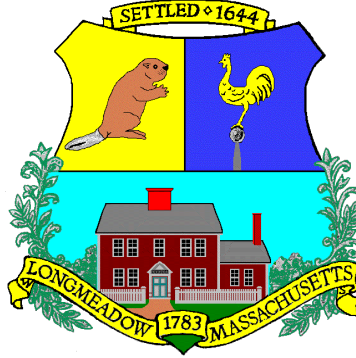


INVITATION FOR WRITTEN RESPONSE (IFWR)

**Underground Storage Tank Removals at
Blueberry Hill Elementary School
and
Wolf Swamp Road Elementary School**



TOWN OF LONGMEADOW
MASSACHUSETTS

July, 2021

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LEGAL NOTICE:

**INVITATION FOR WRITTEN RESPONSE (IFWR)
UNDERGROUND STORAGE TANK REMOVAL AT
BLUEBERRY HILL ELEMENTARY SCHOOL AND WOLF SWAMP ROAD ELEMENTARY SCHOOL**

The Town of Longmeadow, MA, is soliciting written response quotes for the Underground Fuel Storage Tank Removal project. Bid documents are available from the Town of Longmeadow, Purchasing Department, Attn: Chad Thompson- Procurement Manager, 735 Longmeadow Street, Suite 101, Longmeadow, MA 01106, P: 413-565-4185, cthompson@longmeadow.org . Bid documents are available online through the Purchasing Department page of the town website www.longmeadow.org by selecting 'Bids & RFPs' then select the link titled 'Bid & RFP finder' to access documents. Bidders are encouraged to register with the Purchasing Department, those that do not register will be responsible for monitoring the bid listing service for updates and posted addenda. Failure to acknowledge the receipt of addenda may result in a bid rejection.

An Optional Pre-Bid Conference will be held beginning at 10:00 A.M. on Wednesday, July 21, 2021 starting at the Blueberry Hill Elementary School, 275 Blueberry Hill Road, Longmeadow, MA 01106. Bidders will have the opportunity to inspect the site and ask questions during the conference.

Completed bid submission forms may be emailed to cthompson@longmeadow.org or delivered to the Longmeadow Purchasing Department, and must be received by the bid deadline of Wednesday, July 28, 2021 at 2:00PM. Based on the project estimate a public bid opening will not be facilitated. No bid deposit is required. Late bids will be rejected. Wages are subject to Massachusetts minimum wage rates as per M.G.L. C.149, Section 26 to 27H, inclusive. A 50% Payment Bond will be required of the successful bidder upon contract award. No bid may be withdrawn within thirty (30) days after the date of the opening of bids.

All bids received will be evaluated and awarded in accordance with the provisions established under Massachusetts General Law Chapter 30,39M. The Town of Longmeadow, acting through the Town Manager, the Awarding Authority reserves the right to reject any or all bids, waive informalities, and to award the contract in the best interest of the Town.

INVITATION FOR WRITTEN RESPONSE (IFWR)
UNDERGROUND FUEL STORAGE TANK REMOVAL
TOWN OF LONGMEADOW, MASSACHUSETTS

The Town of Longmeadow is soliciting written response quotes for the Underground Fuel Storage Tank Removal project. Bids are requested from qualified and experienced Contractors for the cleaning, demolition and removal of underground storage tanks (USTs) and ancillary equipment located at the following two Town-owned facilities:

Blueberry Hill Elementary School 275 Blueberry Hill Road

Wolf Swamp Elementary School 62 Wolf Swamp Road

The base bid will be removal of the 12,000 gallon heating oil UST at the Blueberry Hill Elementary School. Removal of the 12,000 gallon heating oil UST at the Wolf Swamp Elementary School will be done as an add-alternate at the discretion of the Town. Each UST is understood to be constructed of fiberglass reinforced plastic (FRP).

The work includes removal and disposal of USTs, residual oil in the tanks, concrete top pads, ancillary piping and vents, electrical connections, observation wells, transfer pumps and fuel monitoring systems. Work will also include backfill, compaction, and restoration of the surface within the area of work shown on the project Drawings. (Restoration at the Blueberry Hill School will be loam and seed. Restoration at the Wolf Swamp School will be hot mix asphalt.) The work shall be coordinated by the Longmeadow Department of Public Works.

The Town of Longmeadow has issued this IFWR in accordance with Massachusetts General Law Chapter 30, 39M – Public Works Construction Contracts. The anticipated value of this contract is approximately \$40,000.

1. GENERAL INFORMATION AND BID SUBMISSION REQUIREMENTS

Time and date of Receipt of Bids and Basis of Award

Completed bid submission forms may be emailed to cthompson@longmeadow.org , or delivered to the Longmeadow Purchasing Department, and must be received by the bid deadline of Wednesday, July 28, 2021 at 2:00PM. Based on the project estimate a public bid opening will not be facilitated. No bid deposit is required. Late bids will be rejected. Bids submitted shall be labeled: 'IFWR: UNDERGROUND FUEL STORAGE TANK REMOVAL ' along with the bidder's company name, address and contact information. Late bids will be rejected. No bid deposit is required with the submission of bids as the project estimate is \$40,000.

The contract award shall be awarded to the low bidder that is determined to be responsive and responsible by the Town. An award will be made, if at all, within 30 calendar days of the receipt of bids.

Optional Pre-Bid Conference

An Optional Pre-Bid Conference will be held beginning at 10:00 A.M. on Wednesday, July 21, 2021 starting at the Blueberry Hill Elementary School, 275 Blueberry Hill Road, Longmeadow, MA 01106. Bidders will have the opportunity to inspect the site and ask questions during the conference.

Questions

All questions concerning the IFWR shall be directed to the Town of Longmeadow Purchasing Department, Attention: Chad Thompson, Procurement Manager. All questions shall be submitted to cthompson@longmeadow.org . Once responses are obtained from Longmeadow DPW representatives a response will be provided. Addenda will be issued by the Longmeadow Purchasing Department to those on the bid list if addendum is required. All issued addenda will be posted on the Town of Longmeadow bid listing service which can be accessed through the Purchasing Department page of www.longmeadow.org , select 'Bid & RFP' links. The deadline for submitting questions is five (5) calendar days before the bid deadline. Questions received after the bid deadline will not be answered.

Town's Right to Cancel and Reject Proposals

The Town of Longmeadow acting through the Town Manager, the Awarding Authority reserve the right to reject any and all bids, waive minor informalities and to award a contract in the best interest of the Town.

Bid Signatures

A bid must be signed in ink, as follows:

- (1) if the Contractor is an individual, by her/him personally;
- (2) if the Contractor is a partnership, by the name of the partnership, followed by the signature of each general partner;
- (3) if the Contractor is a corporation, by the authorized officer, whose signature must be attested to by the Clerk/Secretary of the corporation and the corporate seal affixed.

Costs Associated with the IFWR Process

The Town is not responsible for any costs incurred by the submitting Contractors throughout the IFWR submittal process.

2. SCOPE OF SERVICES

Background/Summary of Procurement

The Town of Longmeadow currently has an underground storage tank (UST) at both the Blueberry Hill Elementary School and the Wolf Swamp Elementary School. The UST were formerly used to store heating oil for on-site consumptive use at each of the respective schools.

Under the Scope of this Contract, the Contractor will be required to remove and dispose of the UST(s) and associated equipment and restore the site in accordance with the requirements of this IFWR, the Massachusetts Contingency Plan (MCP), 310 CMR 40.00, 310 CMR 80.00 Underground Storage Tank Systems, and 520 CMR 14.00 Excavation Trench Safety.

In the event that contaminated soil is discovered, excavation, transportation, and disposal of contaminated soil shall be performed in accordance with requirements described in Section C. Personnel

from the Town of Longmeadow will be on site during the Work to collect soil samples with the assistance of the Contractor.

The Contractor Scope of Services should, at a minimum, include the following:

1. Submittals shall be provided within 7 calendar days of the Notice to Proceed. Materials proposed shall satisfy the specifications and performance requirements contained in Appendix A.
2. All supplies and staff necessary to complete the work as described in this IFWR.

Contractor Equipment and Services Procurement

The Town intends to select and make an Agreement with a qualified and experienced Contractor to provide the services described herein. An Agreement will be awarded, if at all, to the responsive and responsible Contractor, whose proposal is determined to be the most advantageous.

AGREEMENT REQUIREMENTS

The successful Contractor will enter into an Agreement with the Town to provide the services necessary to complete the work under this IFWR and to maintain accompanying product warranties.

It is anticipated that the Contract between the Town and the Contractor will be executed in July 2021 and is to have a **Substantial Completion date on or before August 22, 2021.**

The successful Contractor shall provide all material submittals for review and approval by the Town's representative prior to completing the work. Reference the sample contract terms and conditions provided with this document.

3. PRICING

The Contractor shall for all categories on the bid submission form. The Town reserves the right to award only the Base Bid, or the Base Bid and Alternate No.1. In the event of a discrepancy the unit price written in words will be used in recalculating the bid totals.

The Contractor shall acknowledge receipt and acceptance of addenda in Section 8, if any.

4. CONTRACT INSURANCE

The requirements for insurance to be provided by the Successful Bidder are stated in the "Insurance" document provided in Appendix B.

The required insurance certificates will become part of the Agreement.

5. PAYMENT BOND

In accordance with the requirements of Massachusetts General Law, Chapter 30, a Payment Bond of 50% of the total contract value is required for contracts exceeding \$25,000. The Contractor shall provide a Payment Bond using the form provided in Section B.

6. MASSACHUSETTS WAGE RATES

Minimum wage rates as determined by the Commissioner of Department of Workforce Development under the provisions of the Massachusetts General Laws, Chapter 149, Section 26 to 27D, as amended, apply to this project. The Wage Rate Determination is included in Appendix D.

7. NON-COLLUSIVE BIDDING CERTIFICATION

Bidder certifies that, under the penalties of perjury, this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

Bidder certifies that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

8. BID SUBMISSION FORM

The Contractor shall provide lump sum and unit bid prices to furnish the complete scope of services including equipment and labor as described within the IFWR. By signing below, the Contractor represents that the work to be provided shall meet or exceed the minimum requirements contained in this IFWR.

The following lump sum price items shall be full compensation for furnishing all labor, materials, tools, equipment, and services necessary. The following unit price items shall be paid based on actual measured quantities.

BID SUBMISSION FORM
IFWR: UNDERGROUND FUEL STORAGE TANK REMOVAL
LONGMEADOW, MASSACHUSETTS

NAME OF BIDDER: _____

Base Bid: UST Removal at Blueberry Hill Elementary School
275 Blueberry Hill Rd, Longmeadow, MA

ITEM NO.	EST. QUANT.	ITEM DESCRIPTION	UNIT PRICE (WRITTEN IN FIGURES & WORDS)	TOTAL AMOUNT (‘EST. QUNTY’ X ‘UNIT PRICE’= TOTAL AMOUNT)
1	200 GAL.	RESIDUAL OIL/SLUDGE REMOVAL	\$ _____ PER GAL. <hr/> WORDS PER GAL.	\$ _____ TOTAL
2	1 L.S.	REMOVAL OF UST AND APPURTENANT EQUIPMENT	\$ _____ PER L.S. <hr/> WORDS PER L.S.	\$ _____ TOTAL
3	1 L.S.	SITE RESTORATION (LOAM AND SEED)	\$ _____ PER L.S. <hr/> WORDS PER L.S.	\$ _____ TOTAL

BASE BID TOTAL: \$ _____

(Sum of Base Bid ‘Total Amount’, Items 1, 2 and 3 above)

**Bid Alternate No.1: UST Removal at Wolf Swamp Road Elementary School
62 Wolf Swamp Rd, Longmeadow, MA**

ITEM NO.	EST. QUANT.	ITEM DESCRIPTION	UNIT PRICE (WRITTEN IN FIGURES & WORDS)	TOTAL AMOUNT (‘EST. QUNTY’ X ‘UNIT PRICE’= TOTAL AMOUNT)
4	200 GAL.	RESIDUAL OIL/SLUDGE REMOVAL	\$ _____ PER GAL. <hr/> WORDS PER GAL.	\$ _____ TOTAL
5	1 L.S.	REMOVAL OF UST AND APPURTENANT EQUIPMENT	\$ _____ PER L.S. <hr/> WORDS PER L.S.	\$ _____ TOTAL
6	1 L.S.	SITE RESTORATION (HMA)	\$ _____ PER L.S. <hr/> WORDS PER L.S.	\$ _____ TOTAL

BID ALTERNATE NO.1 TOTAL: \$ _____

(Sum of Bid Alternate No.1 ‘Total Amount’, Items 4, 5 and 6 above)

<p>TOTAL BID PRICE</p> <p>Sum of the ‘Base Bid Total’ and ‘Bid Alternate No.1 Total’: \$ _____</p>
--

UNIT PRICING FOR CONTAMINATED SOIL (IF ENCOUNTERED)

It is the Town of Longmeadow’s presumption that the UST systems have not leaked or otherwise caused a release to the environment subject to MGL c. 21e and 310 CMR 40.0000. As a contingency, certain additional unit pricing is being sought as part of the bid process. Acceptance of unit prices shall not be an element of the rule of award for the Contract, but are expected to be reasonable full, fixed and fair prices agreed to in advance by the Contractor at the time of bidding, subject to the final acceptance of the Town of Longmeadow for purposes of Change Order request.

Listing of Unit Price Items of Work:

ITEM NO.	EST. QUANT.	ITEM DESCRIPTION	UNIT PRICE (WRITTEN IN FIGURES & WORDS)	TOTAL AMOUNT (‘EST. QUNTY’ X ‘UNIT PRICE’= TOTAL AMOUNT)
7	50 TONS	CONTAMINATED SOIL / REMEDIATION WASTE	\$ _____ PER TON. <hr/> WORS PER TONS.	\$ _____ TOTAL
8	50 TONS	BACKFILL/COMMON FILL	\$ _____ PER TON. <hr/> WORS PER TONS.	\$ _____ TOTAL

The following addendum are acknowledged _____.

The Bid is submitted by:

Date _____

(Print Name of Firm Submitting a General Bid)

(Signature of Authorized Representative)

(Print Name of Person Signing Bid and Title)

Social Security Number or
Federal Identification Number:

(Business Address)

(City, State and Zip Code)

Phone #: _____

Fax #: _____

Email: _____

NON-COLLUSIVE BIDDING CERTIFICATION

Bidder certifies that, under the penalties of perjury, this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

Bidder certifies that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

SIGNATURE _____

NAME _____

DATE _____

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the Town for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1.FIRM NAME: _____

2.WHEN ORGANIZED: _____

3. INCORPORATED?

_____ YES

_____ NO DATE AND STATE OF INCORPORATION:_____

4. IS YOUR BUSINESS REGISTERED WITH SOMWBA FOR THE FOLLOWING WOMEN AND/OR MINORITY CATEGORIES:

MBE? _____ YES _____ NO

WBE? _____ YES _____ NO or

MWBE? _____ YES _____ NO

5.LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:

6.HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?

_____ YES

_____ NO

IF YES, WHERE AND WHY?

7.HAVE YOU EVER DEFAULTED ON A CONTRACT? _____ YES _____ NO

IF YES, PROVIDE DETAILS.

8.
LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:

9.
IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING **CONTRACTS COMPLETED BY YOUR FIRM LISTING ONLY PROJECTS OF SIMILAR NATURE TO THE PROJECT BEING BID**. A MINIMUM OF TWO (S) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED.

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECTNAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #:(____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

10.

The undersigned certifies that the information contained herein is complete and accurate and here by authorizes and requests any person, firm, or corporation to furnish any information requested by the Town in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: _____

BIDDER: _____

SIGNATURE: _____

PRINTED NAME: _____ TITLE: _____

(End Bid Submission Form)

AGREEMENT – TERMS AND CONDITIONS

This Agreement, made this ____ day of _____ in the year two thousand and 21 (the Effective Date) between the Town of Longmeadow, acting by and through its Town Manager and/or Select Board, hereinafter, hereinafter called OWNER and ____ with an address of _____ hereinafter called CONTRACTOR.

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

WORK

1.1 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents.

ENGINEER

1.2 The Project has been designed by Town of Longmeadow Engineering Department, who is hereinafter called ENGINEER. ENGINEER will act as OWNER's representative, assuming all duties and responsibilities, rights and authority assigned to ENGINEER in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

CONTRACT TIMES

1.3 Dates for Substantial Completion and Final Completion

A. All work shall be **completed by August 22, 2021**, which will be the Substantial Completion date.

1.4 Liquidated Damages

B. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER \$100 for each day that expires after the 'Substantial Completion' date(s) specified in paragraph 1.3.

1.2 Contract Term Extension

A. The contract may be extended beyond the Substantial Completion date at the sole discretion of the Town for a term not to exceed one year from the Effective Date of this contract.

CONTRACT PRICE

1.5 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents **based on actual 'Unit Price'** for units utilized in the supply and services provided under this contract. The amount in current funds equal to the prices stated in CONTRACTOR'S Bid, attached hereto as an exhibit.

