFINITIONS

- A. The following definitions shall be applicable to this Section:

“*Site*”: Refers to 106 ½ Deerfield Street located in Greenfield, Massachusetts as described by the Contract Documents and Drawings.

“*Owner*”: Refers to the Town of Greenfield and their designated, authorized personnel.

“*Consultant*”: Refers to Cardno ATC, 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.

“*Contractor*”: Refers to the Contractor who has been awarded the overall contract for demolition and site restoration work outlined by the Contract Documents.

1.3 DESCRIPTION OF WORK

- A. The Work of this Section includes all labor, materials, tools, and equipment needed to complete site preparation, earthwork, and site restoration as specified.

- B. The Work of this Section includes, but is not limited to:

1. Temporary protection and access.
2. Protection of trees and plantings to remain.
3. Preparation of subgrades for pavements and site improvements.
4. Water and erosion control of excavations.
5. Shoring and bracing as needed.
6. Removal and disposal of unsuitable or surplus excavated materials off site.
7. Providing new fill material as needed for completion of site preparation.
8. Fill and compaction.
9. Rough grading.

1.4 RELATED WORK

- A. Carefully examine all the Contract Documents for requirements that affect the Work of this Section.

- B. Other Work which directly relate to the Work of this Section include, but are not limited to:

1. Section 02082 - Demolition

1.5 QUALITY ASSURANCE:

- A. The Owner's representative will be on site to insure that work specified is performed in compliance with this section.
 - 1. Do not place any fill until the Owner's representative has observed the foundation or excavation.
 - 2. All new fill material brought on-site shall be free of contamination. The Owner reserves the right to perform sampling and testing for chemical contamination on any material proposed to be used as backfill. Owner may prohibit from use on the project any fill material which exhibits the presence of chemical contamination.

1.6 DELIVERY, STORAGE, AND HANDLING: Materials shall be protected from damage from nature. Storage of materials and equipment on site shall be coordinated with the Owner.

1.7 PROJECT CONDITIONS

- A. *Grades and Layout:* The Contractor shall be responsible for verifying existing grades and layouts. Site conditions and information must be field verified before proceeding with Work. The Consultant reserves the right to require adjustments to accommodate field-verified conditions at no additional cost to the owner.
- B. *Public Ways:* Work shall not interfere with normal use of public ways, including streets and sidewalks, unless permission is obtained from the Owner and local authorities.

PART 2.0: PRODUCTS

2.1 COMMON FILL

- A. Provide common fill consisting of new and/or on-site excavated materials composed of earth and stone, free of organic materials, broken pavement, construction debris, and stones larger than 4" in the largest dimension. Use of recycled materials, such as re-processed building demolition material shall not be allowed. Refer to Part 1.5 (2) of this Section for specific requirements associated with testing and approval of new fill material to be used on-site.
- B. *Use:* Backfilling foundation hole.

2.2 PROCESSED GRAVEL

- A. Processed gravel shall consist of clean, hard, durable particles or fragments, free from an excess of soft thin elongated, laminated or disintegrated pieces, and shall conform to the following gradation requirements. Crushed rock of comparable size and grading may be used.

| <u>Sieve</u> | <u>Percent Passing</u> |
|--------------|------------------------|
| 2 inch | 100% |
| 1 ½ inch | 70-100% |

| | |
|---------|--------|
| ¾ inch | 50-85% |
| No. 4 | 30-60% |
| No. 200 | 0-12% |

All processed gravel must be approved prior to placement. The Contractor shall deliver suitable samples of processed gravel to the Owner for inspection purposes.

- B. Processed gravel shall be placed to a minimum depth of 12 inches and/or as specified by the Owner. The gravel shall be placed in a maximum of 4-inch lifts and shall be thoroughly compacted to not less than 95% of the maximum dry density.
- C. *Use:* Top surface layer over area previously occupied by building.

PART 3.0: EXECUTION

3.1 GENERAL

- A. *Inspection and Verification:* The Contractor shall inspect the site and existing conditions. Verify all grades, utility locations, layouts, site improvements, and other existing conditions before beginning Work.
- B. *Regulatory Requirements:* All Work shall conform to the requirements of OSHA and Mass. Dig Safe. Notify authorities and utility companies, as applicable, before proceeding with Work.
- C. *Stockpiling and Disposal:* Materials suitable for reuse shall be stockpiled on the site, in locations acceptable to the Owner. Materials unsuitable for re-use shall be disposed of properly.

3.2 PROTECTION

- A. *Buildings, Landscaping, and Site Improvements:* All Work shall be executed in a manner to prevent damage to existing structures, landscaping, streets, curbs, and walks to remain and to adjacent properties. Protect all existing structures, landscaping, site improvements, and adjacent properties in Work area.
- B. *Safe Passage:* Ensure safe passage of people around the Work area. Guard Work areas with barricades, reflectors, and signs as required by the Owner, applicable safety regulations, and local authorities.
- C. *Dust and Erosion Control:* Take effective measures to prevent windblown dust and to control erosion and run off.
- D. *Shoring and Bracing:* Design, engineer, and provide adequate shoring and bracing to prevent movement or settlement of existing and new construction, including buildings, utilities, paving, and site improvements.
- E. *Utilities:* Locate, mark, and protect all utilities from damage and disruption of services outside the Scope of Work for the Project.

- F. *Dewatering:* Dewater as necessary to maintain dry excavations. Provide temporary water control ditches, pumps, and piping as needed to control water.

3.3 FILL

- A. *Moisture Content:* Control moisture content of subgrades and fill materials by drying and wetting to levels required for proper compaction, as established by ASTM D1557, Method C. Wet fill that cannot be dried within 48 hours of placement shall be removed and replaced with drier fill.
- B. *Placement:* Place fill in horizontal loose layers not exceeding 12" and compact after each layer. Fill areas for site development as required to raise grade to required subgrade elevations.
- C. All fill shall be approved by the Owner prior to use on the site.

3.4 COMPACTION

- A. *Site:* Contractor is to provide 95% of maximum dry density. Fill shall be placed in maximum 12" lifts.

3.5 ROUGH GRADING

- A. Uniformly rough grade to prevent ponding of water and to slope away from structures to remain. Create wide swales to effectively control and drain water. Rough grade to within ± 1 " of indicated subgrades.
- B. Fill voids resulting from demolition of structure with appropriate fill material specified in Section 2.0.
- C. *Maintenance:* Repair and re-establish grades where settlement, damage, or erosion has taken place. Work shall include removal and restoration of surface improvements, if any.

3.6 SITE RESTORATION: Leave site in acceptable condition as specified herein.

END OF SECTION

APPENDIX A
MASSACHUSETTS WAGE RATES



**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**

RONALD L. WALKER, II
Secretary

WILLIAM D MCKINNEY
Director

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

Awarding Authority: Town of Greenfield
Contract Number: **City/Town:** GREENFIELD
Description of Work: The project consists of asbestos abatement and the demolition of 106 1/2 Deerfield Street in Greenfield, MA.
Job Location: 106 1/2 Deerfield Street, Greenfield, MA 010301

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 Department of Labor Standards, Division of Apprentice Standards (DLS/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. **Any apprentice not registered with DLS/DAS regardless of whether or not they are registered with any other federal, state, local, or private agency 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

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| Construction | | | | | | |
| (2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.15 | \$10.41 | \$10.08 | \$0.00 | \$52.64 |
| | 08/01/2016 | \$32.15 | \$10.91 | \$10.08 | \$0.00 | \$53.14 |
| | 12/01/2016 | \$32.15 | \$10.91 | \$10.89 | \$0.00 | \$53.95 |
| (3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.22 | \$10.41 | \$10.08 | \$0.00 | \$52.71 |
| | 08/01/2016 | \$32.22 | \$10.91 | \$10.08 | \$0.00 | \$53.21 |
| | 12/01/2016 | \$32.22 | \$10.91 | \$10.89 | \$0.00 | \$54.02 |
| (4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.34 | \$10.41 | \$10.08 | \$0.00 | \$52.83 |
| | 08/01/2016 | \$32.34 | \$10.91 | \$10.08 | \$0.00 | \$53.33 |
| | 12/01/2016 | \$32.34 | \$10.91 | \$10.89 | \$0.00 | \$54.14 |
| ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 3)</i> | 08/01/2015 | \$90.51 | \$9.80 | \$18.17 | \$0.00 | \$118.48 |
| For apprentice rates see "Apprentice- PILE DRIVER" | | | | | | |
| AIR TRACK OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.90 | \$7.45 | \$12.40 | \$0.00 | \$49.75 |
| | 12/05/2016 | \$30.58 | \$7.45 | \$12.40 | \$0.00 | \$50.43 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.75 | \$7.45 | \$10.52 | \$0.00 | \$47.72 |
| | 12/01/2016 | \$30.50 | \$7.45 | \$10.52 | \$0.00 | \$48.47 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| ASBESTOS WORKER (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)</i> | 12/01/2015 | \$30.94 | \$10.40 | \$5.45 | \$0.00 | \$46.79 |
| ASPHALT RAKER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| ASPHALT RAKER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
| | 12/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| AUTOMATIC GRADER-EXCAVATOR (RECLAIMER) <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| BACKHOE/FRONT-END LOADER OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| BATCH/CEMENT PLANT - ON SITE <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.90 | \$7.45 | \$12.40 | \$0.00 | \$49.75 |
| | 12/05/2016 | \$30.58 | \$7.45 | \$12.40 | \$0.00 | \$50.43 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.75 | \$7.45 | \$10.52 | \$0.00 | \$47.72 |
| | 12/01/2016 | \$30.50 | \$7.45 | \$10.52 | \$0.00 | \$48.47 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| BOILER MAKER <i>BOILERMAKERS LOCAL 29</i> | 01/01/2016 | \$41.62 | \$6.97 | \$16.21 | \$0.00 | \$64.80 |
| | 01/01/2017 | \$42.92 | \$6.97 | \$16.21 | \$0.00 | \$66.10 |

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 65 | \$27.05 | \$6.97 | \$10.54 | \$0.00 | \$44.56 |
| 2 | 65 | \$27.05 | \$6.97 | \$10.54 | \$0.00 | \$44.56 |
| 3 | 70 | \$29.13 | \$6.97 | \$11.35 | \$0.00 | \$47.45 |
| 4 | 75 | \$31.22 | \$6.97 | \$12.16 | \$0.00 | \$50.35 |
| 5 | 80 | \$33.30 | \$6.97 | \$12.97 | \$0.00 | \$53.24 |
| 6 | 85 | \$35.38 | \$6.97 | \$13.78 | \$0.00 | \$56.13 |
| 7 | 90 | \$37.46 | \$6.97 | \$14.59 | \$0.00 | \$59.02 |
| 8 | 95 | \$39.54 | \$6.97 | \$15.40 | \$0.00 | \$61.91 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 65 | \$27.90 | \$6.97 | \$10.54 | \$0.00 | \$45.41 |
| 2 | 65 | \$27.90 | \$6.97 | \$10.54 | \$0.00 | \$45.41 |
| 3 | 70 | \$30.04 | \$6.97 | \$11.35 | \$0.00 | \$48.36 |
| 4 | 75 | \$32.19 | \$6.97 | \$12.16 | \$0.00 | \$51.32 |
| 5 | 80 | \$34.34 | \$6.97 | \$12.97 | \$0.00 | \$54.28 |
| 6 | 85 | \$36.48 | \$6.97 | \$13.78 | \$0.00 | \$57.23 |
| 7 | 90 | \$38.63 | \$6.97 | \$14.59 | \$0.00 | \$60.19 |
| 8 | 95 | \$40.77 | \$6.97 | \$15.40 | \$0.00 | \$63.14 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|--|----------------|-----------|---------|---------|---------------------------|------------|
| BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) | 02/29/2016 | \$38.36 | \$10.18 | \$17.30 | \$0.00 | \$65.84 |
| <i>BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD)</i> | 09/05/2016 | \$39.26 | \$10.18 | \$17.38 | \$0.00 | \$66.82 |
| | 02/27/2017 | \$39.83 | \$10.18 | \$17.38 | \$0.00 | \$67.39 |

