

**PURCHASING DIVISION  
CITY OF WORCESTER  
MASSACHUSETTS 01608-1895  
ROOM 201 - CITY HALL 455 MAIN ST  
PHONE (508) 799-1220**

**SEALED BID INVITATION  
(Labor, - Filed Sub-Bids NOT Required)  
M.G.L. Chapter 30, §39M /  
M.G.L. Chapter 149, s.44A (C)**

**SEALED BID NO. 8049-M4**

**DATE: July 20, 2023**

**CITY OF WORCESTER  
Christopher J. Gagliastro, MCPPO  
Purchasing Director**

**Buyer: Maureen McKeon**

All bids are subject to the terms and conditions and specificity herein set forth.

**COMPLETE FORM FOR GENERAL BID (ENCLOSED) MUST BE SUBMITTED IN A SEALED ENVELOPE:**

DATE: August 9, 2023

TIME: 10:00 A.M. LOCAL TIME

PLACE: Purchasing Division, Room 201, City Hall, Worcester, Massachusetts

MARK SEALED ENVELOPE **"Sealed Bid No 8049-M4, Masonry Repairs-South Division Fire Station/DPF"**

The name and address of the bidder must appear in the upper left-hand corner of the envelope. The City of Worcester is not responsible for bids not properly marked.

**A COMPLETE BID PACKAGE SUBMISSION CONSISTS OF THE FOLLOWING:**

- Form for General Bid (61 – 65)
- Bid Security (5% of Total Bid)
- Other Forms as required by City of Worcester

**OTHER CONDITIONS:**

- Please go to ([www.worcesterma.gov](http://www.worcesterma.gov)) to review bid results following bid due date.
- All questions must be referred in writing to Maureen McKeon via email at [mckeonmp@worcesterma.gov](mailto:mckeonmp@worcesterma.gov) Last day for questions will be August 4, 2023.

**A pre-bid conference will be held on August 1, 2023 at 11 AM, @ South Division Firehouse, 180 Southbridge Street, Worcester, MA. All prospective bidders are encouraged to attend.**

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## **ARTICLE 101: INSTRUCTIONS TO BIDDERS**

### **SECTION 1 - INTRODUCTION; DEFINITIONS**

1.1 In accordance with an Advertisement for Bids, the City of Worcester (the "Owner") has invited bids for the project described in the specifications contained herein.

1.2 These Instructions to Bidders (the "Instructions") are intended to assist bidders in the preparation of their bids, to call attention to various legal requirements and to set forth certain conditions upon which bids are submitted and received.

1.3 The award of the contract is governed by Chapter 30, s. 39M of the Massachusetts General Laws. Certain provisions of the foregoing statute and of other applicable statutes are summarized in these Instructions. Whenever these Instructions or any other contract documents set forth or summarize applicable statutory provisions, whether or not the statutes have been specifically referred to, such summaries are for convenience only, do not purport to be complete or correct as summaries of any particular material, and shall in no respect supersede, expand or limit rights or duties of the Owner or bidders in matters governed by the statute.

1.4 The following definitions shall apply in these Instructions and in the other Contract Documents:

- 1) The term "bidding documents" shall include the Advertisement for Bids, these Instructions, the bid forms, contract forms and other Contract Documents bound herewith, the Drawings, the Specifications, and all Addenda issued prior to receipt of bids.
- 2) The terms "Addenda" and "Addendum" shall mean written documents and/or drawings issued by the Owner prior to execution of the contract which supplement, modify, correct, explain or interpret the bidding documents.
- 3) All definitions set forth in the Conditions of the Contract or the other Contract Documents as therein defined are applicable to these Instructions and to the other bidding documents
- 4) On any project for the construction, reconstruction, installation, demolition, maintenance or repair of any building, or public work, to be funded in whole or in part by city funds, or funds which, in accordance with a federal or state grant, program, or otherwise, the city expends or administers, or any such project to which the city is a signatory to the contract therefore, the provisions of this section shall apply and the same shall be referenced in every invitation to bid for such project and, the following paragraphs shall be contained in every resulting contract there from: "It shall be a material breach of this contract if the contractor and each subcontractor shall not at all times adhere to the provisions of § 1A(e)(9) of chapter nine of the Revised Ordinances of the city by limiting their on- site, noise producing construction and related work to the hours specified by said ordinance".
- 5) The director of purchasing, commissioner of code enforcement and the head of any department shall have the authority to adopt any rules and regulations they deem necessary to implement this subsection with respect to contracts generally and the head of the department awarding any such contract shall have the authority to adopt any rules and regulations he or she deems necessary to implement this subsection with respect to any particular project.

## **SECTION 2 - AVAILABILITY OF CONTRACT DOCUMENTS**

2.1 Each person requesting Contract Documents including bid forms, plans and specifications shall proceed as directed in the Advertisement for Bids.

## **SECTION 3 - EXAMINATION OF SITE AND CONTRACT DOCUMENTS; PRE-BID CONFERENCE**

3.1 Before submitting a bid, each bidder must: (a) thoroughly examine the Contract Documents (b) visit the site to fully examine and acquaint himself with local conditions that may in any manner affect cost, progress, or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work, and (d) study and carefully correlate his observations with the requirements of the Contract Documents. Failure of a bidder to visit the site and acquaint himself with the Contract Documents or to attend the pre-bid conference, if any, shall in no way relieve the bidder from any obligation with respect to his bid.

3.2 On request, the Owner will provide each bidder access to the site to conduct such reasonable investigations and tests as such bidder deems necessary to prepare his bid.

3.3 Each bidder shall promptly notify the Contracting Officer of any ambiguity, inconsistency or error he may discover upon examination of the Contract Documents, the site or other local conditions. Whenever the title "Contracting Officer" is referenced it shall be interpreted as follows: John C. Orrell, Purchasing Director, City of Worcester. The submission of a bid will constitute a representation by the bidder that he has complied with every requirement of this Section 3 and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work of this contract.

## **SECTION 4 - ADDENDA AND INTERPRETATION OF CONTRACT DOCUMENTS**

4.1 All questions and requests for clarifications or interpretations of the meaning of the Contract Documents shall be in writing, addressed to the Purchasing Department, City of Worcester, and to be given consideration must be received at least five (5) days prior to the date fixed for opening of bids.

4.2 Clarifications or such interpretations and any supplemental instructions or forms, if issued, will be issued in the form of written Addenda and when possible, not later than two days before the date fixed for opening of bids. Each bidder shall be responsible for determining that he has received all Addenda issued, and failure of any bidder to receive any such Addendum shall not relieve such bidder from any obligation under its bid as submitted.

4.3 All Addenda so issued shall become part of the Contract Documents.

4.4. Oral clarifications or interpretations will be of no legal effect. The Owner will not be responsible for, and no bidder may rely upon or use as the basis of a claim against the Owner or the Owner's agent, any information, explanation or interpretation of the Contract Documents rendered in any fashion except as herein provided.

## **SECTION 5 - WAGE RATES**

5.1 Minimum rates of wages for work performed under this contract will be as predetermined by the state Department of Labor and Workforce Development, in accordance with the provisions of Sections 27 of Chapter 149 of the Massachusetts General Laws.

5.2 Section 27B of said Chapter 149 provides record-keeping requirements for contractors and subcontractors with respect to employees, hours, wages and other matters.

5.3 Bidders' attention is called to Section 148 of Chapter 149 of the Massachusetts General Laws, relating to the weekly payment of wages.

## **SECTION 6 - SALES TAX**

6.1 Section 6(f) of Chapter 54H of the Massachusetts General Laws exempts from Massachusetts sales tax, building materials and supplies to be used in the project, and bidders shall not include in their bids any amount therefor. The number of the certificate granted by the Commissioner of Revenue for use in obtaining the exemption may be obtained from the City of Worcester.

## **SECTION 7 - PREPARATION AND SUBMISSION OF BIDS**

7.1 Each bid shall be submitted upon the bid forms furnished by the Owner, copies of which are bound with the bid documents. The bid forms shall be submitted, as bound, with the balance of the Contract Documents. All blank spaces shall be filled in, in ink or typewritten, in words or figures. The bid prices for each item on the bid forms shall be stated in both words and figures. Where itemized lump sum or unit prices are called for, all such prices shall be provided by the bidder. In the event of a discrepancy between prices written in words and prices written in figures, the written words shall govern. In the event of a discrepancy between the indicated sum of any column of figures and the correct sum thereof, the correct sum shall govern. The bid shall state the legal name of the bidder and shall be signed in ink by a person or persons legally authorized to bind the bidder to a contract. The name and title of the person or persons signing the bid shall be typed or printed below the signatures.

7.2 Each bid and the bid deposit (described below) shall be submitted to the Owner at the place stated in the Advertisement for Bids in a sealed opaque envelope bearing on the outside the name of the bidder, his address and the title of the project for which the bid is submitted. If forwarded by mail, the sealed bid and the bid deposit shall be enclosed in an envelope with the notation "BID ENCLOSED" on the face and addressed as indicated in the Advertisement for Bids.

7.3 Section 39L of Chapter 30 of the Massachusetts General Laws prohibits the Owner from entering into a contract for this work with, and shall not approve as a subcontractor furnishing labor and materials for a part of any such work, a foreign corporation which has not filed with the Owner, a certificate of the state secretary stating that such corporation has complied with M.G.L. c. 181, sections 3 and 5. Therefore, every Foreign Corporation must furnish a certified copy of its Certificate of Registration that has been duly filed with the state secretary's office. Any bid, general or sub, of a foreign corporation submitted without a Certificate may be rejected pursuant to Section 11.

## **SECTION 8 - RECEIPT OF BIDS**

8.1 All bidders are cautioned to allow ample time for transmittal of bids. Bidders are solely responsible for delivery to and receipt by the Owner of bids at the place stated in the advertisement for Bids. Bids received after the specified time or at other than the specified location will not be accepted or recognized. The time of receipt will determine the acceptability of mailed bids, regardless of postmark.

8.2 Any bid may be withdrawn by the bidder or his duly authorized representative by written notice received by the Owner at the address for receipt of bids specified in the Advertisement for Bids prior to the time scheduled for the opening of such bids or authorized postponement thereof. No bid may be withdrawn for sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of general bids. No telephone or telegraphic bid, change in bid or

withdrawal of bid will be received or recognized. A bid may be amended or modified only by withdrawing the bid and resubmitting another bid prior to the time for the opening of bids.

8.3 Bids will be opened and read publicly at the place and time stated in the Advertisement for Bids or the authorized postponement thereof. Bidders or their authorized representatives are invited to be present.

## **SECTION 9 - BID DEPOSIT**

9.1 Each bid must be accompanied by a bid deposit in the form of a bid bond, or a certified check on, or a treasurer's or cashier check issued by, a responsible bank or trust company, payable to the City of Worcester. A bid bond shall be

- a) in form satisfactory to the Owner substantially conforming to the sample contained in the Contract Documents,
- b) with a surety company qualified to do business (licensed) in the Commonwealth of Massachusetts and satisfactory to the Owner, and
- c) conditioned upon the faithful performance by the principal of the agreements contained in the bid. The bid deposit shall be in the amount of 5% of the value of the bid.

## **SECTION 10 - REJECTION OF BIDS**

10.1 The Owner shall reject every general bid which is not accompanied by the required bid deposit, or which otherwise does not conform to the statutory requirements or the bid documents.

10.2 The Owner reserves the right to reject any and all general bids which contains erasures, alterations, additions, errors or irregularities of any kind, or which contains proposed prices for any class or item of work which are, in the judgment of the Owner, substantially less or more than the actual cost to complete the work; provided, however, that the Owner reserves the right to waive any and all informalities as to form. Matters as to substance shall not be waived.

## **SECTION 11 - AWARD OF CONTRACT**

11.1 The general contract will be awarded to the lowest responsible and eligible general bidder complying with the conditions and requirements provided in these Instructions, the bid forms and the other bid documents.

11.2 Award of the contract will be made within ninety (90) days, Saturdays, Sundays and legal holidays excluded, after (i) the opening of the bids or (ii) the receipt by the Owner of any approvals necessary from federal or state agencies in connection with the project, whichever is later.

11.3 The successful bidder will be notified in writing, by mail or otherwise, that his bid has been accepted and that he has been awarded the contract. The successful bidder shall execute the contract and furnish the required bonds, at the offices of the Owner within five (5) days, Saturdays, Sundays and legal holidays excluded, after presentation of the contract to him or notice to him that the contract is ready for execution.

11.4 If the bidder selected as the general contractor fails to perform his agreement to execute the contract in accordance with the terms of his bid and furnish a performance bond and also a labor and materials payment bond as stated in his bid, the award will be made to the next lowest responsible and eligible general bidder.

## **SECTION 12 - CERTIFICATES AND DOCUMENTS TO BE FURNISHED UPON EXECUTION OF THE CONTRACT**



12.1 Pursuant to Sections 49A of Chapter 62C of the Massachusetts General Laws the contractor must certify that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes. A form of certificate for this purpose is included in the Contract Documents.

12.2 Prior to commencement of work, the contractor must furnish to the Owner certificates evidencing required insurance coverage in accordance with the provisions of the insurance requirements contained in the Supplementary Conditions of the Contract.

12.3 The affidavit of compliance with certain laws of the Commonwealth relating to corporations, and evidence of corporate authority with respect to execution of the contract documents on behalf of the contractor, on the form contained in the bidding documents, must be furnished by the contractor to the Owner at the time of execution of the contract.

12.4 A performance bond and a labor and materials payment bond, each in the amount of the contract sum, must be furnished by the general contractor as stated in the bid form. Such bonds must be on the forms contained in the bid documents and must be executed and delivered to the Owner at the time of execution of the contract. Each attorney-in-fact who executes such a bond on behalf of the surety must affix thereto a certified and current copy of his power of attorney.

## **SECTION 13 - MINORITY/WOMEN BUSINESS ENTERPRISE PROGRAM**

13.1 The Owner has established goals for the participation of minority and women contractors and subcontractors on all City projects. In furtherance thereof, the City of Worcester's Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program is included in the Bidding Documents, and all bidders shall comply with the requirements set forth therein.

## **ARTICLE 102: GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION**

### **SECTION 1 – GENERAL PROVISIONS**

#### **1.1 DEFINITIONS**

##### **1.1.1 THE CONTRACT DOCUMENTS**

The Contract Documents consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, Supplementary and other Conditions), Performance Bond, Payment Bond, Vote of Corporation, Information to Bidders, Bid Proposal, the Drawings, the Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Contracting Officer pursuant to Subparagraph 2.2.3, or (4) a written order for a minor change in the Work issued by the Contracting Officer pursuant to Paragraph 12.3. The Contract Documents do not include Bidding Documents such as, sample forms, or portions of Addenda relating to any of these, or any other documents, unless specifically enumerated in the Owner-Contractor Agreement. The Drawings of this Contract shall be as listed on the cover sheet of the Drawings, as applicable. The Specifications of this Contract shall be listed on the Index to the Technical Specifications. In the event of any conflict among the Contract Documents, the Documents shall be construed according to the following priorities: Highest Priority - Modifications, Second Priority-Agreement, Third Priority - Addenda-later date to take precedence, Fourth Priority - Special Requirements, Fifth Priority - Special Conditions, Sixth Priority - Supplementary General Conditions, Seventh Priority - General Conditions, Eighth Priority - Specifications, Ninth Priority - Drawings.

##### **1.1.2 THE CONTRACT**

The Contract Documents form the Contract for Construction. This Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification as defined in Subparagraph 1.1.1. These General Conditions, wherever applicable, shall be construed consistent with, and terms of the Owner-Contractor Agreement, provided further however, that the terms of such Agreement shall take precedence, as provided in Subparagraph 1.1.1. Except for the special agreements in Paragraph 4.18, nothing contained in the Contract Documents shall be construed to create any contractual relationship of any kind between the Architect and the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between the Owner or the Architect and any Subcontractor or Sub-subcontractor.

### **1.1.3 THE WORK**

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

### **1.1.4 THE PROJECT**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

## **1.2 EXECUTION, CORRELATION AND INTENT**

1.2.1 The Contract Documents shall be signed in not less than duplicate by the Owner and the Contractor.

1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.

1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings. All work mentioned or indicated in the Contract Documents shall be performed by the Contractor as part of this Contract unless it is specifically indicated in the Contract Documents that such work is to be done by others. Should the drawings or the Specifications disagree in themselves or with each other, the Contractor shall provide the better quality or greater quantity of work and/or materials unless otherwise directed by written addendum to the Contract.

1.2.4 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. The Contractor and all Subcontractors shall refer to all of the Drawings, including those showing primarily the work of the mechanical, electrical and other specialized trades, and to all of the Sections of the Specifications, and shall perform all work reasonably inferable therefrom as being necessary to produce the indicated results.

1.2.5 All indications or notations which apply to one of a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever

they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.

1.2.6 Where codes, standards, requirements and publications of public and private bodies are referred to in the Specifications, references shall be understood to be to the latest revision prior to the date of receiving bids, except where otherwise indicated.

1.2.7 Where no explicit quality or standards for materials or workmanship are established for work, such work is to be of good quality for the intended use and consistent with the quality of the surrounding work and of the construction of the Project generally.

1.2.8 All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.

1.2.9 Any test boring or soil test information included with the Contract Documents or otherwise made accessible to the Contractor was obtained by the Owner or Architect for use by the Architect in the design. The Owner and Architect do not hold out such information to the Contractor as an accurate or approximate indication of subsurface conditions, and no claim for extra cost or extension of time resulting from a reliance by the Contractor on such information shall be allowed except as provided in M.G.L. c. 30, section 39N.

### **1.3 OWNERSHIP AND USE OF DOCUMENTS**

1.3.1 All Drawings and Specifications furnished by the Architect, and all copies thereof and the copyright therein, are the property of the Architect or the Owner. They are to be used only with respect to this Project and are not to be used on any other project. With the exception of one contract set for each party to the Contract, such documents are to be returned or suitably accounted for to the Architect on request at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Owner's common law copyright or other reserved rights.

## **SECTION 2 – ARCHITECT**

### **2.1 DEFINITION**

2.1.1 The term Architect refers to either, (a) a professionally licensed architect, engineer, or landscape architect, hired or used by the City, or in the absence of thereof, (b) the Contracting Officer identified in the Instruction to Bidders. The Architect is referred to throughout the Contract Documents as if singular in number and masculine in gender.

### **2.2 ADMINISTRATION OF THE CONTRACT**

2.2.1 The Architect will provide administration of the Contract as herein described and pursuant to the terms of the contract between the Architect and the Owner.

2.2.2 The Architect will be the Owner's representative during construction and until final payment is due. The Architect will advise and consult with the Owner. The Owner's instructions to the Contractor shall be forwarded through the Architect. The Architect will have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents and the Design Services Agreement between the two, unless otherwise modified by written instrument in accordance with Subparagraph 2.2.17.

2.2.3 The Architect will visit the site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Work and to determine in

general if the Work is proceeding in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of his on-site observations as an architect, he will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.

2.2.4 The Architect will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for or have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.

2.2.5 The Architect shall at all times have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the Architect may perform his functions under the Contract Documents.

2.2.6 Based on the Architect's observations and an evaluation of the Contractor's Applications for Payment, the Architect will determine the amounts owing to the Contractor and will certify Certificates for Payment in such amounts, as provided in Paragraph 9.4.

2.2.7 The Architect will be the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder by both the Owner and Contractor.

2.2.8 The Architect will render interpretations necessary for the proper execution or progress of the Work, with reasonable promptness and in accordance with M.G.L. c. 30, section 39P, or any lesser time limit agreed upon. Either party to the Contract may make written request to the Architect for such interpretations.

2.2.9 Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution of progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Architect for decision, which he will render in writing within a reasonable time.

2.2.10 All interpretations and decisions of the Architect shall be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. In his capacity as interpreter and judge, he will endeavor to secure faithful performance by both the Owner and the Contractor, will not show partiality to either, and will not be liable for the result of any interpretation or decision rendered in good faith, and in the absence of negligence, in such capacity.

2.2.11 The Architect's decisions in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.

2.2.12 The Architect will have authority to reject Work that does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the Work in accordance with Subparagraph 7.7.2, whether or not such Work be then fabricated, installed or completed. However, neither the Architect's authority to act under this Subparagraph 2.2.12 nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.

2.2.13 The Architect will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Architect's approval of a special item shall not indicate approval of an assembly of which the item is a component.

2.2.14 The Architect will prepare Change Orders in accordance with Article 12, and will have authority to order minor changes in the Work as provided in Subparagraph 12.3.1.

2.2.15 The Architect will conduct inspections to determine the dates of Substantial Completion and final completion, will receive and forward to the Owner for the Owner's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate of Payment upon compliance with the requirements of Paragraph 9.9.

2.2.16 If the Owner and Architect agree, the Architect will provide one or more Project Representatives to assist the Architect in carrying out his responsibilities at the site. The duties, responsibilities and limitations of authority of any such Project Representative shall be as set forth in an exhibit to be incorporated in the Contract Documents.

2.2.17 The duties, responsibilities, and limitations of authority of the Architect as the Owner's representative during construction, as set forth in the Contract Documents and the contract between the two, will not be modified or extended without consent of the Owner and the Architect.

2.2.18 In case of the termination of the employment of the Architect, the Owner shall appoint an architect against whom the Contractor makes no reasonable objection whose status under the Contract Documents shall be the same as that of the former architect.

## **SECTION 3 – OWNER**

### **3.1 DEFINITION**

3.1.1 The term Owner means the city of Worcester.

### **INFORMATION AND SERVICES REQUIRED OF THE OWNER**

3.2.1 The Owner shall, at the time of execution of the Owner-Contractor Agreement, furnish the certification of adequate appropriation pursuant to M. G. L. Chapter 44, section 31C of the General Laws.

3.2.2 The Owner shall furnish existing surveys, if any, describing the physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.

3.2.3 Except as provided in Subparagraph 4.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

3.2.4 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness after receipt from the Contractor of a written request for such information or services.

3.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, three (3) copies of Drawings and Specifications reasonably necessary for the execution of the Work.

3.2.6 The Owner shall forward all instructions to the Contractor through the Architect.

3.2.7 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Work by Owner or by Separate Contractors, Payments and Completion, and Insurance in Articles 6, 9 and 11 respectively.

### **3.3 OWNER'S RIGHT TO STOP THE WORK**

3.3.1 If the Contractor fails to correct defective Work as required by Paragraph 13.2 or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph 6.1.3.

### **3.4 OWNER'S RIGHT TO CARRY OUT THE WORK**

3.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's additional services made necessary by such default, neglect or failure. Such action by the Owner and the amount charged to the Contractor are both subject to prior notice being given to the Architect by the Owner. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

## **SECTION 4 – CONTRACTOR**

### **4.1 DEFINITION**

4.1.1 The Contractor is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

### **4.2 REVIEW OF CONTRACT DOCUMENTS**

4.2.1 Before starting the Work, and at frequent intervals during the progress thereof, the Contractor shall carefully study and compare the Agreement, Conditions of the Contract, Drawings, Specifications, Addenda and other Contract Documents and shall at once report to the Architect any error, inconsistency or omission he may discover. Any necessary change shall be ordered as provided in Article 12, subject to the requirements of paragraph 1.2 and other provisions of the Contract Documents. If the Contractor proceeds with the Work without such notice to the Architect, having discovered such errors, inconsistencies or omissions, or if by reasonably study of the Contract Documents he could have discovered such, the Contractor shall bear all costs arising therefrom.

4.2.2 The Contractor shall give the Architect timely notice of any additional design drawings, specifications, or instructions required to define the Work in greater detail, or to permit the proper progress of the Work.

4.2.3 The Contractor shall not proceed with any Work not clearly and consistently defined in detail in the Contract Documents, but shall request additional drawings or instructions from the Architect as provided in subparagraph 4.2.2. If the Contractor proceeds with such Work without obtaining further drawings or instructions, he shall correct Work incorrectly done at his own expense.

## **SUPERVISION AND CONSTRUCTION PROCEDURES**

4.3.1 The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

4.3.2 The Contractor shall be responsible to the Owner for the acts and omissions of his employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.

4.3.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect in his administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.7 by persons other than the Contractor.

4.3.4 Where the Contract Documents refer to particular construction means, methods, techniques, sequences or procedures or indicate or imply that such are to be used in the Work, such mention is intended only to indicate that the operations of the Contractor shall be as to produce at least the quality of work implied by the operations described, but the actual determination of whether or not the described operations may be safely and suitably employed on the Work shall be the responsibility of the Contractor, who shall notify the Architect in writing of the actual means, methods, techniques, sequences or procedures which will be employed on the Work, if these differ from those mentioned in the Contract Documents. All loss, damage, or liability, or cost of correcting defective work arising from the employment of any construction means, methods, techniques, sequences or procedures shall be borne by the Contractor, notwithstanding that such construction means, methods, techniques, sequences or procedures are referred to, indicated or implied by the Contract Documents, unless the Contractor has given timely notice to the Architect in writing that such means, methods, techniques, sequences or procedures are not safe or suitable, and the Contractor has then been instructed in writing by the Owner to proceed at the Owner's risk.

## **4.4 LABOR AND MATERIALS**

4.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. The word 'provide' shall mean furnish and install complete, including connections, unless otherwise specified.

4.4.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.

## **4.5 WARRANTY**

4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this Contract will be new and of recent manufacture unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective.

4.5.2 The Contractor shall be responsible for determining that all materials furnished for the Work meet all requirements of the Contract Documents. The Architect may require the Contractor to produce reasonable evidence that a material meets such requirements, such as certified reports of past tests by qualified testing laboratories, reports of studies by qualified experts, or other evidence which, in the opinion of the Architect, would lead to a reasonable certainty that any material used, or proposed to be used, in the Work meets the requirements of the Contract Documents. All such data shall be furnished at the Contractor's expense. This provision shall not require the Contractor to pay for periodic testing of different batches of the same material, unless such testing is specifically required by the Contract Documents to be performed at the Contractor's expense.

4.5.3 If the Contractor proposed to use a material which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, he shall inform the Architect in writing of the nature of such deviations at the time the material is submitted for approval, and shall request written approval of the deviation from the requirements of the Contract Documents.

4.5.4 In requesting approval of the deviations or substitutions, the Contractor shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the Architect, the evidence presented by the Contractor does not provide a sufficient basis for such reasonable certainty, the Architect may reject such substitution or deviation without further investigation.