1.6 The total construction bid based on Unit Price is \$ TBD, the Bid Total. The total amount will be adjusted by measurement of actual installed quantities in strict conformity with the provisions contained herein. The contract shall not exceed the Bid Total without authorization from the Town of Longmeadow by way of completed contract amendment. **PROGRESS PAYMENTS**

1.7 OWNER shall make progress payments on account of the Contract Price on the basis of processed Applications for Payment monthly during construction.

1.8 OWNER shall retain from progress payments 5 percent of the value of Work completed.

AFFIRMATIVE ACTION

- 1.9 The CONTRACTOR shall not discriminate against or exclude any person from participation herein on the grounds of race, religion, color, sex, age, or national origin; and that it shall take affirmative actions to ensure that applicants are employed, and that employers are treated during their employment, without regard to race, religion, color, sex, age, handicapped status, or national origin.
- 1.10 The CONTRACTOR shall not participate in or cooperate with an international boycott, as defined in Section 999 (b)(3) and (4) of the Internal Revenue Code 1986, as amended, or engage in conduct declared to be unlawful by Section 2 of Chapter 151E of the Massachusetts General Laws.

CONTRACTOR'S REPRESENTATIONS

- 1.11 CONTRACTOR makes the following representations:
- B. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - C. CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - D. CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - A. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto.
 - B. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
 - C. CONTRACTOR is aware of the general nature of Work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.
 - D. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
 - E. CONTRACTOR has given OWNER written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents, and the written resolution thereof by OWNER is acceptable to CONTRACTOR.
 - F. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

CONTRACT DOCUMENTS

- 1.12 Contents
- E. The Contract Documents consist of the following:
 - 1. This Agreement
 - 2. 50% Payment Bond in the amount of \$_____ (if contract is greater than \$25,000);

3. General Conditions, Special Provisions, Scope of Work and Specifications outlined in the Invitation for Written Response Document (IFWR):Underground Storage Tank Removals at Blueberry Hill Elementary School and Wolf Swamp Road School, Town of Longmeadow, Massachusetts, July, 2021; and Addendum No. ____ (if any)
 4. Drawings supplied with the IFWR
 5. Exhibits to this Agreement (enumerated as follows):
 - a. CONTRACTOR's Bid;
 - b. Documentation submitted by CONTRACTOR prior to Notice of Award;
 6. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed;
 - b. Written Amendments;
 - c. Work Change Directives;
 - d. Change Order(s).
- B. The documents listed in paragraph 8.1.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 8.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in paragraph 3.05 of the General Conditions.

MISCELLANEOUS

1.13 Terms

- F. Terms used in this Agreement will have the meanings indicated in the General Conditions.

1.14 Assignment of Contract

- G. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

1.15 Successors and Assigns

- H. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

1.16 Severability

- I. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

1.17 The Contractor shall comply with applicable OSHA, State and municipal regulations and requirements for services and facilities in the performance of all requirements of this contract. OSHA safety requirements shall be adhered to for all personnel performing construction, reconstruction, alteration, remodeling or repair of any building or public works project.

For Change Orders work performed by the CONTRACTOR on this project, payment shall be based on Unit of Measure pricing as documented in the CONTRACTOR'S bid submission form, where items are not addressed on the bid submission form the mark-up shall be 15 percent. Also, the CONTRACTOR's markup for Change Order work by CONTRACTOR's sub-contractor(s) shall be limited to 15 percent.



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

Prevailing Wage Rates

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

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

ROSALIN ACOSTA
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority: Town of Longmeadow
Contract Number: **City/Town:** LONGMEADOW
Description of Work: Underground Storage Tank Removal heating oil tank and related equipment removal at two schools.
Job Location: Blueberry Hill Sch & Wolf Swamp Rd Sch, Longmeadow

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 criminal penalties.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$35.95	\$12.91	\$14.82	\$0.00	\$63.68
	08/01/2021	\$35.95	\$13.41	\$14.82	\$0.00	\$64.18
	12/01/2021	\$35.95	\$13.41	\$16.01	\$0.00	\$65.37
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.02	\$12.91	\$14.82	\$0.00	\$63.75
	08/01/2021	\$36.02	\$13.41	\$14.82	\$0.00	\$64.25
	12/01/2021	\$36.02	\$13.41	\$16.01	\$0.00	\$65.44
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.14	\$12.91	\$14.82	\$0.00	\$63.87
	08/01/2021	\$36.14	\$13.41	\$14.82	\$0.00	\$64.37
	12/01/2021	\$36.14	\$13.41	\$16.01	\$0.00	\$65.56
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 3)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$33.00	\$8.60	\$15.99	\$0.00	\$57.59
	12/01/2021	\$33.83	\$8.60	\$15.99	\$0.00	\$58.42
	06/01/2022	\$34.45	\$8.60	\$15.99	\$0.00	\$59.04
	12/01/2022	\$35.08	\$8.60	\$15.99	\$0.00	\$59.67
	06/01/2023	\$35.70	\$8.60	\$15.99	\$0.00	\$60.29
	12/01/2023	\$36.33	\$8.60	\$15.99	\$0.00	\$60.92
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$33.00	\$8.60	\$13.93	\$0.00	\$55.53
	12/01/2021	\$33.83	\$8.60	\$13.93	\$0.00	\$56.36
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASBESTOS WORKER (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)</i>	12/01/2020	\$34.29	\$12.80	\$8.95	\$0.00	\$56.04
ASPHALT RAKER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
AUTOMATIC GRADER-EXCAVATOR (RECLAIMER) <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BACKHOE/FRONT-END LOADER OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
BATCH/CEMENT PLANT - ON SITE <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$33.00	\$8.60	\$15.99	\$0.00	\$57.59
	12/01/2021	\$33.83	\$8.60	\$15.99	\$0.00	\$58.42
	06/01/2022	\$34.45	\$8.60	\$15.99	\$0.00	\$59.04
	12/01/2022	\$35.08	\$8.60	\$15.99	\$0.00	\$59.67
	06/01/2023	\$35.70	\$8.60	\$15.99	\$0.00	\$60.29
	12/01/2023	\$36.33	\$8.60	\$15.99	\$0.00	\$60.92
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$33.00	\$8.60	\$13.93	\$0.00	\$55.53
	12/01/2021	\$33.83	\$8.60	\$13.93	\$0.00	\$56.36
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2020	\$46.10	\$7.07	\$17.98	\$0.00	\$71.15

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$29.97	\$7.07	\$11.69	\$0.00	\$48.73
2	65	\$29.97	\$7.07	\$11.69	\$0.00	\$48.73
3	70	\$32.27	\$7.07	\$12.59	\$0.00	\$51.93
4	75	\$34.58	\$7.07	\$13.49	\$0.00	\$55.14
5	80	\$36.88	\$7.07	\$14.38	\$0.00	\$58.33
6	85	\$39.19	\$7.07	\$15.29	\$0.00	\$61.55
7	90	\$41.49	\$7.07	\$16.18	\$0.00	\$64.74
8	95	\$43.80	\$7.07	\$17.09	\$0.00	\$67.96

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2021	\$44.16	\$11.39	\$20.02	\$0.00	\$75.57
BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD)	08/01/2021	\$45.56	\$11.39	\$20.18	\$0.00	\$77.13
	02/01/2022	\$46.09	\$11.39	\$20.18	\$0.00	\$77.66

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

Effective Date - 02/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.08	\$11.39	\$20.02	\$0.00	\$53.49
2	60	\$26.50	\$11.39	\$20.02	\$0.00	\$57.91
3	70	\$30.91	\$11.39	\$20.02	\$0.00	\$62.32
4	80	\$35.33	\$11.39	\$20.02	\$0.00	\$66.74
5	90	\$39.74	\$11.39	\$20.02	\$0.00	\$71.15

Effective Date - 08/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.78	\$11.39	\$20.18	\$0.00	\$54.35
2	60	\$27.34	\$11.39	\$20.18	\$0.00	\$58.91
3	70	\$31.89	\$11.39	\$20.18	\$0.00	\$63.46
4	80	\$36.45	\$11.39	\$20.18	\$0.00	\$68.02
5	90	\$41.00	\$11.39	\$20.18	\$0.00	\$72.57

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BULLDOZER/POWER SHOVEL/TREE SHREDDER /CLAM SHELL OPERATING ENGINEERS LOCAL 98	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CAISSON & UNDERPINNING BOTTOM MAN LABORERS - FOUNDATION AND MARINE	06/01/2021	\$41.82	\$8.60	\$17.72	\$0.00	\$68.14
	12/01/2021	\$42.83	\$8.60	\$17.72	\$0.00	\$69.15
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING LABORER LABORERS - FOUNDATION AND MARINE	06/01/2021	\$40.67	\$8.60	\$17.72	\$0.00	\$66.99
	12/01/2021	\$41.68	\$8.60	\$17.72	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN LABORERS - FOUNDATION AND MARINE	06/01/2021	\$40.67	\$8.60	\$17.72	\$0.00	\$66.99
	12/01/2021	\$41.68	\$8.60	\$17.72	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR LABORERS - ZONE 3 (BUILDING & SITE)	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
CARPENTER CARPENTERS LOCAL 336 - HAMPDEN HAMPSHIRE FRANKLIN	03/01/2021	\$38.48	\$7.84	\$17.27	\$0.00	\$63.59
	09/01/2021	\$38.98	\$7.84	\$17.27	\$0.00	\$64.09
	03/01/2022	\$39.48	\$7.84	\$17.27	\$0.00	\$64.59
	09/01/2022	\$39.98	\$7.84	\$17.27	\$0.00	\$65.09
	03/01/2023	\$40.48	\$7.84	\$17.27	\$0.00	\$65.59

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CARPENTER - Local 336 Hampden Hampshire Franklin

Effective Date - 03/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.24	\$7.84	\$1.40	\$0.00	\$28.48
2	60	\$23.09	\$7.84	\$1.40	\$0.00	\$32.33
3	70	\$26.94	\$7.84	\$13.07	\$0.00	\$47.85
4	75	\$28.86	\$7.84	\$13.07	\$0.00	\$49.77
5	80	\$30.78	\$7.84	\$14.47	\$0.00	\$53.09
6	80	\$30.78	\$7.84	\$14.47	\$0.00	\$53.09
7	90	\$34.63	\$7.84	\$15.87	\$0.00	\$58.34
8	90	\$34.63	\$7.84	\$15.87	\$0.00	\$58.34

Effective Date - 09/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.49	\$7.84	\$1.40	\$0.00	\$28.73
2	60	\$23.39	\$7.84	\$1.40	\$0.00	\$32.63
3	70	\$27.29	\$7.84	\$13.07	\$0.00	\$48.20
4	75	\$29.24	\$7.84	\$13.07	\$0.00	\$50.15
5	80	\$31.18	\$7.84	\$14.47	\$0.00	\$53.49
6	80	\$31.18	\$7.84	\$14.47	\$0.00	\$53.49
7	90	\$35.08	\$7.84	\$15.87	\$0.00	\$58.79
8	90	\$35.08	\$7.84	\$15.87	\$0.00	\$58.79

Notes:
 % Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$26.54/ 3&4 \$31.76/ 5&6 \$49.23/ 7&8 \$54.48

Apprentice to Journeyworker Ratio:1:5

CARPENTER WOOD FRAME	04/01/2021	\$23.16	\$7.21	\$4.80	\$0.00	\$35.17
CARPENTERS-ZONE 3 (Wood Frame)	04/01/2022	\$23.66	\$7.21	\$4.80	\$0.00	\$35.67
	04/01/2023	\$24.16	\$7.21	\$4.80	\$0.00	\$36.17

All Aspects of New Wood Frame Work

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CARPENTER (Wood Frame) - Zone 3

Effective Date - 04/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$13.90	\$7.21	\$0.00	\$0.00	\$21.11
2	60	\$13.90	\$7.21	\$0.00	\$0.00	\$21.11
3	65	\$15.05	\$7.21	\$0.00	\$0.00	\$22.26
4	70	\$16.21	\$7.21	\$0.00	\$0.00	\$23.42
5	75	\$17.37	\$7.21	\$3.80	\$0.00	\$28.38
6	80	\$18.53	\$7.21	\$3.80	\$0.00	\$29.54
7	85	\$19.69	\$7.21	\$3.80	\$0.00	\$30.70
8	90	\$20.84	\$7.21	\$3.80	\$0.00	\$31.85

Effective Date - 04/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.20	\$7.21	\$0.00	\$0.00	\$21.41
2	60	\$14.20	\$7.21	\$0.00	\$0.00	\$21.41
3	65	\$15.38	\$7.21	\$0.00	\$0.00	\$22.59
4	70	\$16.56	\$7.21	\$0.00	\$0.00	\$23.77
5	75	\$17.75	\$7.21	\$3.80	\$0.00	\$28.76
6	80	\$18.93	\$7.21	\$3.80	\$0.00	\$29.94
7	85	\$20.11	\$7.21	\$3.80	\$0.00	\$31.12
8	90	\$21.29	\$7.21	\$3.80	\$0.00	\$32.30

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$17.63/ 3&4 \$19.95/ 5&6 \$27.22/ 7&8 \$29.54

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD)	01/01/2020	\$41.94	\$12.70	\$17.64	\$0.62	\$72.90
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Apprentice - CEMENT MASONRY/PLASTERING - Springfield/Pittsfield

Effective Date - 01/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.97	\$12.70	\$15.41	\$0.00	\$49.08
2	60	\$25.16	\$12.70	\$17.64	\$0.62	\$56.12
3	65	\$27.26	\$12.70	\$17.64	\$0.62	\$58.22
4	70	\$29.36	\$12.70	\$17.64	\$0.62	\$60.32
5	75	\$31.46	\$12.70	\$17.64	\$0.62	\$62.42
6	80	\$33.55	\$12.70	\$17.64	\$0.62	\$64.51
7	90	\$37.75	\$12.70	\$17.64	\$0.62	\$68.71

Notes:

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

Apprentice to Journeyworker Ratio:1:3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CHAIN SAW OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CRANE OPERATOR <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$40.54	\$12.47	\$14.50	\$0.00	\$67.51
	12/01/2021	\$41.37	\$12.47	\$14.50	\$0.00	\$68.34
	06/01/2022	\$42.24	\$12.47	\$14.50	\$0.00	\$69.21
	12/01/2022	\$43.12	\$12.47	\$14.50	\$0.00	\$70.09
	06/01/2023	\$44.07	\$12.47	\$14.50	\$0.00	\$71.04
	12/01/2023	\$45.02	\$12.47	\$14.50	\$0.00	\$71.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 3</i>	01/01/2021	\$52.06	\$8.25	\$22.75	\$0.00	\$83.06

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.03	\$8.25	\$0.00	\$0.00	\$34.28
2	55	\$28.63	\$8.25	\$6.16	\$0.00	\$43.04
3	60	\$31.24	\$8.25	\$6.72	\$0.00	\$46.21
4	65	\$33.84	\$8.25	\$7.28	\$0.00	\$49.37
5	70	\$36.44	\$8.25	\$19.39	\$0.00	\$64.08
6	75	\$39.05	\$8.25	\$19.95	\$0.00	\$67.25
7	80	\$41.65	\$8.25	\$20.51	\$0.00	\$70.41
8	90	\$46.85	\$8.25	\$21.63	\$0.00	\$76.73

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$40.82	\$8.60	\$17.57	\$0.00	\$66.99
	12/01/2021	\$41.83	\$8.60	\$17.57	\$0.00	\$68.00
	06/01/2022	\$42.83	\$8.60	\$17.57	\$0.00	\$69.00
	12/01/2022	\$43.83	\$8.60	\$17.57	\$0.00	\$70.00
	06/01/2023	\$44.83	\$8.60	\$17.57	\$0.00	\$71.00
	12/01/2023	\$46.08	\$8.60	\$17.57	\$0.00	\$72.25