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Springfield/Pittsfield

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$19.18 | \$10.18 | \$17.30 | \$0.00 | \$46.66 |
| 2 | 60 | \$23.02 | \$10.18 | \$17.30 | \$0.00 | \$50.50 |
| 3 | 70 | \$26.85 | \$10.18 | \$17.30 | \$0.00 | \$54.33 |
| 4 | 80 | \$30.69 | \$10.18 | \$17.30 | \$0.00 | \$58.17 |
| 5 | 90 | \$34.52 | \$10.18 | \$17.30 | \$0.00 | \$62.00 |

Effective Date - 09/05/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$19.63 | \$10.18 | \$17.38 | \$0.00 | \$47.19 |
| 2 | 60 | \$23.56 | \$10.18 | \$17.38 | \$0.00 | \$51.12 |
| 3 | 70 | \$27.48 | \$10.18 | \$17.38 | \$0.00 | \$55.04 |
| 4 | 80 | \$31.41 | \$10.18 | \$17.38 | \$0.00 | \$58.97 |
| 5 | 90 | \$35.33 | \$10.18 | \$17.38 | \$0.00 | \$62.89 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|--------------------------------------|------------|---------|---------|---------|--------|---------|
| BULLDOZER/POWER SHOVEL/TREE SHREDDER | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| <i>/CLAM SHELL OPERATING</i> | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| <i>ENGINEERS LOCAL 98</i> | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| CAISSON & UNDERPINNING BOTTOM MAN | 06/01/2016 | \$36.95 | \$7.45 | \$14.00 | \$0.00 | \$58.40 |
| <i>LABORERS - FOUNDATION AND MARINE</i> | 12/01/2016 | \$37.95 | \$7.45 | \$14.00 | \$0.00 | \$59.40 |

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| CAISSON & UNDERPINNING LABORER | 06/01/2016 | \$35.80 | \$7.45 | \$14.00 | \$0.00 | \$57.25 |
| <i>LABORERS - FOUNDATION AND MARINE</i> | 12/01/2016 | \$36.80 | \$7.45 | \$14.00 | \$0.00 | \$58.25 |

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| CAISSON & UNDERPINNING TOP MAN | 06/01/2016 | \$35.80 | \$7.45 | \$14.00 | \$0.00 | \$57.25 |
| <i>LABORERS - FOUNDATION AND MARINE</i> | 12/01/2016 | \$36.80 | \$7.45 | \$14.00 | \$0.00 | \$58.25 |

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| CARBIDE CORE DRILL OPERATOR | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |

For apprentice rates see "Apprentice- LABORER"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|--------|---------|---------------------------|------------|
| CARPENTER CARPENTERS LOCAL 108 - HAMPDEN HAMPSHIRE | 02/29/2016 | \$32.60 | \$8.55 | \$14.72 | \$0.00 | \$55.87 |

Apprentice - CARPENTER - Local 108 Hampden Hampshire

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.30 | \$8.55 | \$1.20 | \$0.00 | \$26.05 |
| 2 | 60 | \$19.56 | \$8.55 | \$1.20 | \$0.00 | \$29.31 |
| 3 | 70 | \$22.82 | \$8.55 | \$11.12 | \$0.00 | \$42.49 |
| 4 | 75 | \$24.45 | \$8.55 | \$11.12 | \$0.00 | \$44.12 |
| 5 | 80 | \$26.08 | \$8.55 | \$12.32 | \$0.00 | \$46.95 |
| 6 | 80 | \$26.08 | \$8.55 | \$12.32 | \$0.00 | \$46.95 |
| 7 | 90 | \$29.34 | \$8.55 | \$13.52 | \$0.00 | \$51.41 |
| 8 | 90 | \$29.34 | \$8.55 | \$13.52 | \$0.00 | \$51.41 |

Notes: Pre-6/09 Step1\$25.60/2\$27.23/3\$42.83/4\$46.09/5\$49.35/6\$50.98
 ** 1: 1-5/2: 6-8/3:9-11/Steps: 6 mos (600 hrs)/rates by step
 7\$52.61/8\$54.24

Apprentice to Journeyworker Ratio:**

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD) | 01/01/2016 | \$39.62 | \$10.85 | \$13.94 | \$1.30 | \$65.71 |
|---|------------|---------|---------|---------|--------|---------|

Apprentice - CEMENT MASONRY/PLASTERING - Springfield/Pittsfield

Effective Date - 01/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 0 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

Notes: Apprentice wages shall be no less than the following Steps;
 1\$46.02/2\$53.40/3\$56.69/4\$59.98/5\$63.28/6\$66.57/7\$72.15
 Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| CHAIN SAW OPERATOR LABORERS - ZONE 3 (BUILDING & SITE) | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 98 | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|--|----------------|-----------|---------|---------|---------------------------|------------|
| CRANE OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$36.88 | \$10.38 | \$12.01 | \$0.00 | \$59.27 |
| | 12/01/2016 | \$37.28 | \$10.58 | \$12.28 | \$0.00 | \$60.14 |
| | 06/01/2017 | \$37.89 | \$10.58 | \$12.55 | \$0.00 | \$61.02 |
| | 12/01/2017 | \$38.49 | \$10.58 | \$12.82 | \$0.00 | \$61.89 |
| | 06/01/2018 | \$39.10 | \$10.58 | \$13.09 | \$0.00 | \$62.77 |
| | 12/01/2018 | \$39.70 | \$10.58 | \$13.36 | \$0.00 | \$63.64 |
| | 06/01/2019 | \$40.21 | \$10.58 | \$13.63 | \$0.00 | \$64.42 |
| | 12/01/2019 | \$40.81 | \$10.58 | \$13.90 | \$0.00 | \$65.29 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 3</i> | 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 - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$25.23 | \$7.85 | \$0.00 | \$0.00 | \$33.08 |
| 2 | 55 | \$27.75 | \$7.85 | \$3.66 | \$0.00 | \$39.26 |
| 3 | 60 | \$30.28 | \$7.85 | \$3.99 | \$0.00 | \$42.12 |
| 4 | 65 | \$32.80 | \$7.85 | \$4.32 | \$0.00 | \$44.97 |
| 5 | 70 | \$35.32 | \$7.85 | \$14.11 | \$0.00 | \$57.28 |
| 6 | 75 | \$37.85 | \$7.85 | \$14.44 | \$0.00 | \$60.14 |
| 7 | 80 | \$40.37 | \$7.85 | \$14.77 | \$0.00 | \$62.99 |
| 8 | 90 | \$45.41 | \$7.85 | \$15.44 | \$0.00 | \$68.70 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$25.71 | \$7.85 | \$0.00 | \$0.00 | \$33.56 |
| 2 | 55 | \$28.28 | \$7.85 | \$3.66 | \$0.00 | \$39.79 |
| 3 | 60 | \$30.85 | \$7.85 | \$3.99 | \$0.00 | \$42.69 |
| 4 | 65 | \$33.42 | \$7.85 | \$4.32 | \$0.00 | \$45.59 |
| 5 | 70 | \$35.99 | \$7.85 | \$14.11 | \$0.00 | \$57.95 |
| 6 | 75 | \$38.56 | \$7.85 | \$14.44 | \$0.00 | \$60.85 |
| 7 | 80 | \$41.13 | \$7.85 | \$14.77 | \$0.00 | \$63.75 |
| 8 | 90 | \$46.27 | \$7.85 | \$15.44 | \$0.00 | \$69.56 |

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| DEMO: ADZEMAN <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/01/2015 | \$35.50 | \$7.45 | \$13.55 | \$0.00 | \$56.50 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/01/2015 | \$36.50 | \$7.45 | \$13.55 | \$0.00 | \$57.50 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DEMO: BURNERS <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/01/2015 | \$36.25 | \$7.45 | \$13.55 | \$0.00 | \$57.25 |

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|--------|---------|---------------------------|------------|
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DEMO: CONCRETE CUTTER/SAWYER LABORERS - ZONE 3 (BUILDING & SITE) | 12/01/2015 | \$36.50 | \$7.45 | \$13.55 | \$0.00 | \$57.50 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 3 (BUILDING & SITE) | 12/01/2015 | \$36.25 | \$7.45 | \$13.55 | \$0.00 | \$57.25 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DEMO: WRECKING LABORER LABORERS - ZONE 3 (BUILDING & SITE) | 12/01/2015 | \$35.50 | \$7.45 | \$13.55 | \$0.00 | \$56.50 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| DIVER PILE DRIVER LOCAL 56 (ZONE 3) | 08/01/2015 | \$60.34 | \$9.80 | \$18.17 | \$0.00 | \$88.31 |
| For apprentice rates see "Apprentice- PILE DRIVER" | | | | | | |
| DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 3) | 08/01/2015 | \$43.10 | \$9.80 | \$18.17 | \$0.00 | \$71.07 |
| For apprentice rates see "Apprentice- PILE DRIVER" | | | | | | |
| DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) | 08/01/2015 | \$64.65 | \$9.80 | \$18.17 | \$0.00 | \$92.62 |
| For apprentice rates see "Apprentice- PILE DRIVER" | | | | | | |
| DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) | 08/01/2015 | \$90.51 | \$9.80 | \$18.17 | \$0.00 | \$118.48 |
| For apprentice rates see "Apprentice- PILE DRIVER" | | | | | | |
| ELECTRICIAN (Including Core Drilling) ELECTRICIANS LOCAL 7 | 07/03/2016 | \$39.11 | \$9.35 | \$10.32 | \$0.00 | \$58.78 |
| | 01/01/2017 | \$40.01 | \$9.35 | \$10.32 | \$0.00 | \$59.68 |

Apprentice - ELECTRICIAN - Local 7

Effective Date - 07/03/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 40 | \$15.64 | \$5.00 | \$0.47 | \$0.00 | \$21.11 |
| 2 | 45 | \$17.60 | \$5.00 | \$0.53 | \$0.00 | \$23.13 |
| 3 | 50 | \$19.56 | \$9.35 | \$6.04 | \$0.00 | \$34.95 |
| 4 | 55 | \$21.51 | \$9.35 | \$6.10 | \$0.00 | \$36.96 |
| 5 | 65 | \$25.42 | \$9.35 | \$7.21 | \$0.00 | \$41.98 |
| 6 | 70 | \$27.38 | \$9.35 | \$8.27 | \$0.00 | \$45.00 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 40 | \$16.00 | \$5.00 | \$0.48 | \$0.00 | \$21.48 |
| 2 | 45 | \$18.00 | \$5.00 | \$0.54 | \$0.00 | \$23.54 |
| 3 | 50 | \$20.01 | \$9.35 | \$6.05 | \$0.00 | \$35.41 |
| 4 | 55 | \$22.01 | \$9.35 | \$6.11 | \$0.00 | \$37.47 |
| 5 | 65 | \$26.01 | \$9.35 | \$7.23 | \$0.00 | \$42.59 |
| 6 | 70 | \$28.01 | \$9.35 | \$8.29 | \$0.00 | \$45.65 |

Notes: Pre-5/31/11 Begins at Step 3 \$41.19/4\$43.49/5\$45.59/6\$47.79
Steps 1-2 are 1000 hrs; Steps 3-6 are 1500 hrs.