4.5.5 The Contract Documents are intended to produce a completed project of consistent character and quality of design. All components of the project have been selected to have a coordinated design in relation to the overall appearance. The Architect shall judge the design and appearance of proposed substitutes on the basis of their suitability in relation to the overall design of the project, as well as for their intrinsic merits. The Architect will not approve as equal to materials specified proposed substitutes which, in his opinion, would be out of character, obtrusive, or otherwise inconsistent with the character or quality of design of the project. In order to permit coordinated design of color and finishes the Contractor shall, if required by the Architect, furnish the substituted material in any color, finish, texture, or pattern that would have been available from the manufacturer originally specified, at no additional cost to the Owner.

4.5.6 Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the Contractor, notwithstanding approval or acceptance of such substitution by the Owner or the Architect, unless such substitution was made at the written request or direction of the Owner.

4.5.7 The warranty provided in this paragraph 4.5 shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

4.5.8 The Contractor shall procure and deliver to the Architect, no later than the date claimed by the Contractor as the date of Substantial Completion, all special warranties required by the Contract Documents. Delivery by the Contractor shall constitute the Contractor's guarantee to the Owner that the warranty will be performed in accordance with its terms and conditions.

## **4.6 TAXES**



4.6.1 The Contractor shall pay all sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.

4.6.2 IMPORTANT TAX NOTE: This project, being constructed for a political subdivision of the Commonwealth of Massachusetts, is exempt from certain taxes. It is therefore required that the Contractor and all Subcontractors purchasing taxable goods covered by the governing tax codes make known to suppliers the tax-exempt status of the institution in order that such taxes will not appear in the Contract Sum. The Owner will provide the necessary evidence and certificates of its tax exemption upon request of those concerned. The most applicable taxes concerned are:

- a. Federal Excise Taxes as applied to articles which are taxable under Chapter 12 of the Internal Revenue Code of 1954, as amended.
- b. Commonwealth of Massachusetts Sales tax.

#### **4.7 PERMITS, FEES AND NOTICES**

4.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit and for all other permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received.

4.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the performance of the Work.

4.7.3 It is not the responsibility of the Contractor to make certain the Contract Documents are in accordance with the applicable laws, statutes, building codes and regulations. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Architect in writing, and any necessary changes shall be accomplished by appropriate Modification.

4.7.4 If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect, he shall assume full responsibility therefore and shall bear all costs attributable thereto.

#### **4.8 ALLOWANCES**

4.8.1. The Contract shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as the Owner may direct, but the Contractor will not be required to employ persons against whom he makes a reasonable objection. Note, however, that the use of such allowances are prohibited in any contract or work subject to the provisions of M.G.L. c. 149, section 44A.

4.8.2 Unless otherwise provided in the Contract Documents:

1. these allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes;

2. the Contractor's costs for unloading and handling of the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance;
3. whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses.

#### **4.9 SUPERINTENDENCE**

4.9.1 The Contractor shall employ one (1) competent superintendent who shall be in attendance at the Project site full time during the progress of the Work until the date of substantial completion, and for such additional time thereafter as the Architect may determine to be necessary for the expeditious completion of the Work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.

4.9.2 The Contractor shall retain a competent Registered Professional Engineer or Registered Land Surveyor, registered in the Commonwealth of Massachusetts, acceptable to the Architect, who shall establish, where necessary, the exterior lines and required elevations of all buildings and structures to be erected on the site and shall establish sufficient lines and grades for the construction of associated work such as, but not limited to, layout, utilities and site grading. The Engineer or Land Surveyor shall certify as to the actual location of the constructed facilities in relation to property lines, building lines, easements, and other restrictive boundaries and shall establish survey control points onsite.

4.9.3 The Contractor shall establish the grades, lines, levels, and necessary layout required by the various subcontractors in laying out their work.

4.9.4 The Contractor shall coordinate and supervise the work performed by Subcontractors to the end that the work, is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the Work. The Contractor and all Subcontractors shall at all times afford each trade, any separate contractor, or the Owner, every reasonable opportunity for the installation of work and the storage of materials.

#### **4.10 PROGRESS SCHEDULE**

4.10.1 The Contractor shall prepare and submit to the Landscape Architect a progress schedule as described in subparagraphs 8.2.3 through 8.2.9.

#### **4.11 DOCUMENTS AND SAMPLES AT THE SITE**

4.11.1 The Contractor shall maintain at the site for the Owner the record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the Architect and shall be delivered to him for the Owner upon completion of the Work.

4.11.2 Refer to Specifications Section entitled CONTRACT CLOSEOUT, for additional requirements for Record Drawings and Maintenance and Operating Manuals.

#### **4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

4.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

4.12.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.12.4 The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

4.12.5 By approving and submitting Shop Drawings, Product Data, and, Samples, the Contractor thereby represents that he has determined and verified all dimensions, quantities, field dimensions, relations to existing work, coordination with work to be installed later, coordination with information on previously accepted Shop Drawings, Product Data, or Samples and verification of compliance with all the requirements of the Contract Documents. The accuracy of all such information is the responsibility of the Contractor. In reviewing Shop Drawings, Product Data, and Samples, the Architect shall be entitled to rely upon the Contractor's representation that such information is correct and accurate.

4.12.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data or Samples under Subparagraph 2.2.14 unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's approval thereof.

4.12.7 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Architect on previous submittals. Unless such written notice has been given, the Architect's approval of a resubmitted Shop Drawing, Product Data, or Sample shall not constitute approval of any changes not requested on the prior submittal.

4.12.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Architect as provided in Subparagraph 2.2.14. All such portions of the Work shall be in accordance with approved submittals.

4.12.9 Refer to Specifications Section entitled, SUBMITTALS, for additional requirements.

#### **4.13 USE OF SITE**

4.13.1 The right of possession of the premises and the improvements made thereon by the Contractor shall remain at all times in the Owner. The Contractor's right of entry and use thereof arises solely from the permission granted by the Owner under the Contract Documents. The Contractor shall confine his apparatus, the storage of materials and the operations of his workmen to limits indicated by law, ordinances, the Contract Documents and permits and/or directions by the Architect and shall not unreasonably encumber the premises with his materials.

#### **4.14 CUTTING AND PATCHING WORK**

4.14.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

4.14.2 The Contractor shall not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and such separate contractor. The Contractor shall not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

#### **4.15 CLEANING UP**

4.15.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials. Immediately prior to the Architect's inspection for Substantial Completion, the Contractor shall completely clean the premises. Concrete and ceramic surfaces shall be cleaned and washed. Resilient coverings shall be cleaned, waxed and buffed. Woodwork shall be dusted and cleaned. Sash, fixtures, and equipment shall be thoroughly cleaned. Stains, spots, dust, marks and smears shall be removed from all surfaces. Hardware and all metal surfaces shall be cleaned and polished. Glass and plastic surfaces shall be thoroughly cleaned by professional window cleaners. All damaged, broken or scratched glass or plastic shall be replaced by the Contractor at this expense.

4.15.2 If the Contractor fails to clean up at the completion of the Work, the Owner may do so as provided in Paragraph 3.4 and the cost thereof shall be charged to the Contractor.

4.15.3 Refer to Specifications Section entitled, PROJECT CLOSEOUT, for additional requirements.

#### **4.16 COMMUNICATIONS**

4.16.1 The Contractor shall forward all communications to the Owner through the Architect.

#### **4.17 ROYALTIES AND PATENTS**

4.17.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Architect shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Architect.

#### **4.18 INDEMNIFICATION**

4.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Architect and its agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (2) is

caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph 4.18.

4.18.2 In any and all claims against the Architect or any of his agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.18 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

4.18.3 The obligations of the Contractor under this Paragraph 4.18 shall not extend to the liability of the Architect, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, his agents or employees provided, such giving or failure to give is the primary cause of the injury or damage.

## **SECTION 5 – SUBCONTRACTORS**

### **5.1 DEFINITION**

5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the site and as further defined by M.G.L. c. 30, section 39F(3). The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative. The term Subcontractor does not include any separate contractor or his subcontractors.

5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contact with a Subcontractor to perform any of the Work at the site. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.

### **5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK**

5.2.1 Unless otherwise required by the Contract Documents or the Bidding Documents, the Contractor, as soon as practicable after the award of the Contract, shall furnish to the Owner and the Architect, in writing, the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Architect will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection.

5.2.2 The Contractor shall not contract with any such proposed person or entity to which the Owner or the Architect has made reasonable objection under the provisions of Subparagraph 5.2.1. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.

5.2.3 If the Owner or the Architect has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner or the Architect has no

reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by Subparagraph 5.2.1

5.2.4 The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

### **5.3 SUBCONTRACTUAL RELATIONS**

5.3.1 By an appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume to the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner and the Architect. Said agreement shall preserve and protect the rights of the Owner and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 5.3, and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to his Sub-subcontractors.

## **SECTION 6 – WORK BY OWNER OR BY SEPARATE CONTRACTORS**

### **6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS**

6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.

6.1.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

6.1.3 The Owner will provide for the coordination of the work of his own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Paragraph 6.2.

6.1.4 The Contractor shall permit the Owner to place and install as much equipment during the progress of the work as is possible before the completion of the various parts of the work, and agrees that such placing and the installation of equipment shall not in any way evidence the completion of the work or any portion of it, nor shall it signify the Owner's completion of the work or any portion thereof.

### **6.2 MUTUAL RESPONSIBILITY**

6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his Work with theirs as required by the Contract Documents.

6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Architect any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acceptance of the Owner's or separate contractors' work as fit and proper to receive his Work, except as to defects which may subsequently become apparent in such work by others.

6.2.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

6.2.4 Should the Contractor wrongfully cause damage to the work or property of the Owner, or to other work on the site, the Contractor shall promptly remedy such damages as provided in Subparagraph 10.2.5.

6.2.5 Should the Contractor wrongfully cause damage to the work or property of any separate contractor, the Contractor shall upon due notice promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute. If such separate contractor sues the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor.

### **6.3 OWNER'S RIGHT TO CLEAN UP**

6.3.1 If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by Paragraph 4.15, the Owner may clean up and charge the cost thereof to the contractors responsible therefor as the Architect shall determine to be just.

## **SECTION 7 – MISCELLANEOUS PROVISIONS**

### **7.1 GOVERNING LAW**

7.1.1 The Contract shall be governed by the law of the Commonwealth of Massachusetts.

### **7.2 SUCCESSORS AND ASSIGNS**

7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him hereunder, without the previous written consent of the Owner.

7.2.2 If, after making final payment, the Owner conveys to a third party any building or other improvement constructed under the Contract, any rights with respect to the property so conveyed which the Owner may have against the Contractor under Article 13 or by virtue of claims which, under the terms of subparagraph 9.9.4, are reserved to the Owner after the making and acceptance of final payment, shall automatically transfer to such third party.

### **7.3 WRITTEN NOTICE**

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to an authorized representative of the person or entity for whom it was intended, or if delivered at or sent by registered or certified mail or by telegraph to the address of such person or entity set forth in the Agreement or in a subsequent written notice.

#### **7.4 CONSENT OR WAIVER**

7.4.1 No consent or waiver, express or implied, by the Owner or the Architect to, or of, any breach of any covenant, condition or duty of the Contractor shall be construed as a consent to or waiver of any other breach of the same or any other covenant, condition or duty.

#### **7.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND**

7.5.1 The Owner shall have the right to require the Contractor to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder if and as required in the Bidding Documents or in the Contract Documents.

#### **7.6 RIGHTS AND REMEDIES**

7.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

#### **7.7 TESTS**

7.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Architect timely notice of its readiness so the Architect may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities. Unless otherwise provided, the Owner shall bear all costs of other inspections, tests or approvals.

7.7.2 If the Architect determines that any Work requires special inspection, testing, or approval which Subparagraph 7.7.1 does not include, he will, upon written authorization from the Owner, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Subparagraph 7.7.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect's additional services made necessary by such failure, otherwise the Owner shall bear such costs, and an appropriate Change Order shall be issued.

7.7.3 The Contractor shall obtain and deliver promptly to the Architect any occupancy permit or any certificates of final inspection of any part of his work or operating permits for any mechanical apparatus, such as elevators, escalators, boilers, air compressors, etc., which may be required by law to permit full use and occupancy of the premises by the Owner. Receipt of such permits or certificates by the Architect shall be a condition precedent to Substantial Completion of the Work.

### **SECTION 8 – TIME**

#### **8.1 DEFINITIONS**

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined in Subparagraph 8.1.3, including authorized adjustments thereto.



8.1.2 The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date of the Owner-Contractor Agreement or such other date as may be established therein.

8.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended and only minor items which can be corrected or completed without substantial interference with the Owner's use of the Work remain to be corrected or completed.

8.1.4 The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

8.1.5 The term "working day" shall mean any calendar day except Saturdays, Sundays, and legal holidays at the place of the project.

## **8.2 PROGRESS AND COMPLETION**

8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

8.2.2 The Contractor shall begin the Work on the date of commencement as defined in Subparagraph 8.1.2. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.2.3 Within two weeks after award of the Contract, the Contractor shall submit to the Architect a Progress Schedule showing for each class of work included in the Schedule of Values, the percentage completion to be obtained and the total dollar value of work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of work in place, but not including the value of materials delivered but not in place.

8.2.4 The Progress Schedule shall be based on an orderly progression of the Work, allowing adequate time for each operation, and leading to a reasonable certainty of Substantial Completion by the date established in the Agreement. The Progress Schedule will be reviewed by the Architect for compliance with the requirements of this article and will be accepted by him or returned to the Contractor for revision and re-submittal. Unless specifically required by law, no payment under this Contract shall be due until the Progress Schedule has been approved by the Architect.

8.2.5 If in any Application for Payment the total value of the completed Work in place, as certified by the Architect, is less than 90% of the total value of the Work in place estimated in the Progress Schedule, the Owner may, at his option, require the Contractor to accelerate the progress of the work without cost to the Owner by increasing the work force or hours of work, or by other reasonable means approved by the Architect.

8.2.6 If each of three successive applications, as certified by the Architect, indicate that the actual work completed is less than 90% of the values estimated in the Progress Schedule to be completed by the respective dates, the Owner may at his option, treat the Contractor's delinquency as a default justifying the Owner to initiate a termination of the Contract.

8.2.7 If the Architect has determined that the Contractor should be permitted to extend the time for completion, as provided in paragraph 8.3, the calendar dates in the Progress Schedule shall be adjusted accordingly to retain their same relationship to the adjusted date of Substantial Completion, and the dollar value of work to be completed as of the first of each month shall be adjusted pro-rata.

8.2.8 If the Contractor fails to submit any Application for Payment in any month, the Architect shall, for the purpose of this evaluation of progress, certify separately to the actual value of the work in place and completed as of the first of the month, to the best of his knowledge.

8.2.9 Nothing herein shall limit the Owner's right to liquidated or other damages for delays by the Contractor or to any other remedy which he may possess under other provisions of the Contract Documents or by law.

### **8.3 DELAYS AND EXTENSIONS OF TIME**

8.3.1 Any delay and subsequent request for an extension of time shall be governed by M.G.L. c. 30, section 39(O) and the Owner-Contractor Agreement.

8.3.2 No work shall be suspended without the written permission of the Owner or his representative.

8.3.3 If no agreement is made stating the dates upon which interpretations as provided in Subparagraph 2.2.8 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until thirty days after written request is made for them, and not then unless such claim is reasonable.

8.3.4 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

## **SECTION 9 – PAYMENTS AND COMPLETION**

9.1.1 The Contract Sum is stated in the Owner-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents.

### **9.2 SCHEDULE OF VALUES**

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require and shall be revised if later found by the Architect to be inaccurate. This schedule, unless objected to by the Architect, shall be used only as a basis for the Contractor's Applications for Payment.

### **9.3 APPLICATIONS FOR PAYMENT**

9.3.1 At least ten days before the date for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment notarized if required, supported by such data substantiating the Contractor's right to payment as the Owner or the Architect may require, and reflecting retainage, if any, as provided in Supplemental General Conditions-Part I, Article I, Paragraph 1.8 or 1.9; whichever is applicable. The format and number of copies of such Applications for Payment shall be as directed by the Architect.

9.3.2 Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the Owner, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation to the site for those materials and equipment stored off

the site. The Contractor shall reimburse the Owner for any loss or damage to such unincorporated materials or equipment not covered by insurance.

9.3.3 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens". The Contractor further agrees that the submission of any Application for Payment shall conclusively be deemed to waive all liens with respect to said work, materials and labor to which the Contractor then may be entitled; provided, however, that in no event shall such waiver of lien rights waive right to payment for said Work, materials and labor.

9.3.4 Each Application for Payment or periodic estimate requesting payment must be accompanied by a certificate from each subcontractor stating that he has been paid all amounts due him on the basis of the previous periodic payment to the Contractor, or else stating the amount not so paid and the reason for the discrepancy. In the event of any such discrepancy, the Contractor shall be required to furnish his own written explanation.

#### **9.4 CERTIFICATES FOR PAYMENT**

9.4.1 The Architect will, within seven days after the receipt of the Contractor's Application for Payment, either certify a Certificate for Payment to the Owner, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor in writing his reasons for withholding certification of a Certificate as provided in Subparagraph 9.6.1.

9.4.2 The certification of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on his observations at the site as provided in Subparagraph 2.2.3 and the data comprising the Application for Payment, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his Certificate); and that the Contractor is entitled to payment in the amount certified. However, by certifying a Certificate for Payment, the Architect shall not thereby be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work or that he has reviewed the construction means, methods, techniques, sequences or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract.

#### **9.5 PROGRESS PAYMENTS**

9.5.1 After the Architect has certified a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents.

9.5.2 The Contractor shall promptly pay each Subcontractor upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

9.5.3 The Architect may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Architect on account of Work done by such Subcontractor.

9.5.4 Neither the Owner nor the Architect shall have any obligation to pay or to see the payment of any moneys to any Subcontractor except as may otherwise be required by law.

9.5.5 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

## **9.6 PAYMENTS WITHHELD**

9.6.1 The Architect may decline to certify payment, in whole or in part, to the extent reasonably necessary to protect the Owner, if in his/her opinion he/she is unable to make representations to the Owner as provided in Subparagraph 9.4.2. If the Architect is unable to make representations to the Owner as provided in Subparagraph 9.4.2 and to certify payment in the amount of the Application, he/she will notify the Contractor as provided in Subparagraph 9.4.1. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly certify a Certificate for Payment for the amount for which he/she is able to make such representations to the Owner. The Architect may also decline to certify payment or because of subsequently discovered evidence or subsequent observations, he may nullify the whole or any part of any Certificate for Payment previously certified, to such extent as may be necessary in his/her opinion to protect the Owner from loss because of:

1. defective Work not remedied
2. third party claims filed or reasonable evidence indicating probable filing of such claims,
3. failure of the Contractor to make payments properly to subcontractors or for labor, materials or equipment
4. reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,
5. damage to the Owner,
6. reasonable evidence that the Work will not be completed within the Contract Time or
7. persistent failure to carry out the Work in accordance with the Contract Documents
8. failure of mechanical trades or electrical trades subcontractors to comply with mandatory requirements for maintaining record drawings. The Contractor shall be required to check record drawings each month. Written conformation that the record drawings are "up-to-date" shall be required by the Architect before approval of the Contractor's monthly payment requisition will be considered.

9.6.2 When the above grounds in Subparagraph 9.6.1 are removed, payment shall be made for amounts withheld because of them.

## **9.7 FAILURE OF PAYMENT**

9.7.1 If the Architect does not certify a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor as required by the Contract Documents any amount certified by the Architect, then the Contractor may, upon seven additional days written notice to the Owner and the Architect, stop the Work until payment of the amount owing has been received.

## **9.8 SUBSTANTIAL COMPLETION**

9.8.1 When the Contractor considers that the Work, or a portion thereof designated in the Contract Documents for separate completion, is substantially complete as defined in subparagraph 8.1.3, the Contractor shall submit to the Architect (1) a list of items to be completed or corrected, and (2) all special warranties required by the Contract Documents

endorsed by the Contractor and in a form reasonably acceptable to the Architect. The failure to include any items on the list mentioned in the preceding sentence does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect on the basis of an inspection determines that the Work or designed portion thereof is substantially complete, and when the Contractor has submitted to the Architect the special warranties, as provided in the first sentence of this subparagraph, the Architect will then certify a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

9.8.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

## **9.9 FINAL COMPLETION AND FINAL PAYMENT**

9.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when he finds the Work acceptable under the Contract Documents and the Contract fully performed, he will promptly certify a final Certificate of Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The Architect's certification of the final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Subparagraph 9.9.2 have been fulfilled.

9.9.2 Unless otherwise required by applicable law, neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3), if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens, arising out of the Contract, to the extent and in such form as may be designated by the Owner. If the Contractor fails to furnish such releases or waivers as the Owner reasonably requires to satisfy the Owner that there are not outstanding claims, the Owner may require the Contractor, as a condition of final payment, to furnish a bond satisfactory to the Owner to indemnify the Owner against any such claims.

9.9.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Architect so confirms, the Owners shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as provided in Paragraph 7.5., the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to

certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.9.4 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from: (1) unsettled claims under the Bonds required elsewhere in the Contract Documents, (2) faulty or defective Work appearing after Substantial Completion, (3) failure of the Work to comply with the requirements of the Contract Documents, or (4) terms of any special warranties required by the Contract Documents.

9.9.5 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.

## **SECTION 10 – PROTECTION OF PERSONS AND PROPERTY**

### **10.1 SAFETY PRECAUTIONS AND PROGRAMS**

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

### **10.2 SAFETY OF PERSONS AND PROPERTY**

10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to: (1) all employees on the Work and all other persons who may be affected thereby; (2) all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and (3) other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

10.2.5 The Contractor shall promptly remedy all damage or loss (other than damage or loss insured under Paragraph 11.3) to any property referred to in Clause 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone whose acts any of them may be liable and for which the Contractor is responsible under Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to the acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either by of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligations under Paragraph 4.18.

10.2.6 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's

superintendent unless otherwise designed by the Contractor in writing to the Owner and the Architect.

10.2.7 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

### **10.3 EMERGENCIES**

10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for the Changes in the Work.

## **SECTION 11 – INSURANCE**

### **11.1 CONTRACTOR'S LIABILITY INSURANCE**

11.1.1 The Contractor shall purchase and maintain in a company or companies to which the Owner has no reasonable objection, such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's operations under the Contract whether such operations be by himself or by any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- 1) claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts;
- 2) claims for damages because of bodily injury, occupations sickness or disease, or death of his or her employees
- 3) claims for damages because of bodily injury, sickness or disease, or death of any person other than his or her employees
- 4) claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the contractor or, 92) by any other person;
- 5) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and
- 6) claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle

11.1.2 The insurance required by subparagraph 11.1.1 shall include all major divisions of coverage, and shall be on a comprehensive general basis including Premises and Operations (including X-C-U), Owner's and Contractor's Protective Products and Completed Operations, and Owned, Non-owned, and Hired Motor Vehicles. Such insurance shall be written for not less than any limits of liability required by law or those set forth below, whichever is greater.

1. Workmen's Compensation -Statutory/Employers Liability \$500,000.
2. Commercial General Liability - Per Occurrence / Aggregate \$1,000,000 / 2,000,000
3. Automobile Liability – Combined Single Limit
4. Bodily Injury & Property Damage combined single limit of \$ 1,000,000 (all owned, hired and non-owned autos).
5. Excess / Umbrella Liability – Per Occurrence / Aggregate \$ 1,000,000 / \$1,000,000
6. Independent Contractors -Same limits as above
7. Products and Completed Operations -Same limits as above commencing with issuance of final Certificate of Payment.
8. Contractual Liability - Same limits as above.

11.1.3 The insurance required by Subparagraph 11.1.1 shall include contractual liability insurance applicable to the Contractor's obligations under Paragraph 4.18.

11.1.4 Certificates of Insurance acceptable to the Owner shall be filed with the Owner. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least thirty days prior written notice has been given to the Owner.

11.1.4.1 These certificates shall set forth evidence of all coverage required by 11.1.1, 11.1.2 and 11.1.3. The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending limits of coverage.

## **11.2 OWNER'S LIABILITY INSURANCE**

11.2.1 The Owner shall be responsible for maintaining his own liability insurance and, at his option, may purchase and maintain such insurance as will protect him against claims which may arise from operations under the Contract.

## **11.3 PROPERTY INSURANCE**

11.3.1 The Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

11.3.2 The Owner shall purchase and maintain such boiler and machinery insurance as may be required by the Contract Documents or by law. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

11.3.3 Any loss insured under Subparagraph 11.3.1 is to be adjusted with the Contractor and made payable to the Contractor as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgagee clause and of Subparagraph 11.3.8.

11.3.4. The Contractor shall pay each Subcontractor a just share of any insurance moneys received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

11.3.5 The Contractor shall file a copy of all policies with the Owner before an exposure to loss may occur.

11.3.6 The Owner and Contractor waive all rights against (1) each other and the Subcontractors, Sub-subcontractors, agents and employees each of the other, and (2) the Architect and separate contractors, if any, and their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Paragraph 11.3 or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Contractor as trustee. The foregoing waiver afforded the Architect, his agents and employees shall not extend to the liability imposed by Subparagraph 4.18.3. The Owner or the Contractor, as appropriate, shall require of the Architect, separate contractors, Subcontractors, and Sub-subcontractors by appropriate agreements, written where legally required for validity, similar waivers each in favor of all other parties enumerated in this Subparagraph 11.3.6.

11.3.7 If required in writing by any party in interest, the Contractor as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of his duties. He shall deposit in a separate account any money so received, and he shall distribute it in accordance with such agreement as the parties in interest may reach or in accordance with the direction of a court of competent jurisdiction.



11.3.8 The Contractor as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within five days after the occurrence of loss to the Contractor's exercise of this power. If such objection be made, the Contractor as trustee shall make settlement with the insurers in accordance with the direction of a court of competent jurisdiction.

#### **11.4 LOSS OF USE INSURANCE**

11.4.1 The Owner, at his option, may purchase and maintain such insurance as will insure him against loss of use of his property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of his property including consequential losses due to fire or other hazards however caused, to the extent covered by insurance under this Paragraph 11.4.

### **SECTION 12 – CHANGES IN THE WORK**

#### **12.1 CHANGE ORDERS**

12.1.1 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents.

12.1.2 A Change Order is a written order to the Contractor signed by the Owner and the Architect, issued after execution of the Contract, authorizing or directing a change in the Work and/or an adjustment in the Contract Sum or the Contract Time, or both. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement with the terms thereof, including the adjustment in the Contract Sum and/or the Contract Time.