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$41.82	\$8.60	\$17.57	\$0.00	\$67.99
	12/01/2021	\$42.83	\$8.60	\$17.57	\$0.00	\$69.00
	06/01/2022	\$43.83	\$8.60	\$17.57	\$0.00	\$70.00
	12/01/2022	\$44.83	\$8.60	\$17.57	\$0.00	\$71.00
	06/01/2023	\$45.83	\$8.60	\$17.57	\$0.00	\$72.00
	12/01/2023	\$47.08	\$8.60	\$17.57	\$0.00	\$73.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$41.57	\$8.60	\$17.57	\$0.00	\$67.74
	12/01/2021	\$42.58	\$8.60	\$17.57	\$0.00	\$68.75
	06/01/2022	\$43.58	\$8.60	\$17.57	\$0.00	\$69.75
	12/01/2022	\$44.58	\$8.60	\$17.57	\$0.00	\$70.75
	06/01/2023	\$45.58	\$8.60	\$17.57	\$0.00	\$71.75
	12/01/2023	\$46.83	\$8.60	\$17.57	\$0.00	\$73.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$41.82	\$8.60	\$17.57	\$0.00	\$67.99
	12/01/2021	\$42.83	\$8.60	\$17.57	\$0.00	\$69.00
	06/01/2022	\$43.83	\$8.60	\$17.57	\$0.00	\$70.00
	12/01/2022	\$44.83	\$8.60	\$17.57	\$0.00	\$71.00
	06/01/2023	\$45.83	\$8.60	\$17.57	\$0.00	\$72.00
	12/01/2023	\$47.08	\$8.60	\$17.57	\$0.00	\$73.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$41.57	\$8.60	\$17.57	\$0.00	\$67.74
	12/01/2021	\$42.58	\$8.60	\$17.57	\$0.00	\$68.75
	06/01/2022	\$43.58	\$8.60	\$17.57	\$0.00	\$69.75
	12/01/2022	\$44.58	\$8.60	\$17.57	\$0.00	\$70.75
	06/01/2023	\$45.58	\$8.60	\$17.57	\$0.00	\$71.75
	12/01/2023	\$46.83	\$8.60	\$17.57	\$0.00	\$73.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$40.82	\$8.60	\$17.57	\$0.00	\$66.99
	12/01/2021	\$41.83	\$8.60	\$17.57	\$0.00	\$68.00
	06/01/2022	\$42.83	\$8.60	\$17.57	\$0.00	\$69.00
	12/01/2022	\$43.83	\$8.60	\$17.57	\$0.00	\$70.00
	06/01/2023	\$44.83	\$8.60	\$17.57	\$0.00	\$71.00
	12/01/2023	\$46.08	\$8.60	\$17.57	\$0.00	\$72.25
For apprentice rates see "Apprentice- LABORER"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 3)</i>	08/01/2020	\$68.70	\$9.40	\$23.12	\$0.00	\$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 3)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 3)</i>	08/01/2020	\$73.60	\$9.40	\$23.12	\$0.00	\$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 3)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DRAWBRIDGE OPERATOR (Construction) <i>DRAWBRIDGE - SEIU LOCAL 888</i>	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN (Including Core Drilling) <i>ELECTRICIANS LOCAL 7</i>	06/27/2021	\$45.21	\$11.75	\$13.26	\$0.00	\$70.22
	01/02/2022	\$45.81	\$12.00	\$13.42	\$0.00	\$71.23
	07/03/2022	\$46.41	\$12.25	\$13.69	\$0.00	\$72.35
	01/01/2023	\$47.01	\$12.50	\$13.96	\$0.00	\$73.47

Apprentice - *ELECTRICIAN - Local 7*

Effective Date - 06/27/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.08	\$6.45	\$0.54	\$0.00	\$25.07
2	45	\$20.34	\$6.45	\$0.61	\$0.00	\$27.40
3	50	\$22.61	\$11.75	\$7.08	\$0.00	\$41.44
4	55	\$24.87	\$11.75	\$7.15	\$0.00	\$43.77
5	65	\$29.39	\$11.75	\$8.93	\$0.00	\$50.07
6	70	\$31.65	\$11.75	\$10.10	\$0.00	\$53.50

Effective Date - 01/02/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.32	\$6.60	\$0.54	\$0.00	\$25.46
2	45	\$20.61	\$6.60	\$0.61	\$0.00	\$27.82
3	50	\$22.91	\$12.00	\$7.13	\$0.00	\$42.04
4	55	\$25.20	\$12.00	\$7.20	\$0.00	\$44.40
5	65	\$29.78	\$12.00	\$9.01	\$0.00	\$50.79
6	70	\$32.07	\$12.00	\$10.20	\$0.00	\$54.27

Notes:

Steps 1-2 are 1000 hrs; Steps 3-6 are 1500 hrs.

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

ELEVATOR CONSTRUCTOR <i>ELEVATOR CONSTRUCTORS LOCAL 41</i>	01/01/2021	\$56.69	\$15.88	\$19.31	\$0.00	\$91.88
	01/01/2022	\$58.62	\$16.03	\$20.21	\$0.00	\$94.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELEVATOR CONSTRUCTOR - Local 41

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.35	\$15.88	\$0.00	\$0.00	\$44.23
2	55	\$31.18	\$15.88	\$19.31	\$0.00	\$66.37
3	65	\$36.85	\$15.88	\$19.31	\$0.00	\$72.04
4	70	\$39.68	\$15.88	\$19.31	\$0.00	\$74.87
5	80	\$45.35	\$15.88	\$19.31	\$0.00	\$80.54

Effective Date - 01/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$29.31	\$16.03	\$0.00	\$0.00	\$45.34
2	55	\$32.24	\$16.03	\$20.21	\$0.00	\$68.48
3	65	\$38.10	\$16.03	\$20.21	\$0.00	\$74.34
4	70	\$41.03	\$16.03	\$20.21	\$0.00	\$77.27
5	80	\$46.90	\$16.03	\$20.21	\$0.00	\$83.14

Notes:

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

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER <i>ELEVATOR CONSTRUCTORS LOCAL 41</i>	01/01/2021	\$39.68	\$15.88	\$19.31	\$0.00	\$74.87
	01/01/2022	\$41.03	\$16.03	\$20.21	\$0.00	\$77.27
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
FIELD ENG.INST/ROD-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/1999	\$18.84	\$4.80	\$4.10	\$0.00	\$27.74
FIELD ENG.PARTY CHIEF:BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/1999	\$21.33	\$4.80	\$4.10	\$0.00	\$30.23
FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/1999	\$22.33	\$4.80	\$4.10	\$0.00	\$31.23
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 7</i>	06/27/2021	\$45.21	\$11.75	\$13.26	\$0.00	\$70.22
	01/02/2022	\$45.81	\$12.00	\$13.42	\$0.00	\$71.23
	07/03/2022	\$46.41	\$12.25	\$13.69	\$0.00	\$72.35
	01/01/2023	\$47.01	\$12.50	\$13.96	\$0.00	\$73.47
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE <i>LOCAL 7</i>	06/27/2021	\$45.21	\$11.75	\$13.26	\$0.00	\$70.22
	01/02/2022	\$45.81	\$12.00	\$13.42	\$0.00	\$71.23
	07/03/2022	\$46.41	\$12.25	\$13.69	\$0.00	\$72.35
	01/01/2023	\$47.01	\$12.50	\$13.96	\$0.00	\$73.47
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIREMAN OPERATING ENGINEERS LOCAL 98	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96

Apprentice - OPERATING ENGINEERS - Local 98 Class 3

Effective Date - 06/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$21.91	\$12.47	\$14.50	\$0.00	\$48.88
2	70	\$25.56	\$12.47	\$14.50	\$0.00	\$52.53
3	80	\$29.21	\$12.47	\$14.50	\$0.00	\$56.18
4	90	\$32.86	\$12.47	\$14.50	\$0.00	\$59.83

Effective Date - 12/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.40	\$12.47	\$14.50	\$0.00	\$49.37
2	70	\$26.14	\$12.47	\$14.50	\$0.00	\$53.11
3	80	\$29.87	\$12.47	\$14.50	\$0.00	\$56.84
4	90	\$33.61	\$12.47	\$14.50	\$0.00	\$60.58

Notes:

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

Apprentice to Journeyworker Ratio:1:6

FLAGGER & SIGNALER (HEAVY & HIGHWAY) LABORERS - ZONE 3 (HEAVY & HIGHWAY)	06/01/2021	\$24.50	\$8.60	\$13.93	\$0.00	\$47.03
	12/01/2021	\$24.50	\$8.60	\$13.93	\$0.00	\$47.03
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
FLOORCOVERER FLOORCOVERERS LOCAL 2168 ZONE III	09/01/2020	\$37.88	\$7.84	\$17.27	\$0.00	\$62.99

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - FLOORCOVERER - Local 2168 Zone III

Effective Date - 09/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.94	\$7.84	\$1.40	\$0.00	\$28.18
2	55	\$20.83	\$7.84	\$1.40	\$0.00	\$30.07
3	60	\$22.73	\$7.84	\$13.07	\$0.00	\$43.64
4	65	\$24.62	\$7.84	\$13.07	\$0.00	\$45.53
5	70	\$26.52	\$7.84	\$14.47	\$0.00	\$48.83
6	75	\$28.41	\$7.84	\$14.47	\$0.00	\$50.72
7	80	\$30.30	\$7.84	\$15.87	\$0.00	\$54.01
8	85	\$32.20	\$7.84	\$15.87	\$0.00	\$55.91

Notes: Steps are 750 hrs.
 % After 09/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)
 Step 1&2 \$26.29/ 3&4 \$31.43/ 5&6 \$48.83/ 7&8 \$54.01

Apprentice to Journeyworker Ratio:1:1

FORK LIFT <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.73	\$12.47	\$14.50	\$0.00	\$63.70
	12/01/2021	\$37.56	\$12.47	\$14.50	\$0.00	\$64.53
	06/01/2022	\$38.43	\$12.47	\$14.50	\$0.00	\$65.40
	12/01/2022	\$39.31	\$12.47	\$14.50	\$0.00	\$66.28
	06/01/2023	\$40.26	\$12.47	\$14.50	\$0.00	\$67.23
	12/01/2023	\$41.21	\$12.47	\$14.50	\$0.00	\$68.18

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATORS/LIGHTING PLANTS <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$33.28	\$12.47	\$14.50	\$0.00	\$60.25
	12/01/2021	\$34.11	\$12.47	\$14.50	\$0.00	\$61.08
	06/01/2022	\$34.98	\$12.47	\$14.50	\$0.00	\$61.95
	12/01/2022	\$35.86	\$12.47	\$14.50	\$0.00	\$62.83
	06/01/2023	\$36.81	\$12.47	\$14.50	\$0.00	\$63.78
	12/01/2023	\$37.76	\$12.47	\$14.50	\$0.00	\$64.73

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 1333</i>	06/01/2020	\$39.18	\$10.80	\$10.45	\$0.00	\$60.43
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - GLAZIER - Local 1333

Effective Date - 06/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.59	\$10.80	\$1.80	\$0.00	\$32.19
2	56	\$22.04	\$10.80	\$1.80	\$0.00	\$34.64
3	63	\$24.49	\$10.80	\$2.45	\$0.00	\$37.74
4	69	\$26.94	\$10.80	\$2.45	\$0.00	\$40.19
5	75	\$29.39	\$10.80	\$3.15	\$0.00	\$43.34
6	81	\$31.83	\$10.80	\$3.15	\$0.00	\$45.78
7	88	\$34.28	\$10.80	\$10.45	\$0.00	\$55.53
8	94	\$36.73	\$10.80	\$10.45	\$0.00	\$57.98

Notes:

Apprentice to Journeyworker Ratio:1:3

GRADER/TRENCHING MACHINE/DERRICK <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

HVAC (DUCTWORK) <i>SHEETMETAL WORKERS LOCAL 63</i>	07/01/2021	\$38.29	\$10.64	\$17.33	\$1.99	\$68.25
	01/01/2022	\$39.29	\$10.64	\$17.33	\$2.02	\$69.28

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) <i>ELECTRICIANS LOCAL 7</i>	06/27/2021	\$45.21	\$11.75	\$13.26	\$0.00	\$70.22
	01/02/2022	\$45.81	\$12.00	\$13.42	\$0.00	\$71.23
	07/03/2022	\$46.41	\$12.25	\$13.69	\$0.00	\$72.35
	01/01/2023	\$47.01	\$12.50	\$13.96	\$0.00	\$73.47

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 63</i>	07/01/2021	\$38.29	\$10.64	\$17.33	\$1.99	\$68.25
	01/01/2022	\$39.29	\$10.64	\$17.33	\$2.02	\$69.28

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING - WATER) <i>PLUMBERS & PIPEFITTERS LOCAL 104</i>	03/17/2021	\$43.21	\$9.30	\$16.60	\$0.00	\$69.11
	09/17/2021	\$44.21	\$9.30	\$16.60	\$0.00	\$70.11
	03/17/2022	\$45.46	\$9.30	\$16.60	\$0.00	\$71.36
	09/17/2022	\$46.46	\$9.30	\$16.60	\$0.00	\$72.36
	03/17/2023	\$47.71	\$9.30	\$16.60	\$0.00	\$73.61
	09/17/2023	\$48.71	\$9.30	\$16.60	\$0.00	\$74.61
	03/17/2024	\$49.96	\$9.30	\$16.60	\$0.00	\$75.86

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC MECHANIC <i>PLUMBERS & PIPEFITTERS LOCAL 104</i>	03/17/2021	\$43.21	\$9.30	\$16.60	\$0.00	\$69.11
	09/17/2021	\$44.21	\$9.30	\$16.60	\$0.00	\$70.11
	03/17/2022	\$45.46	\$9.30	\$16.60	\$0.00	\$71.36
	09/17/2022	\$46.46	\$9.30	\$16.60	\$0.00	\$72.36
	03/17/2023	\$47.71	\$9.30	\$16.60	\$0.00	\$73.61
	09/17/2023	\$48.71	\$9.30	\$16.60	\$0.00	\$74.61
	03/17/2024	\$49.96	\$9.30	\$16.60	\$0.00	\$75.86
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$33.00	\$8.60	\$13.93	\$0.00	\$55.53
	12/01/2021	\$33.83	\$8.60	\$13.93	\$0.00	\$56.36
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)</i>	09/01/2020	\$39.20	\$13.80	\$17.14	\$0.00	\$70.14
	09/01/2021	\$41.60	\$13.80	\$17.14	\$0.00	\$72.54
	09/01/2022	\$44.05	\$13.80	\$17.14	\$0.00	\$74.99

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

Effective Date - 09/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.60	\$13.80	\$12.42	\$0.00	\$45.82
2	60	\$23.52	\$13.80	\$13.36	\$0.00	\$50.68
3	70	\$27.44	\$13.80	\$14.31	\$0.00	\$55.55
4	80	\$31.36	\$13.80	\$15.25	\$0.00	\$60.41

Effective Date - 09/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$13.80	\$12.42	\$0.00	\$47.02
2	60	\$24.96	\$13.80	\$13.36	\$0.00	\$52.12
3	70	\$29.12	\$13.80	\$14.31	\$0.00	\$57.23
4	80	\$33.28	\$13.80	\$15.25	\$0.00	\$62.33

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (SPRINGFIELD AREA)</i>	03/16/2021	\$36.67	\$8.10	\$21.65	\$0.00	\$66.42
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Springfield

Effective Date - 03/16/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.00	\$8.10	\$21.65	\$0.00	\$51.75
2	70	\$25.67	\$8.10	\$21.65	\$0.00	\$55.42
3	75	\$27.50	\$8.10	\$21.65	\$0.00	\$57.25
4	80	\$29.34	\$8.10	\$21.65	\$0.00	\$59.09
5	85	\$31.17	\$8.10	\$21.65	\$0.00	\$60.92
6	90	\$33.00	\$8.10	\$21.65	\$0.00	\$62.75

Notes:
Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 3 (BUILDING & SITE)	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS - ZONE 3 (BUILDING & SITE)	06/01/2021	\$32.25	\$8.60	\$15.99	\$0.00	\$56.84
	12/01/2021	\$33.08	\$8.60	\$15.99	\$0.00	\$57.67
	06/01/2022	\$33.70	\$8.60	\$15.99	\$0.00	\$58.29
	12/01/2022	\$34.33	\$8.60	\$15.99	\$0.00	\$58.92
	06/01/2023	\$34.95	\$8.60	\$15.99	\$0.00	\$59.54
	12/01/2023	\$35.58	\$8.60	\$15.99	\$0.00	\$60.17

Apprentice - LABORER - Zone 3 Building & Site

Effective Date - 06/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.35	\$8.60	\$15.99	\$0.00	\$43.94
2	70	\$22.58	\$8.60	\$15.99	\$0.00	\$47.17
3	80	\$25.80	\$8.60	\$15.99	\$0.00	\$50.39
4	90	\$29.03	\$8.60	\$15.99	\$0.00	\$53.62

Effective Date - 12/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.85	\$8.60	\$15.99	\$0.00	\$44.44
2	70	\$23.16	\$8.60	\$15.99	\$0.00	\$47.75
3	80	\$26.46	\$8.60	\$15.99	\$0.00	\$51.05
4	90	\$29.77	\$8.60	\$15.99	\$0.00	\$54.36

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER (HEAVY & HIGHWAY)	06/01/2021	\$32.25	\$8.60	\$13.93	\$0.00	\$54.78
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/01/2021	\$33.08	\$8.60	\$13.93	\$0.00	\$55.61

Apprentice - LABORER (Heavy & Highway) - Zone 3

Effective Date - 06/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.35	\$8.60	\$13.93	\$0.00	\$41.88
2	70	\$22.58	\$8.60	\$13.93	\$0.00	\$45.11
3	80	\$25.80	\$8.60	\$13.93	\$0.00	\$48.33
4	90	\$29.03	\$8.60	\$13.93	\$0.00	\$51.56

Effective Date - 12/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.85	\$8.60	\$13.93	\$0.00	\$42.38
2	70	\$23.16	\$8.60	\$13.93	\$0.00	\$45.69
3	80	\$26.46	\$8.60	\$13.93	\$0.00	\$48.99
4	90	\$29.77	\$8.60	\$13.93	\$0.00	\$52.30