Apprentice to Journeyworker Ratio:2:3****

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---------------------------------------|----------------|-----------|---------|---------|---------------------------|------------|
| ELEVATOR CONSTRUCTOR | 01/01/2016 | \$48.77 | \$14.43 | \$14.96 | \$0.00 | \$78.16 |
| <i>ELEVATOR CONSTRUCTORS LOCAL 41</i> | 01/01/2017 | \$49.90 | \$15.28 | \$15.71 | \$0.00 | \$80.89 |

Apprentice - ELEVATOR CONSTRUCTOR - Local 41

Effective Date - 01/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$24.39 | \$14.43 | \$14.96 | \$0.00 | \$53.78 |
| 2 | 55 | \$26.82 | \$14.43 | \$14.96 | \$0.00 | \$56.21 |
| 3 | 65 | \$31.70 | \$14.43 | \$14.96 | \$0.00 | \$61.09 |
| 4 | 70 | \$34.14 | \$14.43 | \$14.96 | \$0.00 | \$63.53 |
| 5 | 80 | \$39.02 | \$14.43 | \$14.96 | \$0.00 | \$68.41 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$24.95 | \$15.28 | \$15.71 | \$0.00 | \$55.94 |
| 2 | 55 | \$27.45 | \$15.28 | \$15.71 | \$0.00 | \$58.44 |
| 3 | 65 | \$32.44 | \$15.28 | \$15.71 | \$0.00 | \$63.43 |
| 4 | 70 | \$34.93 | \$15.28 | \$15.71 | \$0.00 | \$65.92 |
| 5 | 80 | \$39.92 | \$15.28 | \$15.71 | \$0.00 | \$70.91 |

Notes:

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

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| ELEVATOR CONSTRUCTOR HELPER | 01/01/2016 | \$34.14 | \$14.43 | \$14.96 | \$0.00 | \$63.53 |
| <i>ELEVATOR CONSTRUCTORS LOCAL 41</i> | 01/01/2017 | \$34.93 | \$15.28 | \$15.71 | \$0.00 | \$65.92 |
| For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR" | | | | | | |
| FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY) | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
| <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 12/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| FIELD ENG.INST/ROD-BLDG,SITE,HVY/HWY | 06/01/1999 | \$18.84 | \$4.80 | \$4.10 | \$0.00 | \$27.74 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | | | | | | |
| FIELD ENG.PARTY CHIEF:BLDG,SITE,HVY/HWY | 06/01/1999 | \$21.33 | \$4.80 | \$4.10 | \$0.00 | \$30.23 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | | | | | | |
| FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY | 06/01/1999 | \$22.33 | \$4.80 | \$4.10 | \$0.00 | \$31.23 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | | | | | | |
| FIRE ALARM INSTALLER | 07/03/2016 | \$39.11 | \$9.35 | \$10.32 | \$0.00 | \$58.78 |
| <i>ELECTRICIANS LOCAL 7</i> | 01/01/2017 | \$40.01 | \$9.35 | \$10.32 | \$0.00 | \$59.68 |
| For apprentice rates see "Apprentice- ELECTRICIAN" | | | | | | |
| FIRE ALARM REPAIR / MAINTENANCE | 07/03/2016 | \$39.11 | \$9.35 | \$10.32 | \$0.00 | \$58.78 |
| <i>/ COMMISSIONINGELECTRICIANS</i> | 01/01/2017 | \$40.01 | \$9.35 | \$10.32 | \$0.00 | \$59.68 |
| <i>LOCAL 7</i> | | | | | | |
| For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN" | | | | | | |

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|--|----------------|-----------|---------|---------|---------------------------|------------|
| FIREMAN <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |

Apprentice - OPERATING ENGINEERS - Local 98 Class 3

Effective Date - 06/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 60 | \$19.71 | \$10.38 | \$12.01 | \$0.00 | \$42.10 |
| 2 | 70 | \$23.00 | \$10.38 | \$12.01 | \$0.00 | \$45.39 |
| 3 | 80 | \$26.28 | \$10.38 | \$12.01 | \$0.00 | \$48.67 |
| 4 | 90 | \$29.57 | \$10.38 | \$12.01 | \$0.00 | \$51.96 |

Effective Date - 12/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 60 | \$19.95 | \$10.58 | \$12.28 | \$0.00 | \$42.81 |
| 2 | 70 | \$23.28 | \$10.58 | \$12.28 | \$0.00 | \$46.14 |
| 3 | 80 | \$26.60 | \$10.58 | \$12.28 | \$0.00 | \$49.46 |
| 4 | 90 | \$29.93 | \$10.58 | \$12.28 | \$0.00 | \$52.79 |

Notes:

Steps 1-2 are 1000 hrs.; Steps 3-4 are 2000 hrs.

Apprentice to Journeyworker Ratio:1:6

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| FLAGGER & SIGNALER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$20.50 | \$7.45 | \$10.52 | \$0.00 | \$38.47 |
| | 12/01/2016 | \$20.50 | \$7.45 | \$10.52 | \$0.00 | \$38.47 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway) | | | | | | |
| FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE III</i> | 03/01/2016 | \$32.60 | \$8.55 | \$14.42 | \$0.00 | \$55.57 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - FLOORCOVERER - Local 2168 Zone III

Effective Date - 03/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.30 | \$8.55 | \$1.20 | \$0.00 | \$26.05 |
| 2 | 55 | \$17.93 | \$8.55 | \$1.20 | \$0.00 | \$27.68 |
| 3 | 60 | \$19.56 | \$8.55 | \$10.82 | \$0.00 | \$38.93 |
| 4 | 65 | \$21.19 | \$8.55 | \$10.82 | \$0.00 | \$40.56 |
| 5 | 70 | \$22.82 | \$8.55 | \$12.02 | \$0.00 | \$43.39 |
| 6 | 75 | \$24.45 | \$8.55 | \$12.02 | \$0.00 | \$45.02 |
| 7 | 80 | \$26.08 | \$8.55 | \$13.22 | \$0.00 | \$47.85 |
| 8 | 85 | \$27.71 | \$8.55 | \$13.22 | \$0.00 | \$49.48 |

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|-------------------------------------|------------|---------|---------|---------|--------|---------|
| FORK LIFT | 06/01/2016 | \$33.07 | \$10.38 | \$12.01 | \$0.00 | \$55.46 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | 12/01/2016 | \$33.47 | \$10.58 | \$12.28 | \$0.00 | \$56.33 |
| | 06/01/2017 | \$34.08 | \$10.58 | \$12.55 | \$0.00 | \$57.21 |
| | 12/01/2017 | \$34.68 | \$10.58 | \$12.82 | \$0.00 | \$58.08 |
| | 06/01/2018 | \$35.29 | \$10.58 | \$13.09 | \$0.00 | \$58.96 |
| | 12/01/2018 | \$35.89 | \$10.58 | \$13.36 | \$0.00 | \$59.83 |
| | 06/01/2019 | \$36.40 | \$10.58 | \$13.63 | \$0.00 | \$60.61 |
| | 12/01/2019 | \$37.00 | \$10.58 | \$13.90 | \$0.00 | \$61.48 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|-------------------------------------|------------|---------|---------|---------|--------|---------|
| GENERATORS/LIGHTING PLANTS | 06/01/2016 | \$29.62 | \$10.38 | \$12.01 | \$0.00 | \$52.01 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | 12/01/2016 | \$30.02 | \$10.58 | \$12.28 | \$0.00 | \$52.88 |
| | 06/01/2017 | \$30.63 | \$10.58 | \$12.55 | \$0.00 | \$53.76 |
| | 12/01/2017 | \$31.23 | \$10.58 | \$12.82 | \$0.00 | \$54.63 |
| | 06/01/2018 | \$31.84 | \$10.58 | \$13.09 | \$0.00 | \$55.51 |
| | 12/01/2018 | \$32.44 | \$10.58 | \$13.36 | \$0.00 | \$56.38 |
| | 06/01/2019 | \$32.95 | \$10.58 | \$13.63 | \$0.00 | \$57.16 |
| | 12/01/2019 | \$33.55 | \$10.58 | \$13.90 | \$0.00 | \$58.03 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|---------|--------|--------|---------|
| GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) | 06/01/2016 | \$35.58 | \$10.70 | \$8.25 | \$0.00 | \$54.53 |
| <i>GLAZIERS LOCAL 1333</i> | | | | | | |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - GLAZIER - Local 1333

Effective Date - 06/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$17.79 | \$10.70 | \$1.00 | \$0.00 | \$29.49 |
| 2 | 56 | \$20.01 | \$10.70 | \$1.00 | \$0.00 | \$31.71 |
| 3 | 63 | \$22.24 | \$10.70 | \$1.50 | \$0.00 | \$34.44 |
| 4 | 69 | \$24.46 | \$10.70 | \$1.50 | \$0.00 | \$36.66 |
| 5 | 75 | \$26.69 | \$10.70 | \$2.00 | \$0.00 | \$39.39 |
| 6 | 81 | \$28.91 | \$10.70 | \$2.00 | \$0.00 | \$41.61 |
| 7 | 88 | \$31.13 | \$10.70 | \$8.00 | \$0.00 | \$49.83 |
| 8 | 94 | \$33.36 | \$10.70 | \$8.00 | \$0.00 | \$52.06 |

Notes:

Apprentice to Journeyworker Ratio:1:3

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| GRADER/TRENCHING MACHINE/DERRICK <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| HVAC (DUCTWORK) <i>SHEETMETAL WORKERS LOCAL 63</i> | 07/01/2016 | \$32.28 | \$10.54 | \$14.90 | \$1.70 | \$59.42 |
| | 01/01/2017 | \$33.03 | \$10.54 | \$14.90 | \$1.70 | \$60.17 |

For apprentice rates see "Apprentice- SHEET METAL WORKER"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| HVAC (ELECTRICAL CONTROLS) <i>ELECTRICIANS LOCAL 7</i> | 07/03/2016 | \$39.11 | \$9.35 | \$10.32 | \$0.00 | \$58.78 |
| | 01/01/2017 | \$40.01 | \$9.35 | \$10.32 | \$0.00 | \$59.68 |

For apprentice rates see "Apprentice- ELECTRICIAN"

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 63</i> | 07/01/2016 | \$32.28 | \$10.54 | \$14.90 | \$1.70 | \$59.42 |
| | 01/01/2017 | \$33.03 | \$10.54 | \$14.90 | \$1.70 | \$60.17 |

For apprentice rates see "Apprentice- SHEET METAL WORKER"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| HVAC (TESTING AND BALANCING - WATER) <i>PLUMBERS & PIPEFITTERS LOCAL 104</i> | 03/17/2016 | \$38.26 | \$8.45 | \$15.05 | \$0.00 | \$61.76 |
|---|------------|---------|--------|---------|--------|---------|

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

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| HVAC MECHANIC <i>PLUMBERS & PIPEFITTERS LOCAL 104</i> | 03/17/2016 | \$38.26 | \$8.45 | \$15.05 | \$0.00 | \$61.76 |
|--|------------|---------|--------|---------|--------|---------|

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

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.75 | \$7.45 | \$10.52 | \$0.00 | \$47.72 |
| | 12/01/2016 | \$30.50 | \$7.45 | \$10.52 | \$0.00 | \$48.47 |

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)</i> | 09/01/2015 | \$35.05 | \$11.50 | \$13.80 | \$0.00 | \$60.35 |
| | 09/01/2016 | \$36.65 | \$11.50 | \$13.80 | \$0.00 | \$61.95 |
| | 09/01/2017 | \$38.25 | \$11.50 | \$13.80 | \$0.00 | \$63.55 |
| | 09/01/2018 | \$40.05 | \$11.50 | \$13.80 | \$0.00 | \$65.35 |
| | 09/01/2019 | \$42.05 | \$11.50 | \$13.80 | \$0.00 | \$67.35 |