12.1.3 If the Contractor does not agree with the terms of the Change Order, the Contractor shall return the unsigned Change Order to the Owner. In such event, the Work, Contract Sum and /or Contract Time shall be adjusted as reflected in the Change Order, subject to the Contractor's rights under M.G.L. Chapter 30, Section 39J, but in no event shall the Contractor refuse to perform the Work as modified by the Change Order.

#### **12.2 CLAIMS FOR ADDITIONAL COST**

12.2.1 If the Contractor claims that any instructions or orders, whether oral, written, drawings, or otherwise, involve extra cost or time, and such instructions or orders are not accompanied by a written acknowledgment by the Owner that extra payment will be made or time extended, he shall promptly so notify the Owner in writing and shall not proceed with the work until he has received a further written order to proceed; except, as provided in Paragraph 10.3, in the case of an emergency affecting life or property.

12.2.2 Upon receipt from the Contractor of a written notice of claim as provided in Paragraph 12.2.1, the Architect shall review such claim, and if he determines that any work in dispute should proceed, he shall issue to the Contractor a written order, signed by the Owner, (1) to proceed, which shall approve or deny the Contractor's claim, in whole or in part, or (2) to proceed subject to a later determination by the Architect of the Contractor's right to extra payment.

12.2.3 To the extent that the Architect, when issuing the written order to proceed described in 12.2.2, approves the Contractor's claim, the Contract Sum and/or Contract Time shall be

adjusted by Change Order. If the Architect, when issuing his written order to proceed denies, in whole or in part, the Contractor's claim, the Contractor shall proceed with the work without delay, subject to the Contractor's rights under M.G.L. Chapter 30, Section 39J. If the Architect, when issuing his written order to proceed, instructs the Contractor to proceed with the work subject to a later determination by the Architect of the Contractor's right to extra payment or time, the Contractor shall proceed with the Work without delay.

### **12.3 MINOR CHANGES IN THE WORK**

12.3.1 The Architect shall have the authority to order minor changes in the Work that do not involve an adjustment in the Contract Sum or an extension of the Contract Time, and are not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.

### **12.4 EQUITABLE ADJUSTMENTS**

12.4.1 Equitable adjustments in the Contract Sum shall be determined according to one of the following methods, or a combination thereof; as determined by the Owner:

- 1) fixed price basis, provided that the price shall be inclusive of items 3(a) through 3(d), below, and shall be computed in accordance with those provisions.
- 2) Estimated lump sum basis to be adjusted in accordance with Contract unit prices, or other agreed upon unit prices, provided that the unit prices shall be inclusive of all costs related to such equitable adjustments.
- 3) Time and materials basis, based upon a not to exceed, predetermined upset amount to be subsequently adjusted on the basis of actual costs comprised of items (a) through (d) below:
  - a) the costs at prevailing rates for direct labor, material and use of equipment;
  - b) plus, the costs of Worker's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation; or as an alternative, the Contractor may elect to add a flat twenty-five (25%) percent to the total labor rate in (a), above;
  - c) plus ten (10) percent of (a), above, for overhead, superintendence and profit which will be paid to the Contractor for the work of the Contractor and all subcontractors. The contracting parties referred to in this subparagraph shall agree upon the distribution of the ten (10) percent as a matter of contract between each other;
  - d) plus actual direct premium costs of payment and performance bonds required of the Contractor provided there would be an appropriate credit for premiums for a credit change order
  - e) if the extra work requires the use of heavy equipment, cranes and hoisting equipment, and special tools not on site and not originally required to be used upon the work, then the cost of transportation to and from the work site, not exceeding 100 miles, shall be included. The cost of extra work shall not include any cost or rental of small tools, buildings, or any portion of the time of the Contractor's management or office personnel, or any allowance for use of capital.

12.4.2 If the net change is an addition to the Contract Sum, it shall include the Contractor's overhead, superintendence and profit. On any change that involves a net credit, no allowance for overhead superintendence and profit shall be figured. For any change that does not include labor performed or materials installed in the Project, there will be no markup for the contractor's

overhead, superintendence, and profit, notwithstanding any net increase in the Contract Sum. Charges for small tools known as "tools of the trade" are not to be computed in the amount of an equitable change.

## **SECTION 13 – UNCOVERING AND CORRECTION OF WORK**

### **13.1 UNCOVERING OF WORK**

13.1.1 If any portion of the Work should be covered contrary to the request of the Architect or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for his observation and shall be replaced at the Contractor's expense.

13.1.2 If any other portion of the Work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect, with the approval of the Owner, may request to see such Work and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work be found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by the Owner or a separate contractor as provided in Article 6, in which event the Owner shall be responsible.

### **13.2 CORRECTION OF WORK**

13.2.1 The Contractor shall promptly correct all Work rejected by the Architect as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect's additional services made necessary thereby and any costs, loss, or damages to the Owner resulting from such failure or defect.

13.2.2 If, within one year after the Date of Substantial Completion of the Work or designated portion thereof or within one year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This obligation shall survive termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

13.2.3 The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected under Subparagraphs 4.5.1, 13.2.1, and 13.2.2, unless removal is waived by the Owner.

13.2.4 If the Contractor fails to correct defective or nonconforming Work as provided in Subparagraphs 4.5.1, 13.2.1, and 13.2.2, the Owner may correct it in accordance with Paragraph 3.4.

13.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Architect, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days written notice, sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Architect's additional services made necessary thereby. If such proceeds of sale do not cover all costs which the

Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

13.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction or removal.

13.2.7 Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 4.5 hereof. The establishment of the time period of one year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

### **13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK**

13.3.1 If the Owner prefers to accept defective or non-conforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **SUPPLEMENTARY GENERAL CONDITIONS – PART I**

### **STATUTORY PROVISIONS FOR MASSACHUSETTS PUBLIC CONSTRUCTION CONTRACTS CONTENTS**

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**SUPPLEMENTARY GENERAL CONDITIONS – PART I**  
**STATUTORY PROVISIONS FOR MASSACHUSETTS**  
**PUBLIC CONSTRUCTION CONTRACTS**

The following provisions are required by or are intended to be consistent with requirements of Massachusetts statutes governing public construction contracts in the Commonwealth of Massachusetts (hereinafter referred by statute to be included herein shall be deemed to be so included). In addition, the parties recognize that other rights, duties, and obligations with respect to public construction contracts are provided for in the Contract Documents. In case of conflict between the provisions of these Supplementary General Conditions and other provisions in the Contract Documents, the provisions of these Supplementary General Conditions shall govern. In case of conflict between the provisions of these Supplementary General Conditions and the provisions of any applicable statute, the statutory provisions shall govern. Where the term “awarding authority” appears in the following paragraphs, it shall be taken as meaning the Owner.

**ARTICLE 1 – PAYMENT, CONTRACT ADMINISTRATION, etc.**

1.1 “Or Equal” Clause: (Statutory reference: M.G.L. Chapter 30, Section 39M(b))  
This Paragraph 1.1 applies to every contract subject to M.G.L. Chapter 30, Section 39M(b).

This Paragraph 1.1 applies to every contract for the construction, reconstruction or repair of any public work or for the purchase of any material by the Commonwealth, any political subdivision thereof, or any county, city, town, district or housing authority (above certain dollar limits, as stated in the statute), and to contracts awarded pursuant to M.G.L. Chapter 149, Sections 44A through 44H. The said Sections 44A through 44H apply to every contract for the construction, reconstruction, installation, demolition, maintenance or repair of any building by a department, agency, board, commission, authority, or other instrumentality or the Commonwealth or political subdivision thereof, or two or more subdivisions thereof, but not including the Massachusetts Bay Transportation Authority, estimated to cost more than a dollar amount set forth in M.G.L. Chapter 149, Section 44A.

Every such contract shall provide that an item equal to that named or described in the said specifications may be furnished. Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the words “or approved equal” shall be understood to follow. An item shall be considered equal to the item so named or described if, in the opinion of the awarding authority:

- a. It is at least equal in quality, durability, appearance, strength, and design;
- b. it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased, and
- c. it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the specifications. For each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or producers, and for the equal of any one of said name or described materials.

Any structural or mechanical changes made necessary to accommodate substituted equipment under this paragraph shall be at the expense of the Contractor or Subcontractor responsible for the work item. See other paragraphs of General and Supplementary Conditions for procedures to be used in determining compliance with the standards of this paragraph.

1.2 Delays: (Statutory reference: Chapter 30, Section 39O). This Paragraph 1.2 applies to every contract subject to M.G.L. Chapter 30, Section 39M and to every contract subject to Chapter 149, Sections 44A through 44H.

In the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

Except as otherwise provided by law and by this Paragraph 1.2, the Contractor shall not be entitled to damages on account of any hindrances or delays, avoidable or unavoidable; but if such delay be occasioned by the awarding authority, the Contractor may be entitled to an extension of time only, in which to complete the work, to be determined by the Architect.

(a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.

(b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.

1.3 Deviations: (Statutory referenced: M.G.L. Chapter 30, section 39I) This Paragraph 1.3 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or public works for the Commonwealth or any political subdivision thereof.

The Contractor shall perform all the work required by this contract in conformity with the plans and specifications contained therein. No willful and substantial deviation from said plans and specifications shall be made unless authorized in writing by the awarding authority or by the Engineer or Architect in charge of the work who is duly authorized by the awarding authority to approve such deviations. In order to avoid delays in the prosecution of the work required by such contract, such deviation from the plans or specifications may be authorized by a written order of the awarding authority or such Engineer or Architect so authorized to approve such deviation. Within thirty days thereafter, such written order shall be confirmed by a certificate of the awarding authority stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor (2) that the specified deviation does not materially injure the project as a whole; (3) that either the work substituted for the work specified is the same cost and quality, or that an equitable adjustment has been agreed upon between the awarding authority and the Contractor and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the awarding authority.

Such certificate shall be signed under the penalties of perjury and shall be a permanent part of the file record of the work contracted for.

Whoever violates any provision of this section willfully and with intent to defraud shall be punished by a fine of not more than five thousand dollars or by imprisonment for not more than six months, or both.



1.4 Finality of Decisions by Awarding Authority or Architect: (Statutory reference: M.G.L. Chapter 30, Section 39J) This Paragraph 1.4 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the Commonwealth or by any county, city, district, board, commission, or other public body, when the amount of the contract exceeds the amount stated in M.G.L. Chapter 30, Section 39J.

Notwithstanding any contrary provision of this contract, a decision by the contracting body or by any administrative board, official or agency, or by any architect or engineer, on a dispute, whether of fact or of law, arising under said contract shall not be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily, is unsupported by substantial evidence, or is based upon error of law.

1.5 Differing Site Conditions: (Statutory reference: M.G.L. Chapter 30, Section 39N) This Paragraph 1.5 applies to every contract subject to M.G.L. Chapter 30, Section 39M and to every contract subject to M.G.L. Chapter 49, Sections 44A through 44H.

If, during the progress of the work, the Contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the Contract Documents, either the Contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a Contractor, or upon its own initiative, the awarding authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the Contract Documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and Contract Documents and are such a nature as to cause an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

1.6 Timely Decision by Awarding Authority: (Statutory reference: M.G.L. Chapter 30, Section 39P) This Paragraph 1.6 applies to every contract subject to M.G.L. Chapter 30, Section 39M, and to every contract subject to M.G.L. Chapter 149, Sections 44A through 44H.

In every case in which this contract requires the awarding authority, any official, its Architect or Engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, the decision shall be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, Architect or Engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty-day period and the date by which the decision will be made.

1.7 Certificate of Appropriation: (Statutory reference: M.G.L. Chapter 44, Section 31C) This Paragraph 1.7 applies to contracts for construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any city or town costing more than the amount set forth in M.G.L. Chapter 44, Section 31C.

This Contract shall not be deemed to have been made until the auditor or accountant or other officer of the city or town having similar duties has certified thereon that an appropriation in the amount of such contract is available therefor and that an officer or agent of the city, town, or awarding-authority has been authorized to execute said contract and approve all requisitions and change orders. No order to the Contractor for a change in or addition to the work to be performed under a contract subject to this section, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the Contractor is willing to perform without any increase in the contract price, shall be deemed to have been given until the auditor or accountant, or other officer of the awarding authority

having similar duties, has certified thereon that an appropriation in the amount of such order is available therefor; but such certificate shall not be construed as an admission by the awarding authority of its liability to pay for such work. The certificate of the auditor or accountant or other officer of the awarding authority having similar duties, that an appropriation in the amount of such contract or order is available shall bar any defense by the awarding authority on the ground of insufficient appropriation; and any law barring payment in excess of appropriations shall not apply to amounts covered by any certificate under this section.

1.8 Method of Payment: (Statutory reference: M.G.L. Chapter 30, Section 39K) This Paragraph 1.8 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building by the Commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount is more than two thousand dollars, or the amount set forth in M.G.L. Chapter 30, Section 39K.

1.8.1 Within fifteen days after receipt from the Contractor, at the place designated by the awarding authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the awarding authority will make a periodic payment to the Contractor for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the Contractor has title or to which a Subcontractor has title and has authorized the Contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that the materials are free from all encumbrances, but less (1) a retention based on its estimate of the fair value of its claims against the Contractor and less (2) a retention for direct payments to Subcontractors based on demands for same in accordance with the provisions of Paragraph 1.10 of these Supplementary General Conditions, and less (3) a retention not exceeding five percent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the Contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the awarding authority, less than one percent of the original contract price, or (b) the Contractor substantially completes the work and the awarding authority takes possession for occupancy, whichever occurs first, the awarding authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the Contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to Subcontractors based on demands for same in accordance with the provisions of Paragraph 1.10 of these Supplementary General Conditions, or based on the record of payments by the Contractor to the Subcontractors under this contract if such record of payment indicates that the Contractor has not paid Subcontractors as provided in Paragraph 1.10. If the awarding authority fails to make payment as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days...after receipt of such periodic estimate from the Contractor, at the place designated by the awarding authority if such a place is so designated. The Contractor agrees to pay to each Subcontractor a portion of any such interest paid in accordance with the amount due each Subcontractor.

1.8.2 The awarding authority may make changes in any periodic estimate submitted by the Contractor, and the payment due on said periodic estimate shall be computed in accordance with the change so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the awarding authority may, within seven days after receipt, return to the Contractor for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations.

The date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter.

1.8.3 All periodic estimates shall be submitted to the awarding authority, or to its designee as set forth in writing to the Contractor, and the date of receipt by the awarding authority or its designee shall be marked on the estimate. All periodic estimates shall contain a separate item for each subtrade and each sub-subtrade listed in sub-bid form as required by the specifications, and a column listing the amount paid to each subcontractor and sub-subcontractor as of the date the periodic estimate is filed. The person making payment for the awarding authority shall add the daily interest provided for herein to each payment for each day beyond the due date based on the date of receipt marked on the estimate.

1.8.4 A certificate of the Architect to the effect that the Contractor has fully or substantially completed the work shall, subject to the provisions of Paragraph 1.4 of these Supplementary General Conditions, be conclusive for the purposes of this Paragraph 1.8.

1.8.5 Notwithstanding the provisions of this section, at any time after the value of the work remaining to be done is, in the estimation of the awarding authority, less than 1 per cent of the adjusted contract price, or the awarding authority has determined that the contractor has substantially completed the work and the awarding authority has taken possession for occupancy, the awarding authority may send to the general contractor by certified mail, return receipt requested, a complete and final list of all incomplete and unsatisfactory work items, including, for each item on the list, a good faith estimate of the fair and reasonable cost of completing such item. The general contractor shall then complete all such work items within 30 days of receipt of such list or before the contract completion date, whichever is later. If the general contractor fails to complete all incomplete and unsatisfactory work items within 45 days after receipt of such items furnished by the awarding authority or before the contract completion date, whichever is later, subsequent to an additional 14 days written notice to the general contractor by certified mail, return receipt requested, the awarding authority may terminate the contract and complete the incomplete and unsatisfactory work items and charge the cost of same to the general contractor and such termination shall be without prejudice to any other rights or remedies the awarding authority may have under the contract. The awarding authority shall note any such termination in the evaluation form to be filed by the awarding authority pursuant to the provisions of section 44D of chapter 149.

1.9 Method of Payment: (Statutory reference: M.G.L. Chapter 30, section 39G) This Paragraph 1.9 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways; including bridges and other highway structures, sewers and water mains, airports and other public works entered into with the commonwealth, or any agency or political subdivision thereof.

1.9.1 Upon substantial completion of the work required by a contract with the commonwealth, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways, including bridges and other highway structures, sewers and water mains, airports and other public works, the contractor shall present in writing to the awarding authority its certification that the work has been substantially completed. Within twenty-one days thereafter, the awarding authority shall present to the contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the contract sufficient to demonstrate that the work has not been substantially completed. The awarding authority may include with such list a notice setting forth a reasonable time, which shall not in any event be prior to the contract completion date, within which the contractor must achieve substantial completion of the work. In the event that the awarding authority fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the contractor's certification within the twenty-one day period, the contractor's certification shall take effect as the awarding authority's declaration that the work has been substantially completed.

1.9.2 Within sixty-five days after the effective date of a declaration of substantial completion, the awarding authority shall prepare and forthwith send to the contractor for acceptance a substantial

completion estimate for the quality and price of the work done and all but one percent retainage on that work, including the quantity, price and all but one percent retainage for the undisputed part of each work item and extra work item in dispute but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory work items and less the total periodic payments made to date for the work. The awarding authority also shall deduct from the substantial completion estimate an amount equal to the sum of all demands for direct payments filed by subcontractors and not yet paid to subcontractors or deposited in joint accounts pursuant to section 1.10, but no contract subject to said section 1.10 shall contain any other provision authorizing the awarding authority to deduct any amount by virtue of claims asserted against the contract by subcontractors, material suppliers or others.

1.9.3 If the awarding authority fails to prepare and send to the contractor any substantial completion estimate required by section 1.9.2, on or before the date herein above set forth, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such substantial completion estimate, at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the awarding authority sends that substantial completion estimate to the contractor for acceptance or to the date of payment therefor, whichever occurs first. The awarding authority shall include the amount of such interest in the substantial completion estimate.

1.9.4 Within fifteen days after the effective date of the declaration of substantial completion, the awarding authority shall send to the contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items, and unless delayed by causes beyond his control, the contractor shall complete all such work items within forty-five days after the receipt of such list or before the then contract completion date, whichever is later. If the contractor fails to complete such work within such time, the awarding authority may, subsequent to seven days' written notice to the contractor by certified mail, return receipt requested, terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the contractor.

1.9.5 Within thirty days after receipt by the awarding authority of a notice from the contractor stating that all of the work required by the contract has been completed, the awarding authority shall prepare and forthwith send to the contractor for acceptance, a final estimate for the quantity and price of the work done and all retainage on that work less the payments made to date, unless the awarding authority's inspection shows that work items required by the contract remain incomplete or unsatisfactory, or that documentation required by the contract has not been completed. If the awarding authority fails to prepare and sends to the contractor the final estimate within thirty days after receipt of notice of completion, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such final estimate at the rate hereinabove provided from the thirtieth day after such completion until the date on which the awarding authority sends the final estimate to the contractor for acceptance or the date of payment therefor, whichever occurs first, provided that the awarding authority's inspection shows that no work items required by the contract remain incomplete or unsatisfactory. Interest shall not be paid hereunder on amounts for which interest is required to be paid in connection with the substantial completion estimate as hereinabove provided. The awarding authority shall include the amount of the interest required to be paid hereunder in the final estimate.

1.9.6 The awarding authority shall pay the amount due pursuant to any substantial completion or final estimate within thirty-five days after receipt of written acceptance for such estimate from the contractor and shall pay interest on the amount due pursuant to such estimate at the rate hereinabove provided from that thirty-fifth day to the day of payment. Within 15 days after receipt from the contractor, if such place is so designated by the awarding authority, if such place is so designated, of a periodic estimate requesting payment of the amount due for the preceding periodic estimate period, the awarding authority shall make a periodic payment to the contractor for the work performed during the preceding periodic estimate period and for the materials not incorporated in the work but delivered and suitably stored at the site, or at some location agreed upon in writing, to which the contractor has title or to which

a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that materials are free from all encumbrances. The awarding authority shall include with each such payment interest on the amount due pursuant to such periodic estimate at the rate herein above provided from the due date. In the case of periodic payments, the contracting authority may deduct from its payment a retention based on its estimate of the fair value of its claim against the contractor, a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section 1.10, and a retention to secure satisfactory performance of the contractual work not exceeding five percent of the approved amount of any periodic payment, and the same right to retention shall apply to bonded subcontractors entitled to direct payment under section 1.10; provided, that a five percent value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

1.9.7 No periodic, substantial completion or final estimate or acceptance or payment thereof shall bar a contractor from reserving all rights to dispute the quantity and amount of, or the failure of the awarding authority to approve a quantity and amount of, all or part of any work item or extra work item.

1.9.8 Substantial completion, for the purpose of this section 1.9, shall mean either that the work required by the contract has been completed except for work having a contract price of less than one percent of the then adjusted total contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

1.10 Direct Payment: (Statutory reference: M.G.L. Chapter 30, Section 39F) This Paragraph 1.10 applies to every contract awarded pursuant to M.G.L. Chapter 149, Sections 44A through 44J, and (with the exception of Subparagraph 1.10.9) to every contract awarded pursuant to M.G.L. Chapter 30, Section 39M.

1.10.1 Forthwith after the General Contractor receives payment on account of a periodic estimate, the General Contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the General Contractor.

1.10.2 Not later than the sixty-fifth day after each Subcontractor substantially completes the work in accordance with the plans and specifications, the entire balance due under the subcontract, less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the Subcontractor; and the awarding authority shall pay that amount to the General Contractor. The General Contractor shall forthwith pay to the Subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the General Contractor.

1.10.3 Each payment made by the awarding authority to the General Contractor pursuant to Subparagraphs 1.10.1 and 1.10.2 of this Paragraph 1.10 for the labor performed and the materials furnished by a Subcontractor shall be made to the General Contractor for the account of that Subcontractor; and the awarding authority shall take reasonable steps to compel the General Contractor to make each such payment to each such Subcontractor. If the awarding authority has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the General Contractor for payment to the Subcontractor as provided in Subparagraphs 1.10.1 and 1.10.2, the awarding authority shall act upon the demand as provided in this Paragraph 1.10.

1.10.4 If, within seventy days after the Subcontractor has substantially completed the subcontract work, the Subcontractor has not received from the Contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the General Contractor, less any amount retained by the awarding authority as to the estimated cost of completing the incomplete and

unsatisfactory items of work, the Subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the General Contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the Subcontractor has substantially completed the subcontract work. Within ten days after the Subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the General Contractor, the General Contractor may reply to the demand. The reply shall be a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the General Contractor and of the amount due for each claim made by the General Contractor against the Subcontractor.

1.10.5 Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the Subcontractor of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the General Contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the General Contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by Subparagraph 1.10.4. The awarding authority shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deduction from direct payments made as provided in parts (i) and (ii) of this Subparagraph.

1.10.6 The awarding authority shall forthwith deposit the amounts deducted from a direct payment as provided in part (iii) of the Subparagraph 1.10.5 in an interest-bearing joint account in the names of the General Contractor and the Subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the General Contractor and the Subcontractor and shall notify the General Contractor and the Subcontractor of the date of the deposit and the account, including accrued interest, as provided in an agreement between the General Contractor and the Subcontractor or as determined by decree of a court of competent jurisdiction.

1.10.7 All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to Subparagraph 1.10.6 shall be made out of amounts payable to the General Contractor at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the General Contractor and in the order or receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the Contractor to the extent of such payment.

1.10.8 The awarding authority shall deduct from payments to a General Contractor amounts which, together with the deposits in interest-bearing accounts pursuant to Subparagraph 1.10.6, are sufficient to satisfy all unpaid balances of demands for direct payments received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the General Contractor.

1.10.9 If the Subcontractor does not receive payment as provided in Subparagraph 1.10.1 or if the General Contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the Subcontractor and the Subcontractor does not receive payment for same when due less the deductions provided for in Subparagraph 1.10.1, the Subcontractor may demand direct payment by following the procedure in Subparagraph 1.10.4 and the General Contractor may file a sworn reply as provided in that same Subparagraph. A demand made after the first day of the month following that for which the Subcontractor performed or furnished the labor and materials for which the

Subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the General Contractor. Thereafter the awarding authority shall proceed as provided in Subparagraphs 1.10.5, 1.10.6, 1.10.7 and 1.10.8.

1.10.10 Any assignment by a Subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of M.G.L. Chapter 149, Section 29 shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the awarding authority or which are on deposit pursuant to Subparagraph 1.10.6 shall be subordinate to the rights of all Subcontractors who are entitled to be paid under this section and who have not been paid in full.

1.10.11 "Subcontractor" as used in this Paragraph 1.10 (i) for contracts awarded as provided in M.G.L. Chapter 149, Sections 44A-44J, inclusive, shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the General Contractor, (ii) for contracts awarded as provided in M.G.L. Chapter 30, Section 39M(a), shall mean a person approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the General Contractor.

1.10.12 A General Contractor or a Subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in Subparagraph 1.1.6 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A Subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in Subparagraph 1.10.6 by a petition in equity in the superior court against the awarding authority and the Contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. M.G.L. Chapter 231, Sections 59 and 59B shall apply to such petitions. The Court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to Sections 59 and 59B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any Subcontractor with the petition of one or more Subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a Subcontractor filing a demand for direct payment for which no funds due the Contractor are available for direct payment shall have a right to file a petition in a court of equity against the awarding authority claiming a demand for direct payment is premature, and such Subcontractor must file the petition before the awarding authority has made a direct payment to the Subcontractor and has made a deposit of the disputed portion as provided in part (iii) of Subparagraph 1.10.5 and in Subparagraph 1.10.6.

1.10.13 In any petition to collect any claim for which a Subcontractor has filed a demand for direct payment the court shall, upon motion of the General Contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of Subparagraph 1.10.5 and in Subparagraph 1.10.6 any amount held under a trustee writ or pursuant to a restraining order or injunction.

1.11 Discharge or Release of Bonds (Statutory reference: M.G.L. c.30, section 40) This Paragraph 1.11 applies to every contract awarded for the construction or repair of public buildings or other public works.