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.25	\$8.60	\$15.99	\$0.00	\$56.84
	12/01/2021	\$33.08	\$8.60	\$15.99	\$0.00	\$57.67
	06/01/2022	\$33.70	\$8.60	\$15.99	\$0.00	\$58.29
	12/01/2022	\$34.33	\$8.60	\$15.99	\$0.00	\$58.92
	06/01/2023	\$34.95	\$8.60	\$15.99	\$0.00	\$59.54
	12/01/2023	\$35.58	\$8.60	\$15.99	\$0.00	\$60.17
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.35	\$8.60	\$15.99	\$0.00	\$56.94
	12/01/2021	\$33.18	\$8.60	\$15.99	\$0.00	\$57.77
	06/01/2022	\$33.80	\$8.60	\$15.99	\$0.00	\$58.39
	12/01/2022	\$34.43	\$8.60	\$15.99	\$0.00	\$59.02
	06/01/2023	\$35.05	\$8.60	\$15.99	\$0.00	\$59.64
	12/01/2023	\$35.68	\$8.60	\$15.99	\$0.00	\$60.27
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$33.25	\$8.60	\$15.99	\$0.00	\$57.84
	12/01/2021	\$34.08	\$8.60	\$15.99	\$0.00	\$58.67
	06/01/2022	\$34.70	\$8.60	\$15.99	\$0.00	\$59.29
	12/01/2022	\$35.33	\$8.60	\$15.99	\$0.00	\$59.92
	06/01/2023	\$35.95	\$8.60	\$15.99	\$0.00	\$60.54
	12/01/2023	\$36.58	\$8.60	\$15.99	\$0.00	\$61.17
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.25	\$8.60	\$15.99	\$0.00	\$56.84
	12/01/2021	\$33.08	\$8.60	\$15.99	\$0.00	\$57.67
	06/01/2022	\$33.70	\$8.60	\$15.99	\$0.00	\$58.29
	12/01/2022	\$34.33	\$8.60	\$15.99	\$0.00	\$58.92
	06/01/2023	\$34.95	\$8.60	\$15.99	\$0.00	\$59.54
	12/01/2023	\$35.58	\$8.60	\$15.99	\$0.00	\$60.17
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.25	\$8.60	\$15.99	\$0.00	\$56.84
	12/01/2021	\$33.08	\$8.60	\$15.99	\$0.00	\$57.67
	06/01/2022	\$33.70	\$8.60	\$15.99	\$0.00	\$58.29
	12/01/2022	\$34.33	\$8.60	\$15.99	\$0.00	\$58.92
	06/01/2023	\$34.95	\$8.60	\$15.99	\$0.00	\$59.54
	12/01/2023	\$35.58	\$8.60	\$15.99	\$0.00	\$60.17
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LASER BEAM OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86

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

MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE</i>	02/01/2021	\$36.17	\$11.39	\$19.35	\$0.00	\$66.91
	08/01/2021	\$37.17	\$11.39	\$19.48	\$0.00	\$68.04
	02/01/2022	\$37.62	\$11.39	\$19.48	\$0.00	\$68.49

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

Effective Date - 02/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.09	\$11.39	\$19.35	\$0.00	\$48.83
2	60	\$21.70	\$11.39	\$19.35	\$0.00	\$52.44
3	70	\$25.32	\$11.39	\$19.35	\$0.00	\$56.06
4	80	\$28.94	\$11.39	\$19.35	\$0.00	\$59.68
5	90	\$32.55	\$11.39	\$19.35	\$0.00	\$63.29

Effective Date - 08/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.59	\$11.39	\$19.48	\$0.00	\$49.46
2	60	\$22.30	\$11.39	\$19.48	\$0.00	\$53.17
3	70	\$26.02	\$11.39	\$19.48	\$0.00	\$56.89
4	80	\$29.74	\$11.39	\$19.48	\$0.00	\$60.61
5	90	\$33.45	\$11.39	\$19.48	\$0.00	\$64.32

Notes:

Apprentice to Journeyworker Ratio:1:5

MARBLE MASON/TILE LAYER(SP/PT)SeeBrick
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE

See "BRICK/STONE/ARTIFICIAL MASONRY(INCL.MASONRY WATERPROOFING)"

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
MECHANIC/WELDER/BOOM TRUCK <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 3) <i>MILLWRIGHTS LOCAL 1121 - Zone 3</i>	03/01/2021	\$37.66	\$8.58	\$21.57	\$0.00	\$67.81
	01/03/2022	\$38.91	\$8.58	\$21.57	\$0.00	\$69.06
	01/02/2023	\$40.16	\$8.58	\$21.57	\$0.00	\$70.31

Apprentice - MILLWRIGHT - Local 1121 Zone 3

Effective Date - 03/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.71	\$8.58	\$5.72	\$0.00	\$35.01
2	65	\$24.48	\$8.58	\$17.93	\$0.00	\$50.99
3	75	\$28.25	\$8.58	\$18.98	\$0.00	\$55.81
4	85	\$32.01	\$8.58	\$20.01	\$0.00	\$60.60

Effective Date - 01/03/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$21.40	\$8.58	\$5.72	\$0.00	\$35.70
2	65	\$25.29	\$8.58	\$17.93	\$0.00	\$51.80
3	75	\$29.18	\$8.58	\$18.98	\$0.00	\$56.74
4	85	\$33.07	\$8.58	\$20.01	\$0.00	\$61.66

Notes: Step 1&2 Appr. indentured after 1/6/2020 receive no pension, but do receive annuity. (Step 1 \$5.72, Step 2 \$6.66)
Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42

For apprentice rates see "Apprentice- LABORER"

OILER <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$32.20	\$12.47	\$14.50	\$0.00	\$59.17
	12/01/2021	\$33.03	\$12.47	\$14.50	\$0.00	\$60.00
	06/01/2022	\$33.90	\$12.47	\$14.50	\$0.00	\$60.87
	12/01/2022	\$34.78	\$12.47	\$14.50	\$0.00	\$61.75
	06/01/2023	\$35.73	\$12.47	\$14.50	\$0.00	\$62.70
	12/01/2023	\$36.68	\$12.47	\$14.50	\$0.00	\$63.65

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
OTHER POWER DRIVEN EQUIPMENT - CLASS VI <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$30.22	\$12.47	\$14.50	\$0.00	\$57.19
	12/01/2021	\$31.05	\$12.47	\$14.50	\$0.00	\$58.02
	06/01/2022	\$31.92	\$12.47	\$14.50	\$0.00	\$58.89
	12/01/2022	\$32.80	\$12.47	\$14.50	\$0.00	\$59.77
	06/01/2023	\$33.75	\$12.47	\$14.50	\$0.00	\$60.72
	12/01/2023	\$34.70	\$12.47	\$14.50	\$0.00	\$61.67

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Painter (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 3</i>	01/01/2021	\$52.06	\$8.25	\$22.75	\$0.00	\$83.06
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Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.03	\$8.25	\$0.00	\$0.00	\$34.28
2	55	\$28.63	\$8.25	\$6.16	\$0.00	\$43.04
3	60	\$31.24	\$8.25	\$6.72	\$0.00	\$46.21
4	65	\$33.84	\$8.25	\$7.28	\$0.00	\$49.37
5	70	\$36.44	\$8.25	\$19.39	\$0.00	\$64.08
6	75	\$39.05	\$8.25	\$19.95	\$0.00	\$67.25
7	80	\$41.65	\$8.25	\$20.51	\$0.00	\$70.41
8	90	\$46.85	\$8.25	\$21.63	\$0.00	\$76.73

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2021	\$35.43	\$8.25	\$18.85	\$0.00	\$62.53
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* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. *PAINTERS LOCAL 35 - ZONE 3*

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

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.72	\$8.25	\$0.00	\$0.00	\$25.97
2	55	\$19.49	\$8.25	\$4.02	\$0.00	\$31.76
3	60	\$21.26	\$8.25	\$4.38	\$0.00	\$33.89
4	65	\$23.03	\$8.25	\$4.75	\$0.00	\$36.03
5	70	\$24.80	\$8.25	\$16.66	\$0.00	\$49.71
6	75	\$26.57	\$8.25	\$17.03	\$0.00	\$51.85
7	80	\$28.34	\$8.25	\$17.39	\$0.00	\$53.98
8	90	\$31.89	\$8.25	\$18.12	\$0.00	\$58.26

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Painter (Spray or Sandblast, Repaint) <i>Painters Local 35 - Zone 3</i>	01/01/2021	\$32.75	\$8.25	\$18.85	\$0.00	\$59.85

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

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$16.38	\$8.25	\$0.00	\$0.00	\$24.63
2	55	\$18.01	\$8.25	\$4.02	\$0.00	\$30.28
3	60	\$19.65	\$8.25	\$4.38	\$0.00	\$32.28
4	65	\$21.29	\$8.25	\$4.75	\$0.00	\$34.29
5	70	\$22.93	\$8.25	\$16.66	\$0.00	\$47.84
6	75	\$24.56	\$8.25	\$17.03	\$0.00	\$49.84
7	80	\$26.20	\$8.25	\$17.39	\$0.00	\$51.84
8	90	\$29.48	\$8.25	\$18.12	\$0.00	\$55.85

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Painter / Taper (Brush, New) *	01/01/2021	\$34.03	\$8.25	\$18.85	\$0.00	\$61.13
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* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. *Painters Local 35 - Zone 3*

Apprentice - PAINTER - Local 35 Zone 3 - BRUSH NEW

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.02	\$8.25	\$0.00	\$0.00	\$25.27
2	55	\$18.72	\$8.25	\$4.02	\$0.00	\$30.99
3	60	\$20.42	\$8.25	\$4.38	\$0.00	\$33.05
4	65	\$22.12	\$8.25	\$4.75	\$0.00	\$35.12
5	70	\$23.82	\$8.25	\$16.66	\$0.00	\$48.73
6	75	\$25.52	\$8.25	\$17.03	\$0.00	\$50.80
7	80	\$27.22	\$8.25	\$17.39	\$0.00	\$52.86
8	90	\$30.63	\$8.25	\$18.12	\$0.00	\$57.00

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Painter / Taper (Brush, Repaint)	01/01/2021	\$31.35	\$8.25	\$18.85	\$0.00	\$58.45
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Painters Local 35 - Zone 3

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 3 - BRUSH REPAINT

Effective Date - 01/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$15.68	\$8.25	\$0.00	\$0.00	\$23.93
2	55	\$17.24	\$8.25	\$4.02	\$0.00	\$29.51
3	60	\$18.81	\$8.25	\$4.38	\$0.00	\$31.44
4	65	\$20.38	\$8.25	\$4.75	\$0.00	\$33.38
5	70	\$21.95	\$8.25	\$16.66	\$0.00	\$46.86
6	75	\$23.51	\$8.25	\$17.03	\$0.00	\$48.79
7	80	\$25.08	\$8.25	\$17.39	\$0.00	\$50.72
8	90	\$28.22	\$8.25	\$18.12	\$0.00	\$54.59

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	06/01/2021	\$32.25	\$8.60	\$13.93	\$0.00	\$54.78
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/01/2021	\$33.08	\$8.60	\$13.93	\$0.00	\$55.61

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

PANEL & PICKUP TRUCKS DRIVER	06/01/2021	\$35.78	\$12.91	\$14.82	\$0.00	\$63.51
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	08/01/2021	\$35.78	\$13.41	\$14.82	\$0.00	\$64.01
	12/01/2021	\$35.78	\$13.41	\$16.01	\$0.00	\$65.20

PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	08/01/2020	\$43.53	\$9.40	\$23.12	\$0.00	\$76.05
PILE DRIVER LOCAL 56 (ZONE 3)						

For apprentice rates see "Apprentice- PILE DRIVER"

PILE DRIVER	08/01/2020	\$43.53	\$9.40	\$23.12	\$0.00	\$76.05
PILE DRIVER LOCAL 56 (ZONE 3)						

Apprentice - PILE DRIVER - Local 56 Zone 3

Effective Date - 08/01/2020

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\$57.06/2\$61.96/3\$66.87/4\$69.32/5\$71.78/6\$71.78/7\$76.68/8\$76.68

Apprentice to Journeyworker Ratio:1:5

PIPELAYER	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
LABORERS - ZONE 3 (BUILDING & SITE)	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER (HEAVY & HIGHWAY)	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
PLUMBER & PIPEFITTER	03/17/2021	\$43.21	\$9.30	\$16.60	\$0.00	\$69.11
PLUMBERS & PIPEFITTERS LOCAL 104	09/17/2021	\$44.21	\$9.30	\$16.60	\$0.00	\$70.11
	03/17/2022	\$45.46	\$9.30	\$16.60	\$0.00	\$71.36
	09/17/2022	\$46.46	\$9.30	\$16.60	\$0.00	\$72.36
	03/17/2023	\$47.71	\$9.30	\$16.60	\$0.00	\$73.61
	09/17/2023	\$48.71	\$9.30	\$16.60	\$0.00	\$74.61
	03/17/2024	\$49.96	\$9.30	\$16.60	\$0.00	\$75.86

Apprentice - PLUMBER/PIPEFITTER - Local 104

Effective Date - 03/17/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.44	\$9.30	\$9.85	\$0.00	\$38.59
2	50	\$21.61	\$9.30	\$9.85	\$0.00	\$40.76
3	55	\$23.77	\$9.30	\$9.85	\$0.00	\$42.92
4	60	\$25.93	\$9.30	\$9.85	\$0.00	\$45.08
5	65	\$28.09	\$9.30	\$9.85	\$0.00	\$47.24
6	70	\$30.25	\$9.30	\$9.85	\$0.00	\$49.40
7	75	\$32.41	\$9.30	\$9.85	\$0.00	\$51.56
8	80	\$34.57	\$9.30	\$9.85	\$0.00	\$53.72
9	80	\$34.57	\$9.30	\$16.60	\$0.00	\$60.47
10	80	\$34.57	\$9.30	\$16.60	\$0.00	\$60.47

Effective Date - 09/17/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.89	\$9.30	\$9.85	\$0.00	\$39.04
2	50	\$22.11	\$9.30	\$9.85	\$0.00	\$41.26
3	55	\$24.32	\$9.30	\$9.85	\$0.00	\$43.47
4	60	\$26.53	\$9.30	\$9.85	\$0.00	\$45.68
5	65	\$28.74	\$9.30	\$9.85	\$0.00	\$47.89
6	70	\$30.95	\$9.30	\$9.85	\$0.00	\$50.10
7	75	\$33.16	\$9.30	\$9.85	\$0.00	\$52.31
8	80	\$35.37	\$9.30	\$9.85	\$0.00	\$54.52
9	80	\$35.37	\$9.30	\$16.60	\$0.00	\$61.27
10	80	\$35.37	\$9.30	\$16.60	\$0.00	\$61.27

Notes: **1:1,2:5,3:9,4:12

Apprentice to Journeyworker Ratio:**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PNEUMATIC CONTROLS (TEMP.) <i>PLUMBERS & PIPEFITTERS LOCAL 104</i>	03/17/2021	\$43.21	\$9.30	\$16.60	\$0.00	\$69.11
	09/17/2021	\$44.21	\$9.30	\$16.60	\$0.00	\$70.11
	03/17/2022	\$45.46	\$9.30	\$16.60	\$0.00	\$71.36
	09/17/2022	\$46.46	\$9.30	\$16.60	\$0.00	\$72.36
	03/17/2023	\$47.71	\$9.30	\$16.60	\$0.00	\$73.61
	09/17/2023	\$48.71	\$9.30	\$16.60	\$0.00	\$74.61
	03/17/2024	\$49.96	\$9.30	\$16.60	\$0.00	\$75.86
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWDERMAN & BLASTER <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$33.25	\$8.60	\$15.99	\$0.00	\$57.84
	12/01/2021	\$34.08	\$8.60	\$15.99	\$0.00	\$58.67
	06/01/2022	\$34.70	\$8.60	\$15.99	\$0.00	\$59.29
	12/01/2022	\$35.33	\$8.60	\$15.99	\$0.00	\$59.92
	06/01/2023	\$35.95	\$8.60	\$15.99	\$0.00	\$60.54
	12/01/2023	\$36.58	\$8.60	\$15.99	\$0.00	\$61.17
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$33.25	\$8.60	\$13.93	\$0.00	\$55.78
	12/01/2021	\$34.08	\$8.60	\$13.93	\$0.00	\$56.61
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$37.04	\$12.47	\$14.50	\$0.00	\$64.01
	12/01/2021	\$37.87	\$12.47	\$14.50	\$0.00	\$64.84
	06/01/2022	\$38.74	\$12.47	\$14.50	\$0.00	\$65.71
	12/01/2022	\$39.62	\$12.47	\$14.50	\$0.00	\$66.59
	06/01/2023	\$40.57	\$12.47	\$14.50	\$0.00	\$67.54
	12/01/2023	\$41.52	\$12.47	\$14.50	\$0.00	\$68.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS 404 - Construction Service (Northampton)</i>	05/01/2020	\$22.44	\$11.07	\$6.50	\$0.00	\$40.01
RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
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>	06/01/2021	\$35.90	\$12.47	\$14.50	\$0.00	\$62.87
	12/01/2021	\$36.73	\$12.47	\$14.50	\$0.00	\$63.70
	06/01/2022	\$37.60	\$12.47	\$14.50	\$0.00	\$64.57
	12/01/2022	\$38.48	\$12.47	\$14.50	\$0.00	\$65.45
	06/01/2023	\$39.43	\$12.47	\$14.50	\$0.00	\$66.40
	12/01/2023	\$40.38	\$12.47	\$14.50	\$0.00	\$67.35