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

Effective Date - 09/01/2015

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$17.53 | \$11.50 | \$10.05 | \$0.00 | \$39.08 |
| 2 | 60 | \$21.03 | \$11.50 | \$10.80 | \$0.00 | \$43.33 |
| 3 | 70 | \$24.54 | \$11.50 | \$11.55 | \$0.00 | \$47.59 |
| 4 | 80 | \$28.04 | \$11.50 | \$12.30 | \$0.00 | \$51.84 |

Effective Date - 09/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$18.33 | \$11.50 | \$10.05 | \$0.00 | \$39.88 |
| 2 | 60 | \$21.99 | \$11.50 | \$10.80 | \$0.00 | \$44.29 |
| 3 | 70 | \$25.66 | \$11.50 | \$11.55 | \$0.00 | \$48.71 |
| 4 | 80 | \$29.32 | \$11.50 | \$12.30 | \$0.00 | \$53.12 |

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (SPRINGFIELD AREA)</i> | 03/16/2016 | \$31.09 | \$7.80 | \$19.60 | \$0.00 | \$58.49 |
| | 09/16/2016 | \$31.74 | \$7.80 | \$19.60 | \$0.00 | \$59.14 |
| | 03/16/2017 | \$32.39 | \$7.80 | \$19.60 | \$0.00 | \$59.79 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Springfield

Effective Date - 03/16/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$18.65 | \$7.80 | \$19.60 | \$0.00 | \$46.05 |
| 2 | 70 | \$21.76 | \$7.80 | \$19.60 | \$0.00 | \$49.16 |
| 3 | 75 | \$23.32 | \$7.80 | \$19.60 | \$0.00 | \$50.72 |
| 4 | 80 | \$24.87 | \$7.80 | \$19.60 | \$0.00 | \$52.27 |
| 5 | 85 | \$26.43 | \$7.80 | \$19.60 | \$0.00 | \$53.83 |
| 6 | 90 | \$27.98 | \$7.80 | \$19.60 | \$0.00 | \$55.38 |

Effective Date - 09/16/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$19.04 | \$7.80 | \$19.60 | \$0.00 | \$46.44 |
| 2 | 70 | \$22.22 | \$7.80 | \$19.60 | \$0.00 | \$49.62 |
| 3 | 75 | \$23.81 | \$7.80 | \$19.60 | \$0.00 | \$51.21 |
| 4 | 80 | \$25.39 | \$7.80 | \$19.60 | \$0.00 | \$52.79 |
| 5 | 85 | \$26.98 | \$7.80 | \$19.60 | \$0.00 | \$54.38 |
| 6 | 90 | \$28.57 | \$7.80 | \$19.60 | \$0.00 | \$55.97 |

Notes:

Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 3 (BUILDING & SITE) | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LABORER LABORERS - ZONE 3 (BUILDING & SITE) | 06/06/2016 | \$29.15 | \$7.45 | \$12.40 | \$0.00 | \$49.00 |
| | 12/05/2016 | \$29.83 | \$7.45 | \$12.40 | \$0.00 | \$49.68 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - LABORER - Zone 3 Building & Site

Effective Date - 06/06/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$17.49 | \$7.45 | \$12.40 | \$0.00 | \$37.34 |
| 2 | 70 | \$20.41 | \$7.45 | \$12.40 | \$0.00 | \$40.26 |
| 3 | 80 | \$23.32 | \$7.45 | \$12.40 | \$0.00 | \$43.17 |
| 4 | 90 | \$26.24 | \$7.45 | \$12.40 | \$0.00 | \$46.09 |

Effective Date - 12/05/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$17.90 | \$7.45 | \$12.40 | \$0.00 | \$37.75 |
| 2 | 70 | \$20.88 | \$7.45 | \$12.40 | \$0.00 | \$40.73 |
| 3 | 80 | \$23.86 | \$7.45 | \$12.40 | \$0.00 | \$43.71 |
| 4 | 90 | \$26.85 | \$7.45 | \$12.40 | \$0.00 | \$46.70 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|-------------------------------------|------------|---------|--------|---------|--------|---------|
| LABORER (HEAVY & HIGHWAY) | 06/01/2016 | \$29.00 | \$7.45 | \$10.52 | \$0.00 | \$46.97 |
| LABORERS - ZONE 3 (HEAVY & HIGHWAY) | 12/01/2016 | \$29.75 | \$7.45 | \$10.52 | \$0.00 | \$47.72 |

Apprentice - LABORER (Heavy & Highway) - Zone 3

Effective Date - 06/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$17.40 | \$7.45 | \$10.52 | \$0.00 | \$35.37 |
| 2 | 70 | \$20.30 | \$7.45 | \$10.52 | \$0.00 | \$38.27 |
| 3 | 80 | \$23.20 | \$7.45 | \$10.52 | \$0.00 | \$41.17 |
| 4 | 90 | \$26.10 | \$7.45 | \$10.52 | \$0.00 | \$44.07 |

Effective Date - 12/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$17.85 | \$7.45 | \$10.52 | \$0.00 | \$35.82 |
| 2 | 70 | \$20.83 | \$7.45 | \$10.52 | \$0.00 | \$38.80 |
| 3 | 80 | \$23.80 | \$7.45 | \$10.52 | \$0.00 | \$41.77 |
| 4 | 90 | \$26.78 | \$7.45 | \$10.52 | \$0.00 | \$44.75 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|-------------------------------------|------------|---------|--------|---------|--------|---------|
| LABORER: CARPENTER TENDER | 06/06/2016 | \$29.15 | \$7.45 | \$12.40 | \$0.00 | \$49.00 |
| LABORERS - ZONE 3 (BUILDING & SITE) | 12/05/2016 | \$29.83 | \$7.45 | \$12.40 | \$0.00 | \$49.68 |

For apprentice rates see "Apprentice- LABORER"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|-----------------------|------------------|---------------|----------------|----------------------------------|-------------------|
| LABORER: CEMENT FINISHER TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/07/2015 | \$29.10 | \$7.45 | \$11.86 | \$0.00 | \$48.41 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LABORER: MASON TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$30.15 | \$7.45 | \$12.40 | \$0.00 | \$50.00 |
| | 12/05/2016 | \$30.83 | \$7.45 | \$12.40 | \$0.00 | \$50.68 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LABORER: MASON TENDER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
| | 12/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.15 | \$7.45 | \$12.40 | \$0.00 | \$49.00 |
| | 12/05/2016 | \$29.83 | \$7.45 | \$12.40 | \$0.00 | \$49.68 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LABORER: TREE REMOVER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.15 | \$7.45 | \$12.40 | \$0.00 | \$49.00 |
| | 12/05/2016 | \$29.83 | \$7.45 | \$12.40 | \$0.00 | \$49.68 |
| 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 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| LASER BEAM OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
| | 12/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE</i> | 02/29/2016 | \$31.76 | \$10.18 | \$16.98 | \$0.00 | \$58.92 |
| | 09/05/2016 | \$32.67 | \$10.18 | \$17.05 | \$0.00 | \$59.90 |
| | 02/27/2017 | \$33.24 | \$10.18 | \$17.05 | \$0.00 | \$60.47 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO FINISHER-Local 3 Marble/Tile (Spr/Pitt)

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$15.88 | \$10.18 | \$16.98 | \$0.00 | \$43.04 |
| 2 | 60 | \$19.06 | \$10.18 | \$16.98 | \$0.00 | \$46.22 |
| 3 | 70 | \$22.23 | \$10.18 | \$16.98 | \$0.00 | \$49.39 |
| 4 | 80 | \$25.41 | \$10.18 | \$16.98 | \$0.00 | \$52.57 |
| 5 | 90 | \$28.58 | \$10.18 | \$16.98 | \$0.00 | \$55.74 |

Effective Date - 09/05/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$16.34 | \$10.18 | \$17.05 | \$0.00 | \$43.57 |
| 2 | 60 | \$19.60 | \$10.18 | \$17.05 | \$0.00 | \$46.83 |
| 3 | 70 | \$22.87 | \$10.18 | \$17.05 | \$0.00 | \$50.10 |
| 4 | 80 | \$26.14 | \$10.18 | \$17.05 | \$0.00 | \$53.37 |
| 5 | 90 | \$29.40 | \$10.18 | \$17.05 | \$0.00 | \$56.63 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| MARBLE MASONS, TILELAYERS & TERRAZZO MECH | 02/29/2016 | \$38.36 | \$10.18 | \$17.30 | \$0.00 | \$65.84 |
| BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE | 09/05/2016 | \$39.26 | \$10.18 | \$17.38 | \$0.00 | \$66.82 |
| | 02/27/2017 | \$39.83 | \$10.18 | \$17.38 | \$0.00 | \$67.39 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECH - Local 3 Marble/Tile (Spr/Pitt)

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$19.18 | \$10.18 | \$17.30 | \$0.00 | \$46.66 |
| 2 | 60 | \$23.02 | \$10.18 | \$17.30 | \$0.00 | \$50.50 |
| 3 | 70 | \$26.85 | \$10.18 | \$17.30 | \$0.00 | \$54.33 |
| 4 | 80 | \$30.69 | \$10.18 | \$17.30 | \$0.00 | \$58.17 |
| 5 | 90 | \$34.52 | \$10.18 | \$17.30 | \$0.00 | \$62.00 |

Effective Date - 09/05/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$19.63 | \$10.18 | \$17.38 | \$0.00 | \$47.19 |
| 2 | 60 | \$23.56 | \$10.18 | \$17.38 | \$0.00 | \$51.12 |
| 3 | 70 | \$27.48 | \$10.18 | \$17.38 | \$0.00 | \$55.04 |
| 4 | 80 | \$31.41 | \$10.18 | \$17.38 | \$0.00 | \$58.97 |
| 5 | 90 | \$35.33 | \$10.18 | \$17.38 | \$0.00 | \$62.89 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| MECHANIC/WELDER/BOOM TRUCK <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| MILLWRIGHT (Zone 3) <i>MILLWRIGHTS LOCAL 1121 - Zone 3</i> | 04/01/2015 | \$33.13 | \$9.80 | \$16.21 | \$0.00 | \$59.14 |
|---|------------|---------|--------|---------|--------|---------|

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MILLWRIGHT - Local 1121 Zone 3

Effective Date - 04/01/2015

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 55 | \$18.22 | \$9.80 | \$4.48 | \$0.00 | \$32.50 |
| 2 | 65 | \$21.53 | \$9.80 | \$13.36 | \$0.00 | \$44.69 |
| 3 | 75 | \$24.85 | \$9.80 | \$14.18 | \$0.00 | \$48.83 |
| 4 | 85 | \$28.16 | \$9.80 | \$14.99 | \$0.00 | \$52.95 |