1.11.1 Bonds given to the commonwealth, any county, city, town or political subdivision to secure the performance of contracts for the construction or repair of public buildings or other public works may be

discharged or released by the awarding authority, upon such terms as it deems expedient, after the expiration of one year from the time of completion, subject to Section 1.8, of the work contracted to be done; provided that no claim filed under said bond is pending, and provided further, that no such bonds shall be discharged or released prior to the expiration of all special guarantees provided for in the contract unless new bonds in substitution therefor specifically relating to the unexpired guarantees shall be taken.

## ARTICLE 2 – WAGES AND EMPLOYMENT PRACTICES

2.1 Preference To Veterans and Citizens In Public Works; Rate of Wages: (Statutory reference: M.G.L. c. 149, Section 26) This Paragraph 2.1 applies to every contract or subcontract for the construction of public works by the Commonwealth or by a county, town or district.

2.1.1 In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers, preference shall first be given to citizens of the Commonwealth who have been residents of the Commonwealth for at least six months at the commencement of their employment, who are veterans as defined in M.G.L. Chapter 4, Section 7, clause 43, and who are qualified to perform the work to which the employment relates and, within such preference, preference shall be given to service-disabled veterans; and secondly, to citizens of the Commonwealth generally who have been residents of the Commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town, authority or district, and within such preference, preference shall be given to service-disabled veterans.

2.1.2 The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the Commissioner as hereinafter provided; provided that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal town paying the highest rate; provided further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective agreements or understandings in the private construction industry between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established; provided further, that in towns where no such rate or rates have been established, the wages paid to mechanics, teamsters, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the Commonwealth or a county, town, authority or district, when such employees are employed in the construction, addition to or alteration of public buildings for which special appropriations of more than one thousand dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

2.2 List of Jobs; Classifications; Determination of Rate of Wages; Schedule: (Statutory reference: M.G.L. Chapter 149, Section 27) This Paragraph 2.2. applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

2.2.1 The commissioner shall prepare, for the use of such public officials or public bodies whose duty it shall be to cause public works to be constructed, a list of the several jobs usually performed on various types of public works upon which mechanics and apprentices, teamsters, chauffeurs and laborers are employed, including the transportation of gravel or fill to the site of said public works or the removal of



surplus gravel or fill from such site. The commissioner shall classify said jobs, and he may revise such classification from time to time, as he may deem advisable. Prior to awarding a contract for the construction of public works, said public official or public body shall submit to the commissioner a list of the jobs upon which mechanics and apprentices, teamsters, chauffeurs and laborers are to be employed, and shall request the commissioner to determine the rate of wages to be paid on each job. Each year after the awarding of the contract, the public official or public body shall submit to the commissioner a list of the jobs upon which mechanics and apprentices and laborers are to be employed and shall request that the commissioner update the determination of the rate of wages to be paid on each job. The general contractor shall annually obtain updated rates from the public official or public body and no contractor or subcontractor shall pay less than the rates so established. Said rates shall apply to all persons engaged in transporting gravel or fill to the site of said public works or removing gravel or fill from such site, regardless of whether such persons are employed by a contractor or subcontractor or are independent contractors or owner-operators. The commissioner, subject to the provisions of Section 2.1, shall proceed forthwith to determine the same, and shall furnish said official or public body with a schedule of such rate or rates of wages as soon as said determination shall have been made. In advertising or calling for bids for said works, the awarding official or public body shall incorporate said schedule in the advertisement or call for bids by an appropriate reference thereto, and shall furnish a copy of said schedule, without cost, to any person requesting the same. Said schedule shall be made a part of the contract for said works and shall continue to be the minimum rate or rates of wages for said employees during the life of the contract. Any person engaged in the construction of said works shall cause a legible copy of said schedule and subsequent updates to be kept posted in a conspicuous place at the site of said works during the life of the contract. An apprentice performing work on a project subject to this section shall maintain in his possession an apprentice identification card issued pursuant to section M.G.L. Chapter 23, Section 11W. The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in said Section 2.1, and such payments shall be considered as payments to persons under this section performing work as herein provided.

☐ Any employer engaged in the construction of such works who does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction. Whoever shall pay less than said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner, and whoever, for himself, or as representative, agent or officer of another, shall take or receive for his own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any part or portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for work done or service rendered on said public works, shall have violated this section and shall be punished or shall be subject to a civil citation or order as provided in M.G.L. Chapter 149, Section 27C. The president and treasurer of a corporation and any officers or agents having the management of such corporation shall also be deemed to be employers of the employees of any corporation within the meaning of Sections 2.1 to 2.3, inclusive. Offers of restitution or payment of restitution shall not be considered in imposing such punishment.

2.2.2 When an investigation by the attorney general's office reveals that a contractor or subcontractor has violated this section by failing to pay said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner, or that a contractor or subcontractor has, for himself, or as representative, agent or officer of another, taken or received for his own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for work done or service rendered on said public works, the attorney general may, upon written notice to the contractor or subcontractor and the sureties of the contractor or subcontractor, and after a hearing thereon, order work halted on the part of the contract on which such wage violations occurred, until the defaulting contractor or subcontractor has

filed with the attorney general's office a bond in the amount of such penal sum as the attorney general shall determine, conditioned upon payment of said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner. An employee claiming to be aggrieved by a violation of this section may, 90 days after the filing of a complaint with the attorney general, or sooner if the attorney general assents in writing, and within 3 years after the violation, institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief, for any damages incurred, and for any lost wages and other benefits. An employee so aggrieved who prevails in such an action shall be awarded treble damages, as liquidated damages, for any lost wages and other benefits and shall also be awarded the costs of the litigation and reasonable attorneys' fees.

2.3 Employment Records To Be Kept By Contractor, Subcontractors; Statement of Compliance: (Statutory reference: M.G.L. c. 149, Section 27B) This Paragraph 2.3 applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

Every Contractor, Subcontractor or public body engaged in said public works to which Paragraph 2.3 of these Supplementary General Conditions applies shall keep a true and accurate records of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on said works, and hours worked by, and wages paid to, each such employee, and shall promptly furnish to the Attorney General or his representative, upon his request, a copy of said record, signed by the employer or his authorized agent under the penalties of perjury. For every week in which an apprentice is employed by a contractor, subcontractor or public body subject to this section, a photocopy of the apprentice's apprentice identification card, issued pursuant to M.G.L. Chapter 23, Section 11W, shall be attached to the records submitted under this section. Such records shall be open to inspection by any authorized representative of the department at any reasonable time, and as often as may be necessary. Every contractor and subcontractor required to keep such a record shall submit a copy of said record to the awarding authority directly and on a weekly basis.

Each such Contractor, Subcontractor or public body shall preserve its payroll records for a period of three years from the date of completion of the contract.

Each such Contractor, Subcontractor or public body shall furnish to the awarding authority directly 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.

## STATEMENT OF COMPLIANCE

I, \_\_\_\_\_  
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

\_\_\_\_\_  
(Contractor, Subcontractor or public body)

on the \_\_\_\_\_ and that all mechanics  
(building or project)

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 \_\_\_\_\_

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the awarding authority for such inspection and copying.

2.4 Wages Paid to Operators of Trucks and Other Equipment: (Statutory reference: M.G.L. c. 149, Section 27F) This Paragraph 2.4 applies to every contract for the construction of public works by the Commonwealth, or by a county, city, town or district.

No agreement of lease, rental or other arrangement, and no order or requisition under which a truck or any automotive or other vehicle or equipment is to be engaged in public works by the commonwealth or by a county, city, town or district, shall be entered into or given by any public official or public body unless said agreement, order or requisition contains a stipulation requiring prescribed rates of wages, as determined by the commissioner, to be paid to the operators of said trucks, vehicles or equipment. Any such agreement, order or requisition which does not contain said stipulation shall be invalid, and no payment shall be made thereunder. Said rates of wages shall be requested of said commissioner by said public official or public body, and shall be furnished by the commissioner in a schedule containing the classifications of jobs, and the rate of wages to be paid for each job. Said rates of wages shall include payments to health and welfare plans, or, if no such plan is in effect between employers and employees, the amount of such payments shall be paid directly to said operators. Whoever pays less than said rates of wages, including payments to health and welfare funds, or the equivalent in wages, on said works, and whoever accepts for his own use, or for the use of any other person, as a rebate, gratuity or in any other guise, any part or portion of said wages or health and welfare funds, shall have violated this section and shall be punished or shall be subject to a civil citation or order as provided in M.G.L. Chapter 149, Section 27C. An employee claiming to be aggrieved by a violation of this section may, 90 days after the filing of a complaint with the attorney general, or sooner if the attorney general assents in writing, and within 3 years after the violation, institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief, for any damages incurred, and for any lost wages and other benefits. An employee so aggrieved who prevails in such an action shall be awarded treble damages, as liquidated damages, for

any lost wages and other benefits and shall also be awarded the costs of the litigation and reasonable attorneys' fees.

2.5 Reserve Police Officers: (Statutory reference: M.G.L. Chapter 149, Section 34B) This Paragraph 2.5 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public works for the Commonwealth or any political subdivision thereof.

The contractor shall pay to any reserve police officer employed by him in any city or town the prevailing rate of wages paid to regular police officers in such city or town.

2.6 Eight-hour Day, etc.: (Statutory reference: M.G.L. Chapter 149, Sections 30, 34, and 34A) This Paragraph 2.6 applies only to contracts which are subject to the provisions of the aforesaid sections of the Massachusetts General Laws.

No laborer, worker, mechanic, foreman or inspector working within this Commonwealth in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of extraordinary emergency.

2.7 Lodging, etc.: (Statutory reference: M.G.L. Chapter 149, Section 25) This paragraph 2.7 applies to every contract for the doing of public work with the Commonwealth, a county, city or town, or with a department, board, commission, or officer acting therefor.

Every employee under this contract shall lodge, board and trade where and with whom he elects, and neither the Contractor nor his agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

2.8 Access to Contractor's Records: (Executive Order No. 195) This Paragraph 2.8 applies to every contract for the purchase of services or materials by any agency, bureau, board, commission, institution, or department of the Commonwealth or a municipal contract funded, in whole or in part, by the Commonwealth.

The Governor or his designee, the secretary of administration and finance, and the state auditor or his designee shall have the right at reasonable times and upon reasonable notice to examine the books, records and other compilations of data of the Contractor which pertain to the performance and requirements of this contract.

2.9 Worker's Compensation Insurance: (Statutory reference: M.G.L. chapter 149, Section 34) This Paragraph 2.9 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or other public works for the Commonwealth or any political subdivision thereof.

The Contractor shall, before commencing performance of the contract, provide by insurance for the payment of and the furnishing of other benefits under M.G.L. Chapter 152 to all persons to be employed under the contract, and the Contractor shall continue such insurance in full force and effect during the term of the contract. Sufficient proof of compliance with this Paragraph 2.9 must be furnished at the time of execution of this contract. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the contract and shall operate as an immediate termination thereof. No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to other party and to the awarding authority at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice.

Notice of cancellation sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of the addressee requested, shall be a sufficient notice. An affidavit of any officer, agent or employee of the insurer or of the insured, as the case may be, duly authorized for the purpose, that he has so sent such notice addressed as aforesaid shall be prima facie evidence of the sending thereof as aforesaid. This section shall apply to the legal representative, trustee in bankruptcy, receiver, assignee, trustee and the successor in interest of any such contractor. The superior court shall have jurisdiction in equity to enforce this section.

Whoever violates any provision of this section shall be punished by a fine of not more than one hundred dollars or by imprisonment for six months, or both; and, in addition, any contractor who violates any provision of this section shall be prohibited from contracting, directly or indirectly, with the commonwealth or any political subdivision thereof, for the construction, alteration, demolition, maintenance or repair of, or addition to, any public works or public building for a period of two years from the date of conviction of said violation.

### ARTICLE 3 – CONTRACTOR'S ACCOUNTING METHOD REQUIREMENTS

#### 3.1 (Statutory reference: M.G.L. Chapter 30, Section 39R)

This Article 3 applies to "Contracts" and "Contractors", as defined in Subparagraph 3.1.1 and 3.1.2, below.

3.1.1 "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A which is for an amount or estimated amount that exceeds the dollar amount set forth in M.G.L. Chapter 30, Section 39R.

3.1.2 "Contract" means any contract awarded or executed pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A which is for an amount or estimated amount that exceeds the dollar amount set forth in M.G.L. Chapter 30, Section 39R.

3.1.3 "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

3.1.4 "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.

3.1.5 "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepting accounting principles and auditing standards for the purpose of expressing a *certified* opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

3.1.6 "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed, the reasons therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that

management has fully disclosed all material facts to the independent certified public accountant, and that the auditing financial statement is a true and complete statement of the financial condition of the Contractor.

3.1.7 "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the Contractor.

3.1.8 Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

3.2 Subparagraph 3.1.2 hereof notwithstanding, every agreement or contract awarded or executed pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A, shall provide that:

3.2.1 The Contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor; and

3.2.2 Until the expiration of six years after final payment, the awarding authority, office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the Contractor or his Subcontractors that directly pertain to, and involve transactions relating to, the Contractor or his Subcontractors; and

3.2.3 If the agreement is a contract as defined herein, the Contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the Contractor's independent certified public accountant approving or otherwise commenting on the changes.

3.2.4 If the agreement is a contract as defined herein, the Contractor has filed a statement of management on internal accounting controls as set forth in Paragraph 3.3 below prior to the execution of the contract.

3.2.5 If the agreement is a contract as defined herein, the Contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in Paragraph 3.5 below.

3.3 Every Contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:

3.3.1 transactions are executed in accordance with management's general and specific authorization:

3.3.2 transactions are recorded as necessary

(i) to permit preparation of financial statements in conformity with generally accepted accounting principles, and

(ii) to maintain accountability for assets;

3.3.3 Access to assets is permitted only in accordance with management's general or specific authorization; and

3.3.4 The recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

3.4 Every Contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he/she has examined the statement of management on internal accounting controls, and expressing an opinion as to:

3.4.1 Whether the representations of management in response to this paragraph and Paragraph 3.2 above are consistent with the result of management's evaluation of the system of internal accounting controls; and

3.4.2 Whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

3.5 Every Contractor awarded a contract by the Commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report.

#### ARTICLE 4 – MISCELLANEOUS

4.1 Weather Protection: This Paragraph 4.1 applies to every contract subject to M.G.L. Chapter 149, Section 44A.

4.1.1 The Contractor shall install weather protection and provide adequate heat in the protected area from November 1 to March 31, as required by M.G.L. Chapter 149 Section 44F(1).

4.2 Form for Sub-contract: This Paragraph 4.2 applies to every contract subject to M.G.L. Chapter 149 Section 44A.

4.2.1 The Contractor when sub-contracting with sub-bidders filed pursuant to M.G.L. Chapter 149, Section 44F shall use the form for sub-contract in Chapter 149 Section 44F(4)(c).

4.3 Foreign Corporations: This Paragraph 4.3 applies to every contract with the Commonwealth, a county, city, town, district, board, commission, or other public body for the construction, reconstruction, alteration, remodeling, repair, or demolition of any public building or other public works.

4.3.1 The Contractor, if a foreign corporation, shall comply with M.G.L. Chapter 30, Section 39L.

4.4 Shoring: (Statutory reference: M.G.L. Chapter 149, Section 129A). This Paragraph 4.4 applies to every construction project carried on by any city, town, county, or other subdivision of the Commonwealth in which a trench is to be dug to a depth of five feet or more, except a trench for laying of water pipes dug to a depth of six and one-half feet which will be open less than 48 hours, and except for digging of graves.

4.4.1 Such trenches shall be shored and braced in conformity with rules and regulations for the prevention of accidents in construction operations, as adopted and enforced by the Attorney General.

4.5 Certification of Compliance with Tax Laws: (Statutory reference: M.G.L. Chapter 62C, Section 49A) This Paragraph 4.5 applies to contracts for goods or services furnished by any department, board, commission, division, authority, district or other agency of the Commonwealth or any subdivision of the Commonwealth, including a city, town or district.

4.5.1 By executing this contract, the Contractor certifies, under penalties of perjury, that to the best of his information, knowledge and belief he has complied with all laws of the Commonwealth relating to taxes.

4.6 Verification of Construction Debris Disposal: (Worcester Revised Ordinances Chapter 8, Section 7) This paragraph 4.6 shall apply to every contract entered into by the City of Worcester for the demolition, renovation, rehabilitation, or alteration of a building or structure.

- a. In furtherance of the requirements set forth in G.L. c.40, §54, and §114.1.3 of the State Building Code, the building commissioner shall require any person who obtains a permit for the demolition, renovation, rehabilitation, or alteration of a building or structure to provide verification that the debris resulting from such activities was disposed of at the licensed solid waste facility named in conjunction with the permit application.
- b. The verification required under sub-section (a), above, shall consist of the following:
  - 1) a dated receipt, signed by the owner/operator of the licensed solid waste disposal facility where the debris was deposited.
  - 2) the receipt shall contain a description of the debris disposed of, and its weight, or volume.
  - 3) the permit holder shall also provide the building commissioner with an affidavit that the receipt submitted is true and accurate to the best of the permit holder's knowledge.
  - 4) if the permit holder cannot dispose of the debris at the location indicated, it shall be the permit holder's obligation to obtain an amendment to the permit reflecting the new disposal location. The building commissioner shall be so notified, and the permit amended, prior to the disposal of the debris at the new disposal location.
- c. This section shall not apply to the construction of a new building or structure.

4.7 Responsible Employer Ordinance: (Worcester Revised Ordinances, Chapter 2, Section 35) *This paragraph 4.7 shall apply to every contract entered into by the City of Worcester for the construction, reconstruction, installation, demolition, maintenance or repair of any building, where the contract amount is more than one hundred thousand dollars.*

- a. The city council hereby finds and determines that taxpayer money is most efficiently and productively spent by awarding construction contracts to firms that include and enforce provisions requiring compliance with state laws governing the payment of prevailing wages, the provision of workers compensation coverage, and the proper classification of individuals as employees and not as independent contractors, as well as provisions concerning health insurance coverage and state-certified apprenticeship programs. The city council hereby further finds and determines that it is appropriate for it to exercise its entrepreneurial discretion by requiring firms that are awarded such contracts to comply with this ordinance because failure to comply is injurious to the life, health, and happiness of individuals employed by such firms and is deleterious to the quality of life in the city where most of such individuals reside.
- b. Every contract awarded by the city under G.L. c.149 and G.L. 149A shall be deemed to incorporate by reference the provisions of sub-parts (c)(1) through (8) of together with the provisions of subsections (d) and (e) of this section. Any person, company or corporation shall acknowledge, in writing, receipt of said requirements with their bid or proposal.
- c. All bidders or proposers and all subcontractors and trade contractors, including subcontractors that are not subject to G.L. c.149, Section 44F, under the bidder for projects subject to G.L. c.149, Section 44A(2), and proposers under G.L. c. 149A, shall as a condition for bidding or subcontracting verify under oath and in writing at the time of bidding or subcontracting verify under oath and in writing at the time of bidding or submittal in response to and RFP or in any event prior to entering



into a subcontract at any tier, that they comply with the following conditions for bidding or subcontracting and, for the duration of the project, shall comply with the following obligations:

- 1) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must comply with the obligations established under G.L. c. 149 to pay the appropriate lawful prevailing wage rates to their employees.
- 2) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must at the time of bidding maintain or participate in a bona fide apprentice training program as defined by G.L. c.23, Sections 11H and 11I for each apprenticeship trade or occupation represented in their workforce that is approved by the Division of Apprentice Standards of the Department of Labor and Workforce Development, regardless of whether or not the program qualifies as an employee welfare benefit plan under ERISA, and must register all apprentices with the Division and abide by the apprentice to journeyman ratio for each trade prescribed therein in the performance of any work on the project. This provision does not require the program to be an ERISA plan; the program need only have been approved by the Division of Apprentice Standards. All general bidders or proposers and all trade contractors and sub-bidders at every tier must submit with its bid or proposal an original, stamped Sponsor Verification letter from the Commonwealth of Massachusetts, Department of Labor and Workforce Development – Division Apprentice Standards, issued within the past 90 days, evidencing that at the time of submitting a bid or proposal, the bidder or proposer is currently an Approved Sponsor of Apprentices. Any bid or proposal submitted without the above documentation shall be rejected; ***(compliance with the apprentice training provision is currently suspended 7/2014)***
- 3) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must maintain appropriate industrial accident insurance coverage for all the employees on the project in accordance with G.L. c. 152;
- 4) The bidder or proposer and all trade contractors and subcontractors under the bidder must properly classify employees as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance coverage, unemployment taxes, social security taxes and income tax withholding. (G.L. c.149, Section 148B on employee classification);
- 5) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must at the time of bidding certify that, at the time employees begin work at the worksite, all employees will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration, and shall ensure that all employees working at the worksite possess such qualifications at all times throughout the duration of their work on the project and furnish documentation of successful completion of the course;
- 6) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must be in compliance with the health and hospitalization requirements of the Massachusetts Health Care Reform law established by Chapter 58 of the Acts of 2006, as amended, and regulations promulgated under that statute by the Commonwealth Health Insurance Connector Authority.
- 7) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must make arrangements to ensure that each employee of every contractor entering or leaving the project individually completes the appropriate entries in a daily sign-in/out log. The sign-in/out log shall include: the location of the project; current date; printed employee name; signed employee name; and the time of each entry or exiting.

The log shall contain a prominent notice that employees are entitled under state law to receive the prevailing wage rate for their work on the project. Such sign-in/out logs shall be provided to the City on a daily basis.

- 8) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer, prior to bidding or, if not subject to bidding requirements, prior to performing any work on the project, shall sign under oath and provide to the City a certification that they are not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the City.
- d. A proposal or bid submitted by any general bidder or by any trade contractor or subcontractor under the general bidder or proposer that does not comply with any of the foregoing conditions for bidding shall be rejected, and no subcontract for work outside the scope of G.L. c.149, Section 44F shall be awarded to a subcontractor that does not comply with the foregoing conditions.
- e. All bidders or proposers and all trade contractors and subcontractors under the bidder or proposer who are awarded or who otherwise obtain contracts on the projects subject to G.L. c.149, Section 44A(2) or c.149A, shall comply with each of the obligations set forth in this Section 4.7 for the entire duration of their work on the project, and an officer of each bidder or subcontractor under the bidder shall certify under oath and in writing on a weekly basis that they are in compliance with such obligations.
- f. Any proposer, bidder, trade contractor or subcontractor under the bidder or proposer who fails to comply with any one of the obligations set forth in this Section 4.7 for any period of time shall be, at the sole discretion of the City, subject to one or more of the following sanctions:
  - 1) cessation of work on the project until compliance is obtained;
  - 2) withholding of payment due under any contract or subcontract until compliance is obtained;
  - 3) permanent removal from any further work on the project;
  - 4) liquidated damages payable to the City in the amount of 5% of the dollar value of the contract.
- g. In addition to the sanctions outlined in subsection (h) above, a proposer, general bidder or contractor shall be equally liable for the violations of its subcontractor with the exception of violations arising from work performed pursuant to subcontracts that are subject to G.L. c.149, Section 44F. Any contractor or subcontractor that has been determined by the City or by any court or agency to have violated any of the obligations set forth in this Section 4.7 shall be barred from performing any work on any future projects for six months for a first violation, three years for a second violation and permanently for a third violation.

4.8 Regulation of Construction Noise: (Worcester Revised Ordinances, Chapter 8, Section 34) This paragraph 4.8 shall apply to anyone operating powered construction equipment delivering construction equipment and/or supplies at any construction site or project within the city of Worcester.

- a. It shall be unlawful for any person, firm, corporation, partnership, or other entity to operate powered construction equipment or to build, erect, construct, demolish, alter, repair, excavate or engage in hoisting, grading, site work, including tree and brush removal, dredging or pneumatic hammering, or to deliver construction equipment and/or supplies to the site on any building, road, tower, parking lot, machine, pipe, sewer, sidewalk, or any other construction project (hereafter collectively the "construction project"), except between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and Saturday, except for "emergency work" which is performed in the interest of public safety or welfare and for which a permit has been issued by the commissioner of public works and parks or the commissioner of inspectional services.

It shall be unlawful for any person, firm, corporation, partnership, or other entity to engage in a construction project activity on Sundays or legal holidays without a permit from the police chief issued pursuant to G.L. c. 136, Section 7 or 15 and a permit issued by the commissioner of inspectional services hereunder.

b. Emergency work permits may be issued in:

- 1) cases of urgent necessity and for the interests of health, safety and convenience of the public. The commissioner of inspectional services shall whether the reasons given for the urgent necessity are valid and reasonable, and whether the health, safety and convenience of the public will be protected or better served by granting the permit requested and whether the manner and amount of loss or inconvenience to the party in interest imposes a significant hardship; or,
- 2) cases where, because the location and nature of the work, the noise caused by said work will not be heard by anyone not working on the project. The commissioner of inspectional services shall consider whether supplying machinery and/or materials to the construction project site will cause unreasonable noise along the routes to the construction project site, and whether such activity will impact residential neighborhoods, and shall not grant any emergency work permit unless unreasonable noise in residential areas will be prevented.

c. Emergency work permits may be issued to the general contractor on a blanket basis that applies to all of the contractors working on the job, or may be issued to specific contractors on the construction project, at the discretion of the Commissioner.

Emergency work permits may be issued for not more than one week at a time, and may be renewed for additional one week periods at the discretion of the Commissioner.

d. Prior to issuing or reissuing said emergency work permit, the commissioner of inspectional services shall review the work being conducted and all attendant circumstances, and shall prescribe whatever limitations possible to minimize the generation of noise, and to minimize the impact of noise on the neighbors to the construction project.

e. Emergency repair work performed by the Department of Public Works and/or any public utility is exempt from this section.

f. The fee for each such Emergency work permits issued under this section shall be set in accordance with Chapter 2, § 24 of the City of Worcester Revised Ordinances of 2008.

g. On any project for the construction, reconstruction, installation, demolition, maintenance or repair of any building, or public work, to be funded in whole or in part by city funds, or funds which, in accordance with a federal or state grant, program, or otherwise, the city expends or administers, or any such project to which the city is a signatory to the contract therefor, the provisions of this section shall apply and the same shall be referred in every invitation to bid for such project and, the following paragraphs shall be contained in every resulting contract therefrom:

“It shall be a material breach of this contract if the contractor and each subcontractor shall not at all times adhere to the provisions of § 34 of chapter eight of the Revised Ordinances of the city, by limiting their on-site, noise producing construction and related work to the hours specified by the Ordinance.