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Coal tar pitch) <i>ROOFERS LOCAL 248</i>	07/16/2020	\$33.66	\$11.75	\$16.20	\$0.00	\$61.61
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For apprentice rates see "Apprentice- ROOFER"

ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg) <i>ROOFERS LOCAL 248</i>	07/16/2020	\$33.16	\$11.75	\$15.70	\$0.00	\$60.61
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Apprentice - ROOFER - Local 248

Effective Date - 07/16/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.90	\$11.75	\$0.00	\$0.00	\$31.65
2	65	\$21.55	\$11.75	\$15.70	\$0.00	\$49.00
3	70	\$23.21	\$11.75	\$15.70	\$0.00	\$50.66
4	75	\$24.87	\$11.75	\$15.70	\$0.00	\$52.32
5	80	\$26.53	\$11.75	\$15.70	\$0.00	\$53.98
6	85	\$28.19	\$11.75	\$15.70	\$0.00	\$55.64
7	90	\$29.84	\$11.75	\$15.70	\$0.00	\$57.29
8	95	\$31.50	\$11.75	\$15.70	\$0.00	\$58.95

Notes:

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

Apprentice to Journeyworker Ratio:1:3

ROOFER SLATE / TILE / PRECAST CONCRETE <i>ROOFERS LOCAL 248</i>	07/16/2020	\$33.66	\$11.75	\$16.20	\$0.00	\$61.61
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For apprentice rates see "Apprentice- ROOFER"

SCRAPER <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$36.51	\$12.47	\$14.50	\$0.00	\$63.48
	12/01/2021	\$37.34	\$12.47	\$14.50	\$0.00	\$64.31
	06/01/2022	\$38.21	\$12.47	\$14.50	\$0.00	\$65.18
	12/01/2022	\$39.09	\$12.47	\$14.50	\$0.00	\$66.06
	06/01/2023	\$40.04	\$12.47	\$14.50	\$0.00	\$67.01
	12/01/2023	\$40.99	\$12.47	\$14.50	\$0.00	\$67.96

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

SELF-POWERED ROLLERS AND COMPACTORS (TAMPERS) <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$35.90	\$12.47	\$14.50	\$0.00	\$62.87
	12/01/2021	\$36.73	\$12.47	\$14.50	\$0.00	\$63.70
	06/01/2022	\$37.60	\$12.47	\$14.50	\$0.00	\$64.57
	12/01/2022	\$38.48	\$12.47	\$14.50	\$0.00	\$65.45
	06/01/2023	\$39.43	\$12.47	\$14.50	\$0.00	\$66.40
	12/01/2023	\$40.38	\$12.47	\$14.50	\$0.00	\$67.35

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SELF-PROPELLED POWER BROOM <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$33.28	\$12.47	\$14.50	\$0.00	\$60.25
	12/01/2021	\$34.11	\$12.47	\$14.50	\$0.00	\$61.08
	06/01/2022	\$34.98	\$12.47	\$14.50	\$0.00	\$61.95
	12/01/2022	\$35.86	\$12.47	\$14.50	\$0.00	\$62.83
	06/01/2023	\$36.81	\$12.47	\$14.50	\$0.00	\$63.78
	12/01/2023	\$37.76	\$12.47	\$14.50	\$0.00	\$64.73
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
SHEETMETAL WORKER <i>SHEETMETAL WORKERS LOCAL 63</i>	07/01/2021	\$38.29	\$10.64	\$17.33	\$1.99	\$68.25
	01/01/2022	\$39.29	\$10.64	\$17.33	\$2.02	\$69.28

Apprentice - SHEET METAL WORKER - Local 63

Effective Date - 07/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$17.23	\$4.79	\$4.67	\$0.80	\$27.49
2	50	\$19.15	\$5.32	\$5.19	\$0.89	\$30.55
3	55	\$21.06	\$5.85	\$9.33	\$1.09	\$37.33
4	60	\$22.97	\$6.38	\$9.33	\$1.16	\$39.84
5	65	\$24.89	\$6.92	\$9.33	\$1.23	\$42.37
6	70	\$26.80	\$7.45	\$9.33	\$1.31	\$44.89
7	75	\$28.72	\$7.98	\$9.33	\$1.38	\$47.41
8	80	\$30.63	\$8.51	\$16.29	\$1.66	\$57.09
9	85	\$32.55	\$9.04	\$16.29	\$1.74	\$59.62
10	90	\$34.46	\$9.58	\$16.29	\$1.81	\$62.14

Effective Date - 01/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$17.68	\$4.79	\$4.67	\$0.81	\$27.95
2	50	\$19.65	\$5.32	\$5.19	\$0.90	\$31.06
3	55	\$21.61	\$5.85	\$9.33	\$1.10	\$37.89
4	60	\$23.57	\$6.38	\$9.33	\$1.18	\$40.46
5	65	\$25.54	\$6.92	\$9.33	\$1.25	\$43.04
6	70	\$27.50	\$7.45	\$9.33	\$1.33	\$45.61
7	75	\$29.47	\$7.98	\$9.33	\$1.40	\$48.18
8	80	\$31.43	\$8.51	\$16.29	\$1.69	\$57.92
9	85	\$33.40	\$9.04	\$16.29	\$1.76	\$60.49
10	90	\$35.36	\$9.58	\$16.29	\$1.84	\$63.07

Notes:

Apprentice to Journeyworker Ratio:1:3

SPECIALIZED EARTH MOVING EQUIP < 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.24	\$12.91	\$14.82	\$0.00	\$63.97
	08/01/2021	\$36.24	\$13.41	\$14.82	\$0.00	\$64.47
	12/01/2021	\$36.24	\$13.41	\$16.01	\$0.00	\$65.66

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.53	\$12.91	\$14.82	\$0.00	\$64.26
	08/01/2021	\$36.53	\$13.41	\$14.82	\$0.00	\$64.76
	12/01/2021	\$36.53	\$13.41	\$16.01	\$0.00	\$65.95
SPRINKLER FITTER <i>SPRINKLER FITTERS LOCAL 669</i>	04/01/2021	\$43.14	\$10.55	\$16.41	\$0.00	\$70.10

Apprentice - SPRINKLER FITTER - Local 669

Effective Date - 04/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.41	\$7.75	\$0.00	\$0.00	\$27.16
2	50	\$21.57	\$7.75	\$0.00	\$0.00	\$29.32
3	55	\$23.73	\$10.55	\$8.15	\$0.00	\$42.43
4	60	\$25.88	\$10.55	\$8.15	\$0.00	\$44.58
5	65	\$28.04	\$10.55	\$8.40	\$0.00	\$46.99
6	70	\$30.20	\$10.55	\$8.40	\$0.00	\$49.15
7	75	\$32.36	\$10.55	\$8.40	\$0.00	\$51.31
8	80	\$34.51	\$10.55	\$8.40	\$0.00	\$53.46
9	85	\$36.67	\$10.55	\$8.40	\$0.00	\$55.62
10	90	\$38.83	\$10.55	\$8.40	\$0.00	\$57.78

Notes:

Apprentice to Journeyworker Ratio:1:1

TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 7</i>	06/27/2021	\$45.21	\$11.75	\$13.26	\$0.00	\$70.22
	01/02/2022	\$45.81	\$12.00	\$13.42	\$0.00	\$71.23
	07/03/2022	\$46.41	\$12.25	\$13.69	\$0.00	\$72.35
	01/01/2023	\$47.01	\$12.50	\$13.96	\$0.00	\$73.47

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 7

Effective Date - 06/27/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.08	\$6.45	\$0.54	\$0.00	\$25.07
2	45	\$20.34	\$6.45	\$0.61	\$0.00	\$27.40
3	50	\$22.61	\$11.75	\$7.08	\$0.00	\$41.44
4	55	\$24.87	\$11.75	\$7.15	\$0.00	\$43.77
5	65	\$29.39	\$11.75	\$8.93	\$0.00	\$50.07
6	70	\$31.65	\$11.75	\$10.10	\$0.00	\$53.50

Effective Date - 01/02/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.32	\$6.60	\$0.54	\$0.00	\$25.46
2	45	\$20.61	\$6.60	\$0.61	\$0.00	\$27.82
3	50	\$22.91	\$12.00	\$7.13	\$0.00	\$42.04
4	55	\$25.20	\$12.00	\$7.20	\$0.00	\$44.40
5	65	\$29.78	\$12.00	\$9.01	\$0.00	\$50.79
6	70	\$32.07	\$12.00	\$10.20	\$0.00	\$54.27

Notes:

Steps are 800 hours

Apprentice to Journeyworker Ratio:1:1

TERRAZZO FINISHERS	02/01/2021	\$54.69	\$11.39	\$22.09	\$0.00	\$88.17
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	08/01/2021	\$56.09	\$11.39	\$22.25	\$0.00	\$89.73
	02/01/2022	\$56.68	\$11.39	\$22.25	\$0.00	\$90.32

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - TERRAZZO FINISHER-Local 3 Marble/Tile (Spr/Ptt)

Effective Date - 02/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.35	\$11.39	\$22.09	\$0.00	\$60.83
2	60	\$32.81	\$11.39	\$22.09	\$0.00	\$66.29
3	70	\$38.28	\$11.39	\$22.09	\$0.00	\$71.76
4	80	\$43.75	\$11.39	\$22.09	\$0.00	\$77.23
5	90	\$49.22	\$11.39	\$22.09	\$0.00	\$82.70

Effective Date - 08/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.05	\$11.39	\$22.25	\$0.00	\$61.69
2	60	\$33.65	\$11.39	\$22.25	\$0.00	\$67.29
3	70	\$39.26	\$11.39	\$22.25	\$0.00	\$72.90
4	80	\$44.87	\$11.39	\$22.25	\$0.00	\$78.51
5	90	\$50.48	\$11.39	\$22.25	\$0.00	\$84.12

Notes:

Apprentice to Journeyworker Ratio:1:5

TERRAZZO MECHANIC	02/01/2021	\$55.77	\$11.39	\$22.08	\$0.00	\$89.24
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	08/01/2021	\$57.17	\$11.39	\$22.24	\$0.00	\$90.80
	02/01/2022	\$57.74	\$11.39	\$22.24	\$0.00	\$91.37

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 02/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.89	\$11.39	\$22.08	\$0.00	\$61.36
2	60	\$33.46	\$11.39	\$22.08	\$0.00	\$66.93
3	70	\$39.04	\$11.39	\$22.08	\$0.00	\$72.51
4	80	\$44.62	\$11.39	\$22.08	\$0.00	\$78.09
5	90	\$50.19	\$11.39	\$22.08	\$0.00	\$83.66

Effective Date - 08/01/2021

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.59	\$11.39	\$22.24	\$0.00	\$62.22
2	60	\$34.30	\$11.39	\$22.24	\$0.00	\$67.93
3	70	\$40.02	\$11.39	\$22.24	\$0.00	\$73.65
4	80	\$45.74	\$11.39	\$22.24	\$0.00	\$79.37
5	90	\$51.45	\$11.39	\$22.24	\$0.00	\$85.08

Notes:

Apprentice to Journeyworker Ratio:1:5

TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2021	\$42.07	\$8.60	\$17.72	\$0.00	\$68.39
	12/01/2021	\$43.08	\$8.60	\$17.72	\$0.00	\$69.40
For apprentice rates see "Apprentice- LABORER"						
TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2021	\$40.79	\$8.60	\$17.72	\$0.00	\$67.11
	12/01/2021	\$41.80	\$8.60	\$17.72	\$0.00	\$68.12
For apprentice rates see "Apprentice- LABORER"						
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2021	\$40.67	\$8.60	\$17.72	\$0.00	\$66.99
	12/01/2021	\$41.68	\$8.60	\$17.72	\$0.00	\$68.00
For apprentice rates see "Apprentice- LABORER"						
TRACTORS <i>OPERATING ENGINEERS LOCAL 98</i>	06/01/2021	\$35.90	\$12.47	\$14.50	\$0.00	\$62.87
	12/01/2021	\$36.73	\$12.47	\$14.50	\$0.00	\$63.70
	06/01/2022	\$37.60	\$12.47	\$14.50	\$0.00	\$64.57
	12/01/2022	\$38.48	\$12.47	\$14.50	\$0.00	\$65.45
	06/01/2023	\$39.43	\$12.47	\$14.50	\$0.00	\$66.40
	12/01/2023	\$40.38	\$12.47	\$14.50	\$0.00	\$67.35
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.82	\$12.91	\$14.82	\$0.00	\$64.55
	08/01/2021	\$36.82	\$13.41	\$14.82	\$0.00	\$65.05
	12/01/2021	\$36.82	\$13.41	\$16.01	\$0.00	\$66.24
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2021	\$52.90	\$8.60	\$18.17	\$0.00	\$79.67
	12/01/2021	\$53.91	\$8.60	\$18.17	\$0.00	\$80.68
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2021	\$54.90	\$8.60	\$18.17	\$0.00	\$81.67
	12/01/2021	\$55.91	\$8.60	\$18.17	\$0.00	\$82.68
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2021	\$44.97	\$8.60	\$18.17	\$0.00	\$71.74
	12/01/2021	\$45.98	\$8.60	\$18.17	\$0.00	\$72.75
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2021	\$46.97	\$8.60	\$18.17	\$0.00	\$73.74
	12/01/2021	\$47.98	\$8.60	\$18.17	\$0.00	\$74.75
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2021	\$36.24	\$12.91	\$14.82	\$0.00	\$63.97
	08/01/2021	\$36.24	\$13.41	\$14.82	\$0.00	\$64.47
	12/01/2021	\$36.24	\$13.41	\$16.01	\$0.00	\$65.66
WAGON DRILL OPERATOR <i>LABORERS - ZONE 3 (BUILDING & SITE)</i>	06/01/2021	\$32.50	\$8.60	\$15.99	\$0.00	\$57.09
	12/01/2021	\$33.33	\$8.60	\$15.99	\$0.00	\$57.92
	06/01/2022	\$33.95	\$8.60	\$15.99	\$0.00	\$58.54
	12/01/2022	\$34.58	\$8.60	\$15.99	\$0.00	\$59.17
	06/01/2023	\$35.20	\$8.60	\$15.99	\$0.00	\$59.79
	12/01/2023	\$35.83	\$8.60	\$15.99	\$0.00	\$60.42
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 3 (HEAVY & HIGHWAY)</i>	06/01/2021	\$32.50	\$8.60	\$13.93	\$0.00	\$55.03
	12/01/2021	\$33.33	\$8.60	\$13.93	\$0.00	\$55.86
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
WATER METER INSTALLER <i>PLUMBERS & PIPEFITTERS LOCAL 104</i>	03/17/2021	\$43.21	\$9.30	\$16.60	\$0.00	\$69.11
	09/17/2021	\$44.21	\$9.30	\$16.60	\$0.00	\$70.11
	03/17/2022	\$45.46	\$9.30	\$16.60	\$0.00	\$71.36
	09/17/2022	\$46.46	\$9.30	\$16.60	\$0.00	\$72.36
	03/17/2023	\$47.71	\$9.30	\$16.60	\$0.00	\$73.61
	09/17/2023	\$48.71	\$9.30	\$16.60	\$0.00	\$74.61
	03/17/2024	\$49.96	\$9.30	\$16.60	\$0.00	\$75.86
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Outside Electrical - West						
EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$44.67	\$8.00	\$12.55	\$0.00	\$65.22
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$30.58	\$8.00	\$5.48	\$0.00	\$44.06
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN / TRUCK DRIVER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$39.97	\$8.00	\$10.96	\$0.00	\$58.93
For apprentice rates see "Apprentice- LINEMAN"						
HEAVY EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$47.01	\$8.00	\$13.22	\$0.00	\$68.23
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$51.71	\$8.00	\$15.55	\$0.00	\$75.26

Apprentice - LINEMAN (Outside Electrical) - West Local 42

Effective Date - 09/01/2019

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$31.03	\$8.00	\$3.43	\$0.00	\$42.46
2	65	\$33.61	\$8.00	\$3.51	\$0.00	\$45.12
3	70	\$36.20	\$8.00	\$3.59	\$0.00	\$47.79
4	75	\$38.78	\$8.00	\$5.16	\$0.00	\$51.94
5	80	\$41.37	\$8.00	\$5.24	\$0.00	\$54.61
6	85	\$43.95	\$8.00	\$5.32	\$0.00	\$57.27
7	90	\$46.54	\$8.00	\$7.40	\$0.00	\$61.94

Notes:

Apprentice to Journeyworker Ratio:1:2

TELEDATA CABLE SPLICER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	02/04/2019	\$30.73	\$4.70	\$3.17	\$0.00	\$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	02/04/2019	\$28.93	\$4.70	\$3.14	\$0.00	\$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	02/04/2019	\$28.93	\$4.70	\$3.14	\$0.00	\$36.77
TRACTOR-TRAILER DRIVER <i>OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42</i>	09/01/2019	\$44.67	\$8.00	\$12.55	\$0.00	\$65.22

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.