Notes:
Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| MORTAR MIXER | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| OILER | 06/01/2016 | \$28.54 | \$10.38 | \$12.01 | \$0.00 | \$50.93 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | 12/01/2016 | \$28.94 | \$10.58 | \$12.28 | \$0.00 | \$51.80 |
| | 06/01/2017 | \$29.55 | \$10.58 | \$12.55 | \$0.00 | \$52.68 |
| | 12/01/2017 | \$30.15 | \$10.58 | \$12.82 | \$0.00 | \$53.55 |
| | 06/01/2018 | \$30.76 | \$10.58 | \$13.09 | \$0.00 | \$54.43 |
| | 12/01/2018 | \$31.36 | \$10.58 | \$13.36 | \$0.00 | \$55.30 |
| | 06/01/2019 | \$31.87 | \$10.58 | \$13.63 | \$0.00 | \$56.08 |
| | 12/01/2019 | \$32.47 | \$10.58 | \$13.90 | \$0.00 | \$56.95 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| OTHER POWER DRIVEN EQUIPMENT - CLASS VI | 06/01/2016 | \$26.56 | \$10.38 | \$12.01 | \$0.00 | \$48.95 |
| <i>OPERATING ENGINEERS LOCAL 98</i> | 12/01/2016 | \$26.96 | \$10.58 | \$12.28 | \$0.00 | \$49.82 |
| | 06/01/2017 | \$27.57 | \$10.58 | \$12.55 | \$0.00 | \$50.70 |
| | 12/01/2017 | \$28.17 | \$10.58 | \$12.82 | \$0.00 | \$51.57 |
| | 06/01/2018 | \$28.78 | \$10.58 | \$13.09 | \$0.00 | \$52.45 |
| | 12/01/2018 | \$29.38 | \$10.58 | \$13.36 | \$0.00 | \$53.32 |
| | 06/01/2019 | \$29.89 | \$10.58 | \$13.63 | \$0.00 | \$54.10 |
| | 12/01/2019 | \$30.49 | \$10.58 | \$13.90 | \$0.00 | \$54.97 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| PAINTER (BRIDGES/TANKS) | 07/01/2016 | \$50.46 | \$7.85 | \$16.10 | \$0.00 | \$74.41 |
| <i>PAINTERS LOCAL 35 - ZONE 3</i> | 01/01/2017 | \$51.41 | \$7.85 | \$16.10 | \$0.00 | \$75.36 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$25.23 | \$7.85 | \$0.00 | \$0.00 | \$33.08 |
| 2 | 55 | \$27.75 | \$7.85 | \$3.66 | \$0.00 | \$39.26 |
| 3 | 60 | \$30.28 | \$7.85 | \$3.99 | \$0.00 | \$42.12 |
| 4 | 65 | \$32.80 | \$7.85 | \$4.32 | \$0.00 | \$44.97 |
| 5 | 70 | \$35.32 | \$7.85 | \$14.11 | \$0.00 | \$57.28 |
| 6 | 75 | \$37.85 | \$7.85 | \$14.44 | \$0.00 | \$60.14 |
| 7 | 80 | \$40.37 | \$7.85 | \$14.77 | \$0.00 | \$62.99 |
| 8 | 90 | \$45.41 | \$7.85 | \$15.44 | \$0.00 | \$68.70 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$25.71 | \$7.85 | \$0.00 | \$0.00 | \$33.56 |
| 2 | 55 | \$28.28 | \$7.85 | \$3.66 | \$0.00 | \$39.79 |
| 3 | 60 | \$30.85 | \$7.85 | \$3.99 | \$0.00 | \$42.69 |
| 4 | 65 | \$33.42 | \$7.85 | \$4.32 | \$0.00 | \$45.59 |
| 5 | 70 | \$35.99 | \$7.85 | \$14.11 | \$0.00 | \$57.95 |
| 6 | 75 | \$38.56 | \$7.85 | \$14.44 | \$0.00 | \$60.85 |
| 7 | 80 | \$41.13 | \$7.85 | \$14.77 | \$0.00 | \$63.75 |
| 8 | 90 | \$46.27 | \$7.85 | \$15.44 | \$0.00 | \$69.56 |

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| PAINTER (SPRAY OR SANDBLAST, NEW) * | 07/01/2016 | \$33.78 | \$7.85 | \$12.30 | \$0.00 | \$53.93 |
| * If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 3 | 01/01/2017 | \$34.68 | \$7.85 | \$12.30 | \$0.00 | \$54.83 |

Apprentice - PAINTER Local 35 Zone 3 - Spray/Sandblast - New

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.89 | \$7.85 | \$0.00 | \$0.00 | \$24.74 |
| 2 | 55 | \$18.58 | \$7.85 | \$1.57 | \$0.00 | \$28.00 |
| 3 | 60 | \$20.27 | \$7.85 | \$1.71 | \$0.00 | \$29.83 |
| 4 | 65 | \$21.96 | \$7.85 | \$1.85 | \$0.00 | \$31.66 |
| 5 | 70 | \$23.65 | \$7.85 | \$11.45 | \$0.00 | \$42.95 |
| 6 | 75 | \$25.34 | \$7.85 | \$11.59 | \$0.00 | \$44.78 |
| 7 | 80 | \$27.02 | \$7.85 | \$11.73 | \$0.00 | \$46.60 |
| 8 | 90 | \$30.40 | \$7.85 | \$12.02 | \$0.00 | \$50.27 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$17.34 | \$7.85 | \$0.00 | \$0.00 | \$25.19 |
| 2 | 55 | \$19.07 | \$7.85 | \$1.57 | \$0.00 | \$28.49 |
| 3 | 60 | \$20.81 | \$7.85 | \$1.71 | \$0.00 | \$30.37 |
| 4 | 65 | \$22.54 | \$7.85 | \$1.85 | \$0.00 | \$32.24 |
| 5 | 70 | \$24.28 | \$7.85 | \$11.45 | \$0.00 | \$43.58 |
| 6 | 75 | \$26.01 | \$7.85 | \$11.59 | \$0.00 | \$45.45 |
| 7 | 80 | \$27.74 | \$7.85 | \$11.73 | \$0.00 | \$47.32 |
| 8 | 90 | \$31.21 | \$7.85 | \$12.02 | \$0.00 | \$51.08 |

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|---------------------------------------|------------|---------|--------|---------|--------|---------|
| PAINTER (SPRAY OR SANDBLAST, REPAINT) | 07/01/2016 | \$31.11 | \$7.85 | \$12.30 | \$0.00 | \$51.26 |
| PAINTERS LOCAL 35 - ZONE 3 | 01/01/2017 | \$32.00 | \$7.85 | \$12.30 | \$0.00 | \$52.15 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 3 - Spray/Sandblast - Repaint

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$15.56 | \$7.85 | \$0.00 | \$0.00 | \$23.41 |
| 2 | 55 | \$17.11 | \$7.85 | \$1.57 | \$0.00 | \$26.53 |
| 3 | 60 | \$18.67 | \$7.85 | \$1.71 | \$0.00 | \$28.23 |
| 4 | 65 | \$20.22 | \$7.85 | \$1.85 | \$0.00 | \$29.92 |
| 5 | 70 | \$21.78 | \$7.85 | \$11.45 | \$0.00 | \$41.08 |
| 6 | 75 | \$23.33 | \$7.85 | \$11.59 | \$0.00 | \$42.77 |
| 7 | 80 | \$24.89 | \$7.85 | \$11.73 | \$0.00 | \$44.47 |
| 8 | 90 | \$28.00 | \$7.85 | \$12.02 | \$0.00 | \$47.87 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.00 | \$7.85 | \$0.00 | \$0.00 | \$23.85 |
| 2 | 55 | \$17.60 | \$7.85 | \$1.57 | \$0.00 | \$27.02 |
| 3 | 60 | \$19.20 | \$7.85 | \$1.71 | \$0.00 | \$28.76 |
| 4 | 65 | \$20.80 | \$7.85 | \$1.85 | \$0.00 | \$30.50 |
| 5 | 70 | \$22.40 | \$7.85 | \$11.45 | \$0.00 | \$41.70 |
| 6 | 75 | \$24.00 | \$7.85 | \$11.59 | \$0.00 | \$43.44 |
| 7 | 80 | \$25.60 | \$7.85 | \$11.73 | \$0.00 | \$45.18 |
| 8 | 90 | \$28.80 | \$7.85 | \$12.02 | \$0.00 | \$48.67 |

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|---|------------|---------|--------|---------|--------|---------|
| PAINTER / TAPER (BRUSH, NEW) * | 07/01/2016 | \$32.38 | \$7.85 | \$12.30 | \$0.00 | \$52.53 |
| * If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 3 | 01/01/2017 | \$33.28 | \$7.85 | \$12.30 | \$0.00 | \$53.43 |

Apprentice - PAINTER - Local 35 Zone 3 - BRUSH NEW

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.19 | \$7.85 | \$0.00 | \$0.00 | \$24.04 |
| 2 | 55 | \$17.81 | \$7.85 | \$1.57 | \$0.00 | \$27.23 |
| 3 | 60 | \$19.43 | \$7.85 | \$1.71 | \$0.00 | \$28.99 |
| 4 | 65 | \$21.05 | \$7.85 | \$1.85 | \$0.00 | \$30.75 |
| 5 | 70 | \$22.67 | \$7.85 | \$11.45 | \$0.00 | \$41.97 |
| 6 | 75 | \$24.29 | \$7.85 | \$11.59 | \$0.00 | \$43.73 |
| 7 | 80 | \$25.90 | \$7.85 | \$11.73 | \$0.00 | \$45.48 |
| 8 | 90 | \$29.14 | \$7.85 | \$12.02 | \$0.00 | \$49.01 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$16.64 | \$7.85 | \$0.00 | \$0.00 | \$24.49 |
| 2 | 55 | \$18.30 | \$7.85 | \$1.57 | \$0.00 | \$27.72 |
| 3 | 60 | \$19.97 | \$7.85 | \$1.71 | \$0.00 | \$29.53 |
| 4 | 65 | \$21.63 | \$7.85 | \$1.85 | \$0.00 | \$31.33 |
| 5 | 70 | \$23.30 | \$7.85 | \$11.45 | \$0.00 | \$42.60 |
| 6 | 75 | \$24.96 | \$7.85 | \$11.59 | \$0.00 | \$44.40 |
| 7 | 80 | \$26.62 | \$7.85 | \$11.73 | \$0.00 | \$46.20 |
| 8 | 90 | \$29.95 | \$7.85 | \$12.02 | \$0.00 | \$49.82 |

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|----------------------------------|------------|---------|--------|---------|--------|---------|
| PAINTER / TAPER (BRUSH, REPAINT) | 07/01/2016 | \$29.70 | \$7.85 | \$12.30 | \$0.00 | \$49.85 |
| PAINTERS LOCAL 35 - ZONE 3 | 01/01/2017 | \$30.60 | \$7.85 | \$12.30 | \$0.00 | \$50.75 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 3 - BRUSH REPAINT

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$14.85 | \$7.85 | \$0.00 | \$0.00 | \$22.70 |
| 2 | 55 | \$16.34 | \$7.85 | \$1.57 | \$0.00 | \$25.76 |
| 3 | 60 | \$17.82 | \$7.85 | \$1.71 | \$0.00 | \$27.38 |
| 4 | 65 | \$19.31 | \$7.85 | \$1.85 | \$0.00 | \$29.01 |
| 5 | 70 | \$20.79 | \$7.85 | \$11.45 | \$0.00 | \$40.09 |
| 6 | 75 | \$22.28 | \$7.85 | \$11.59 | \$0.00 | \$41.72 |
| 7 | 80 | \$23.76 | \$7.85 | \$11.73 | \$0.00 | \$43.34 |
| 8 | 90 | \$26.73 | \$7.85 | \$12.02 | \$0.00 | \$46.60 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 50 | \$15.30 | \$7.85 | \$0.00 | \$0.00 | \$23.15 |
| 2 | 55 | \$16.83 | \$7.85 | \$1.57 | \$0.00 | \$26.25 |
| 3 | 60 | \$18.36 | \$7.85 | \$1.71 | \$0.00 | \$27.92 |
| 4 | 65 | \$19.89 | \$7.85 | \$1.85 | \$0.00 | \$29.59 |
| 5 | 70 | \$21.42 | \$7.85 | \$11.45 | \$0.00 | \$40.72 |
| 6 | 75 | \$22.95 | \$7.85 | \$11.59 | \$0.00 | \$42.39 |
| 7 | 80 | \$24.48 | \$7.85 | \$11.73 | \$0.00 | \$44.06 |
| 8 | 90 | \$27.54 | \$7.85 | \$12.02 | \$0.00 | \$47.41 |