A waiver from the above requirements may, in certain circumstances, be granted in accordance with subsections (b), (c) and (d) of § 34 of chapter eight of the Revised Ordinances of the city.”

h. The commissioner of inspectional services shall have the authority to adopt any rules and regulations he or she deems necessary to implement this section.

- i. Nothing in this section shall be deemed to prevent an individual from performing work on his or her own property, so long as the work is being done by the owner of the property or by direct relative(s) of the owner, and said work is not being done for profit.
- j. This section may be enforced by the commissioner of inspectional services, the building commissioner, the chief of police or their subordinates.

Any violation of this section by any person, firm, corporation, partnership, or other entity, shall be individually punished with a fine of \$100.00. Each day upon which a violation of this section occurs shall be considered a separate violation. Employers shall be deemed the violator for violations committed by their employees.

4.9 Regulation of Excessive and Unreasonable Noise: (Worcester Revised Ordinances, Chapter 9, Section 1A(e)(9) This paragraph 4.9 shall apply to anyone operating powered construction equipment delivering construction equipment and/or supplies at any construction site or project within the city of Worcester.

- a. No person shall operate any powered construction equipment or build, erect, construct, demolish, alter, repair, excavate or engage in hoisting, grading, site work, including tree and brush removal, dredging or pneumatic hammering, or deliver construction equipment and/or supplies to the site on any building, road, tower, parking lot, machine, pipe, sewer, sidewalk, or any other construction project, except between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and Saturday, and between the hours of 9:00 a.m. and 7:00 p.m. on Sundays, except for work performed by a public service or municipal utility department or "emergency work" performed with the express written permission of the commissioner of inspectional services or the commissioner of public works and parks. Emergency work shall be limited to such work that is clearly essential to respond to a sudden and unexpected threat to public health or public safety. Emergency work permission may be granted to a general or sub-contractor on a blanket basis governing all persons working on a specified portion of a particular job. Emergency work permission may be granted for not more than one week at a time, and may be renewed for additional one week periods at the discretion of the commissioner who granted the initial permission.

## ARTICLE 104: GENERAL BID FORM *for*

### Masonry Repairs-South Division Firehouse/DPF Bid # 8049-M4

BIDDER

\_\_\_\_\_  
Name of the Firm or Proprietorship Submitting this Bid (please print)

This bid must be accompanied by a deposit in the form of cash, or bid bond, or a certified check, treasurer's check, or cashier's check, payable to the City of Worcester (hereinafter referred to as the "Owner", or the "Awarding Authority") in the amount of five percent (5%) of the total value of the bid. No other form of bid security will be accepted.

By submitting this bid the Bidder represents that it has carefully examined the site of work described herein; has become thoroughly familiar with local conditions and the character and extent of the work; has carefully examined the Drawings, Project Manual and Contract Documents including all Addenda which are a part of this proposal, the General Bid Form, and thoroughly understands their stipulations, requirements, and provisions, and that the Bidder will contract, in the form of contract required, to provide all necessary and proper machinery, equipment, facilities, and means to do all the work and furnish all the materials necessary and proper to carry out such contract in the manner and on the conditions set forth therein in accordance with the Contract Documents, and to perform or observe all other contract requirements thereby. By submitting this bid, the Bidder further represents that it agrees to be subject to the jurisdiction of the courts of the Commonwealth of Massachusetts with respect to any actions arising out of or related to this bid or any contract that may be entered into based upon this bid, and that any such actions commenced by the Bidder shall be commenced in the courts of the Commonwealth of Massachusetts.

A bidder wishing to amend this bid after transmittal to the Owner may do so only by withdrawing this bid and resubmitting another bid prior to the time for opening bids.

TO THE AWARDING AUTHORITY:

- A.** The undersigned Bidder proposes to furnish all labor, materials, and equipment necessary and required for the project described herein in Worcester, MA, in accordance with the accompanying plans and specifications for the contract price specified below, subject to additions or deductions according to the terms of the Contract Documents.
- B.** This Bid includes Addenda numbered: \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_
- C.** The proposed total base Bid price is:

\$ \_\_\_\_\_

\_\_\_\_\_  
(TOTAL BASE BID WRITTEN IN WORDS)

**D. BID ALTERNATES: N/A**

The owner may select at its option, any Alternate or combination of Alternates, or none of the Alternates. The Bidder is required to provide a bid for each Alternate listed below. If selected by the Owner, the Alternate(s) will be added to the total Base Bid price to determine the low bidder.

**E. UNIT PRICES:**

In addition to stating the Total Base Bid Price, the Bidder shall state prices for the various items of work as may be listed herein. The Unit Prices listed on the proposal pages, if accepted by the Owner in the award of the contract, may be used for computing adjustments during the course of construction, based upon extra work ordered by the Owner, or for countermanded, reduced, or omitted by the Owner.

The Unit Prices listed on the proposal pages shall be a complete price (overhead, profit, bond, labor and materials) to be added or deducted on the basis of quantities of work involved. Unit Prices accepted by the Owner shall be written into the Owner-Contractor Agreement.

**F. TIME FOR COMPLETION**

**Project shall be substantially completed by September 8, 2023.**

- G.** The Bidder agrees that if it is selected as the lowest responsible and eligible bidder, the Bidder will within five (5) days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials (a.k.a., payment) bond, each of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the awarding authority and each in the sum of the contract price, the premiums for which are to be paid by the Bidder and are included in the bid price(s) contained herein.

The Bidder hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section 44F.

The undersigned further certifies under penalties of perjury that this bid is in all respects bona-fide, fair and made without collusion or fraud with any other person. As used herein the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section 29F of Chapter 29 or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date: \_\_\_\_\_

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

Signature: \_\_\_\_\_

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

(Name of Person Signing Bid and Title)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City, State and Zip Code)

Fax: (\_\_\_\_\_) \_\_\_\_\_ Phone: (\_\_\_\_\_) \_\_\_\_\_

Social Security Number or  
Federal Identification Number: \_\_\_\_\_

**E-Mail Address:** \_\_\_\_\_

NOTE: If Bidder is a corporation, indicate state of incorporation; if a partnership, give full names and addresses of all partners; and if a sole proprietorship, give residential address if different from business address. Use the following spaces:

If a Corporation:

Incorporated in what state: \_\_\_\_\_

President: \_\_\_\_\_

Treasurer: \_\_\_\_\_

Secretary: \_\_\_\_\_

If a foreign corporation (incorporated or organized under laws other than laws of the Commonwealth of Massachusetts), is the corporation registered with the Massachusetts Secretary of State's office? Yes \_\_\_ No \_\_\_

If the Bidder is a foreign corporation, it is required under M.G.L. c. 30, section 39L to furnish to the awarding authority a certificate of the Secretary of State stating that the corporation has complied with M.G.L. c. 156D, Part 15, subdivision A, s. 15.03, and Part 16, subdivision B, s. 16.22.

If a Partnership: (Name all Partners)

Name of Partner: \_\_\_\_\_

Residence: \_\_\_\_\_

\_\_\_\_\_

Name of Partner: \_\_\_\_\_

Residence: \_\_\_\_\_

\_\_\_\_\_

Name of Partner: \_\_\_\_\_

Residence: \_\_\_\_\_

\_\_\_\_\_

If an Individual:

Name: \_\_\_\_\_

Residence: \_\_\_\_\_

\_\_\_\_\_

If an Individual doing business under a firm name:

Name of Firm: \_\_\_\_\_

Name of Individual: \_\_\_\_\_

Business Address: \_\_\_\_\_

\_\_\_\_\_

Residential Address \_\_\_\_\_  
(if different from above)

\_\_\_\_\_

Other form of business organization:

\_\_\_\_\_

\_\_\_\_\_



**SURETY INFORMATION:**

**The bidder will give below the name and address and State of Incorporation of the surety company who will sign the bonds. Performance and Payment Bonds in the amount of 100% of the dollar value of the contract will be required at time of contract execution.**

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***It is contractor's responsibility to submit the required bond documentation in a form satisfactory to the City.***

**STATEMENT OF BIDDER'S QUALIFICATIONS**

**The bidder is requested to state below what work of a similar character to that included in the proposed contract he/she has done and to give references that will enable the Owner to judge his/her experience, skill, business standing and overall responsibility.**

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**END OF GENERAL BID FORM**

## ARTICLE 105: OWNER-CONTRACTOR AGREEMENT

THIS AGREEMENT made on at Worcester, in the County of Worcester and Commonwealth of Massachusetts, by and between (hereinafter called the Contractor), and the City of Worcester, a municipal corporation within said County of Worcester, (hereinafter called the City).

W I T N E S S E T H:

That the Contractor, in consideration of the payments hereinafter mentioned, and of the fulfillment of the agreements herein mutually entered into, agrees with the City as follows:

### SCOPE OF WORK:

(1) The Contractor shall, pursuant to the terms of this AGREEMENT, provide all the supplies, materials, and equipment, and perform all the labor, services and supervision necessary and proper for (hereinafter called the "Project") in the City of Worcester, Massachusetts, and to accomplish any and all work incidental thereto.

### BONDS:

(2) The Contractor shall obtain and deposit with the City the following bond(s) in the amount of:

PERFORMANCE BOND: \_\_\_\_\_ (\$ \_\_\_\_\_)

PAYMENT BOND: \_\_\_\_\_ (\$ \_\_\_\_\_)

with sureties satisfactory to the Contracting Officer to (a) guarantee the faithful performance by the Contractor of all its obligations under this AGREEMENT and (b) constitute the security required by Massachusetts General Laws Chapter 149, Section 29, and Chapter 30, Section 39A, as amended, for the payment by the Contractor and its subcontractors for all labor performed or furnished and for all materials used or employed in connection with this AGREEMENT.

### CONTRACTING OFFICER:

(3) Wherever used in this AGREEMENT, the term "Contracting Officer" shall mean the City Official(s) so designated below, or the individual duly appointed by him/her for the performance of any of his/her functions or responsibilities under this AGREEMENT. The work performed hereunder shall be carried out under the direction and subject to the approval and acceptance of \_\_\_\_\_ (hereinafter called the Contracting Officer).

### INCORPORATED DOCUMENTS:

(4) The performance of this AGREEMENT is subject to the provisions of the following documents, all of which are attached hereto and intended to be an integral part of this AGREEMENT (hereinafter collectively referred to as "the Contract Documents").

- a. Information to Bidders
- b. Bid Proposal
- c. Specifications, Drawings and Addenda

The Contract Documents are to be read collectively and complementary to one another; any requirement under one shall be as binding as if required by all. In the event of any conflict or inconsistency between the provisions of this AGREEMENT and any of the other Contract Documents, the provisions of this AGREEMENT shall prevail. In the event of any conflict or inconsistency between this AGREEMENT, the Contract Documents and any applicable state law, the applicable statutory provisions shall prevail.

### TIME FOR PERFORMANCE:

(5) Time is of the essence for this AGREEMENT. The work of this AGREEMENT must be substantially completed \_\_\_\_\_.

PRICE:

(6) The City will pay the Contractor for all materials delivered or furnished and for all the work performed pursuant to Article (1) hereof a sum of money as follows:

\_\_\_\_\_. (\$ \_\_\_\_\_).

PAYMENT:

(7) Payment shall be made by the City in accordance with General Laws Chapter 30, Section 39G (1988 ed.), as amended, which is included in the Supplementary General Conditions to the Contract.

a) In addition to the retainage provided for in the above statutory provisions, the City may also, with the written consent of the Contractor, use any of the sums payable under this contract to pay for labor, materials, and for the rental of equipment that has been furnished to the Contractor or any of its subcontractors in connection with work under this contract, regardless of whether claims for such obligations have been filed with the City under General Laws Chapter 149, Section 29 or Chapter 30, Section 39A.

b) The payment shall be in full for furnishing all materials, supplies, labor services, supervision, tools and equipment and the use thereof as embraced under the AGREEMENT and shall also constitute the payment for all loss or damage to the Contractor arising out of the nature of the work or from the action of the elements or from any unforeseen difficulties or obstructions which may arise or be encountered during the prosecution of the work until its final approval by the Contracting Officer, and for all risks to the Contractor of every description connected with the prosecution of the work or infringement of patents, trademarks, or copyrights and for completing the work in an acceptable manner.

c) The payment of any periodic estimate or of any retained percentage shall in no way constitute an acceptance of the work or in no way prejudice or affect the obligation of the Contractor at his own cost or expense to repair, correct, renew, or replace any defects or imperfections in the construction as well as all damages due or attributable to such defects, nor shall any such payment for any current estimate or of any retained percentages prejudice or affect the rights of the City to hold the Contractor liable for breach of contract or to avail itself of the remedies under Article 15, hereof.

d) If at any time there shall be evidence of any lien or other claim for which, if established, the City may become liable, directly or indirectly, and which is chargeable to the Contractor, the City may retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify it against any such claim. If there prove to be any such claim after all the payments are made, the Contractor shall refund to the City all moneys that the City pays in discharging such claim in consequence of the Contractor's default.

e) The Contractor, and each subcontractor, at every tier, represents, warrants and certifies that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes and all Ordinances and Orders of the City of Worcester relating to taxes, fees and charges, or is lawfully contesting the validity of the same. The Contractor, and each subcontractor, at every tier, further represents, warrants and certifies that it will remain in such compliance during the term of this

Agreement, including any amendments or extensions hereto. Breach of any of these provisions shall be deemed a material breach which shall entitle the City to immediately terminate this Agreement and take any other action authorized by law to collect any amounts due the City.

#### PAYMENT OF SUBCONTRACTORS

(8) Payment to subcontractors shall be made in accordance with General Laws Chapter 30, Section 39F (1988 ed.), as amended, which is included in the Supplementary General Conditions.

#### NOTICE:

(9) Wherever in this AGREEMENT the City is to give or receive a notice, the Contracting Officer as defined in Article (3) shall be the City's agent for such purpose.

#### PERFORMANCE:

(10) a. The Contractor shall give his personal attention constantly to the faithful prosecution of the work and shall keep the same under his personal control. He shall not assign by power of attorney or otherwise the work or any part thereof without the previous written consent of the Contracting Officer. He shall not either legally or equitably assign any of the moneys payable under this contract or any claim thereto unless by and with like consent on the part of the Contracting Officer and the City Treasurer. He shall be responsible for all the acts and omissions of his employees and of all persons directly or indirectly employed by him in connection with the prosecution of this work.

b. The Contractor shall provide sufficient and proper facilities at all times for the inspection of the work by the City. He shall, after receiving written notice that certain work or construction is improper, unsafe or defective or that such construction in any way fails to conform to the contract documents, forthwith remove such unsafe or defective construction and reconstruct the same in a manner satisfactory to the Contracting Officer. Upon failure of the Contractor to remedy the construction after being so notified, the Contracting Officer may cause such defective work to be remedied or replaced and the City may deduct the cost thereof from any moneys due or to become due the Contractor.

c. The City, acting through the Contracting Officer, shall have the authority to suspend the work wholly, or in part thereof, for such period as he shall deem necessary, due to failure of the Contractor to carry out orders given or to perform any provision of the contract. Upon receipt of written order from the Contracting Officer, the Contractor shall immediately suspend the work or such part thereof in accordance with the order. No work shall be suspended without the written permission of the Contracting Officer. The work shall be resumed when conditions so warrant, or deficiencies have been corrected and the condition of the contract satisfied as ordered or approved in writing by the Contracting Officer. No allowance of any kind will be made for suspension of work by order of the Contracting Officer pursuant to this paragraph.

d. If, during the process of the work, the Contractor or the City discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the contract documents either the Contractor or the City may request an equitable adjustment in the price of the AGREEMENT applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from the Contractor, or upon its own initiative, the City shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally

recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of work, the City shall make an equitable adjustment in the contract price and the AGREEMENT shall be modified in writing accordingly. (G. L. c. 30, s.39N, as amended, which is included in the Supplementary General Conditions).

e. The Contractor agrees that it will have no claim for damages of any kind on account of any delay in commencement of the Work, or any delay or suspension of any portion thereof, except as hereinafter provided. Post commencement, the Contractor shall have no claim for damages of any kind on account of any delay or suspension of any portion of the work except as hereinafter provided. Adjustments, if any, in the contract price due to a suspension, delay, interruption or failure to act by the City shall be governed by the provisions of General Laws Chapter 30, section 39(O), as amended, which is included in the Supplementary Conditions. Provided, however, the provisions of this paragraph shall not apply to any suspension pursuant to paragraph 10(c), or for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this AGREEMENT provides for an equitable adjustment of the contract price, or time under any other AGREEMENT provision. Provided further, that no adjustment shall be made if the performance of the Contractor would have been prevented by other causes, even if the work had not been so suspended, delayed or interrupted by the City. Provided further, that a subcontractor shall have the same rights against the Contractor for payment for an increase in the cost of his performance as the provisions of this paragraph gives the Contractor against the City, but nothing herein shall in any way change, modify or alter any other rights which the Contractor and subcontractor may have against each other.

f. The Contractor must submit the amount of a claim under provision (e) to the City in writing as soon as practicable after the end of the suspension, delay or interruption or failure to act and, in any event, not later than the date of final payment under this AGREEMENT and, except for costs due to a suspension order, the City shall not approve any costs in the claim incurred more than twenty days before the Contractor notified the City in writing of the act or failure to act involved in the claim.

g. The City may award other contracts for additional work. The Contractor shall cooperate fully with other contractors and carefully fit his own work to that of other contracts as may be directed by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor.

h. The Contractor shall comply with all the laws, state and federal, applicable to the work and construction herein provided for. This AGREEMENT is made subject to all laws, state and federal; and if any clause hereof does not conform to such law, then such clause shall be void and the operative state or federal law shall be inserted in lieu thereof. Any violation by the Contractor of state or federal laws relating to the employment of labor upon the work or the construction contemplated by this AGREEMENT shall be a sufficient cause for the City to cancel the AGREEMENT without in any way being liable in damages therefor. Should the City cancel the AGREEMENT because of the failure on the part of the Contractor to observe the state or federal laws, or the rules and regulations relating to employment and labor upon the work herein contemplated, then upon cancellation the City reserves all rights and benefits herein or by law provided against the Contractor for the breach of the conditions of this AGREEMENT.

i. When the use of explosives is necessary for the prosecution of the work, the Contractor shall take the utmost care not to endanger life and property. Whenever directed, the number and size of the charges shall be reduced. All explosives shall be stored in a secure manner. All such storage places shall be marked clearly "DANGEROUS - EXPLOSIVES", and shall be in the care of competent watchmen at all times. The method of storage and handling explosives and highly inflammable materials shall conform to all the State laws and regulations, as well as any local requirements.

j. Upon the completion of the work, the Contractor shall at his own expense remove all equipment, temporary Contractor's buildings and sheds, fencing, rubbish and waste material in and about the area that has been worked and he shall leave the premises and the work performed all in a neat and proper condition.

k. Before commencing the work, the Contractor shall, if required, submit a schedule of operations for approval by the Contracting Officer. The schedule shall show the methods and order of operations that the Contractor proposes to use. The approval of the schedule by the Contracting Officer shall not be construed as relieving the Contractor from any responsibility.

l. Should the Contractor be obstructed or delayed in the prosecution of the work by any act or neglect on the part of the City, or as a result of damage which may be caused by lightning, earthquake, rain, storm, or cyclone, then the time fixed for completion may be extended for a period equivalent to the time lost by reason of any of the foregoing causes. No such extension shall be made unless a claim therefor is presented in writing to the Contracting Officer within forty-eight hours of the occurrence of such delay. The Contractor shall have no claim against the City for damages on account of such delay. The duration of the extension itself must be certified to by the Contracting Officer.

#### ADDITIONAL WORK:

(11) a. The Contractor agrees to perform any work related to the subject matter of the AGREEMENT, but not within the scope of the AGREEMENT and its specifications, upon the written order of the Contracting Officer, the payment for such extra work to be made in accordance with one of the methods set forth in Article 12 of the General Conditions of the Contract for Construction.

b. The Contracting Officer may make alterations in the line, grade, plan, form, dimensions, or materials of the subject matter of the contract, or any part thereof either before or after commencement of construction. Where such alterations increase the quantity or standard of the work to be done, payment for such increase shall be made in the same way that payment is made for such extra work under (a), above. Where such alterations diminish the quantity or standard of the work to be done, an adjustment shall be made to the benefit of the City based upon the unit prices where used, or where unit prices are not used, as the Contracting Officer shall determine.

#### EMPLOYMENT:

(12) a. The Contractor shall employ competent workers, and if notified by the Contracting Officer in writing that any person engaged upon the work is incompetent, unfaithful, disorderly or otherwise unsatisfactory, then such worker shall be discharged from the work.

b. In the employment of persons, including mechanics, teamsters, chauffeurs and laborers, under this contract, preference shall be given

First: To citizens of the Commonwealth who are residents of the City of Worcester and who have served in the Army or Navy of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates.

Second: To citizens of the Commonwealth who are residents of Worcester and are qualified to perform the work to which the employment relates.

Third: To citizens of the Commonwealth who have served in the Army or Navy of the United States in time of war and have been honorably discharged therefrom or released from active duty therein and who are qualified to perform the work to which the employment relates.

Fourth: To citizens of the Commonwealth generally.

Fifth: To citizens of the United States.

The foregoing provisions shall not apply to those persons employed in a supervisory capacity. In so far as practicable preference is to be given Worcester Truckers in hauling materials.

c. No laborer, worker, mechanic, foreman, or inspector working within the Commonwealth of Massachusetts in the employ of the Contractor, sub-contractors, or other persons doing or contracting to do the whole or part of the work contemplated by this AGREEMENT, shall be required or permitted to work more than eight hours in any one calendar day; or more than 48 hours in one week, or more than 6 days in any one week in full compliance with provisions of G. L. c. 149, sec. 34, except in cases of emergency.

d. Every employee in the work covered by this AGREEMENT shall lodge, board and trade where and with whom he elects and neither the Contractor nor his agents or employees shall directly or indirectly require as a condition of employment therein that an employee shall lodge, board or trade at a particular place or with a particular person.

e. The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements of the Department of Public Health, local health officials or of other appropriate authorities. The maintenance of all sanitary facilities shall be subject to the laws of the Commonwealth and to the rules and regulations of the State Board of Health and of the Commissioner of Public Health for the City of Worcester.

f. The Contractor shall, before commencing the work, provide by insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws (Ter. Ed.) to all persons employed under the AGREEMENT, and he shall continue such insurance in force and effect during the term thereof. The City may require the Contractor to deliver certificates of insurance as sufficient proof of compliance with the foregoing. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the AGREEMENT and shall entitle the City to terminate the AGREEMENT without in any way being liable in damages therefor.

g. The Contractor shall keep a true and accurate register of all mechanics, teamsters, chauffeurs and laborers employed upon the work contemplated by this AGREEMENT, showing the name, address and occupational classification of each such employee, the hours worked by and the wages paid to each such employee, and shall furnish the Massachusetts Attorney General's office, or such other appropriate state official upon request a true statement thereof.

h. Minimum wage rates under the provisions of General Laws c. 149, section 27, as amended, have been determined by the state Department of Labor and Workforce Development, and

the Contractor shall in the payment of wages be bound by them during the life of the AGREEMENT. The applicable schedule of minimum wage rates, as so determined, is incorporated elsewhere within the Contract Documents.

**TERMINATION:**

(13) a. If the Contractor shall be adjudged a bankrupt, or if he shall make a general assignment for the benefit of his creditors, or if a receiver of his property shall be appointed, or if the work to be done under the AGREEMENT shall be abandoned, or if the AGREEMENT or any part thereof shall be sublet without the previous written consent of the Contracting Officer, or if the AGREEMENT or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the Contracting Officer shall be of the opinion that the work, or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor has violated any of the provisions of the AGREEMENT, the Contracting Officer, for and in behalf of the City, may notify the Contractor to discontinue all work, or any part thereof; and thereupon the Contractor shall discontinue such work or such part thereof as the Contracting Officer may designate, remove his equipment, tools, supplies and materials as the Contracting Officer directs, and the City may thereupon, by contract or otherwise, as it may determine, complete the work, or such part thereof, and charge the entire expense of so completing the work or any part thereof to the Contractor.

b. If the Contracting Officer shall certify by written notice to the Contractor that the rate of progress is not satisfactory, the City may, instead of notifying the Contractor to discontinue all of the work or any part thereof, notify him from time to time to increase the force, equipment and plant, or any of them, employed on the whole or any part of the work, stating the amount of increase required. Unless the Contractor shall, within five days after such notice, increase his force, equipment and plant to the extent required therein, and maintain and employ the same from day to day until the completion of the work or such part thereof, or until the conditions of the work or such part thereof, or until the conditions as to the rate of progress shall, in the opinion of the Contracting Officer, be fulfilled, the City may employ and direct the labors of such additional force, equipment and plant as may, in the opinion of the Contracting Officer, be necessary to insure the completion of the work or such part thereof within the time specified or at the earliest possible date thereafter, and charge the expense thereof to the Contractor. Neither the notice from the Contracting Officer to the Contractor to increase his force, equipment or plant nor the employment of additional force, equipment or plant by the City shall be held to prevent a subsequent notice to the Contractor from the City to discontinue the work under the provisions of the preceding portion of this Article.

c. All expenses charged under this Article shall be deducted by the City out of moneys then due or to become due the Contractor under this AGREEMENT, or any part thereof. In such accounting, the City shall not be obligated to obtain the lowest figures for the work of completing the AGREEMENT or any part thereof, or for insuring its proper completion, and all sums actually paid by the City shall be charged to the Contractor. If the expense so charged is greater than the sum which would have been payable under the AGREEMENT, if the same had been completed by the Contractor, then the Contractor shall pay the amount of the excess to the City upon completion of the work and without further demand being made therefor.

d. The Contractor shall not be relieved of liability to the City by virtue of any termination of this AGREEMENT and any claim for damages against the Contractor relating to the Contractor's performance under this AGREEMENT shall survive any termination hereunder.



#### GUARANTEES:

(14) a. The Contractor guarantees the work under this AGREEMENT and the materials furnished by him for use in connection therewith to be free from defects or flaws for one year after the completion of the AGREEMENT. It is expressly understood, however, that this guarantee provision shall not absolve the Contractor from any liability to the City arising out of a failure to substantially comply with the terms of the AGREEMENT.

b. If at any time within said guaranty period, any part of the work constructed under the terms of this AGREEMENT shall in the opinion of the Contracting Officer require repairing due to defective work or materials furnished by the Contractor he may notify the Contractor in writing to make the required repairs. If the Contractor shall neglect to start such repairs within ten days of the date of giving him notice thereof and to complete the same to the satisfaction of the Contracting Officer with reasonable dispatch, then the latter may employ other persons to make such repairs. The City shall charge the expense thereof to the Contractor and may use any moneys still retained to pay for the same, and if such sum is insufficient, the Contractor shall be obligated to pay the balance thereof.