WEEKLY PAYROLL RECORDS REPORT
& STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, Section 27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the next page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

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

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Industries within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

<p style="margin: 0;">STATEMENT OF COMPLIANCE</p> <p style="text-align: right; margin: 0;">_____, 20____</p>	
I, _____ <small>(Name of signatory party)</small>	_____ <small>(Title)</small>
do hereby state: That I pay or supervise the payment of the persons employed by	
_____ <small>(Contractor, subcontractor or public body)</small>	on the _____ <small>(Building or project)</small>
and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.	
Signature _____	
Title _____	

SECTION 02 11 10 – CONTAMINATED MATERIAL MANAGEMENT

PART 1 - GENERAL

1.1 DESCRIPTION

This Specification has been made part of the Contract Documents **as a contingency** in the event that Contaminated Media (e.g., soil) is encountered during the performance of the Work. It is the Town of Longmeadow's presumption that the UST systems have not leaked or otherwise caused a release to the environment subject to MGL c. 21e and 310 CMR 40.0000.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Protective measures required during excavation of contaminated material.
 - 2. Staging of contaminated soil.
 - 3. Loading, transporting, and disposing off-site of contaminated soil and groundwater.
- B. Related Sections include the following:
 - 1. Section 02 65 00 – Underground Storage Tank Removal.

1.3 REFERENCES

- A. 310 CMR 40.0000: Massachusetts Contingency Plan
- B. 40 CFR 260-265 and 280: Resource Conservation and Recovery Act
- C. 49 CFR 170-180: Hazardous Material Transportation Regulations

1.4 SUBMITTALS

- A. Submit the names of State-approved disposal facilities for contaminated media, and documentation of their respective state or federal operating permits and written acceptance of the materials at least one week prior to disposal.
- B. Material shipment records, including Bills-of-Lading, required by applicable Federal, State and local regulations, at least 48 hours prior to removal of the material.
- C. Scale tickets for confirmation of payment within one week of material disposal and prior to or alongside the associated payment requisition.

1.5 QUALITY ASSURANCE

- A. Scales used for determination of weight for contaminated soil, concrete, or asphalt debris disposal shall be certified by the Commonwealth of Massachusetts.
- B. Soil encountered during excavation which is suspected to be contaminated shall be managed by the Contractor under the direction of the Engineer and Licensed Site Professional (LSP). Soil management shall also include excavation sampling and testing of soils by the Engineer to determine if soil is contaminated.

1.6 PROJECT CONDITIONS

- A. Keep contaminated equipment within designated work area as directed by the Engineer. Decontaminate equipment each time it is removed from contaminated work area to another area on site.
- B. Locate stockpile and staging areas as close as is practical to the excavation area to limit movement within the site boundaries. Stockpile locations shall be coordinated with the Owner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Plastic Sheet: Polyethylene sheeting, 10-mil minimum thickness, 10 feet minimum width.
- B. Absorbent Boom: 8-inch diameter SPC Oil Sorbent Booms™ or approved equal.
- C. Granular Absorbent: Speedi-Dri or approved equal.
- D. Shipping Drums: U.S. DOT approved shipping drums complying with 49 CFR Part 173, labeled in accordance with 49 CFR Part 172, and compatible with liquid and semi-liquid contaminated materials present at the site.
- E. Vehicles for Transporting Contaminated Liquids and Waste: registered with MassDEP and meeting appropriate State and Federal DOT standards.

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide separate stockpiles for contaminated and non-contaminated soil.
- B. Sweep paved areas daily.

3.2 DECONTAMINATION PROCEDURES

- A. Follow the requirements of 29 CFR 1910.120 and the contractor's HASP.
- B. Provide for decontamination of personnel, equipment and supplies that enter the contaminated work area or are exposed to contaminated material.
- C. Personnel decontamination, at a minimum, shall consist of work practices aimed at limiting the spread of contaminants, use of disposable protective clothing, and proper personal hygiene practices, including no smoking within the work area and washing of exposed skin areas prior to leaving the work area for breaks, lunch, or at the conclusion of each work day.

3.3 CONTAMINATED SOIL MANAGEMENT

- A. In the event a reportable condition is identified, the work shall proceed in accordance with the requirements of 310 CMR 40.000 and the direction of the Owner's Licensed Site Professional (LSP). When the Contractor locates material that is believed to be contaminated or hazardous, the Contractor shall notify the Engineer.

1. The Contractor shall segregate soil for disposal or reuse based on its environmental quality, as directed by the Engineer. Engineer will screen excavated soil with field instrumentation to evaluate the presence of petroleum contamination and to separate contaminated soil.
 2. The Contractor shall assist the Engineer in collection of samples to characterize the materials, as requested by the Engineer.
 3. Both "clean" and "contaminated" soil stockpile locations will be established at locations acceptable to the Owner
- B. Construct containment system for stockpiling of contaminated soil or soil suspected to be contaminated to prevent seepage of soil or water into the environment.
1. Lay down polyethylene sheeting of sufficient size for contaminated soil stockpile, perimeter erosion controls, and granular absorbent outer ring.
 2. Install erosion controls along entire perimeter of stockpile, in accordance with manufacturer's recommendations and local, state and federal regulations.
 3. When excavation is ongoing, occasionally mist contaminated stockpile with water during windy or dry conditions.
 4. Cover stockpile with polyethylene sheeting, surround with sorbent materials to contain material and to prevent infiltration of the elements. Secure in place with weights.
- C. At the contractor's sole discretion and cost, lined roll-off containers may be utilized in lieu of a field-erected stockpile system.
- D. Maintain stockpile and containment system. Inspect daily for damage and signs of leakage. Immediately replace damaged materials.

3.4 LOADING, TRANSPORTATION AND DISPOSAL

- A. Contaminated Soils:
1. Contaminated soils shall be loaded from stockpiles into Contractor vehicles and transported to a soil recycling/disposal or hazardous waste facility, approved by the Owner. All vehicles used to transport soils shall be clean and free of any residual soil or debris and shall have a metal dump body free from any holes and a sealable, watertight tailgate. Transport vehicles, vehicle gross weight and loading and unloading procedures shall meet all appropriate state and DOT standards.
 2. The materials shall be covered during transport to ensure that seepage of soil or water and/or dust into or out of the dump body is prevented. Bulk solids shall be kept several inches below the top of the truck container.
 3. The Contractor vehicles shall utilize maximum legal load limits for transport from the site to the disposal facility.
 4. The load shall be secured to prevent shifting or release during transport.
 5. Contractor shall weigh each truckload of soil on certified scales. It is the responsibility of the Contractor to select a weigh station or facility that has scales appropriate and suitable for the Project. Prior to beginning the work, Contractor shall provide the Owner with the following:
 - a. The name and location of the scale facility to be used for weighing the material. This entity is subject to the approval of the Owner.
 - b. The recorded tare weight for each truck to be utilized on the Project.

6. The Contractor shall deliver all scale tickets to the Engineer for confirmation of quantities to be paid. The tare tickets should be retained with the daily tickets or tally sheets. No tickets shall knowingly be issued or loads accepted that are heavier than legal weight limits.

B. Bulk Contaminated Material:

1. All vehicles used by the Contractor to transport "contaminated" liquid and solid waste, other than soil, shall be registered with the Commonwealth for the transport of such material. The materials shall be covered or protected during transport to prevent the seepage of waste material, water or dust into or out of the vehicle. Transport vehicles, gross vehicle weight and loading and unloading procedures shall meet all appropriate State and Federal DOT standards.
2. The Contractor shall load and transport bulk waste material, other than soil, to a permitted solid waste disposal facility, as arranged by the Contractor and accepted by the Engineer.

C. Drums

1. If drums are utilized for the collection of decontamination rinse water, these drums are the responsibility of the Contractor and shall be loaded and transported to an approved and permitted waste disposal facility, as arranged by the Contractor.

3.5 CONTAMINATED GROUNDWATER MANAGEMENT

- A. The Contractor shall notify the Owner and Engineer if free floating product (petroleum) is observed on the surface of the water table within the UST grave following removal. As directed by Owner and LSP, skimming and/or pumping of the free product shall be conducted until all free products is captured and properly containerized.
- B. Groundwater and free floating product collected by the Contractor shall be containerized and managed in accordance with State and Federal Regulations.

3.6 BACKFILL

- A. Backfill in accordance with Section 31 20 00 – Excavation, Backfill, Compaction and Dewatering, at the direction of the Engineer.

PART 4 - MEASUREMENT AND PAYMENT

A. Residual Oil/Sludge Removal:

1. The price, so stated, constitutes full compensation for removing and disposing of the tank contents and includes all costs incident to pumping or otherwise removing the liquids, all hauling, disposing of, and for all equipment, tools, labor and incidentals necessary to complete the work.
2. Actual gallons of material delivered to permitted treatment/disposal facilities, as measured by the as measured by the volume of residual waste in each tank truck (from a from tank gauging system) or by Contractor "sticking" the tank versus appropriate tank chart.

END OF SECTION

SECTION 02 65 00 – UNDERGROUND STORAGE TANK REMOVAL

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Although not a complete list of relevant references, specific attention is called to the following Sections:
 - 1. Section 02 11 10 – Contaminated Material Management, as it pertains to the handling of contaminated soil, fuel residuals and other waste material.
 - 2. Section 31 20 00 – Excavation, Backfill, Compaction and Dewatering as it pertains to backfill, compaction and restoration of the UST grave.
- B. Refer to the drawings for further definition of location, extent, and details of the work described herein.
- C. Coordinate with the Engineer with regard to analytical testing requirements and sample collection, and as directed with regard to soil handling and closure documentation. The Town of Longmeadow is responsible for laboratory testing of soil and/or groundwater as specified herein.
- D. Where referenced, standard specifications of Technical Societies, Manufacturers' Associations, and Federal Agencies shall include all amendments current as of the date of issue of these Specifications.
- E. The Contractor shall note that underground utilities and structural elements not designated for demolition on the project drawings are to be protected from damage during the execution of the work.

1.2 REFERENCE STANDARDS

- A. Occupational Safety
 - 1. 29 CFR 1910.120 and 1926.65: Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response (HAZWOPER) in the General Industry and Construction sectors. Where one citation is used, both are implied.
 - 2. 29 CFR 1910.146 Occupational Safety and Health Administration Confined Space Entry.
 - 3. 520 CMR 14.00: Excavation and Trench Safety
 - 4. NFPA 30: Flammable and Combustible Liquids Code
- B. Hazardous Materials Transportation, Storage and Disposal
 - 1. 310 CMR 40.000: Massachusetts Contingency Plan
 - 2. 527 CMR 9.00: Massachusetts Fire Code, Tanks and Containers
 - 3. 40 CFR 260-265 and 280: Resource Conservation and Recovery Act
 - 4. 49 CFR 170-180: Hazardous Material Transportation Regulations
 - 5. NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response
- C. Tank Closure
 - 1. 310 CMR 80.00: Underground Storage Tank (UST) Systems

2. API 1604: Recommended Practice for the Removal and Disposal of Used Underground Petroleum Storage Tanks
3. Comm. #402-96: Commonwealth of Massachusetts Underground Storage Tank Closure Assessment Manual

1.3 SUMMARY OF WORK

- A. Provide all labor, equipment, implements and materials required to remove and dispose heating oil underground storage tank (UST) and associated appurtenances. The following items are major items of work included:
 1. Clean and remove any residual liquids and sludges contained in the UST, containerize, transport and dispose off-site in accordance with local, state and federal regulations.
 2. Disconnect, clean, cut, remove and dispose supply, return, and vent lines as indicated on site plans. Electrical lines shall be disconnected and conduit cut at edge of excavation.
 3. Remove the UST from subgrade, load and dispose at a state-licensed salvaging facility. Obtain and submit appropriate documentation of disposal of the UST, residuals, and any other components required to be disposed.
 4. Assist with sample collection activities as overseen by the Engineer to evaluate soil conditions and determination of whether a reportable petroleum release has occurred. Be prepared to conduct excavation activities as directed by the Engineer in response to a reportable release of petroleum.
 5. Backfill and compact the excavation as described in Section 31 20 00 Earth Moving.
- B. Contractor shall follow the provisions of this Section as warranted in the event that additional USTs not depicted on the site plans are identified at the site.
 1. Contractor shall notify Engineer of identification of additional tank(s). The Engineer shall notify the owner. Contractor shall proceed with tank removal in accordance with the specification at the direction of the Owner and Engineer.

1.4 PERMITS, FEES, INSPECTION, CERTIFICATES

- A. Notify DigSafe no less than 72 business hours prior to the commencement of excavation work. Locate and clear all utilities in the work area.
- B. Apply for, obtain and pay for all permits and inspections required. Pay any required fees.
 1. Contractor is responsible to complete form FP-292 (as applicable) and coordinate removal with the MassDEP and the Longmeadow Fire Department and obtain additional local permits as required.
 2. Contractor is required to acquire any permits necessary for the performance of the work, including but not limited to trench permits in accordance with 520 CMR 14.00, as applicable, and any permits required for cutting, torch welding, or other methods associated with the removal of the UST and appurtenances.
 3. Contractor shall obtain permits for electrical and mechanical trades as required by state building code and local regulation.
- C. Obey pertinent Federal, State, and Municipal laws, bylaws, codes and regulations, and authorities having jurisdiction, including but not limited to the regulations listed in Part 1.4.

1.5 SUBMITTALS

- A. Prior to the commencement of work, provide the following submittals to the Engineer. Provide five business days' notice of the date of UST removal:
1. DigSafe® confirmation number
 2. Health and Safety Plan (HASP) for Engineer's record, and documentation of appropriate training for the work, in accordance with OSHA regulations and General Contractor requirements. Contractor bears sole responsibility for implementation of the HASP, and the Engineer and Owner bear no responsibility for its content.
 3. Documentation supporting the implementation of any structural controls required to maintain the site, including shoring, trenching or other related components as applicable. Where structural controls (shoring, trench boxes, etc.) are required, structural support plans shall be prepared and sealed by a Massachusetts-licensed Professional Engineer of competent discipline.
 4. Fully executed Form FP-292: Application and Permit for Storage Tank Removal.
 5. The location and MassDEP Tank Yard registration number for the UST disposal facility, and the location of the disposal facilities for waste liquids and residuals generated during UST removal activities.
 6. A work plan including a schedule and depicting the proposed work areas, including proposed exclusion zones, staging areas, stockpile locations, laydown areas, and areas of ingress and egress as needed.
 7. Documentation of the backfill soil quality in accordance with Section 31 20 00 Excavation, Backfill, Compaction and Dewatering.
- B. The following submittals will be required within seven days of the completion of the work:
1. Fully executed manifests, bills of lading, disposal tickets, tank ledgers, and other appropriate information related to the disposal of the UST, related appurtenances, concrete slab, residuals, and waste products.

1.6 HEALTH AND SAFETY

- A. The Contractor shall note that petroleum may be encountered in environmental media outside of the UST, and shall prepare a HASP that addresses safe working conditions. The HASP shall be prepared in conformance with OSHA HAZWOPER requirements and shall, at a minimum, include the following information:
1. Identification of the Contractor's Site Safety Officer and the appropriate chain of command, including a health and safety manager and emergency coordinator, if warranted.
 2. A job hazard assessment for each project task and description of hazard communication practices.
 3. Use of personnel protective equipment (PPE), including a protocol for upgrading levels of PPE as necessary.
 4. Protocols for ensuring safe cleaning of the UST in accordance with local, state and federal requirements.
 5. Monitoring requirements to ensure worker health and safety during UST removal and cleaning operations.
 6. Procedures for air monitoring and respiratory protection.
 7. Traffic control requirements, as warranted.

8. Other requirements as included in 29 CFR 1926.65.
9. The Contractor shall maintain a copy of the HASP on site and make it available for review as requested by the Engineer and local authorities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Support structures used to maintain and protect existing facilities will be designated by the Contractor and approved prior to the commencement of work.
- B. Polyethylene sheeting, 6-mil minimum thickness, 10-foot minimum width.
- C. Hay bales in sufficient quantity to control storm water impacts to stockpiled materials and prevent discharge to storm water infrastructure, as needed.
- D. Spill containment materials including, but not limited to, booms and/or pads, and the tools to collect the materials after use and must be maintained on-site.
- E. Absorbent Boom: 8-inch diameter SPC Oil Sorbent Boom™ or approved equal.
- F. Granular Absorbent: Speedi-Dri or approved equal.
- G. Backfill materials conform to Section 31 20 00 Excavation, Backfill, Compaction and Dewatering.
- H. Steel plates, barrels, caution tape, snow fencing, etc. shall be provided as necessary for overnight protection of excavation areas, and shall conform to all requirements of the local Trench Permit, and meet relevant MassDOT standards for such materials.