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY) LABORERS - ZONE 3 (HEAVY & HIGHWAY) | 06/01/2016 | \$29.00 | \$7.45 | \$10.52 | \$0.00 | \$46.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway) | 12/01/2016 | \$29.75 | \$7.45 | \$10.52 | \$0.00 | \$47.72 |
| PANEL & PICKUP TRUCKS DRIVER TEAMSTERS JOINT COUNCIL NO. 10 ZONE B | 12/01/2012 | \$30.28 | \$9.07 | \$8.00 | \$0.00 | \$47.35 |
| PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 (ZONE 3) | 08/31/2015 | \$39.00 | \$9.80 | \$18.17 | \$0.00 | \$66.97 |
| For apprentice rates see "Apprentice- PILE DRIVER" | 08/31/2015 | \$39.00 | \$9.80 | \$18.17 | \$0.00 | \$66.97 |
| PILE DRIVER PILE DRIVER LOCAL 56 (ZONE 3) | | | | | | |

Apprentice - PILE DRIVER - Local 56 Zone 3

Effective Date - 08/31/2015

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 0 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

Notes: Apprentice wages shall be no less than the following Steps;
 (Same as set in Zone 1)
 1\$50.05/2\$54.25/3\$58.46/4\$60.56/5\$62.66/6\$62.66/7\$66.87/8\$66.87

Apprentice to Journeyworker Ratio:1:3

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PIPELAYER LABORERS - ZONE 3 (BUILDING & SITE) | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
|--|------------|---------|--------|---------|--------|---------|

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PIPELAYER (HEAVY & HIGHWAY) LABORERS - ZONE 3 (HEAVY & HIGHWAY) | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
|--|------------|---------|--------|---------|--------|---------|

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PLUMBER & PIPEFITTER PLUMBERS & PIPEFITTERS LOCAL 104 | 03/17/2016 | \$38.26 | \$8.45 | \$15.05 | \$0.00 | \$61.76 |
|--|------------|---------|--------|---------|--------|---------|

Apprentice - PLUMBER/PIPEFITTER - Local 104

Effective Date - 03/17/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 45 | \$17.22 | \$8.45 | \$9.05 | \$0.00 | \$34.72 |
| 2 | 50 | \$19.13 | \$8.45 | \$9.05 | \$0.00 | \$36.63 |
| 3 | 60 | \$22.96 | \$8.45 | \$9.05 | \$0.00 | \$40.46 |
| 4 | 70 | \$26.78 | \$8.45 | \$9.05 | \$0.00 | \$44.28 |
| 5 | 80 | \$30.61 | \$8.45 | \$15.05 | \$0.00 | \$54.11 |

Notes:
 Steps are 2000 hrs.

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PNEUMATIC CONTROLS (TEMP.) PLUMBERS & PIPEFITTERS LOCAL 104 | 03/17/2016 | \$38.26 | \$8.45 | \$15.05 | \$0.00 | \$61.76 |
|--|------------|---------|--------|---------|--------|---------|

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

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS - ZONE 3 (HEAVY & HIGHWAY) | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
|--|------------|---------|--------|---------|--------|---------|

LABORERS - ZONE 3 (HEAVY & HIGHWAY)

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| POWDERMAN & BLASTER LABORERS - ZONE 3 (BUILDING & SITE) | 06/06/2016 | \$30.15 | \$7.45 | \$12.40 | \$0.00 | \$50.00 |
|--|------------|---------|--------|---------|--------|---------|

For apprentice rates see "Apprentice- LABORER"

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS - ZONE 3 (HEAVY & HIGHWAY) | 06/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
|--|------------|---------|--------|---------|--------|---------|

LABORERS - ZONE 3 (HEAVY & HIGHWAY)

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$33.38 | \$10.38 | \$12.01 | \$0.00 | \$55.77 |
| | 12/01/2016 | \$33.78 | \$10.58 | \$12.28 | \$0.00 | \$56.64 |
| | 06/01/2017 | \$34.39 | \$10.58 | \$12.55 | \$0.00 | \$57.52 |
| | 12/01/2017 | \$34.99 | \$10.58 | \$12.82 | \$0.00 | \$58.39 |
| | 06/01/2018 | \$35.60 | \$10.58 | \$13.09 | \$0.00 | \$59.27 |
| | 12/01/2018 | \$36.20 | \$10.58 | \$13.36 | \$0.00 | \$60.14 |
| | 06/01/2019 | \$36.71 | \$10.58 | \$13.63 | \$0.00 | \$60.92 |
| | 12/01/2019 | \$37.31 | \$10.58 | \$13.90 | \$0.00 | \$61.79 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

| | | | | | | |
|---|------------|---------|---------|--------|--------|---------|
| READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 404</i> | 05/01/2016 | \$21.01 | \$10.23 | \$9.40 | \$0.00 | \$40.64 |
|---|------------|---------|---------|--------|--------|---------|

| | | | | | | |
|-------------------------------------|------------|---------|--------|--------|--------|---------|
| RESIDENTIAL WOOD FRAME CARPENTER ** | 02/29/2016 | \$26.81 | \$7.20 | \$5.35 | \$0.00 | \$39.36 |
|-------------------------------------|------------|---------|--------|--------|--------|---------|

** 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. *CARPENTERS LOCAL 108 - HAMPDEN HAMPSHIRE*

As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.

Apprentice - CARPENTER (Residential Wood Frame) - 108 Hampden Hampshire

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$16.09 | \$7.20 | \$0.00 | \$0.00 | \$23.29 |
| 2 | 60 | \$16.09 | \$7.20 | \$5.35 | \$0.00 | \$28.64 |
| 3 | 65 | \$17.43 | \$7.20 | \$5.35 | \$0.00 | \$29.98 |
| 4 | 70 | \$18.77 | \$7.20 | \$5.35 | \$0.00 | \$31.32 |
| 5 | 75 | \$20.11 | \$7.20 | \$5.35 | \$0.00 | \$32.66 |
| 6 | 80 | \$21.45 | \$7.20 | \$5.35 | \$0.00 | \$34.00 |
| 7 | 85 | \$22.79 | \$7.20 | \$5.35 | \$0.00 | \$35.34 |
| 8 | 90 | \$24.13 | \$7.20 | \$5.35 | \$0.00 | \$36.68 |

Notes:

** 1: 1-5, 2: 6-8, 3: 9-11

Apprentice to Journeyworker Ratio:**

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |

For apprentice rates see "Apprentice- LABORER"

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| ROLLER OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.24 | \$10.38 | \$12.01 | \$0.00 | \$54.63 |
| | 12/01/2016 | \$32.64 | \$10.58 | \$12.28 | \$0.00 | \$55.50 |
| | 06/01/2017 | \$33.25 | \$10.58 | \$12.55 | \$0.00 | \$56.38 |
| | 12/01/2017 | \$33.85 | \$10.58 | \$12.82 | \$0.00 | \$57.25 |
| | 06/01/2018 | \$34.46 | \$10.58 | \$13.09 | \$0.00 | \$58.13 |
| | 12/01/2018 | \$35.06 | \$10.58 | \$13.36 | \$0.00 | \$59.00 |
| | 06/01/2019 | \$35.57 | \$10.58 | \$13.63 | \$0.00 | \$59.78 |
| | 12/01/2019 | \$36.17 | \$10.58 | \$13.90 | \$0.00 | \$60.65 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| ROOFER (Coal tar pitch) <i>ROOFERS LOCAL 248</i> | 07/16/2016 | \$31.25 | \$9.41 | \$13.25 | \$0.00 | \$53.91 |
| | 10/16/2016 | \$32.25 | \$9.41 | \$13.25 | \$0.00 | \$54.91 |
| For apprentice rates see "Apprentice- ROOFER" | | | | | | |
| ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg) <i>ROOFERS LOCAL 248</i> | 07/01/2016 | \$30.75 | \$9.41 | \$12.75 | \$0.00 | \$52.91 |
| | 10/16/2016 | \$31.75 | \$9.41 | \$12.75 | \$0.00 | \$53.91 |

Apprentice - ROOFER - Local 248

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$18.45 | \$9.41 | \$0.00 | \$0.00 | \$27.86 |
| 2 | 65 | \$19.99 | \$9.41 | \$12.75 | \$0.00 | \$42.15 |
| 3 | 70 | \$21.53 | \$9.41 | \$12.75 | \$0.00 | \$43.69 |
| 4 | 75 | \$23.06 | \$9.41 | \$12.75 | \$0.00 | \$45.22 |
| 5 | 80 | \$24.60 | \$9.41 | \$12.75 | \$0.00 | \$46.76 |
| 6 | 85 | \$26.14 | \$9.41 | \$12.75 | \$0.00 | \$48.30 |
| 7 | 90 | \$27.68 | \$9.41 | \$12.75 | \$0.00 | \$49.84 |
| 8 | 95 | \$29.21 | \$9.41 | \$12.75 | \$0.00 | \$51.37 |

Effective Date - 10/16/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$19.05 | \$9.41 | \$0.00 | \$0.00 | \$28.46 |
| 2 | 65 | \$20.64 | \$9.41 | \$12.75 | \$0.00 | \$42.80 |
| 3 | 70 | \$22.23 | \$9.41 | \$12.75 | \$0.00 | \$44.39 |
| 4 | 75 | \$23.81 | \$9.41 | \$12.75 | \$0.00 | \$45.97 |
| 5 | 80 | \$25.40 | \$9.41 | \$12.75 | \$0.00 | \$47.56 |
| 6 | 85 | \$26.99 | \$9.41 | \$12.75 | \$0.00 | \$49.15 |
| 7 | 90 | \$28.58 | \$9.41 | \$12.75 | \$0.00 | \$50.74 |
| 8 | 95 | \$30.16 | \$9.41 | \$12.75 | \$0.00 | \$52.32 |

Notes:

Steps are 750 hrs.Roofers(Tear Off)1:1; Same as above

Apprentice to Journeyworker Ratio:1:3

| | | | | | | |
|--|------------|---------|--------|---------|--------|---------|
| ROOFER SLATE / TILE / PRECAST CONCRETE <i>ROOFERS LOCAL 248</i> | 07/16/2016 | \$31.25 | \$9.41 | \$13.25 | \$0.00 | \$53.91 |
| | 10/16/2016 | \$32.25 | \$9.41 | \$13.25 | \$0.00 | \$54.91 |
| For apprentice rates see "Apprentice- ROOFER" | | | | | | |