#### INDEMNIFICATION:

(15) a. The Contractor shall indemnify and save harmless the City of Worcester and all of its officers, agents and employees against all suits, claims or liability of every name, nature, and description arising out of or in consequence of the acts or omissions of this AGREEMENT in the performance of the work covered by the contract and/or his failure to comply with the terms and conditions hereof; and will at his own cost and expense defend any and all such suits and actions.

b. The Contractor shall bear all losses resulting from the use or storage of explosives and highly inflammable materials and shall save the City harmless from all claims for bodily injuries or death to any person and from all claims for property damage or destruction arising out of the use or storage of explosives and highly inflammable materials.

c. The Contractor further covenants to hold and save the City, its officers, servants and employees harmless from and against all and every demand or demands, of any nature or kind for or on account of the use of any patented invention, article or appliance included in the materials and equipment agreed to be furnished, supplied or used under this AGREEMENT.

#### INSURANCE:

(16) a. The Contractor shall carry public liability insurance so as to save the City harmless from any and all claims for damages arising out of bodily injury to, or death of, any person or persons and for all claims for damages arising out of injury to or destruction of property caused by accidents resulting from the use of implements, equipment or labor used in the performance of the AGREEMENT or from any neglect, default, omission or want of proper care or misconduct on the part of the Contractor or of any one in his employ during the execution of the work. Such insurance shall include coverage for blasting and explosion if explosives are to be used.

b. The Contractor shall carry any other types of insurance as may be required elsewhere in the Contract Documents. All insurance policies required in the Contract Document shall be provided by companies satisfactory to the City.

c. Prior to starting work under this AGREEMENT the Contractor shall deposit with the City's Purchasing Division certificates from the insurers to the effect that the insurance policies required in

the above paragraphs have been issued to the Contractor. The certificates must be on a form satisfactory to the City.

d. Unless greater amounts of insurance coverage are required elsewhere in the Contract Documents, the amounts of such public liability insurance shall not be less than the minimum amounts set forth below:

- i. Commercial General Liability \$1,000,000.00 per occurrence / \$ 2,000,000.00 aggregate.
- ii. Automotive Liability, for bodily injury & property damage combined single limit of, \$ 1,000,000.00 (all owned, hired and non-owned autos).
- iii. Excess / Umbrella Liability – Per Occurrence / Aggregate \$ 1,000,000 / \$ 1,000,000

e. Unless greater amounts of insurance coverage are required elsewhere in the Contract Documents, the Contractor shall also carry bodily injury and property damage insurance in amounts not less than those set forth above covering the operation of all motor vehicles owned by the Contractor and engaged in this work.

f. No cancellation of any insurance whether by the insurer or by insured shall be effective unless written notice thereof is given to the City at least fifteen days prior to the intended effective date thereof, which date has been expressed in the notice. Prior to the effective date of any such cancellation the Contractor shall take out new insurance to cover the policies so canceled. The Insurance Companies shall remain liable, however, until new and satisfactory insurance policies have been delivered to and accepted by the City.

#### CONFLICT OF INTEREST

(17) a. The Contractor warrants that he has complied with all provisions of law regarding the award of this AGREEMENT and that he, or his employees, agents, officers, directors or trustees have not offered or attempted to offer anything of value to any employee of the City in connection with this AGREEMENT.

b. The Contractor further warrants that no elected official or employee of the City of Worcester, including unpaid members of the City boards and commissions, serves as an officer, director, trustee or employee of Contractor, and that no elected officials or employees of the City of Worcester have or will have a direct or indirect financial interest in this AGREEMENT.

c. Violation of this Article shall be material breach of this AGREEMENT and shall be grounds for immediate termination of this AGREEMENT by the City without regard to any enforcement activities undertaken or completed by any enforcement agency.

d. Termination of this AGREEMENT pursuant to this Article shall not waive any claims for damages that the City may have against the Contractor resulting from Contractor's violation of the terms of this Article.

#### SEVERABILITY:

(18) If any provision of this AGREEMENT is held invalid by any court or body of competent jurisdiction, the remainder of this AGREEMENT shall remain in full force and effect.

#### HEADINGS:

(19) The section headings in this AGREEMENT are for convenience and reference only and in no way define or limit the scope or content of this AGREEMENT or in any way affect its provisions.

#### AMENDMENTS:

(20) This AGREEMENT may be amended or modified only by written instrument duly executed by the parties.

ENTIRE AGREEMENT:

(21) This AGREEMENT contains the entire understanding of the parties and supersedes all prior agreements, representations, proposals and undertakings of the parties.

IN WITNESS WHEREOF, the Contractor has hereunto set his hand and seal, and the City has caused its corporate seal to be hereto affixed and this AGREEMENT to be executed in its name and behalf the day and year first above written.

CITY OF WORCESTER

(CONTRACTOR)

By: \_\_\_\_\_  
Christopher J. Gagliastro  
Purchasing Director

By: \_\_\_\_\_  
(Seal)

APPROVED AS TO LEGAL FORM:

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

CERTIFICATION OF FUNDING:

I certify that an appropriation of funds in the amount of this Agreement is contained in account number \_\_\_\_\_.

By: \_\_\_\_\_  
Robert V. Stearns  
City Auditor

APPROVED:

By: \_\_\_\_\_  
Eric D. Batista  
City Manager

## ARTICLE 106: PAYMENT BOND

KNOW ALL BY THESE PRESENTS, that \_\_\_\_\_ a corporation duly established by law and having a usual place of business at \_\_\_\_\_ as PRINCIPAL, and, \_\_\_\_\_ a corporation organized under the laws of the **(State/Commonwealth)** of \_\_\_\_\_ and duly authorized and admitted, under the provisions of Chapter 175 of the Massachusetts General Laws as amended, to transact the business of a fidelity and surety company in Massachusetts, as SURETY, are held and firmly bound unto the City of Worcester, a municipal corporation within the Commonwealth of Massachusetts, in the sum of \_\_\_\_\_ lawful money of the United States of America, to be paid to the City of Worcester, its successors and assigns, to the payment of which, well and truly to be made, the PRINCIPAL and the SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said PRINCIPAL has entered into an Agreement of even date herewith with the City of Worcester, said Agreement being for the \_\_\_\_\_ in the city of Worcester, Massachusetts;

NOW THEREFORE, the condition of this obligation is such that if the PRINCIPAL shall pay for all labor performed or furnished and for all materials used or employed or any appliance and equipment used or employed or rented or hired out in the execution of said Agreement and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said Agreement that may hereafter be made, notice to the SURETY of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, the provisions of Massachusetts General Laws, Chapter 149, Section 29 and Chapter 30, Section 39A as amended, then this obligation shall become null and void; otherwise it shall remain in full force and virtue.

IN TESTIMONY WHEREOF, the PRINCIPAL has hereunto caused its name and seal to be affixed, and the SURETY has caused its corporate seal to be hereunto affixed by a duly authorized officer thereof and this instrument to be executed and delivered in its name and behalf by its attorney-in-fact, duly authorized by its by-laws and votes, powers of attorney, and letters of appointment and authorization, certificated copies of which documents are annexed to this bond and may be introduced in evidence as if a part hereof.

(Principal)

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

(Surety)

BY: \_\_\_\_\_  
Attorney-in-Fact

## ARTICLE 107: PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS, that \_\_\_\_\_ a corporation duly established by law and having a usual place of business at \_\_\_\_\_ as PRINCIPAL, and \_\_\_\_\_, a corporation duly established under the laws of the (Commonwealth/State) of \_\_\_\_\_ and duly authorized and admitted, under the provisions of Chapter 175 of the Massachusetts General Laws as amended, to transact the business of a fidelity and surety company in Massachusetts, as SURETY, are held and firmly bound unto the City of Worcester, a municipal corporation within the Commonwealth of Massachusetts, in the sum of \_\_\_\_\_ lawful money of the United States of America, to be paid to said City of Worcester, its successors and assigns, to the payment of which, well and truly to be made, the PRINCIPAL and said SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas the said PRINCIPAL has entered into an Agreement of even date hereof with the City of Worcester, said Agreement being for the \_\_\_\_\_ in the city of Worcester, Massachusetts;

NOW THEREFORE, the condition of this obligation is such that if the said PRINCIPAL shall well and faithfully perform all the terms and conditions of said Agreement on its part to be kept and performed as therein stipulated, including guarantee and maintenance provisions therein, and shall pay for all materials furnished and for all labor performed in the execution of said Agreement, and shall indemnify and save harmless the said City of Worcester as therein stipulated, then this obligation shall be of no effect; otherwise it shall remain in full force and virtue.

And the said SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Agreement, or to the work to be performed thereunder, or to the specifications accompanying the same, shall in any way effect its obligation on this bond; and it does hereby waive notice of any change, extension of time, alterations or additions to the terms of said Agreement, or to the work, or to the specifications.

In the event that the Agreement is abandoned by the Contractor, or is terminated by the City under the provisions thereof, said SURETY hereby further agrees that it shall, if requested in writing by the City, take such action as is necessary to complete said Agreement.

IN TESTIMONY WHEREOF, the PRINCIPAL has hereunto caused its name and seal to be affixed, and the said SURETY has caused its corporate seal to be hereunto affixed by a duly authorized officer thereof and this instrument to be executed and delivered in its name and behalf by its attorney-in-fact, duly authorized by its by-laws and votes, powers of attorney, and letters of appointment and authorization, certificated copies of which documents are annexed to this bond and may be introduced in evidence as if a part hereof.

(PRINCIPAL)

(SEAL)

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

(SURETY)

(SEAL)

By: \_\_\_\_\_  
Attorney-in-fact

## **ARTICLE 108 - APPLICATIONS FOR PAYMENT**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- i. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

#### **1.2 SUMMARY**

- A. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.
  1. Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, List of Subcontracts, and Submittal Schedule.
- B. The Contractor's Construction Schedule and Submittal Schedule are included in Section "Submittals".

#### **1.3 SCHEDULE OF VALUES**

- A. Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.
  1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
    - a. Contractor's construction schedule.
    - b. Application for Payment form.
    - c. List of subcontractors.
    - d. Schedule of allowances, if any.
    - e. Schedule of alternates, if any.
    - f. List products.
    - g. List of principal suppliers and fabricators.
    - h. Schedule of submittals.
  2. Submit the Schedule of Values to the Architect at the earliest feasible date, but in no case later than seven (7) days before the date scheduled for submittal of the initial Application for Payment.
  3. Sub-Schedules: Where the Work is separated into phases that require separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values. Coordinate with the Clerk of the Works for exact breakdown of major categories of work.
  1. Identification: Include the following Project identification on the Schedule of Values:
    - a. Project name and location.
    - b. Name of the Architect.
    - c. Project number.
    - d. Contractor's name and address.
    - e. Date of submittal.
  2. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:
    - a. Generic name.

- b. Related Specification Section.
  - c. Name of subcontractor.
  - d. Name of manufacturer or fabricator.
  - e. Name of supplier.
  - f. Change Orders (numbers) that have affected value.
  - g. Dollar value to nearest dollar.
  - h. Percentage of Contract Sum to the nearest percent, adjusted to total 100 percent
- 3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.
- 4. Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum.
- 5. For each part of the Work where an Application for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 6. Margins of Cost: Show line items for indirect costs, and margins on actual costs, only to the extent that such items will be listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete including its total cost and proportionate share of general overhead and profit margin.
  - a. At the Contractor's option, temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown as separate line items in the Schedule of Values or distributed as general overhead expense.
- 7. Schedule Updating: Update and resubmit the Schedule of Values when Change Orders result in a change in the Contract Sum.

#### **1.4 APPLICATIONS FOR PAYMENT:**

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
  - 1. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.
- B. Payment Application Times: Each progress payment date is as indicated in the Agreement. The period of construction Work covered by each Application or Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment. No exceptions will be made.
- D. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Contractor. Incomplete applications will be returned without action.
  - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.
- E. Include amounts of Change Orders issued prior to the last day of the construction period covered by the application.



- F. Transmittal: Submit six (6) executed copies of each Application for Payment to the Architect by means ensuring receipt within twenty-four (24) hours; one (1) copy shall be complete, including proof of payments (see, 1.4F) and similar attachments, when required.
1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.
  2. With each requisition, after the first requisition, submit one (1) copy of up-dated as-built drawings for all underground and concealed work, showing locations, depths, or elevations.
- G. Proof of Payments: With each Application for Payment, submit proof of payment to every subcontractor and supplier, at each tier, entitled to payment under the previous requisition and periodic payment made by the Owner to the Contractor on behalf of all such entities.
1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final or full waivers or proof of payments.
  3. Proof of Payment Delays: Submit each Application for Payment with the Contractor's proof of payment for the period of construction covered by the Application or it may be returned as incomplete.
    - a. Submit final Application for Payment with or preceded by final proof of payment for every entity involved with performance of Work covered by the application who could lawfully be entitled to file for direct payment under M.G.L. c. 30, s. 39F, and/or against the Contractor's Labor and Materials Payment Bond.
  4. Submit proof of payment in a manner acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:
1. List of subcontractors.
  2. List of principal suppliers and fabricators.
  3. Schedule of Values.
  4. Contractor's Construction Schedule (preliminary, if not final).
  5. Schedule of principal products.
  6. Submittal Schedule (preliminary, if not final).
  7. List of Contractor's staff assignments.
  8. List of Contractor's principal consultants.
  9. Copies of building permits.
  10. Copies of authorizations and licenses from governing authorities for performance of the Work
  11. Initial progress report.
  12. Report of pre-construction meeting.
  13. Certificates of insurance and insurance policies.
  14. Performance and payment bonds (if required).
  15. Data needed to acquire Owner's insurance.
  16. Initial settlement survey and damage report, if required.

- I. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; this application shall reflect any Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Administrative actions and submittals that shall proceed or coincide with Application for Payment at Substantial Completion include:
  - 1. Occupancy permits and similar approvals.
  - 2. Warranties (guarantees) and maintenance agreements.
  - 3. Test/adjust/balance records.
  - 4. Maintenance instructions.
  - 5. Meter readings.
  - 6. Start-up performance reports.
  - 7. Change over information related to Owner's occupancy, use, operation and maintenance.
  - 8. Final cleaning.
  - 9. Application for reduction of retainage, and consent of surety.
  - 10. Advice on shifting insurance coverages.
  - 11. Final progress photographs.
  - 12. List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.
- K. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final payment Application for Payment include the following:
  - 1. Completion of Project closeout requirements.
  - 2. Completion of items specified for completion after Substantial Completion.
  - 3. Assurance that unsettled claims will be settled.
  - 4. Assurance that Work not complete and accepted will be completed without undue delay.
  - 5. Transmittal of required Project construction records to Owner.
  - 6. Certified property survey.
  - 7. Proof that taxes, fees and similar obligations have been paid.
  - 8. Removal of temporary facilities and services.
  - 9. Removal of surplus materials, rubbish and similar elements.
  - 10. Change of door locks to Owner's access.

## **ARTICLE 109 - MODIFICATION PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

#### **1.2 SUMMARY**

- A. This section specifies administrative and procedural requirements for handling and processing Contract modifications.

- B. Related Sections: The following sections contain requirements that relate to this section:
1. Division 1 Section "Submittals" for requirements for the Contractor's Construction Schedule.
  2. Division 1 Section "Application for Payment" for administrative procedures governing applications for payment.
  3. Division 1 Section "Product Substitutions" for administrative procedures for handling requests for substitutions made after award of the Contract.

### **1.3 MINOR CHANGES IN THE WORK**

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect.

### **1.4 CHANGE ORDER PROPOSAL REQUESTS**

- A. Owner-Initiated Proposal Requests: Proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time will be issued by the Architect, with a detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.

1. Proposal requests issued by the Architect are for information only. Do not consider them an instruction either to stop work in progress, or to execute the proposed change.
2. Unless otherwise indicated in the proposal request, within twenty (20) days of receipt of the proposal request, submit to the Architect for the Owner's review an estimate of cost necessary to execute the proposed change.
  - a. Include a list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
  - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.

- B. Contractor-Initiated Change Order Proposal Requests: When latent or other unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.

1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and/or the Contract Time.
2. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Comply with requirements in Section "Product Substitutions" if the proposed change in the Work requires the substitution of one product or system for a product or system specified.

### **1.5 ALLOWANCES**

- A. Allowance Adjustment: Base each Change Order Proposal Request for an allowance cost adjustment solely on the difference between the actual purchase amount and the allowance,

multiplied by the final measurement of work-in-place, with reasonable allowances, where applicable, for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in the purchase amount only where indicated as part of the allowance.
  2. When requested, prepare explanations and documentation to substantiate the margins claimed.
  3. The Owner reserves the right to establish the actual quantity of work-in-place by Independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit, within twenty (20) days of receipt of the change order authorizing work to proceed. Claims submitted later than twenty (20) days will be rejected.
1. The Change Order cost amount shall not include the Contractor's or Subcontractor's indirect expense except when it is clearly demonstrated that either the nature or scope of work required was changed from that which could have been foreseen from information in Contract Documents.
  2. No change to the Contractor's indirect expense is permitted for selection of higher or lower priced materials or systems of the same scope and nature as originally indicated.

## **1.6 CHANGE ORDER PROCEDURES**

- A. Upon the Owner's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the Owner and Contractor.

## **1.7 OVERHEAD AND PROFIT**

- A. Overhead and Profit will be as noted elsewhere in these specifications.
- B. In reviewing change orders, the Architect will exercise his right to request a complete breakdown from the Contractor showing exact costs for labor and material, as well as delivery slips and invoices from suppliers and other subcontractors.

# **ARTICLE 110 - PRODUCT SUBSTITUTIONS**

## **PART 1 - GENERAL**

### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

### **1.2 SUMMARY**

- A. This Section specifies administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. The Contractor's Construction Schedule and the Schedule of Submittals are included under Section "Submittals".

- C. Standards: Refer to Section "Reference Standards and Definitions" for applicability of industry standards to products specified.
- D. Procedural requirements governing the Contractor's selection of products and product options are included under Section "Materials and Equipment".

### **1.3 DEFINITIONS**

- A. Definitions used in this Article are not intended to change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions". The following are not considered substitutions:
  - 1. Specified options of products and construction methods included in Contract Documents.
  - 2. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

### **1.4 SUBMITTALS**

- A. Substitution Request Submittal: Requests for substitution will be considered if received within sixty (60) days after commencement of the Work. Requests received more than sixty (60) days after commencement of the Work may be considered or rejected at the discretion of the Architect.
  - 1. Submit three (3) copies of each request for substitution for consideration. Submit requests in the form and in accordance with procedures required for Change Order proposals.
  - 2. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate.
    - a. Product Data, including Drawings and descriptions of products, fabrication and installation procedures.
    - b. Samples, where applicable or requested.
    - c. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements such as size, weight, durability, performance and visual effect, i.e. color, texture, pattern, etc.
    - d. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors, that will become necessary to accommodate the proposed substitution.
    - e. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
    - f. Cost information, including a proposal of the net change, if any, in the Contract Sum.

- g. Certification by the Contractor that the substitution proposed is equal to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.
3. Architects' Action: Within one (1) week of receipt of the request for substitution, the Architect will request additional information or documentation necessary for evaluation of the request. Within two (2) weeks of receipt of the request, or one (1) week of receipt of the additional information or documentation, whichever is later, the Architect will notify the Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name. Acceptance will be in the form of a Change Order, when a change in contract cost or time is required; or in the form of Architect's supplemental instructions when no change to contract cost or time is required.

## **PART 2 - PRODUCTS**

### **2.1 SUBSTITUTIONS**

- A. Conditions: The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise requests will be returned without action except to record non-compliance with these requirements.
  1. Extensive revisions to Contract Documents are not required.
  2. Proposed changes are in keeping with the intent of Contract Documents.
  3. The request is timely, fully documented and properly submitted.
  4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
  5. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  6. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
  7. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.
  8. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.
  9. Where a proposed substitution involves more than one prime Contractor, each Contractor shall cooperate with the other Contractors involved to coordinate the Work, provide uniformity and consistency, and to assure compatibility of products.
- B. The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

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**MINORITY/WOMEN BUSINESS ENTERPRISE and WORKER UTILIZATION  
PROGRAM**

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**BIDDERS MUST COMPLETE AND SUBMIT FORM E00-101  
WHICH IS PART OF THE BID SUBMISSION**

**INCLUDED IN THIS SECTION ARE COPIES OF THE AGREEMENT BETWEEN THE CITY AND THE MASSACHUSETTS COMMISSION AGAINST DISCRIMINATION WHICH GOVERN THE ACTIVITIES ADDRESSED BY THE E00-101 FORM.**

**Direct any questions about these forms and procedures to:**

**Purchasing Division  
City Hall – Room 201  
455 Main Street  
Worcester, MA 01608  
(508) 799-1220  
[purchasing@worcesterma.gov](mailto:purchasing@worcesterma.gov)**

**CITY OF WORCESTER**

**MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION  
PROGRAM**

**AFFIDAVIT OF ACKNOWLEDGEMENT and CERTIFICATE OF COMPLIANCE**

Form E00-101

**TO ALL CONTRACTORS:**

General Bidders and Filed Subbidders shall complete and submit this form as part of their bid. Non-Filed Subcontractors shall complete and submit this form to the General Contractor before beginning work.

**I. THE MINORITY AND WOMEN BUSINESS AND UTILIZATION PROGRAMS**

Pursuant to an agreement between the City of Worcester and the Commonwealth of Massachusetts, during the performance of any contract with the City of Worcester, all Contractors, Filed Subcontractors, and Subcontractors are bound by the obligations of the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program. **All contractors and subcontractors if subcontracting any portion of the work are obligated to make a good faith effort to engage 10% minority and 15% women owned businesses. Further, each contractor shall make a good faith effort to maintain a workforce that is 38% people of color and 10% women.**

The undersigned hereby certifies that he/she is familiar with the provisions of The Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Programs and agrees to adhere to the provisions therein.

II. This contractor **IS** ☐ **or IS NOT** ☐ certified by the State Office of Minority and Women Business Assistance to be a minority or women owned and operated business; and

III. **WILL** ☐ **or WILL NOT** ☐ subcontract any portion of this contract.

Project Name: \_\_\_\_\_ Bid Number: \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
Date



**MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION  
PROGRAM**

FORM EOO-D/102

**BIDDERS INFORMATION ON PROCEDURES AND FORMS**

To make all contractors aware of their obligation to follow certain procedures and file appropriate reports pertaining to those procedures, the following is an outline of Minority/Women Business Enterprise and Worker Utilization Program. Also included here is the Affidavit of Acknowledgement and Certification of Compliance, Form E00-101. This form is to be completed and filed as part of your bid.

The following documents are included in this bid:

1. **AFFIDAVIT OF ACKNOWLEDGEMENT AND CERTIFICATION OF COMPLIANCE**, E00-101

This form is to be completed by all General Contractors and Filed Subcontractors and submitted as part of their bid on all City of Worcester construction projects.

2. **SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTI-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM** E00-D/3

The agreement between the City of Worcester and the Massachusetts Commission Against Discrimination establishing the goals and procedures for the utilization of minority and women owned businesses and minority and women workers on City Construction projects.

3. **SUCCESSFUL BIDDER'S OBLIGATION TO PROCEDURES AND FORMS**, EE0-D/103

This is a listing of the procedures and forms that will be provided to the successful bidder for use prior to beginning work and at various times throughout the life of the project.

**THE CITY OF WORCESTER**

**SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTI-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM**

**I. AGREEMENT**

During the performance of this contract, the Contractor or Filed Subcontractor and all subcontractors (herein collectively referred to as the Contractor), for himself/herself, his/her assignees, and successors in interest, agree as follows:

1. In conjunction with the performance of work under this contract, the contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, age, sex, or handicap. The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising; layoff; termination, rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship. The contractor shall post hereafter in a conspicuous place, available to employees and applicants for employment, notices to be provided by the Commission setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (M.G.L. Chapter 151 B).
2. In connection with the performance of work under this contract, the Contractor shall undertake in good faith affirmative action measures designed to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, age, sex, or handicap, and to eliminate and remedy any effects of such discrimination in the past. Such affirmative action shall entail positive and aggressive measures to ensure equal opportunity in the areas of apprenticeship training programs. This affirmative action shall include all action required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, age, sex, or handicap. The purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future City public construction project.

**II. OBLIGATION**

1. As part of the obligation of remedial action under the foregoing section, the Contractor shall maintain goals on this project no less than 38 percent (38%) people of color employee and 10 percent (10%) women employee hours of the total work hours in each job category including but not limited to, bricklayers, carpenters, cement masons, electricians, iron workers, operating engineers, and those “classes of work” enumerated in section 44C of chapter 149 of the Massachusetts General Laws.

In the hiring of minority and women journeymen, apprentices, trainees and advanced trainees, the Contractor shall rely on referrals from a multi-employer affirmative action program approved by the City, traditional referral methods utilized by the construction industry, and referrals from agencies, not more than three in number at any one time, designated by the City.

### **III. REPORTS**

1. Contractor shall prepare projected manning tables on a quarterly basis, **Quarterly Projected Workforce Table, E00-105**. These shall be broken down into projections by week, for workers required in each trade. Copies shall be furnished to the City one week in advance of the commencement of the period covered, and at such time as there is a need to be updated during the period.
2. Records of employment referral orders, prepared by the Contractor, shall be made available to the City on request.
3. The Contractor shall prepare the **Certified Payroll Report on a weekly basis**, which lists the hours worked in each trade by each employee identified as minority, non-minority, male and female. Copies of these shall be provided to the City at the end of each week.

### **IV. SUBCONTRACTING WORK**

If the Contractor shall use any Subcontractor on any work performed under this contract, affirmative action shall be taken to negotiate with qualified minority and women contractors. This affirmative action shall cover both pre-bid and post-bid periods.

### **V. EMPLOYMENT**

In the employment of journeymen, apprentices, trainees, and advanced trainees, the Contractor shall give preference, first to citizens of the Commonwealth who have served in the armed forces of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates, and , secondly, to citizens of the Commonwealth generally, and, if such cannot be obtained in sufficient numbers, then to citizens of the United States.