2.2 TOOLS AND EQUIPMENT

- A. Contractor shall provide equipment and tools as needed to complete the project, including but not limited to the following:
 1. Heavy equipment (e.g. vacuum truck, wheel loader, excavator, etc.) and qualified operating engineers.
 2. Hand tools (e.g. shovels, picks, etc.).
 3. Any and all materials necessary for safe cleaning, including but not limited to dry ice, explosive gas meters, hoses, pumps, and associated appurtenances.
- B. Electrified tools and equipment must be intrinsically safe and grounded to reduce the risk of electric spark.
- C. The Contractor shall have available sufficient inventory of materials necessary for the job, including protective clothing, respirators, filter cartridges, tape, and polyethylene sheeting of proper size and thickness.
- D. The Contractor shall be responsible to supply power and water as needed to complete work.

PART 3 - EXECUTION

3.1 PRE-EXCAVATION

- A. Excavation shall not commence until the Contractor has marked the proposed limits of excavation and obtained DigSafe clearance, and the underground facilities have been marked in their designated colors.
- B. Power to the UST system shall be disconnected prior to closure.
- C. Structural controls will be implemented, if warranted to prevent unanticipated movement of the UST or structural damage to site features intended to remain.
- D. An Exclusion Zone shall be established to limit unauthorized access to the work area.
- E. The Contractor shall provide temporary erosion, sedimentation, and storm water control measures as necessary during UST removal activities.

3.2 EXPOSURE, ENTRY AND CLEANING

- A. Contractor shall demolish the overlying pad and excavate to expose the top of the UST and remove its appurtenances.
- B. Contractor shall remove and containerize residual liquids from the UST to the extent feasible, and clean the UST interior.
- C. Cleaning shall be deemed complete when residual liquids and sludge have been removed from the UST and containerized to the maximum extent practicable.
- D. Refer to Section 02 11 10 for measurement and payment for tank cleaning.

3.3 FUEL PIPING

- A. Fuel lines shall be vacuumed clean concurrent with the UST cleaning activities, disconnected and removed in their entirety.
- B. Vent piping shall be cut and removed as shown on the drawings.
- C. All disconnected fuel piping shall be disposed off-site in accordance with state and federal regulations.

3.4 UST REMOVAL AND DISPOSAL

- A. The contractor shall expose the top of the UST to the extent necessary to remove the UST from the subsurface. Soil removed during UST exposure shall be stored on polyethylene sheeting in the vicinity of the excavation and the stockpile shall be covered and secured at the conclusion of each working day.
 - 1. Stop excavation and immediately inform the Engineer if material exhibits characteristics of contamination (odors, staining, sheens).
 - 2. If contaminated soil is encountered, the Contractor shall notify the Engineer. The Engineer will notify MassDEP if applicable, and will direct response actions as warranted. Contractor shall be prepared to remove soil at the direction of the Engineer prior to completion of the work.

3. Material excavated in order to expose the UST shall be reused or disposed off-site at the direction of the Engineer, based on its suitability for reuse on the site.
- B. Tie-down systems, if encountered shall be addressed as follows:
 1. The straps and metal clips shall be removed and disposed.
 2. Dead-men or pads shall be retained on-site.
 - C. The excavation shall be kept as small as practicable to conduct the work. The excavation shall be made in open cut and no tunneling will be allowed.
 - D. The tanks shall be lifted from the excavation and disposed off-site in accordance with local and state regulations.
 1. The USTs shall become the property and responsibility of the Contractor and shall be removed from the site and disposed of in accordance with the applicable regulations at a Massachusetts tank yard.
 2. Tank cutting, if conducted, shall be performed in accordance with municipal ordinances, the Contractor's Site Specific HASP, and in accordance with any Hot Work permits, if required.
 3. Excavation support shall be provided if the Contractor must enter the excavation to support removal activities.
 - E. The Contractor shall remove and dispose of all existing tank appurtenances and piping to include exposed vent line, high-level alarms mounted on school exterior wall, interior tank gauging system (Veeder-Root), and pump within mechanical room.
 - F. The Contractor shall provide appropriate security measures and engineered controls to prevent unauthorized access to the excavation area following UST removal and until the completion of backfilling.
 - G. Backfill and compact the excavation area in accordance with the specifications and upon approval from the Engineer.

3.5 DECONTAMINATION

- A. All equipment shall be decontaminated prior to delivery to the site.
- B. Heavy equipment contaminated during the performance of the work shall be decontaminated on a schedule compatible with site operations and in no case later than the end of the same working day.
 1. Equipment may not be removed from the work area to other areas of the project site until it has been adequately decontaminated.
 2. Decontamination procedures may include power washing equipment, manual removal of contaminated media, or other methods as appropriate.
 3. Contractor shall containerize decontamination for off-site disposal.
- C. Contractor shall manage soiled personnel protective equipment and dispose of at no additional cost to the Owner.

3.6 ENVIRONMENTAL CHARACTERIZATION AND QUALITY CONTROL

- A. Activities required by the MassDEP UST closure guidance, including soil screening, and soil sample collection will be overseen by the Engineer.
- B. Upon removal of the UST, the Contractor will be responsible for assisting with the collection of samples (soil) for UST closure consistent with 310 CMR 80.00 requirements and their approved "UST Closure Plan." The Engineer will be present for screening of soil samples.

3.7 ENVIRONMENTAL REMEDIATION

- A. It is the Town of Longmeadow's presumption that the UST systems have not leaked or otherwise caused a release to the environment subject to MGL c. 21e and 310 CMR 40.0000.
- B. Refer to Section 02 11 10 – Contaminated Material Management. Excavate, stage and dispose of materials at the direction of the Engineer.

3.8 MATERIAL DISPOSAL

- A. The Contractor shall properly dispose of all containers of liquids, residuals, contaminated groundwater, and/or regulated soil generated from UST cleaning, spill containment, solid waste, asphalt, concrete, and PPE produced during the removal of the tank.
- B. The Contractor shall be responsible for preparation of all required waste manifests including but not limited to hazardous waste manifests, material shipping records, and bills of lading necessary for the transport and disposal of materials generated during the UST removal. The Contractor shall provide the Owner and Engineer 48-hour notice for review and execution as generator for waste shipping documents.
- C. The Owner shall be notified at least 24 hours in advance of transporting waste liquids from the Site. The Owner shall be notified at least 24 hours prior to the removal and off-site disposal of contaminated soil. The Owner shall sign the shipping documents for each load removed from the Site.
- D. The Contractor is responsible for the lawful transportation and disposal of the waste materials.

PART 4 - MEASUREMENT AND PAYMENT

A. Contaminated Soil / Remediation Waste:

- 1. The price, so stated, constitutes full compensation for excavation, staging, handling, loading, transporting and disposing/recycling (asphalt batch) of contaminated soil and material from the site to approved treatment/disposal facilities, preparation of manifests or bills of lading, fees paid, and incidental materials, tools, equipment, and services.
- 2. Actual net weight in tons of material delivered to permitted treatment/disposal facilities, as measured by the permanent scales at the respective facilities. Total weight will be the summation of weight bills issued by such facilities. No minimum tonnages will be accepted.

END OF SECTION

SECTION 31 20 00 – EXCAVATION, BACKFILL, COMPACTION AND DEWATERING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. Excavation, backfill and compaction for subsurface utilities
 - 2. Earth retention systems
 - 3. Test pits
 - 4. Temporary dewatering systems

1.2 REFERENCES

- A. ASTM D698 - Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ [600 kN-m/m³]), Annual Book of ASTM Standards - Volume 04.08. - Soil and Rock
- B. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method. Annual Book of ASTM Standards - Volume 04.08 - Soil and Rock
- C. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System). Annual Book of ASTM Standards - Volume 04.08 - Soil and Rock
- D. ASTM D2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth), Annual Book of ASTM Standards - Volume 04.08. - Soil and Rock
- E. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth), Annual Book of ASTM Standards - Volume 04.08. - Soil and Rock
- F. 29 CFR Part 1926 Subpart P - OSHA Excavation Regulations 1926.560 through 1926.562 including Appendices A through F

1.3 DEFINITIONS

- A. Benching - A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
- B. Earth Retention Systems - Any structural system, such as sheeting and bracing or cofferdams, designed to retain in-situ soils in place and prevent the collapse of the sides of an excavation in order to protect employees and adjacent structures.
- C. Excavation - Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.
- D. Protective System - A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include earth retention systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

- E. Registered Professional Engineer - A person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a "registered professional engineer" within the meaning of this standard when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.
- F. Shield System - A structure that is designed to withstand the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either pre-manufactured or job-built in accordance with 29 CFR 1926.652(c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields."
- G. Sloping - A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.
- H. Temporary Dewatering System – A system to lower and control water to maintain stable, undisturbed subgrades at the lowest excavation levels. Dewatering shall be provided for all pipelines, structures and for all other miscellaneous excavations.
- I. Trench - A narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m).

1.4 SUBMITTALS

- A. Drawings and calculations for each Earth Retention System required in the Work. The submittal shall be in sufficient detail to disclose the method of operation for each of the various stages of construction required for the completion of the Earth Retention Systems.
 - 1. Submit calculations and drawings for Earth Retention Systems prepared, signed and stamped by a Professional Engineer registered in the state where the work is performed.
 - 2. All Excavation, Trenching, and related Earth Retention Systems shall comply with the requirements of OSHA excavation safety standards (29 CFR Part 1926 Subpart P) and State requirements. Where conflict between OSHA and State regulations exists, the more stringent requirements shall apply.
- B. Performance data for the compaction equipment to be utilized
- C. Construction methods that will be utilized for the removal of rock

1.5 PROJECT CONDITIONS

- A. Notify Dig Safe and obtain Dig Safe identification numbers.
- B. Notify utility owners in reasonable advance of the work and request the utility owner to stake out on the ground surface the underground facilities and structures. Notify the Engineer in writing of any refusal or failure to stake out such underground utilities after reasonable notice.

- C. Make explorations and Excavations to determine the location of existing underground structures, pipes, house connection services, and other underground facilities in accordance with Paragraph 3.2.D of this Section.

PART 2 PRODUCTS

2.1 SOIL MATERIALS

- A. Fill material is subject to the approval of the Engineer and may be either material removed from excavations or borrow from off site. Fill material, whether from the excavations or from borrow, shall be of such nature that after it has been placed and properly compacted, it will make a dense, stable fill.
- B. In no case shall Remediation Waste, as that term is defined under 310 CMR 40.0000, be used or re-used as fill material.
- C. Satisfactory fill materials shall include materials classified by ASTM D 2487 as GW, GP, GM, GP-GM, GW-GM, GC, GP-GC, SW, and SP.
- D. Satisfactory fill materials shall not contain trash, refuse, vegetation, masses of roots, individual roots more than 18 inches long or more than 1/2 inch in diameter, or stones over 6 inches in diameter. Organic matter shall not exceed minor quantities and shall be well distributed.
- E. Satisfactory fill materials shall not contain frozen materials nor shall backfill be placed on frozen material.
- F. Excavated surface and/or pavement materials such as gravel or trap rock that are salvaged may be used as a sub-grade material. In no case shall salvaged materials be substituted for the required gravel base.

2.2 DEWATERING MATERIALS

- A. Provide hay bales and silt fence in accordance with Section 01570.
- B. Provide silt filter bags (Dandy Dewatering Bag, Dirt bag, JMP Environ-Protection Filter Bag, or equal) of adequate size to match flow rate.

PART 3 EXECUTION

3.1 PREPARATION

- A. Public Safety and Convenience
 1. Take precautions for preventing injuries to persons or damage to property in or about the Work.
 2. Provide safe access for the Owner's representatives at site during construction.
 3. Do not obstruct site drainage, natural watercourses or other provisions made for drainage.

3.2 CONSTRUCTION

A. Earth Retention Systems

1. Provide Earth Retention Systems necessary for safety of personnel and protection of the Work, adjacent work, utilities and structures.
2. Maintain Earth Retention Systems for the duration of the Work.
3. Systems shall be constructed using interlocking corner pieces at the four corners. Running sheet piles by at the corners, in lieu of fabricated corner pieces, will not be allowed.
4. Drive sheeting ahead of and below the advancing trench excavation to avoid loss of materials from below and from in front of the sheeting.
5. Sheeting is to be driven to at least the depth specified by the designer of the earth retention system, but no less than 2 feet below the bottom of the Excavation.
6. Remove sheeting, unless designated to be left in place, in a manner that will not endanger the construction or other structures. Backfill and properly compact all voids left or caused by the withdrawal of sheeting.
7. Remove earth retention systems, which have been designated by the Engineer to be left in place, to a depth of 3 feet below the established grade.

B. Excavation

1. Perform excavation to the lines and grades indicated on the Drawings. Backfill unauthorized over-excavation in accordance with the provisions of this Section, at no additional cost to the Owner.
2. Excavate with equipment selected to minimize damage to existing utilities or other facilities. Hand excavate as necessary to locate utilities or avoid damage.
3. Saw cut the existing pavement in the vicinity of the excavation prior to the start of excavation in paved areas, so as to prevent damage to the paving outside the requirements of construction.
4. During excavation, material satisfactory for backfill shall be stockpiled in an orderly manner at a distance from the sides of the excavation equal to at least one half the depth of the excavation, but in no case closer than 2 feet.
 - a. Excavated material not required or not suitable for backfill shall be removed from the site.
 - b. Perform grading to prevent surface water from flowing into the excavation.
 - c. Pile excavated material in a manner that will endanger neither the safety of personnel in the trench nor the Work itself. Avoid obstructing sidewalks and driveways.
 - d. Hydrants under pressure, valve pit covers, valve boxes, manholes, curb stop boxes, fire and police call boxes, or other utility controls shall be left unobstructed and accessible until the Work is completed.
5. Make pipe trenches as narrow as practicable and keep the sides of the trenches undisturbed until backfilling has been completed. Provide a clear distance of 12 inches on each side of the pipe.

6. The final 6 inches of excavation and grading of the trench bottom shall be performed by hand so as not to disturb the material below the grade required for setting the pipe or appurtenances.
 - a. Where suitable bedding materials will be placed and compacted throughout the length of the trench, hand excavation of the final 6 inches will not be required.
 - b. Grade the trench bottom to provide uniform bearing and support for the bottom quadrant of each section of pipe.
 - c. Excavate bell holes at each joint to eliminate point bearing.
 - d. Remove stones greater than 6 inches in any dimension from the bottom of the trench to avoid point bearing.
7. If satisfactory materials are not encountered at the design subgrade level, excavate unsatisfactory materials to the depth directed by the Engineer and properly dispose of the material. Backfill the resulting extra depth of excavation with satisfactory fill materials and compact in accordance with the provisions of this Section.

C. Backfill and Compaction

1. Unless otherwise specified or indicated on the Drawings, use satisfactory material removed during excavation for backfilling trenches. The Engineer may require stockpiling, drying, blending and reuse of materials from sources on the Project.
2. Spread and compact the material promptly after it has been deposited. When, in the Engineer's judgment, equipment is inadequate to spread and compact the material properly, reduce the rate of placing of the fill or employ additional equipment.
3. When excavated material is specified for backfill and there is an insufficient amount of this material at a particular location on the Project due to rejection of a portion thereof, consideration will be given to the use of excess material from one portion of the Project to make up the deficiency existing on other portions of the Project. Moving this excess material from one portion of the Project and placing it in another portion of the Project will be at no additional cost to the Owner.
 - a. Use borrow material if there is no excess of excavated material available at other portions of the Project.
4. Backfilling and compaction methods shall attain 95% of maximum dry density at optimum moisture content as determined in accordance with ASTM D698, Method C.
5. Do not place stone or rock fragment larger than six inches in greatest dimension in the backfill.
6. Maximum loose lift height for backfilling existing or borrow material shall be 8 inches, unless satisfactory compaction is demonstrated otherwise to the Engineer through field-testing. In no case shall loose lift height for backfilling exceed 12 inches.
7. Do not drop large masses of backfill material into the trench endangering the pipe or adjacent utilities.