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|---|----------------|-----------|---------|---------|---------------------------|------------|
| SCRAPER <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.85 | \$10.38 | \$12.01 | \$0.00 | \$55.24 |
| | 12/01/2016 | \$33.25 | \$10.58 | \$12.28 | \$0.00 | \$56.11 |
| | 06/01/2017 | \$33.86 | \$10.58 | \$12.55 | \$0.00 | \$56.99 |
| | 12/01/2017 | \$34.46 | \$10.58 | \$12.82 | \$0.00 | \$57.86 |
| | 06/01/2018 | \$35.07 | \$10.58 | \$13.09 | \$0.00 | \$58.74 |
| | 12/01/2018 | \$35.67 | \$10.58 | \$13.36 | \$0.00 | \$59.61 |
| | 06/01/2019 | \$36.18 | \$10.58 | \$13.63 | \$0.00 | \$60.39 |
| | 12/01/2019 | \$36.78 | \$10.58 | \$13.90 | \$0.00 | \$61.26 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| SELF-POWERED ROLLERS AND COMPACTORS (TAMPERS) <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.24 | \$10.38 | \$12.01 | \$0.00 | \$54.63 |
| | 12/01/2016 | \$32.64 | \$10.58 | \$12.28 | \$0.00 | \$55.50 |
| | 06/01/2017 | \$33.25 | \$10.58 | \$12.55 | \$0.00 | \$56.38 |
| | 12/01/2017 | \$33.85 | \$10.58 | \$12.82 | \$0.00 | \$57.25 |
| | 06/01/2018 | \$34.46 | \$10.58 | \$13.09 | \$0.00 | \$58.13 |
| | 12/01/2018 | \$35.06 | \$10.58 | \$13.36 | \$0.00 | \$59.00 |
| | 06/01/2019 | \$35.57 | \$10.58 | \$13.63 | \$0.00 | \$59.78 |
| | 12/01/2019 | \$36.17 | \$10.58 | \$13.90 | \$0.00 | \$60.65 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| SELF-PROPELLED POWER BROOM <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$29.62 | \$10.38 | \$12.01 | \$0.00 | \$52.01 |
| | 12/01/2016 | \$30.02 | \$10.58 | \$12.28 | \$0.00 | \$52.88 |
| | 06/01/2017 | \$30.63 | \$10.58 | \$12.55 | \$0.00 | \$53.76 |
| | 12/01/2017 | \$31.23 | \$10.58 | \$12.82 | \$0.00 | \$54.63 |
| | 06/01/2018 | \$31.84 | \$10.58 | \$13.09 | \$0.00 | \$55.51 |
| | 12/01/2018 | \$32.44 | \$10.58 | \$13.36 | \$0.00 | \$56.38 |
| | 06/01/2019 | \$32.95 | \$10.58 | \$13.63 | \$0.00 | \$57.16 |
| | 12/01/2019 | \$33.55 | \$10.58 | \$13.90 | \$0.00 | \$58.03 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| SHEETMETAL WORKER <i>SHEETMETAL WORKERS LOCAL 63</i> | 07/01/2016 | \$32.28 | \$10.54 | \$14.90 | \$1.70 | \$59.42 |
| | 01/01/2017 | \$33.03 | \$10.54 | \$14.90 | \$1.70 | \$60.17 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 63

Effective Date - 07/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 45 | \$14.53 | \$6.21 | \$4.10 | \$0.00 | \$24.84 |
| 2 | 50 | \$16.14 | \$6.55 | \$4.55 | \$0.00 | \$27.24 |
| 3 | 55 | \$17.75 | \$6.89 | \$8.19 | \$0.98 | \$33.81 |
| 4 | 60 | \$19.37 | \$7.22 | \$8.19 | \$1.04 | \$35.82 |
| 5 | 65 | \$20.98 | \$7.55 | \$8.19 | \$1.10 | \$37.82 |
| 6 | 70 | \$22.60 | \$7.88 | \$8.19 | \$1.16 | \$39.83 |
| 7 | 75 | \$24.21 | \$8.22 | \$8.19 | \$1.22 | \$41.84 |
| 8 | 80 | \$25.82 | \$9.30 | \$13.99 | \$1.47 | \$50.58 |
| 9 | 85 | \$27.44 | \$9.64 | \$13.99 | \$1.53 | \$52.60 |
| 10 | 90 | \$29.05 | \$9.98 | \$13.99 | \$1.59 | \$54.61 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 45 | \$14.86 | \$6.21 | \$4.10 | \$0.00 | \$25.17 |
| 2 | 50 | \$16.52 | \$6.55 | \$4.55 | \$0.00 | \$27.62 |
| 3 | 55 | \$18.17 | \$6.89 | \$8.19 | \$1.00 | \$34.25 |
| 4 | 60 | \$19.82 | \$7.22 | \$8.19 | \$1.06 | \$36.29 |
| 5 | 65 | \$21.47 | \$7.55 | \$8.19 | \$1.12 | \$38.33 |
| 6 | 70 | \$23.12 | \$7.88 | \$8.19 | \$1.18 | \$40.37 |
| 7 | 75 | \$24.77 | \$8.22 | \$8.19 | \$1.24 | \$42.42 |
| 8 | 80 | \$26.42 | \$9.30 | \$13.99 | \$1.49 | \$51.20 |
| 9 | 85 | \$28.08 | \$9.64 | \$13.99 | \$1.55 | \$53.26 |
| 10 | 90 | \$29.73 | \$9.98 | \$13.99 | \$1.61 | \$55.31 |

Notes:

Apprentice to Journeyworker Ratio:1:3

| | | | | | | |
|--|------------|---------|--------|--------|--------|---------|
| SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 3 | 06/01/2013 | \$25.81 | \$7.07 | \$7.05 | \$0.00 | \$39.93 |
|--|------------|---------|--------|--------|--------|---------|

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SIGN ERECTOR - Local 35 Zone 3

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 <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.44 | \$10.41 | \$10.08 | \$0.00 | \$52.93 |
| | 08/01/2016 | \$32.44 | \$10.91 | \$10.08 | \$0.00 | \$53.43 |
| | 12/01/2016 | \$32.44 | \$10.91 | \$10.89 | \$0.00 | \$54.24 |
| SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.73 | \$10.41 | \$10.08 | \$0.00 | \$53.22 |
| | 08/01/2016 | \$32.73 | \$10.91 | \$10.08 | \$0.00 | \$53.72 |
| | 12/01/2016 | \$32.73 | \$10.91 | \$10.89 | \$0.00 | \$54.53 |
| SPRINKLER FITTER <i>SPRINKLER FITTERS LOCAL 669</i> | 01/01/2016 | \$38.01 | \$8.52 | \$12.13 | \$0.00 | \$58.66 |

Apprentice - SPRINKLER FITTER - Local 669

Effective Date - 01/01/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 45 | \$17.10 | \$7.45 | \$0.00 | \$0.00 | \$24.55 |
| 2 | 50 | \$19.01 | \$7.45 | \$0.00 | \$0.00 | \$26.46 |
| 3 | 55 | \$20.91 | \$8.52 | \$6.30 | \$0.00 | \$35.73 |
| 4 | 60 | \$22.81 | \$8.52 | \$6.30 | \$0.00 | \$37.63 |
| 5 | 65 | \$24.71 | \$8.52 | \$6.55 | \$0.00 | \$39.78 |
| 6 | 70 | \$26.61 | \$8.52 | \$6.55 | \$0.00 | \$41.68 |
| 7 | 75 | \$28.51 | \$8.52 | \$6.55 | \$0.00 | \$43.58 |
| 8 | 80 | \$30.41 | \$8.52 | \$6.55 | \$0.00 | \$45.48 |
| 9 | 85 | \$32.31 | \$8.52 | \$6.55 | \$0.00 | \$47.38 |
| 10 | 90 | \$34.21 | \$8.52 | \$6.55 | \$0.00 | \$49.28 |

Notes:

Apprentice to Journeyworker Ratio:1:1

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------------------------------|----------------|-----------|--------|---------|---------------------------|------------|
| TELECOMMUNICATION TECHNICIAN | 07/03/2016 | \$39.11 | \$9.35 | \$10.32 | \$0.00 | \$58.78 |
| <i>ELECTRICIANS LOCAL 7</i> | 01/01/2017 | \$40.01 | \$9.35 | \$10.32 | \$0.00 | \$59.68 |

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 7

Effective Date - 07/03/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 40 | \$15.64 | \$5.00 | \$0.47 | \$0.00 | \$21.11 |
| 2 | 45 | \$17.60 | \$5.00 | \$0.53 | \$0.00 | \$23.13 |
| 3 | 50 | \$19.56 | \$9.35 | \$6.04 | \$0.00 | \$34.95 |
| 4 | 55 | \$21.51 | \$9.35 | \$6.10 | \$0.00 | \$36.96 |
| 5 | 65 | \$25.42 | \$9.35 | \$7.21 | \$0.00 | \$41.98 |
| 6 | 70 | \$27.38 | \$9.35 | \$8.27 | \$0.00 | \$45.00 |

Effective Date - 01/01/2017

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 40 | \$16.00 | \$5.00 | \$0.48 | \$0.00 | \$21.48 |
| 2 | 45 | \$18.00 | \$5.00 | \$0.54 | \$0.00 | \$23.54 |
| 3 | 50 | \$20.01 | \$9.35 | \$6.05 | \$0.00 | \$35.41 |
| 4 | 55 | \$22.01 | \$9.35 | \$6.11 | \$0.00 | \$37.47 |
| 5 | 65 | \$26.01 | \$9.35 | \$7.23 | \$0.00 | \$42.59 |
| 6 | 70 | \$28.01 | \$9.35 | \$8.29 | \$0.00 | \$45.65 |

Notes:

Steps are 800 hours

Apprentice to Journeyworker Ratio:1:1

| | | | | | | |
|---|------------|---------|---------|---------|--------|---------|
| TERRAZZO FINISHERS | 02/29/2016 | \$31.76 | \$10.18 | \$16.98 | \$0.00 | \$58.92 |
| <i>BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE</i> | 09/05/2016 | \$32.67 | \$10.18 | \$17.05 | \$0.00 | \$59.90 |
| | 02/27/2017 | \$33.24 | \$10.18 | \$17.05 | \$0.00 | \$60.47 |

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO FINISHER-Local 3 Marble/Tile (Spr/Pitt)

Effective Date - 02/29/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$15.88 | \$10.18 | \$16.98 | \$0.00 | \$43.04 |
| 2 | 60 | \$19.06 | \$10.18 | \$16.98 | \$0.00 | \$46.22 |
| 3 | 70 | \$22.23 | \$10.18 | \$16.98 | \$0.00 | \$49.39 |
| 4 | 80 | \$25.41 | \$10.18 | \$16.98 | \$0.00 | \$52.57 |
| 5 | 90 | \$28.58 | \$10.18 | \$16.98 | \$0.00 | \$55.74 |

Effective Date - 09/05/2016

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|---------|---------|---------------------------|------------|
| 1 | 50 | \$16.34 | \$10.18 | \$17.05 | \$0.00 | \$43.57 |
| 2 | 60 | \$19.60 | \$10.18 | \$17.05 | \$0.00 | \$46.83 |
| 3 | 70 | \$22.87 | \$10.18 | \$17.05 | \$0.00 | \$50.10 |
| 4 | 80 | \$26.14 | \$10.18 | \$17.05 | \$0.00 | \$53.37 |
| 5 | 90 | \$29.40 | \$10.18 | \$17.05 | \$0.00 | \$56.63 |

Notes:

Apprentice to Journeyworker Ratio:1:5

| | | | | | | |
|--|------------|---------|---------|---------|--------|---------|
| TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i> | 06/01/2016 | \$37.20 | \$7.45 | \$14.00 | \$0.00 | \$58.65 |
| | 12/01/2016 | \$38.20 | \$7.45 | \$14.00 | \$0.00 | \$59.65 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i> | 06/01/2016 | \$35.92 | \$7.45 | \$14.00 | \$0.00 | \$57.37 |
| | 12/01/2016 | \$36.92 | \$7.45 | \$14.00 | \$0.00 | \$58.37 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i> | 06/01/2016 | \$35.80 | \$7.45 | \$14.00 | \$0.00 | \$57.25 |
| | 12/01/2016 | \$36.80 | \$7.45 | \$14.00 | \$0.00 | \$58.25 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| TRACTORS <i>OPERATING ENGINEERS LOCAL 98</i> | 06/01/2016 | \$32.24 | \$10.38 | \$12.01 | \$0.00 | \$54.63 |
| | 12/01/2016 | \$32.64 | \$10.58 | \$12.28 | \$0.00 | \$55.50 |
| | 06/01/2017 | \$33.25 | \$10.58 | \$12.55 | \$0.00 | \$56.38 |
| | 12/01/2017 | \$33.85 | \$10.58 | \$12.82 | \$0.00 | \$57.25 |
| | 06/01/2018 | \$34.46 | \$10.58 | \$13.09 | \$0.00 | \$58.13 |
| | 12/01/2018 | \$35.06 | \$10.58 | \$13.36 | \$0.00 | \$59.00 |
| | 06/01/2019 | \$35.57 | \$10.58 | \$13.63 | \$0.00 | \$59.78 |
| | 12/01/2019 | \$36.17 | \$10.58 | \$13.90 | \$0.00 | \$60.65 |
| For apprentice rates see "Apprentice- OPERATING ENGINEERS" | | | | | | |
| TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$33.02 | \$10.41 | \$10.08 | \$0.00 | \$53.51 |
| | 08/01/2016 | \$33.02 | \$10.91 | \$10.08 | \$0.00 | \$54.01 |
| | 12/01/2016 | \$33.02 | \$10.91 | \$10.89 | \$0.00 | \$54.82 |
| TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i> | 06/01/2016 | \$48.08 | \$7.45 | \$14.40 | \$0.00 | \$69.93 |
| | 12/01/2016 | \$49.08 | \$7.45 | \$14.40 | \$0.00 | \$70.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |

| Classification | Effective Date | Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|--|-----------------------|------------------|---------------|----------------|----------------------------------|-------------------|
| TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i> | 06/01/2016 | \$50.08 | \$7.45 | \$14.40 | \$0.00 | \$71.93 |
| | 12/01/2016 | \$51.08 | \$7.45 | \$14.40 | \$0.00 | \$72.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i> | 06/01/2016 | \$40.15 | \$7.45 | \$14.40 | \$0.00 | \$62.00 |
| | 12/01/2016 | \$41.15 | \$7.45 | \$14.40 | \$0.00 | \$63.00 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i> | 06/01/2016 | \$42.15 | \$7.45 | \$14.40 | \$0.00 | \$64.00 |
| | 12/01/2016 | \$43.15 | \$7.45 | \$14.40 | \$0.00 | \$65.00 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i> | 06/01/2016 | \$32.44 | \$10.41 | \$10.08 | \$0.00 | \$52.93 |
| | 08/01/2016 | \$32.44 | \$10.91 | \$10.08 | \$0.00 | \$53.43 |
| | 12/01/2016 | \$32.44 | \$10.91 | \$10.89 | \$0.00 | \$54.24 |
| WAGON DRILL OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i> | 06/06/2016 | \$29.40 | \$7.45 | \$12.40 | \$0.00 | \$49.25 |
| | 12/05/2016 | \$30.08 | \$7.45 | \$12.40 | \$0.00 | \$49.93 |
| For apprentice rates see "Apprentice- LABORER" | | | | | | |
| WAGON DRILL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i> | 06/01/2016 | \$29.25 | \$7.45 | \$10.52 | \$0.00 | \$47.22 |
| | 12/01/2016 | \$30.00 | \$7.45 | \$10.52 | \$0.00 | \$47.97 |
| For apprentice rates see "Apprentice- LABORER (Heavy and Highway)" | | | | | | |
| WATER METER INSTALLER <i>PLUMBERS & PIPEFITTERS LOCAL 104</i> | 03/17/2016 | \$38.26 | \$8.45 | \$15.05 | \$0.00 | \$61.76 |
| For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER" | | | | | | |
| Outside Electrical - West | | | | | | |
| EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$42.16 | \$8.20 | \$9.26 | \$0.00 | \$59.62 |
| For apprentice rates see "Apprentice- LINEMAN" | | | | | | |
| GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$28.87 | \$8.20 | \$8.87 | \$0.00 | \$45.94 |
| For apprentice rates see "Apprentice- LINEMAN" | | | | | | |
| GROUNDMAN / TRUCK DRIVER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$37.73 | \$8.20 | \$9.13 | \$0.00 | \$55.06 |
| For apprentice rates see "Apprentice- LINEMAN" | | | | | | |
| HEAVY EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$44.37 | \$8.20 | \$9.33 | \$0.00 | \$61.90 |
| For apprentice rates see "Apprentice- LINEMAN" | | | | | | |
| JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$48.80 | \$8.20 | \$9.46 | \$0.00 | \$66.46 |

Apprentice - LINEMAN (Outside Electrical) - West Local 42

Effective Date - 08/30/2015

| Step | percent | Apprentice Base Wage | Health | Pension | Supplemental Unemployment | Total Rate |
|------|---------|----------------------|--------|---------|---------------------------|------------|
| 1 | 60 | \$29.28 | \$8.20 | \$0.88 | \$0.00 | \$38.36 |
| 2 | 65 | \$31.72 | \$8.20 | \$0.95 | \$0.00 | \$40.87 |
| 3 | 70 | \$34.16 | \$8.20 | \$9.02 | \$0.00 | \$51.38 |
| 4 | 75 | \$36.60 | \$8.20 | \$9.10 | \$0.00 | \$53.90 |
| 5 | 80 | \$39.04 | \$8.20 | \$9.17 | \$0.00 | \$56.41 |
| 6 | 85 | \$41.48 | \$8.20 | \$9.24 | \$0.00 | \$58.92 |
| 7 | 90 | \$43.92 | \$8.20 | \$9.32 | \$0.00 | \$61.44 |

Notes:

Apprentice to Journeyworker Ratio:1:2

| | | | | | | |
|--|------------|---------|--------|--------|--------|---------|
| TELEDATA CABLE SPLICER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 01/01/2016 | \$28.98 | \$4.25 | \$3.12 | \$0.00 | \$36.35 |
| TELEDATA LINEMAN/EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 01/01/2016 | \$27.31 | \$4.25 | \$3.07 | \$0.00 | \$34.63 |
| TELEDATA WIREMAN/INSTALLER/TECHNICIAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 01/01/2016 | \$27.31 | \$4.25 | \$3.07 | \$0.00 | \$34.63 |
| TRACTOR-TRAILER DRIVER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 08/30/2015 | \$42.16 | \$8.20 | \$9.26 | \$0.00 | \$59.62 |
| TREE TRIMMER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 01/31/2016 | \$18.51 | \$3.55 | \$0.00 | \$0.00 | \$22.06 |
| TREE TRIMMER GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i> | 01/31/2016 | \$16.32 | \$3.55 | \$0.00 | \$0.00 | \$19.87 |

This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is not on the ground. This classification does not apply to wholesale tree removal.

This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.

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.

APPENDIX B
AERIAL SITE PHOTO



8
24,280 SF

18
.02 A.
49'
50'
28'

39
15,246 SF

106 1/2 Deerfield Street

40
10,237 SF

19
.07 A.

6
7,405 SF

38
6,534 SF

7
7,145 SF

41
4,562 SF

20
3,485 SF

37
10,019 SF

21
2,614 SF

35B
6,200 SF

35A

22
4,345 SF

35

23
1,152 SF

24
3,963 SF

34

5' ALONG C.L. OF GREEN RIVER

MEADE STREET

DEERFIELD

WASH

GREEN RIVER

GREEN RIVER

12' RW

127'

33'

102

105'

226'

143'

75

32'

107'

22'

49'
50'
28'

98'

98'

128'

15

60'

129'

82'

105'

143'

122'

106

58'

38'

17

55'

19

138'

106 1/2

118'

60'

122'

114

73'

83'

111

49'

42'

19

65'

130'

167'

62'

120

52'

115

62'

18'

38'

48'

60'

22±

49'

14'

72'

125'

53'

46'

50'

15'

92'

77'

48'

131

27'

60'

30'

123

16'

101'

60'

70'

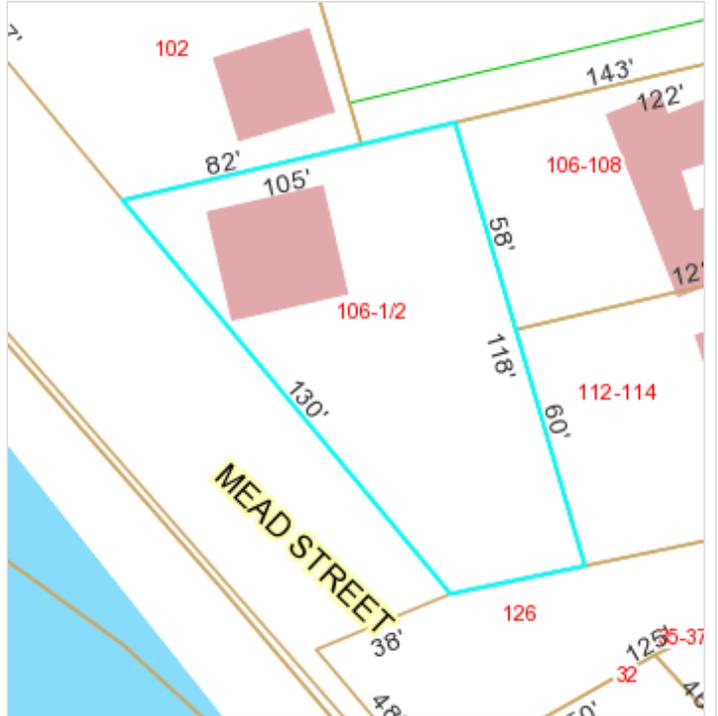
APPENDIX C
ASSESSOR'S CARD



Town of Greenfield, Massachusetts
Property Record Card Card 1 of 1

106-1/2 DEERFIELD ST

ID: **24-41-0** Book / Page: **1837/330**



Owner: SHIBILO MARTHA JEAN
 Co-Owner:
 Mailing Address: 106 1/2 DEERFIELD STREET
 GREENFIELD MA 01301

Assessment: Total: 79000
 Building: 50300, Land: 28700, Yard Items: 0

Sales History

| Grantor | Legal Reference | Sale Date | Sale Price |
|---------|-----------------|-----------|------------|
| SHIBILO | 1837/330 | 1/1/1985 | 0 |

MainStreetGIS, LLC
www.mainstreetgis.com

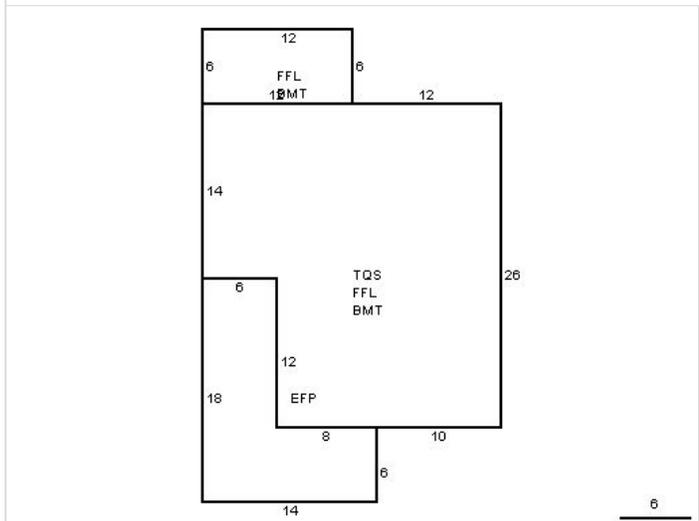
Land Information

Land Area: 0.1 AC / 4562 SQ FT Zoning: GENERAL COMM
 Land Use: 101 - ONE FAM
 Neighborhood: EF - E FAIR

Building Information

Units:
 Year Built: 1912
 Style: OLD STYLE
 Rooms: 6
 Bedrooms: 3
 Baths: 1
 Half Baths: 0

Stories: 1 Threeqr
 Heat Fuel: OIL
 Heat Type: FORCED H/A
 Roof Structure: GABLE
 Roof Covering: SLATE
 Kitchens: 1
 Fireplaces: 0



Extra Feat. / Yard Items

| Type | Area | Assessment |
|------|------|------------|
| | | |

Sub Areas

| Type | Area |
|------------|------|
| BASEMENT | 624 |
| ENCL PORCH | 156 |
| 1ST FLOOR | 624 |
| 3/4 STORY | 414 |

Data last updated: 1/1/2016 - Printed from: <http://www.mainstreetmaps.com/MA/Greenfield/>