### **VI. RIGHT OF ACCESS**

A designee of the City shall have the right of access to the construction site.

### **VII. COMPLIANCE WITH REQUIREMENTS**

The contractor shall comply with the provisions of Executive Order No. 227 amending and revising Executive Order No. 74, as amended by executive Order No. 16 dated May 1, 1975 and of Chapter 151B as amended, of the Massachusetts General Laws, both of which are herein incorporated by reference and made part of this contract.

### **VIII. NON-DISCRIMINATION**

The Contractor, in the performance of all work after the award, and prior to completion of the contract work, will not discriminate on the grounds of race, color, religious creed, national origin, age, sex, or handicap in employment practices, in the selection or retention of other contractors or in the procurement of materials and rentals of equipment.

### **IX. SOLICITATIONS FOR SUBCONTRACTORS, AND FOR THE PROCUREMENT OF MATERIALS AND EQUIPMENT**

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or supplies, each entity solicited shall be notified in writing by the contractor of the

Contractor's obligation under this contract relative to non-discrimination and affirmative action.

**X. CONTRACTOR'S CERTIFICATION**

Contractors bidding as General Contractors or Filed Sub-contractors shall certify that they will comply with the minority and women manpower and business enterprise goals and specific affirmative action steps contained in this Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program by signing and submitting with the bid the **Affidavit of Acknowledgement and Certification of Compliance, Form E00-101**.

If any Contractor subcontracts any portion of the work, the Contractor is required to obtain from each Subcontractor, regardless of tier, an Affidavit of Acknowledgement and Certification of Compliance, Form E00-101 stating that it will comply with the minority and women subcontracting and manpower ratios and specific affirmative action steps contained in this Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program by signing this form and submitting it to the Contractor for submission to the awarding authority not later than five working days following the opening of the bids.

**XI. COMPLIANCE – INFORMATION, REPORTS, AND SANCTIONS**

1. The Contractor will provide all information and reports required by the City on instructions issued and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the City to affect the employment of personnel. This provision shall apply only to information pertinent to the City's supplementary affirmative action contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the City and shall set forth what efforts have been made to obtain the information.
2. Whenever the City believes the Contractor may not be operating in compliance with the terms of this Section, the City directly, or through its designated agent, shall conduct an appropriate investigation, and confer with the parties, to determine if such Contractor is operating in compliance with the terms of this Section. If the City or its agent finds the Contractor not in compliance, it shall make a preliminary report of non-compliance and notify such Contractor in writing of such steps as will in the judgment of the City or its agent bring such Contractor into compliance. In the event that such Contractor fails or refuses to fully perform such steps, the City shall make a final report of non-compliance, and recommend the imposition of one or more of the sanctions listed below. If, however, the City believes the Contractor has taken or is taking every possible measure to achieve compliance, it shall not make final a report on non-compliance. Within fourteen (14) days of the receipt of the recommendations of the City, the administering agency shall move to impose one or more of the following sanctions, as it may deem appropriate to attain full and effective enforcement.
  - a. The recovery by the administering agency from the Contractor of 1/10 of 1% of the contract award price or \$1000.00, whichever sum is greater, in the nature of liquidated damages or, if a Subcontractor is in non-compliance, the recovery by the administering agency from the Contractor as a back charge against the Subcontractor of 1/10 of 1% of the subcontract price, or \$400.00, whichever sum

is greater, in the nature of liquidated damages, for each week that such party fails or refuses to comply;

- b. The suspension of any payment or part thereof due under the contract until such time as the Contractor or any Subcontractor is able to demonstrate compliance with the terms of the contract;
  - c. The termination, or cancellation, of the contract, in whole or in part, unless the Contractor is able to demonstrate within a specified time his compliance with the terms of the contract;
  - d. The denial to the Contractor of the right to participate in any further contracts awarded by the administering agency for a period of up to three years.
3. If at any time after the imposition of one or more of the above sanctions a Contractor is able to demonstrate that he/she is in compliance with this section, he/she may request the administering agency in consultation with the City, to suspend the sanctions conditionally, pending a final determination by the City as to whether the contractor is in compliance. Upon final determination, based on the recommendations of the adjudicatory body, the City shall either lift the sanctions or reimpose them.
4. Sanctions enumerated under Section XII-2 shall not be imposed except after an adjudicatory proceeding, as that term is used in M.G.L. Chapter 30, has been conducted. No investigation by the City or its agent shall be initiated without prior notice to the Contractor.

## **XII. SEVERABILITY**

The provisions of this Section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decisions of such court shall not affect or impair any of the remaining provisions.

## **XIII. WAIVER**

The City of Worcester reserves the right to waive any stipulation in the M/WBE Program when deemed necessary or appropriate for the general good of the City and its programs.

## **DEFINITIONS**

Contractor	Except where otherwise specifically stated the term "Contractor" shall mean any General Contractor, Filed Subcontractor or Non-Filed Subcontractor.
City	is the City of Worcester , Massachusetts
M/WBE	is Minority and Women Business Enterprise as certified by the State Office of Minority and Women Business Assistance to be 51% or more minority or women owned and operated.

**MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION  
PROGRAMS**

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FORM E00-D/103

**SUCCESSFUL BIDDER'S OBLIGATION TO PROCEDURES AND FORMS**

All successful bidders on City of Worcester construction projects will receive a package of procedures and forms that are to be used at specific times throughout the life of the project.

The following is a list of the documents that will be sent to successful bidders when this office is notified that a contract has been, or is about to be, executed.

**I. BUILDING TRADES – CONTACT LIST, E00-D/6**

When a contractor cannot fulfill the worker utilization percentages, the appropriate building trades locals may be contacted to request assistance in locating and engaging qualified workers.

**II. AFFIDAVIT OF ACKNOWLEDGEMENT and CERTIFICATION OF COMPLIANCE, (FOR SUBCONTRACTORS), E00-101**

If any portion of a project is to be subcontracted at any tier, each additional subcontractor shall complete this form and send it to the Contract Compliance Office within two business days of contract execution and PRIOR to beginning work on the project.

**III. TABLE OF PROJECTED SUBCONTRACTORS, E00-103**

The use of subcontractors at any tier shall be reported to the Contract Compliance Office on this form prior to the subcontractor beginning work on the project.

**IV. SUBCONTRACTOR'S CERTIFICATE OF INTENT TO PARTICIPATE, E00-104**

Each Non-Filed subcontractor engaged to work on a project shall complete and forward this form to the Contract Compliance Office prior to beginning work on the project.

**V. QUARTERLY PROJECTED WORKFORCE TABLE, E00-105**

Each General Contractor, Filed Subcontractor and Non-Filed Subcontractor, regardless of tier, shall complete and forward this form to the Contract Compliance Office prior to beginning work and again for each additional three month period throughout the life of the project.

## **VI. REQUEST FOR MODIFICATION**

### **E00-106B, MINORITY AND WOMEN BUSINESS UTILIZATION E00-106C, MINORITY AND WOMEN UTILIZATION IN THE WORK FORCE**

Any General Contractor, Filed Subcontractor or Non-Filed Subcontractor, regardless of tier, not meeting the minority and women goals, may file a request for modification after having exhausted all possible sources. Requests for modification are considered **ONLY** after attempts to fulfill these mandates have been documented and submitted to the Contract Compliance Office with the appropriate sections of this form.

A modification or waiver will not be granted because a contractor wishes to use an existing workforce that does not achieve the goals of 38% of total work hours to be worked by people of color and 10% of total work hours to be worked by women; and,

If subcontracting, does not meet the goals of 10% of the contract value for Minority Business Enterprises and 15% of the contract value to Women Business Enterprises.

## **VII. WEEKLY PAYROLL REPORT FORM & STATEMENT OF COMPLIANCE**

At the end of each week of work, all Contractors, Filed Subcontractors, and Non-Filed Subcontractors, regardless of tier, shall complete and submit these forms to the Contract Compliance Office.

The Contract Compliance Office will also accept computer generated payroll reports. However, if the computer payroll does not reflect the prevailing wage, the Contractor must provide a breakdown of the benefits paid to each employee which, when added to the base wage, equals the prevailing wage.

The City of Worcester regards the monitoring of weekly certified payroll reports to be a most important function. Therefore, all certified payroll reports shall be scrutinized by the Contract Compliance Office and any violations of the Commonwealth's prevailing wage law will be vigorously enforced.

**PREVAILING WAGE RATES**

**&**

**CERTIFIED PAYROLL REPORTING**

**FORMS**

**NOTE:** Successful bidder/contractor shall submit the required certified payroll reporting forms on a weekly basis *via email* to:

**[certifiedpayrollrecords@worcesterma.gov](mailto:certifiedpayrollrecords@worcesterma.gov)**

**City of Worcester – Purchasing Division  
City Hall – Room 201  
455 Main Street  
Worcester, MA 01608**



# MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM



Company's Name:		Address:				Phone No.:				Payroll No.:									
Employer's Signature:		Title:				Contract No:		Tax Payer ID Number		Work Week Ending:									
Awarding Authority's Name:		Public Works Project Name:				Public Works Project Location:				Min. Wage Rate Sheet Number									
General / Prime Contractor's Name:		Subcontractor's Name:						"Employer" Hourly Fringe Benefit Contributions											
				(B+C+D+E)      (A x F)															
Employee Name & Complete Address	Work Classification:	Employee is OSHA 10 certified (?)	Appr. Rate (%)	Hours Worked								Project Hours (A) All Other Hours	Hourly Base Wage (B)	Health & Welfare Insurance (C)	ERISA Pension Plan (D)	Supp. Unemp. (E)	Total Hourly Prev. Wage (F)	Project Gross Wages Total Gross Wages	Check No. (H)
				Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.									

Are all apprentice employees identified above currently registered with the MA DLS's Division of Apprentices Standards?      YES ☐      NO ☐

For all apprentices performing work during the reporting period, attach a copy of the apprentice identification card issued by the Massachusetts Department of Labor Standards / Division of Apprentices Standards.      No apprentices are identified above ☐

**NOTE:** Pursuant to MGL c. 149, s. 27B, every contractor and subcontractor is required to submit a true and accurate copy of their certified weekly payroll records to the awarding authority by first-class mail or e-mail. In addition, each weekly payroll must be accompanied by a statement of compliance signed by the employer. Failure to comply may result in the commencement of a criminal action or the issuance of a civil citation.

Date Received by Awarding Authority  
 /      /

CITY OF WORCESTER

Monthly Workforce Report

PROJECT NAME\_\_\_\_\_

Construction Manager: \_\_\_\_\_

Project: \_\_\_\_\_ Contract #: \_\_\_\_\_

Period Covered: \_\_\_\_\_ through \_\_\_\_\_

		GOAL - 38%		GOAL - 10%			
PROJECT-TO-DATE:		PEOPLE OF COLOR		FEMALE		MINORITY OWNED	WOMEN OWNED
Contractor/Sub-Contractor	Total Hours	PTD Hours	PTD Percentage	PTD Hours	PTD Percentage		
XX	600		0.0%		0.0%	YES / NO	YES / NO
						YES / NO	YES / NO
						YES / NO	YES / NO
						YES / NO	YES / NO
MONTHLY TOTAL:	600.0	0.00	0.0%	0.0	0.0%		

PROJECT NAME\_\_\_\_\_

Construction Manager: \_\_\_\_\_

Project: \_\_\_\_\_ Contract #: \_\_\_\_\_

Period Covered: \_\_\_\_\_ through \_\_\_\_\_

		GOAL - 38%		GOAL - 10%	
PROJECT-TO-DATE:		PEOPLE OF COLOR		FEMALE	
Trade	Total Hours	PTD Hours	PTD Percentage	PTD Hours	PTD Percentage
Carpenter	600.0	0.0	0.0%	0.0	0.0%
X					
X					
X					
X					
X					
MONTHLY TOTALS	600.0	0.0	0.0%	0.0	0.0%

## WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §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 reverse of this 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. For every week in which an apprentice is employed, a photocopy of the apprentice's identification card must be attached to the payroll report. 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 awarding authority directly, 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:

### STATEMENT OF COMPLIANCE

\_\_\_\_\_, 20\_\_\_\_

I, \_\_\_\_\_, \_\_\_\_\_  
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

\_\_\_\_\_ on the \_\_\_\_\_  
(Contractor, subcontractor or public body) (Building or project)

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 \_\_\_\_\_



MAURA HEALEY  
Governor

KIM DRISCOLL  
Lt. Governor

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**

LAUREN JONES  
Secretary

MICHAEL FLANAGAN  
Director

**Awarding Authority:** City of Worcester  
**Contract Number:** 8049-M4 **City/Town:** WORCESTER  
**Description of Work:** Provide materials, labor and supervision for masonry repairs at Fire Station for the City of Worcester

**Job Location:** 180 Southbridge St., Worcester

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**Information about Prevailing Wage Schedules for Awarding Authorities and Contractors**

- **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 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, the 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. The annual update requirement is not applicable to 27F "rental of equipment" contracts. **The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.**
- 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 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 a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons 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 DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must 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. For a sample payroll reporting form go to <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.
- Contractors must obtain the wage schedules from awarding authorities. 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.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
<b>Construction</b>						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	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>	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>	12/01/2021	\$36.14	\$13.41	\$16.01	\$0.00	\$65.56
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 2)</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 2</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
	06/01/2024	\$40.44	\$9.40	\$16.89	\$0.00	\$66.73
	12/01/2024	\$41.77	\$9.40	\$16.89	\$0.00	\$68.06
	06/01/2025	\$43.16	\$9.40	\$16.89	\$0.00	\$69.45
	12/01/2025	\$44.54	\$9.40	\$16.89	\$0.00	\$70.83
	06/01/2026	\$45.98	\$9.40	\$16.89	\$0.00	\$72.27
	12/01/2026	\$47.42	\$9.40	\$16.89	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASBESTOS WORKER (PIPES & TANKS) <i>HEAT &amp; FROST INSULATORS LOCAL 6 (WORCESTER)</i>	12/01/2020	\$38.10	\$12.80	\$9.45	\$0.00	\$60.35
ASPHALT RAKER <i>LABORERS - ZONE 2</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
	06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
	12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
	06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
	12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
	06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
	12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 2</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 2</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
	06/01/2024	\$40.44	\$9.40	\$16.89	\$0.00	\$66.73
	12/01/2024	\$41.77	\$9.40	\$16.89	\$0.00	\$68.06
	06/01/2025	\$43.16	\$9.40	\$16.89	\$0.00	\$69.45
	12/01/2025	\$44.54	\$9.40	\$16.89	\$0.00	\$70.83
	06/01/2026	\$45.98	\$9.40	\$16.89	\$0.00	\$72.27
	12/01/2026	\$47.42	\$9.40	\$16.89	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2023	\$47.37	\$7.07	\$20.31	\$0.00	\$74.75
	01/01/2024	\$48.12	\$7.07	\$20.60	\$0.00	\$75.79

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$30.79	\$7.07	\$13.22	\$0.00	\$51.08
2	65	\$30.79	\$7.07	\$13.22	\$0.00	\$51.08
3	70	\$33.16	\$7.07	\$14.23	\$0.00	\$54.46
4	75	\$35.53	\$7.07	\$15.24	\$0.00	\$57.84
5	80	\$37.90	\$7.07	\$16.25	\$0.00	\$61.22
6	85	\$40.26	\$7.07	\$17.28	\$0.00	\$64.61
7	90	\$42.63	\$7.07	\$18.28	\$0.00	\$67.98
8	95	\$45.00	\$7.07	\$19.32	\$0.00	\$71.39

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
2	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
3	70	\$33.68	\$7.07	\$14.23	\$0.00	\$54.98
4	75	\$36.09	\$7.07	\$15.24	\$0.00	\$58.40
5	80	\$38.50	\$7.07	\$16.25	\$0.00	\$61.82
6	85	\$40.90	\$7.07	\$17.28	\$0.00	\$65.25
7	90	\$43.31	\$7.07	\$18.28	\$0.00	\$68.66
8	95	\$45.71	\$7.07	\$19.32	\$0.00	\$72.10

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 (WORCESTER)	02/01/2023	\$58.21	\$11.49	\$21.65	\$0.00	\$91.35
	08/01/2023	\$60.26	\$11.49	\$21.65	\$0.00	\$93.40
	02/01/2024	\$61.51	\$11.49	\$21.65	\$0.00	\$94.65
	08/01/2024	\$63.61	\$11.49	\$21.65	\$0.00	\$96.75
	02/01/2025	\$64.91	\$11.49	\$21.65	\$0.00	\$98.05
	08/01/2025	\$67.06	\$11.49	\$21.65	\$0.00	\$100.20
	02/01/2026	\$68.41	\$11.49	\$21.65	\$0.00	\$101.55
	08/01/2026	\$70.61	\$11.49	\$21.65	\$0.00	\$103.75
	02/01/2027	\$72.01	\$11.49	\$21.65	\$0.00	\$105.15

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Worcester**

**Effective Date -** 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$29.11	\$11.49	\$21.65	\$0.00	\$62.25
2	60	\$34.93	\$11.49	\$21.65	\$0.00	\$68.07
3	70	\$40.75	\$11.49	\$21.65	\$0.00	\$73.89
4	80	\$46.57	\$11.49	\$21.65	\$0.00	\$79.71
5	90	\$52.39	\$11.49	\$21.65	\$0.00	\$85.53

**Effective Date -** 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.13	\$11.49	\$21.65	\$0.00	\$63.27
2	60	\$36.16	\$11.49	\$21.65	\$0.00	\$69.30
3	70	\$42.18	\$11.49	\$21.65	\$0.00	\$75.32
4	80	\$48.21	\$11.49	\$21.65	\$0.00	\$81.35
5	90	\$54.23	\$11.49	\$21.65	\$0.00	\$87.37

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

BULLDOZER/GRADER/SCRAPER	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN	06/01/2023	\$44.73	\$9.40	\$17.97	\$0.00	\$72.10
LABORERS - FOUNDATION AND MARINE	12/01/2023	\$45.98	\$9.40	\$17.97	\$0.00	\$73.35
	06/01/2024	\$47.46	\$9.40	\$17.97	\$0.00	\$74.83
	12/01/2024	\$48.93	\$9.40	\$17.97	\$0.00	\$76.30
	06/01/2025	\$50.43	\$9.40	\$17.97	\$0.00	\$77.80
	12/01/2025	\$51.93	\$9.40	\$17.97	\$0.00	\$79.30
	06/01/2026	\$53.48	\$9.40	\$17.97	\$0.00	\$80.85
	12/01/2026	\$54.98	\$9.40	\$17.97	\$0.00	\$82.35

For apprentice rates see "Apprentice- LABORER"



Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2023	\$43.58	\$9.40	\$17.97	\$0.00	\$70.95
	12/01/2023	\$44.83	\$9.40	\$17.97	\$0.00	\$72.20
	06/01/2024	\$46.31	\$9.40	\$17.97	\$0.00	\$73.68
	12/01/2024	\$47.78	\$9.40	\$17.97	\$0.00	\$75.15
	06/01/2025	\$49.28	\$9.40	\$17.97	\$0.00	\$76.65
	12/01/2025	\$50.78	\$9.40	\$17.97	\$0.00	\$78.15
	06/01/2026	\$52.33	\$9.40	\$17.97	\$0.00	\$79.70
	12/01/2026	\$53.83	\$9.40	\$17.97	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2023	\$43.58	\$9.40	\$17.97	\$0.00	\$70.95
	12/01/2023	\$44.83	\$9.40	\$17.97	\$0.00	\$72.20
	06/01/2024	\$46.31	\$9.40	\$17.97	\$0.00	\$73.68
	12/01/2024	\$47.78	\$9.40	\$17.97	\$0.00	\$75.15
	06/01/2025	\$49.28	\$9.40	\$17.97	\$0.00	\$76.65
	12/01/2025	\$50.78	\$9.40	\$17.97	\$0.00	\$78.15
	06/01/2026	\$52.33	\$9.40	\$17.97	\$0.00	\$79.70
	12/01/2026	\$53.83	\$9.40	\$17.97	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2023	\$45.12	\$9.33	\$19.97	\$0.00	\$74.42

**Apprentice - CARPENTER - Zone 2 Eastern MA**

**Effective Date - 03/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.56	\$9.33	\$1.73	\$0.00	\$33.62
2	60	\$27.07	\$9.33	\$1.73	\$0.00	\$38.13
3	70	\$31.58	\$9.33	\$14.78	\$0.00	\$55.69
4	75	\$33.84	\$9.33	\$14.78	\$0.00	\$57.95
5	80	\$36.10	\$9.33	\$16.51	\$0.00	\$61.94
6	80	\$36.10	\$9.33	\$16.51	\$0.00	\$61.94
7	90	\$40.61	\$9.33	\$18.24	\$0.00	\$68.18
8	90	\$40.61	\$9.33	\$18.24	\$0.00	\$68.18

**Notes:**

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80  
Step 1&2 \$30.71/ 3&4 \$36.93/ 5&6 \$56.82/ 7&8 \$63.06

**Apprentice to Journeyworker Ratio:1:5**

CARPENTER WOOD FRAME <i>CARPENTERS-ZONE 3 (Wood Frame)</i>	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
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**Apprentice - CARPENTER (Wood Frame) - Zone 3**

**Effective Date -** 04/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.50	\$7.21	\$0.00	\$0.00	\$21.71
2	60	\$14.50	\$7.21	\$0.00	\$0.00	\$21.71
3	65	\$15.70	\$7.21	\$0.00	\$0.00	\$22.91
4	70	\$16.91	\$7.21	\$0.00	\$0.00	\$24.12
5	75	\$18.12	\$7.21	\$3.80	\$0.00	\$29.13
6	80	\$19.33	\$7.21	\$3.80	\$0.00	\$30.34
7	85	\$20.54	\$7.21	\$3.80	\$0.00	\$31.55
8	90	\$21.74	\$7.21	\$3.80	\$0.00	\$32.75

**Notes:**

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80  
Step 1&2 \$17.86/ 3&4 \$20.22/ 5&6 \$27.57/ 7&8 \$29.94

**Apprentice to Journeyworker Ratio:1:5**

CEMENT MASONRY/PLASTERING	07/01/2023	\$50.59	\$12.75	\$22.74	\$0.87	\$86.95
BRICKLAYERS LOCAL 3 (WORCESTER)	01/01/2024	\$51.73	\$12.75	\$22.74	\$0.87	\$88.09

**Apprentice - CEMENT MASONRY/PLASTERING - Worcester**

**Effective Date -** 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.30	\$12.75	\$15.49	\$0.00	\$53.54
2	60	\$30.35	\$12.75	\$17.99	\$0.87	\$61.96
3	65	\$32.88	\$12.75	\$18.99	\$0.87	\$65.49
4	70	\$35.41	\$12.75	\$19.99	\$0.87	\$69.02
5	75	\$37.94	\$12.75	\$20.99	\$0.87	\$72.55
6	80	\$40.47	\$12.75	\$21.99	\$0.87	\$76.08
7	90	\$45.53	\$12.75	\$22.99	\$0.87	\$82.14

**Notes:**

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

**Apprentice to Journeyworker Ratio:1:3**

CHAIN SAW OPERATOR	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$55.35	\$14.75	\$16.15	\$0.00	\$86.25
	12/01/2023	\$56.63	\$14.75	\$16.15	\$0.00	\$87.53
	06/01/2024	\$57.95	\$14.75	\$16.15	\$0.00	\$88.85
	12/01/2024	\$59.43	\$14.75	\$16.15	\$0.00	\$90.33
	06/01/2025	\$60.76	\$14.75	\$16.15	\$0.00	\$91.66
	12/01/2025	\$62.23	\$14.75	\$16.15	\$0.00	\$93.13
	06/01/2026	\$63.56	\$14.75	\$16.15	\$0.00	\$94.46
	12/01/2026	\$65.04	\$14.75	\$16.15	\$0.00	\$95.94
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$35.30	\$14.75	\$16.15	\$0.00	\$66.20
	12/01/2023	\$36.12	\$14.75	\$16.15	\$0.00	\$67.02
	06/01/2024	\$36.97	\$14.75	\$16.15	\$0.00	\$67.87
	12/01/2024	\$37.92	\$14.75	\$16.15	\$0.00	\$68.82
	06/01/2025	\$38.77	\$14.75	\$16.15	\$0.00	\$69.67
	12/01/2025	\$39.72	\$14.75	\$16.15	\$0.00	\$70.62
	06/01/2026	\$40.58	\$14.75	\$16.15	\$0.00	\$71.48
	12/01/2026	\$41.53	\$14.75	\$16.15	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2023	\$55.51	\$9.65	\$23.70	\$0.00	\$88.86
	01/01/2024	\$56.06	\$9.95	\$23.95	\$0.00	\$89.96
	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

**Apprentice - PAINTER Local 35 - BRIDGES/TANKS**

**Effective Date - 07/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.76	\$9.65	\$0.00	\$0.00	\$37.41
2	55	\$30.53	\$9.65	\$6.55	\$0.00	\$46.73
3	60	\$33.31	\$9.65	\$7.14	\$0.00	\$50.10
4	65	\$36.08	\$9.65	\$7.74	\$0.00	\$53.47
5	70	\$38.86	\$9.65	\$20.13	\$0.00	\$68.64
6	75	\$41.63	\$9.65	\$20.73	\$0.00	\$72.01
7	80	\$44.41	\$9.65	\$21.32	\$0.00	\$75.38
8	90	\$49.96	\$9.65	\$22.51	\$0.00	\$82.12

**Effective Date - 01/01/2024**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.03	\$9.95	\$0.00	\$0.00	\$37.98
2	55	\$30.83	\$9.95	\$6.66	\$0.00	\$47.44
3	60	\$33.64	\$9.95	\$7.26	\$0.00	\$50.85
4	65	\$36.44	\$9.95	\$7.87	\$0.00	\$54.26
5	70	\$39.24	\$9.95	\$20.32	\$0.00	\$69.51
6	75	\$42.05	\$9.95	\$20.93	\$0.00	\$72.93
7	80	\$44.85	\$9.95	\$21.53	\$0.00	\$76.33
8	90	\$50.45	\$9.95	\$22.74	\$0.00	\$83.14