8. Install pipe in rock excavated trenches on a dense graded stone bedding with a minimum depth of 6 inches. Shape the stone bedding at the pipe bells to provide uniform support. Encase the pipe in the dense graded crushed stone bedding to a grade 6 inches over the top of the pipe and 12 inches on each side of the pipe.
9. Backfill from the bottom of the trench to the centerline of the pipe with the specified material. This initial backfill is to be placed in lifts of no more than 6 inches and thoroughly tamped under and around the pipe. This initial backfilling shall be deposited in the trench for its full width on both sides of the pipe, fittings and appurtenances simultaneously.
10. Electrical conduit not encased in concrete, shall be backfilled with sand borrow conforming to the requirements of Section 02320. The backfill shall be placed in the trench for its full width and shall extend to 12 inches over the pipe.
11. Where excavation is made through permanent pavements, curbs, paved driveways or paved sidewalks, or where such structures are undercut by the excavation, place the entire backfill to sub-grade with granular materials and compact in 6 inch lifts. Use approved mechanical tampers for the full depth of the trench. If required, sprinkle the backfill material with water before tamping so as to improve compaction.
12. Place and compact backfill around manholes, vaults, pumping stations, gate boxes or other structures in six inch layers, from a point 1 foot over the pipe. Exercise care to protect and prevent damage to the structures.
13. Install impervious trench dams where stone borrow is used for pipe bedding to prevent groundwater from following along the stone bedding. Install dams every 100 feet.

D. Test Pit Excavation

1. Excavate test pits at locations as are indicated on the Drawings, as necessary, or as required by the Engineer. Test pits are required to locate underground facilities whose location, depth or size are not precisely known and are critical to the Work. Brace, sheet, and pump test pit excavations for safe excavation and examination of the structure or utility to be exposed.
2. Determine the material and construction characteristics of the existing pipeline exposed during the test pit excavation.
3. Measure the depth to the top of each pipe and utility, from the ground surface, at each test pit location.
4. Clear the site, excavate and backfill all test pits. Cut and remove roadway surfaces; remove cement, concrete and bituminous concrete sidewalks; remove, handle, rehandle, backfill and dispose of materials encountered within the limits of the Work.
5. Conduct all subsurface investigations in accordance 29 CFR Part 1926 Subpart P – OSHA Excavation Regulations 1926.560 through 1926.562 including Appendices A through F.
6. Upon completion of the examination by the Engineer backfill and compact the test pits in accordance with this Section.
7. Repair paved surfaces in accordance with Section 02740.

E. Dewatering

1. Provide, operate and maintain adequate pumping, diversion and drainage facilities to maintain the excavated area sufficiently dry from groundwater and/or surface runoff so as not to adversely affect construction procedures nor cause excessive disturbance of underlying natural ground. Locate dewatering system components so that they do not interfere with construction under this or other contracts.
2. Take actions necessary to ensure that dewatering discharges comply with permits applicable to the Project. Dispose of water from the trenches and excavations in such a manner as to avoid public nuisance, injury to public health or the environment, damage or public or private property, or damage to public or private property, or damage to the work completed or in progress.
3. Repair any damage resulting from the failure of the dewatering operations and any damage resulting from the failure to maintain all the areas of work in a suitable dry condition, at no additional cost to the Owner.
4. Exercise care to ensure that water does not collect in the bell or collar holes to sufficient depth to wet the bell or collar of pipes waiting to be jointed.
5. Take precautions to protect new work from flooding during storms or from other causes. Control the grading in the areas surrounding all excavations so that the surface of the ground will be properly sloped to prevent water from running into the excavated area. Where required, provide temporary ditches for drainage. Upon completion of the work, all areas shall be restored to original condition.
6. Brace or otherwise protect pipelines and structures not stable against uplift during construction.
7. Do not excavate until the dewatering system is operational and the excavation may proceed without disturbance to the final subgrade.
8. Unless otherwise specified, continue dewatering uninterrupted until the structures, pipes, and appurtenances to be installed have been completed such that they will not float or be otherwise damaged by an increase in groundwater elevation.
9. If open pumping from sumps and ditches results in "boils", loss of fines, or softening of the ground, submit a dewatering plan to the Engineer within 48 hours. Implement the approved modified plan and repair any damage incurred at no additional cost to the Owner.
10. Where subgrade materials are unable to meet the subgrade density requirements due to improper dewatering techniques, remove and replace the materials in accordance with Section 02320 at no additional cost to the Owner.
11. Notify the Engineer immediately if any settlement or movement is detected of survey points adjacent to excavations being dewatered. If settlement is deemed by the Engineer to be related to the dewatering, submit a modified dewatering plan to the Engineer within 24 hours. Implement the approved modified plan and repair any damage incurred to the adjacent structure at no additional cost to the Owner.
12. Dewatering discharge:

- a. Install sand and gravel filters in conjunction with well points and deep wells to prevent the migration of fines from the existing soil during the dewatering operation.
- b. Do not discharge water into any sanitary sewer system.
- c. Provide separately controllable pumping lines.
- d. The Engineer reserves the right to sample discharge water at any time.

13. Removal

- a. Do not remove dewatering system without written approval from the Engineer.
- b. Backfill and compact sumps or ditches with screened gravel or crushed rock.
- c. Remove well points and deep wells. Backfill abandoned well holes with cement grout having a water cement ratio of 1 to 1 by volume.

END OF SECTION

SECTION 32 12 16 – BITUMINOUS CONCRETE PAVEMENT

PART 1 GENERAL

1.1 SUMMARY

- A. Related Sections
 - 1. Section 02315 - Excavation, Backfilling, Compaction and Dewatering

1.2 REFERENCES

- A. Commonwealth of Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges," 1988 Edition as amended.
- B. AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, 1990 Edition, as amended.

1.3 SUBMITTALS

- A. Product information and mix design for each mix specified under this Section.
- B. Product data sheets for all additives proposed in the mix design.
- C. Certificate indicating the mixes specified meet or exceed the requirements specified herein.
- D. Certificate indicating the mix plant conforms to TAI Manual MS-3, Commonwealth of Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges."

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with TAI Manual MS-8., Commonwealth of Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges."
- B. Mixing Plant: Conform to TAI Manual MS-3, Commonwealth of Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges."
- C. Obtain materials from same source throughout.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General
 - 1. Bituminous materials shall conform to the requirements of these Specifications.
 - 2. Bitumen delivered to a project or to a mix plant must be accompanied by a proper certificate signed by the producer's authorized representative. Shipments of material not accompanied by a certificate will not be accepted for use in the work.
- B. Bituminous Concrete Paving (Hot Mix Asphalt) shall be Class I, Type I-1, as specified in Sections 460 and M3.11.0 of the above referenced Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges," 1988 edition, as amended.

- C. Hot Mix Asphalt (HMA)
 - 1. Hot Mix Asphalt materials shall meet the requirements of M3.11.0 of the above referenced Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges," 1988 edition, as amended.
 - 2. Only Performance Graded Asphalt Binder grades PG 64-28 or PG 52-34 will be used as modifiers and shall meet the requirements of AASHTO M 320.

PART 3 EXECUTION

3.1 PAVING – GENERAL

- A. Install bituminous concrete pavement in accordance with Section 460 of the Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges," 1988 edition, as amended.
- B. Place binder course as soon as possible after the gravel base has been prepared, shaped and compacted.
- C. Place and compact binder course by steel-wheeled rollers of sufficient weight to thoroughly compact the bituminous concrete.
- D. Maintain pavement under this Contract during the guarantee period of one year and promptly (within 3 days of notice given by the Engineer) refill and repave areas which have settled or are otherwise unsatisfactory for traffic.
- E. All pavement thicknesses referred to herein are compacted thicknesses. Place sufficient mix to ensure that the specified thickness of pavement occurs wherever called for.
- F. In no case will pavement be placed until the gravel base is dry and compacted to at least 95% maximum density at optimum moisture content.
- G. No mix shall be placed on wet or damp surfaces.
- H. Regardless of any temperature requirements, no mix conforming to the requirements of these specifications shall be placed after October 31 or before May 1 of any year.
- I. All manhole frames, catch basin frames and utility boxes are to be set to the grade of the binder course until such time as the top course is placed. Then reset the frames to the grade of the top course. Frames and utility boxes shall not be allowed to protrude above the surface of the binder course. All excavated materials removed for raising of the frames and utility boxes are to be replaced with concrete. This ring of concrete shall be filled flush with the surrounding binder course.

- J. Furnish and spread calcium chloride on disturbed surfaces to control dust conditions at the direction of the Engineer.
- K. The contact surfaces of curbs, castings, and other structures shall be painted with a tack coat prior to placement of paving.
- L. Along curbs, structures and all other places not accessible with a roller, the paving mixture shall be thoroughly compacted with tampers. Such tampers shall not weigh less than 25 pounds and shall have a tamping face no more than 50 square inches in size. The surface of the mixture after compaction shall be smooth and true to the established line and grade.
- M. Top course mixes shall provide for 4% air voids in the finished product. The initial in-place voids shall not exceed 7.5%. Final in-place voids shall not be below 2.5%. Additional asphalt content shall not be added for the sole purpose of reducing the in-place voids. If the in-place voids are too high or the paving is expected to occur during cold weather, more compactive effort will be required to adjust the void content rather than increasing the asphalt content.
- N. Breakdown rolling shall not occur before the HMA has cooled to a temperature of 320 degrees Fahrenheit, and shall be completed before the HMA mat has cooled to a temperature of 275 degrees Fahrenheit. Intermediate rolling shall be completed prior to the HMA mat attaining a temperature of 200 degrees Fahrenheit. Finish rolling shall be completed prior to the HMA mat attaining a temperature of 150 degrees Fahrenheit. Roller and paver speeds shall be agreed upon with the Engineer prior to placing HMA to ensure mix temperature requirements will be met.
- O. When the air temperature falls below 50°F, extra precautions shall be taken in drying the aggregates, controlling the temperatures of the materials and placing and compacting the mixtures.
- P. No mixtures shall be placed when the air temperature is below 40°F, or when the material on which the mixtures are to be placed contains frost or has a surface temperature ENGINEER considers too low.
- Q. No vehicular traffic or loads shall be permitted on the newly completed pavement until adequate stability has been attained and the material has cooled sufficiently to prevent distortion or loss of fines. If the climatic or other conditions warrant it, the period of time before opening to traffic may be extended at the discretion of the Engineer.
- R. Existing drainage patterns shall not be altered by the new pavement construction unless otherwise shown on the Drawings.
- S. Maintain binder course in a condition suitable for traffic throughout the construction period. Defects shall be repaired within 3 days of notification.
- T. Prepare the binder course for placement of the top course. The binder course shall be regraded, placing additional bituminous concrete where settling has occurred, repairing the existing surface and replacing broken or damaged sections at no additional cost to the Owner. The binder course surface shall be in all respects acceptable to the Engineer before the final pavement is placed. The surface shall then be broom cleaned.

- U. Following preparation of the binder course, apply the tack coat at 0.10 gallons per square yard and place the top course.
- V. Apply joint adhesive to all longitudinal joints for proper adhesion of the new bituminous concrete pavement to the existing.
- W. Pavement markings damaged during the course of the work shall be repaired in accordance with pre-existing painted conditions.
- X. Following all paving, the area along the edge of all pavements, sidewalks, berms, waterways, etc. shall be backed up with gravel, or loam and seed as required, so that it is flush with the adjacent paving. Whenever possible the final surface of the backup material shall slope away from the surface edge to allow proper sheeting of runoff.

END OF SECTION

SECTION 32 92 00 - LAWNS AND GRASSES

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Seeding.
 - 2. Topsoil.
- B. Related Sections include the following:
 - 1. Section 31 1000 "Site Clearing"
 - 2. Section 31 2000 "Earth Moving"

1.2 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of topsoil.
- B. Topsoil: Native or imported topsoil, or surface soil modified to become topsoil; mixed with soil amendments. Free of masses of roots and individual roots more than 6 inches long and 1/2 inch in diameter, subject to approval by the Engineer.
- C. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath topsoil.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
- C. Product Certificates: For soil amendments, fertilizers, and mulch, signed by product manufacturer.
- D. Qualification Data: For landscape Installer.
- E. Material Test Reports: For existing surface soil and imported topsoil.
- F. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of lawns during a calendar year. Submit before expiration of required maintenance periods.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful lawn establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when planting is in progress.

- B. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.
- C. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of topsoil.
 - 1. Report suitability of topsoil for lawn growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory topsoil.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Seed: Deliver seed in original sealed, labeled, and undamaged containers.

1.6 SCHEDULING

- A. Planting Restrictions: None for this Project
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.7 LAWN MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
 - 1. Seeded Lawns: 60 days from date of Substantial Completion.
 - a. When full maintenance period has not elapsed before end of planting season, or if lawn is not fully established, continue maintenance during next planting season.
- B. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, re-grade, and replant bare or eroded areas and re-mulch to produce a uniformly smooth lawn.
 - 1. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch. Anchor as required to prevent displacement.
- C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
 - 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water lawn at a minimum rate of 1 inch per week.
- D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain grass height of 2 to 3 inches.
- E. Lawn Post-fertilization: Apply fertilizer after initial mowing and when grass is dry.
 - 1. Use fertilizer that will provide actual nitrogen of at least 1 lb. /1000 sq. ft. to lawn area.

PART 2 - PRODUCTS

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.
- B. Seed Species: Seed of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:
 - 1. New Lawns: Valley Green Mix #1 or approved equal. Valley Green, USA Holyoke, MA 1-800-862-0089 www.valleygreenusa.com
Over Seeding for established turf: Valley Green Mix #2 or approved equal. Valley Green, USA Holyoke, MA 1-800-862-0089 www.valleygreenusa.com

New Loam Seed Mix	
Creeping Red Fescue	40%
Chewing Fescue	40%
Perennial Rye	20%
Overseeding Seed Mix	
Perennial Rye	80%
Kentucky Bluegrass	20%

2.2 TOPSOIL

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 6 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
 - 1. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - a. Supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from agricultural land, bogs or marshes.
 - 2. Topsoil Source: Import topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from agricultural land, bogs or marshes.

2.3 PLANTING ACCESSORIES

- A. Selective Herbicides: EPA registered and approved, of type recommended by manufacturer for application.

2.4 FERTILIZER

- A. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 1 percent nitrogen and 18 percent phosphoric acid.
- B. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.
- C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing agency.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive lawns and grass for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydro seeding overspray.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 LAWN PREPARATION

- A. Limit lawn subgrade preparation to areas to be planted.
- B. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 6 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- C. Thoroughly blend topsoil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend topsoil mix.
- D. Delay mixing fertilizer with topsoil if planting will not proceed within a few days.
- E. Mix lime with dry soil before mixing fertilizer.
 - 1. Spread topsoil mix to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if topsoil or subgrade is frozen, muddy, or excessively wet.
- F. Unchanged Subgrades: If lawns are to be planted in areas unaltered or undisturbed by excavating, grading, or surface soil stripping operations, prepare surface soil as follows:
- G. Remove existing grass, vegetation, and turf. Do not mix into surface soil.

- H. Loosen surface soil to a depth of at least of 6 inches. Apply soil amendments and fertilizers according to topsoil mix proportions and mix thoroughly into top 6 inches of soil. Till soil to a homogeneous mixture of fine texture.
- I. Remove stones larger than 1 inch in any dimension and sticks, roots, trash, and other extraneous matter.
- J. Legally dispose of waste material, including grass, vegetation, and turf, off Owner's property.
- K. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
- L. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- M. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

3.4 SEEDING

- A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
- B. Do not use wet seed or seed that is moldy or otherwise damaged.
- C. Sow seed at the rate of 2 lb./1,000 sq. ft.
- D. Rake seed lightly into top 1/8 inch of topsoil, roll lightly, and water with fine spray.
- E. Protect seeded areas with slopes not exceeding 1:3 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose depth over seeded areas. Spread by hand, blower, or other suitable equipment.
- F. Bond straw mulch by spraying with asphalt emulsion at the rate of 10 to 13 gal./1,000 sq. ft.. Take precautions to prevent damage or staining of structures or other plantings adjacent to mulched areas. Immediately clean damaged or stained areas.

3.5 HYDROSEEDING

- A. Hydroseeding: Mix specified seed, fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
- B. Mix slurry with tackifier.
- C. Apply slurry uniformly to all areas to be seeded in a one-step process. Apply mulch at a minimum rate of 1,500-lb/acre dry weight but not less than the rate required to obtain specified seed-sowing rate.

3.6 LAWN RENOVATION

- A. Renovate existing lawn damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.

- B. Reestablish lawn where settlement or washouts occur or where minor re-grading is required.
- C. Remove sod and vegetation from diseased or unsatisfactory lawn areas; do not bury in soil.
- D. Remove topsoil containing foreign materials resulting from Contractor's operations, including oil drippings, fuel spills, stone, gravel, and other construction materials, and replace with new topsoil.
- E. Mow, dethatch, core aerate, and rake existing lawn.
- F. Remove waste and foreign materials, including grass, vegetation, and turf, and legally dispose of them off Owner's property.
- G. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches.
- H. Apply soil amendments and initial fertilizers required for establishing new lawns and mix thoroughly into top 4 inches of existing soil. Provide new topsoil to fill low spots and meet finish grades.
- I. Apply seed and protect with straw mulch as required for new lawns.
- J. Water newly planted areas and keep moist until new lawn is established.

3.7 SATISFACTORY LAWNS

- A. Satisfactory Seeded Lawn: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 3 by 3 inches.
- B. Reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

3.8 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.
- C. Remove erosion-control measures after grass establishment period.

END OF SECTION