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

DEMO: ADZEMAN	06/01/2023	\$43.73	\$9.40	\$17.82	\$0.00	\$70.95
LABORERS - ZONE 2	12/01/2023	\$44.98	\$9.40	\$17.82	\$0.00	\$72.20
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR	06/01/2023	\$44.73	\$9.40	\$17.82	\$0.00	\$71.95
LABORERS - ZONE 2	12/01/2023	\$45.98	\$9.40	\$17.82	\$0.00	\$73.20
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS	06/01/2023	\$44.48	\$9.40	\$17.82	\$0.00	\$71.70
LABORERS - ZONE 2	12/01/2023	\$45.73	\$9.40	\$17.82	\$0.00	\$72.95
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER	06/01/2023	\$44.73	\$9.40	\$17.82	\$0.00	\$71.95
LABORERS - ZONE 2	12/01/2023	\$45.98	\$9.40	\$17.82	\$0.00	\$73.20
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR	06/01/2023	\$44.48	\$9.40	\$17.82	\$0.00	\$71.70
LABORERS - ZONE 2	12/01/2023	\$45.73	\$9.40	\$17.82	\$0.00	\$72.95
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER	06/01/2023	\$43.73	\$9.40	\$17.82	\$0.00	\$70.95
LABORERS - ZONE 2	12/01/2023	\$44.98	\$9.40	\$17.82	\$0.00	\$72.20
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 2)</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 2)</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 2)</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 2)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) <i>DRAWBRIDGE - SEIU LOCAL 888</i>	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN <i>ELECTRICIANS LOCAL 96</i>	09/04/2022	\$45.59	\$12.20	\$17.50	\$0.00	\$75.29

**Apprentice - *ELECTRICIAN - Local 96***

**Effective Date -** 09/04/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.24	\$12.20	\$0.55	\$0.00	\$30.99
2	43	\$19.60	\$12.20	\$0.59	\$0.00	\$32.39
3	48	\$21.88	\$12.20	\$14.18	\$0.00	\$48.26
4	55	\$25.07	\$12.20	\$14.63	\$0.00	\$51.90
5	65	\$29.63	\$12.20	\$15.27	\$0.00	\$57.10
6	80	\$36.47	\$12.20	\$16.22	\$0.00	\$64.89

**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>	01/01/2023	\$61.13	\$16.08	\$20.56	\$0.00	\$97.77
	01/01/2024	\$61.98	\$16.18	\$20.96	\$0.00	\$99.12
	01/01/2025	\$62.83	\$16.28	\$21.36	\$0.00	\$100.47
	01/01/2026	\$63.68	\$16.38	\$21.76	\$0.00	\$101.82
	01/01/2027	\$64.53	\$16.48	\$22.16	\$0.00	\$103.17

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - ELEVATOR CONSTRUCTOR - Local 41**

**Effective Date - 01/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.57	\$16.08	\$0.00	\$0.00	\$46.65
2	55	\$33.62	\$16.08	\$20.56	\$0.00	\$70.26
3	65	\$39.73	\$16.08	\$20.56	\$0.00	\$76.37
4	70	\$42.79	\$16.08	\$20.56	\$0.00	\$79.43
5	80	\$48.90	\$16.08	\$20.56	\$0.00	\$85.54

**Effective Date - 01/01/2024**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.99	\$16.18	\$0.00	\$0.00	\$47.17
2	55	\$34.09	\$16.18	\$20.96	\$0.00	\$71.23
3	65	\$40.29	\$16.18	\$20.96	\$0.00	\$77.43
4	70	\$43.39	\$16.18	\$20.96	\$0.00	\$80.53
5	80	\$49.58	\$16.18	\$20.96	\$0.00	\$86.72

**Notes:**

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

**Apprentice to Journeyworker Ratio:1:1**

ELEVATOR CONSTRUCTOR HELPER	01/01/2023	\$42.79	\$16.08	\$20.56	\$0.00	\$79.43
ELEVATOR CONSTRUCTORS LOCAL 41	01/01/2024	\$43.39	\$16.18	\$20.96	\$0.00	\$80.53
	01/01/2025	\$43.98	\$16.28	\$21.36	\$0.00	\$81.62
	01/01/2026	\$44.58	\$16.38	\$21.76	\$0.00	\$82.72
	01/01/2027	\$45.17	\$16.48	\$22.16	\$0.00	\$83.81

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
	06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
	12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
	06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
	12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
	06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
	12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21

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

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	05/01/2023	\$49.06	\$14.50	\$16.15	\$0.00	\$79.71
OPERATING ENGINEERS LOCAL 4	11/01/2023	\$50.30	\$14.50	\$16.15	\$0.00	\$80.95
	05/01/2024	\$51.54	\$14.50	\$16.15	\$0.00	\$82.19
	11/01/2024	\$52.83	\$14.50	\$16.15	\$0.00	\$83.48
	05/01/2025	\$54.27	\$14.50	\$16.15	\$0.00	\$84.92
	11/01/2025	\$55.56	\$14.50	\$16.15	\$0.00	\$86.21
	05/01/2026	\$57.00	\$14.50	\$16.15	\$0.00	\$87.65
	11/01/2026	\$58.29	\$14.50	\$16.15	\$0.00	\$88.94
	05/01/2027	\$59.72	\$14.50	\$16.15	\$0.00	\$90.37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2023	\$50.62	\$14.50	\$16.15	\$0.00	\$81.27
	11/01/2023	\$51.87	\$14.50	\$16.15	\$0.00	\$82.52
	05/01/2024	\$53.12	\$14.50	\$16.15	\$0.00	\$83.77
	11/01/2024	\$54.42	\$14.50	\$16.15	\$0.00	\$85.07
	05/01/2025	\$55.87	\$14.50	\$16.15	\$0.00	\$86.52
	11/01/2025	\$57.17	\$14.50	\$16.15	\$0.00	\$87.82
	05/01/2026	\$58.62	\$14.50	\$16.15	\$0.00	\$89.27
	11/01/2026	\$59.92	\$14.50	\$16.15	\$0.00	\$90.57
	05/01/2027	\$61.37	\$14.50	\$16.15	\$0.00	\$92.02
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2023	\$24.20	\$14.50	\$16.15	\$0.00	\$54.85
	11/01/2023	\$24.93	\$14.50	\$16.15	\$0.00	\$55.58
	05/01/2024	\$25.66	\$14.50	\$16.15	\$0.00	\$56.31
	11/01/2024	\$26.42	\$14.50	\$16.15	\$0.00	\$57.07
	05/01/2025	\$27.27	\$14.50	\$16.15	\$0.00	\$57.92
	11/01/2025	\$28.03	\$14.50	\$16.15	\$0.00	\$58.68
	05/01/2026	\$28.88	\$14.50	\$16.15	\$0.00	\$59.53
	11/01/2026	\$29.64	\$14.50	\$16.15	\$0.00	\$60.29
	05/01/2027	\$30.49	\$14.50	\$16.15	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 96</i>	09/04/2022	\$45.59	\$12.20	\$17.50	\$0.00	\$75.29
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINT/COMMISSIONING <i>ELECTRICIANS LOCAL 96</i>	09/04/2022	\$45.59	\$12.20	\$17.50	\$0.00	\$75.29
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$43.96	\$14.75	\$16.15	\$0.00	\$74.86
	12/01/2023	\$44.97	\$14.75	\$16.15	\$0.00	\$75.87
	06/01/2024	\$46.03	\$14.75	\$16.15	\$0.00	\$76.93
	12/01/2024	\$47.21	\$14.75	\$16.15	\$0.00	\$78.11
	06/01/2025	\$48.27	\$14.75	\$16.15	\$0.00	\$79.17
	12/01/2025	\$49.44	\$14.75	\$16.15	\$0.00	\$80.34
	06/01/2026	\$50.50	\$14.75	\$16.15	\$0.00	\$81.40
	12/01/2026	\$51.68	\$14.75	\$16.15	\$0.00	\$82.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$25.98	\$9.40	\$16.89	\$0.00	\$52.27
	12/01/2023	\$25.98	\$9.40	\$16.89	\$0.00	\$52.27
	06/01/2024	\$27.01	\$9.40	\$16.89	\$0.00	\$53.30
	12/01/2024	\$27.01	\$9.40	\$16.89	\$0.00	\$53.30
	06/01/2025	\$28.09	\$9.40	\$16.89	\$0.00	\$54.38
	12/01/2025	\$28.09	\$9.40	\$16.89	\$0.00	\$54.38
	06/01/2026	\$29.21	\$9.40	\$16.89	\$0.00	\$55.50
	12/01/2026	\$29.21	\$9.40	\$16.89	\$0.00	\$55.50
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE II</i>	03/01/2022	\$47.96	\$9.33	\$20.27	\$0.00	\$77.56

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - FLOORCOVERER - Local 2168 Zone II**

**Effective Date - 03/01/2022**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.98	\$9.33	\$1.79	\$0.00	\$35.10
2	55	\$26.38	\$9.33	\$1.79	\$0.00	\$37.50
3	60	\$28.78	\$9.33	\$14.90	\$0.00	\$53.01
4	65	\$31.17	\$9.33	\$14.90	\$0.00	\$55.40
5	70	\$33.57	\$9.33	\$16.69	\$0.00	\$59.59
6	75	\$35.97	\$9.33	\$16.69	\$0.00	\$61.99
7	80	\$38.37	\$9.33	\$18.48	\$0.00	\$66.18
8	85	\$40.77	\$9.33	\$18.48	\$0.00	\$68.58

**Notes:** Steps are 750 hrs.

% After 10/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)

Step 1&2 \$31.90/ 3&4 \$38.39/ 5&6 \$58.70/ 7&8 \$65.26

**Apprentice to Journeyworker Ratio:1:1**

FORK LIFT/CHERRY PICKER	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	06/01/2023	\$35.30	\$14.75	\$16.15	\$0.00	\$66.20
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$36.12	\$14.75	\$16.15	\$0.00	\$67.02
	06/01/2024	\$36.97	\$14.75	\$16.15	\$0.00	\$67.87
	12/01/2024	\$37.92	\$14.75	\$16.15	\$0.00	\$68.82
	06/01/2025	\$38.77	\$14.75	\$16.15	\$0.00	\$69.67
	12/01/2025	\$39.72	\$14.75	\$16.15	\$0.00	\$70.62
	06/01/2026	\$40.58	\$14.75	\$16.15	\$0.00	\$71.48
	12/01/2026	\$41.53	\$14.75	\$16.15	\$0.00	\$72.43

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	07/01/2023	\$45.01	\$9.65	\$23.70	\$0.00	\$78.36
GLAZIERS LOCAL 35 (ZONE 2)	01/01/2024	\$45.56	\$9.95	\$23.95	\$0.00	\$79.46
	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86



Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.51	\$9.65	\$0.00	\$0.00	\$32.16
2	55	\$24.76	\$9.65	\$6.55	\$0.00	\$40.96
3	60	\$27.01	\$9.65	\$7.14	\$0.00	\$43.80
4	65	\$29.26	\$9.65	\$7.74	\$0.00	\$46.65
5	70	\$31.51	\$9.65	\$20.13	\$0.00	\$61.29
6	75	\$33.76	\$9.65	\$20.73	\$0.00	\$64.14
7	80	\$36.01	\$9.65	\$21.32	\$0.00	\$66.98
8	90	\$40.51	\$9.65	\$22.51	\$0.00	\$72.67

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.78	\$9.95	\$0.00	\$0.00	\$32.73
2	55	\$25.06	\$9.95	\$6.66	\$0.00	\$41.67
3	60	\$27.34	\$9.95	\$7.26	\$0.00	\$44.55
4	65	\$29.61	\$9.95	\$7.87	\$0.00	\$47.43
5	70	\$31.89	\$9.95	\$20.32	\$0.00	\$62.16
6	75	\$34.17	\$9.95	\$20.93	\$0.00	\$65.05
7	80	\$36.45	\$9.95	\$21.53	\$0.00	\$67.93
8	90	\$41.00	\$9.95	\$22.74	\$0.00	\$73.69

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68

**Apprentice - OPERATING ENGINEERS - Local 4**

**Effective Date - 06/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$29.85	\$14.75	\$0.00	\$0.00	\$44.60
2	60	\$32.57	\$14.75	\$16.15	\$0.00	\$63.47
3	65	\$35.28	\$14.75	\$16.15	\$0.00	\$66.18
4	70	\$38.00	\$14.75	\$16.15	\$0.00	\$68.90
5	75	\$40.71	\$14.75	\$16.15	\$0.00	\$71.61
6	80	\$43.42	\$14.75	\$16.15	\$0.00	\$74.32
7	85	\$46.14	\$14.75	\$16.15	\$0.00	\$77.04
8	90	\$48.85	\$14.75	\$16.15	\$0.00	\$79.75

**Effective Date - 12/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$30.54	\$14.75	\$0.00	\$0.00	\$45.29
2	60	\$33.32	\$14.75	\$16.15	\$0.00	\$64.22
3	65	\$36.09	\$14.75	\$16.15	\$0.00	\$66.99
4	70	\$38.87	\$14.75	\$16.15	\$0.00	\$69.77
5	75	\$41.65	\$14.75	\$16.15	\$0.00	\$72.55
6	80	\$44.42	\$14.75	\$16.15	\$0.00	\$75.32
7	85	\$47.20	\$14.75	\$16.15	\$0.00	\$78.10
8	90	\$49.98	\$14.75	\$16.15	\$0.00	\$80.88

Notes:

**Apprentice to Journeyworker Ratio:1:6**

HVAC (DUCTWORK)	07/01/2023	\$42.55	\$10.64	\$17.54	\$2.05	\$72.78
SHEETMETAL WORKERS LOCAL 63	01/01/2024	\$43.80	\$10.64	\$17.54	\$2.05	\$74.03
	07/01/2024	\$45.05	\$10.64	\$17.54	\$2.05	\$75.28
	01/01/2025	\$46.30	\$10.64	\$17.54	\$2.05	\$76.53
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (ELECTRICAL CONTROLS)	09/04/2022	\$45.59	\$12.20	\$17.50	\$0.00	\$75.29
ELECTRICIANS LOCAL 96						
For apprentice rates see "Apprentice- ELECTRICIAN"						
HVAC (TESTING AND BALANCING - AIR)	07/01/2023	\$42.55	\$10.64	\$17.54	\$2.05	\$72.78
SHEETMETAL WORKERS LOCAL 63	01/01/2024	\$43.80	\$10.64	\$17.54	\$2.05	\$74.03
	07/01/2024	\$45.05	\$10.64	\$17.54	\$2.05	\$75.28
	01/01/2025	\$46.30	\$10.64	\$17.54	\$2.05	\$76.53
For apprentice rates see "Apprentice- SHEET METAL WORKER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) <i>PLUMBERS LOCAL 4</i>	03/01/2023	\$51.50	\$9.80	\$17.42	\$0.00	\$78.72
	09/01/2023	\$52.90	\$9.80	\$17.42	\$0.00	\$80.12
	03/01/2024	\$54.30	\$9.80	\$17.42	\$0.00	\$81.52
	09/01/2024	\$55.70	\$9.80	\$17.42	\$0.00	\$82.92
	03/01/2025	\$57.10	\$9.80	\$17.42	\$0.00	\$84.32
	09/01/2025	\$58.50	\$9.80	\$17.42	\$0.00	\$85.72
	03/01/2026	\$59.90	\$9.80	\$17.42	\$0.00	\$87.12
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PLUMBERS LOCAL 4</i>	03/01/2023	\$51.50	\$9.80	\$17.42	\$0.00	\$78.72
	09/01/2023	\$52.90	\$9.80	\$17.42	\$0.00	\$80.12
	03/01/2024	\$54.30	\$9.80	\$17.42	\$0.00	\$81.52
	09/01/2024	\$55.70	\$9.80	\$17.42	\$0.00	\$82.92
	03/01/2025	\$57.10	\$9.80	\$17.42	\$0.00	\$84.32
	09/01/2025	\$58.50	\$9.80	\$17.42	\$0.00	\$85.72
	03/01/2026	\$59.90	\$9.80	\$17.42	\$0.00	\$87.12
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$38.21	\$9.40	\$16.89	\$0.00	\$64.50
	12/01/2023	\$39.11	\$9.40	\$16.89	\$0.00	\$65.40
	06/01/2024	\$40.44	\$9.40	\$16.89	\$0.00	\$66.73
	12/01/2024	\$41.77	\$9.40	\$16.89	\$0.00	\$68.06
	06/01/2025	\$43.16	\$9.40	\$16.89	\$0.00	\$69.45
	12/01/2025	\$44.54	\$9.40	\$16.89	\$0.00	\$70.83
	06/01/2026	\$45.98	\$9.40	\$16.89	\$0.00	\$72.27
	12/01/2026	\$47.42	\$9.40	\$16.89	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) <i>HEAT &amp; FROST INSULATORS LOCAL 6 (WORCESTER)</i>	09/01/2022	\$48.95	\$13.80	\$17.14	\$0.00	\$79.89

**Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Worcester**

**Effective Date -** 09/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.48	\$13.80	\$12.42	\$0.00	\$50.70
2	60	\$29.37	\$13.80	\$13.36	\$0.00	\$56.53
3	70	\$34.27	\$13.80	\$14.31	\$0.00	\$62.38
4	80	\$39.16	\$13.80	\$15.25	\$0.00	\$68.21

**Notes:**

Steps are 1 year

**Apprentice to Journeyworker Ratio:1:4**

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (WORCESTER AREA)</i>	03/16/2023	\$52.42	\$8.35	\$26.70	\$0.00	\$87.47
	03/16/2024	\$53.67	\$8.35	\$26.70	\$0.00	\$88.72

Apprentice - IRONWORKER - Local 7 Worcester

Effective Date - 03/16/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$31.45	\$8.35	\$26.70	\$0.00	\$66.50
2	70	\$36.69	\$8.35	\$26.70	\$0.00	\$71.74
3	75	\$39.32	\$8.35	\$26.70	\$0.00	\$74.37
4	80	\$41.94	\$8.35	\$26.70	\$0.00	\$76.99
5	85	\$44.56	\$8.35	\$26.70	\$0.00	\$79.61
6	90	\$47.18	\$8.35	\$26.70	\$0.00	\$82.23

Effective Date - 03/16/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$32.20	\$8.35	\$26.70	\$0.00	\$67.25
2	70	\$37.57	\$8.35	\$26.70	\$0.00	\$72.62
3	75	\$40.25	\$8.35	\$26.70	\$0.00	\$75.30
4	80	\$42.94	\$8.35	\$26.70	\$0.00	\$77.99
5	85	\$45.62	\$8.35	\$26.70	\$0.00	\$80.67
6	90	\$48.30	\$8.35	\$26.70	\$0.00	\$83.35

Notes:

Apprentice to Journeyworker Ratio:1:4

JACKHAMMER & PAVING BREAKER OPERATOR	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
LABORER	06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65

Apprentice - *LABORER - Zone 2*

Effective Date - 06/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.48	\$9.40	\$16.89	\$0.00	\$48.77
2	70	\$26.22	\$9.40	\$16.89	\$0.00	\$52.51
3	80	\$29.97	\$9.40	\$16.89	\$0.00	\$56.26
4	90	\$33.71	\$9.40	\$16.89	\$0.00	\$60.00

Effective Date - 12/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$23.02	\$9.40	\$16.89	\$0.00	\$49.31
2	70	\$26.85	\$9.40	\$16.89	\$0.00	\$53.14
3	80	\$30.69	\$9.40	\$16.89	\$0.00	\$56.98
4	90	\$34.52	\$9.40	\$16.89	\$0.00	\$60.81

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER (HEAVY & HIGHWAY)	06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
	06/01/2024	\$39.69	\$9.40	\$16.89	\$0.00	\$65.98
	12/01/2024	\$41.02	\$9.40	\$16.89	\$0.00	\$67.31
	06/01/2025	\$42.41	\$9.40	\$16.89	\$0.00	\$68.70
	12/01/2025	\$43.79	\$9.40	\$16.89	\$0.00	\$70.08
	06/01/2026	\$45.23	\$9.40	\$16.89	\$0.00	\$71.52
	12/01/2026	\$46.67	\$9.40	\$16.89	\$0.00	\$72.96

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
<b>Apprentice -   LABORER (Heavy &amp; Highway) - Zone 2</b>							
<b>Effective Date -   06/01/2023</b>							
Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	60	\$22.48	\$9.40	\$16.89	\$0.00	\$48.77	
2	70	\$26.22	\$9.40	\$16.89	\$0.00	\$52.51	
3	80	\$29.97	\$9.40	\$16.89	\$0.00	\$56.26	
4	90	\$33.71	\$9.40	\$16.89	\$0.00	\$60.00	
<b>Effective Date -   12/01/2023</b>							
Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	60	\$23.02	\$9.40	\$16.89	\$0.00	\$49.31	
2	70	\$26.85	\$9.40	\$16.89	\$0.00	\$53.14	
3	80	\$30.69	\$9.40	\$16.89	\$0.00	\$56.98	
4	90	\$34.52	\$9.40	\$16.89	\$0.00	\$60.81	
<div>Notes:</div>							
<b>Apprentice to Journeyworker Ratio:1:5</b>							
LABORER: CARPENTER TENDER		06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2		12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER		06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2		12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER		06/01/2023	\$37.55	\$9.40	\$16.95	\$0.00	\$63.90
LABORERS - ZONE 2		12/01/2023	\$38.45	\$9.40	\$16.95	\$0.00	\$64.80
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER		06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2		12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY)		06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2 (HEAVY & HIGHWAY)		12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
		06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
		12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
		06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
		12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
		06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
		12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER		06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2		12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER		06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2		12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
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	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
	06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
	12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
	06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
	12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
	06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
	12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
MARBLE & TILE FINISHERS	02/01/2023	\$46.25	\$11.49	\$20.37	\$0.00	\$78.11
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2023	\$47.89	\$11.49	\$20.37	\$0.00	\$79.75
	02/01/2024	\$48.89	\$11.49	\$20.37	\$0.00	\$80.75
	08/01/2024	\$50.57	\$11.49	\$20.37	\$0.00	\$82.43
	02/01/2025	\$51.61	\$11.49	\$20.37	\$0.00	\$83.47
	08/01/2025	\$53.33	\$11.49	\$20.37	\$0.00	\$85.19
	02/01/2026	\$54.41	\$11.49	\$20.37	\$0.00	\$86.27
	08/01/2026	\$56.17	\$11.49	\$20.37	\$0.00	\$88.03
	02/01/2027	\$57.29	\$11.49	\$20.37	\$0.00	\$89.15

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

**Effective Date - 02/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.13	\$11.49	\$20.37	\$0.00	\$54.99
2	60	\$27.75	\$11.49	\$20.37	\$0.00	\$59.61
3	70	\$32.38	\$11.49	\$20.37	\$0.00	\$64.24
4	80	\$37.00	\$11.49	\$20.37	\$0.00	\$68.86
5	90	\$41.63	\$11.49	\$20.37	\$0.00	\$73.49

**Effective Date - 08/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$11.49	\$20.37	\$0.00	\$55.81
2	60	\$28.73	\$11.49	\$20.37	\$0.00	\$60.59
3	70	\$33.52	\$11.49	\$20.37	\$0.00	\$65.38
4	80	\$38.31	\$11.49	\$20.37	\$0.00	\$70.17
5	90	\$43.10	\$11.49	\$20.37	\$0.00	\$74.96

**Notes:**

**Apprentice to Journeyworker Ratio:1:3**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
MARBLE MASONS,TILELAYERS & TERRAZZO MECH <i>BRICKLAYERS LOCAL 3 - MARBLE &amp; TILE</i>	02/01/2023	\$60.37	\$11.49	\$22.31	\$0.00	\$94.17
	08/01/2023	\$62.42	\$11.49	\$22.31	\$0.00	\$96.22
	02/01/2024	\$63.67	\$11.49	\$22.31	\$0.00	\$97.47
	08/01/2024	\$65.77	\$11.49	\$22.31	\$0.00	\$99.57
	02/01/2025	\$67.07	\$11.49	\$22.31	\$0.00	\$100.87
	08/01/2025	\$69.22	\$11.49	\$22.31	\$0.00	\$103.02
	02/01/2026	\$70.57	\$11.49	\$22.31	\$0.00	\$104.37
	08/01/2026	\$72.77	\$11.49	\$22.31	\$0.00	\$106.57
	02/01/2027	\$74.17	\$11.49	\$22.31	\$0.00	\$107.97

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

**Effective Date - 02/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.19	\$11.49	\$22.31	\$0.00	\$63.99
2	60	\$36.22	\$11.49	\$22.31	\$0.00	\$70.02
3	70	\$42.26	\$11.49	\$22.31	\$0.00	\$76.06
4	80	\$48.30	\$11.49	\$22.31	\$0.00	\$82.10
5	90	\$54.33	\$11.49	\$22.31	\$0.00	\$88.13

**Effective Date - 08/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.21	\$11.49	\$22.31	\$0.00	\$65.01
2	60	\$37.45	\$11.49	\$22.31	\$0.00	\$71.25
3	70	\$43.69	\$11.49	\$22.31	\$0.00	\$77.49
4	80	\$49.94	\$11.49	\$22.31	\$0.00	\$83.74
5	90	\$56.18	\$11.49	\$22.31	\$0.00	\$89.98

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"



Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 3) <i>MILLWRIGHTS LOCAL 1121 - Zone 3</i>	01/02/2023	\$40.16	\$8.58	\$21.57	\$0.00	\$70.31
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#### Apprentice - *MILLWRIGHT - Local 1121 Zone 3*

Effective Date - 01/02/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$22.09	\$8.58	\$5.72	\$0.00	\$36.39
2	65	\$26.10	\$8.58	\$17.93	\$0.00	\$52.61
3	75	\$30.12	\$8.58	\$18.98	\$0.00	\$57.68
4	85	\$34.14	\$8.58	\$20.01	\$0.00	\$62.73

**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:1:4**

MORTAR MIXER <i>LABORERS - ZONE 2</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$24.34	\$14.75	\$16.15	\$0.00	\$55.24
	12/01/2023	\$24.91	\$14.75	\$16.15	\$0.00	\$55.81
	06/01/2024	\$25.51	\$14.75	\$16.15	\$0.00	\$56.41
	12/01/2024	\$26.17	\$14.75	\$16.15	\$0.00	\$57.07
	06/01/2025	\$26.77	\$14.75	\$16.15	\$0.00	\$57.67
	12/01/2025	\$27.43	\$14.75	\$16.15	\$0.00	\$58.33
	06/01/2026	\$28.02	\$14.75	\$16.15	\$0.00	\$58.92
	12/01/2026	\$28.69	\$14.75	\$16.15	\$0.00	\$59.59

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$29.67	\$14.75	\$16.15	\$0.00	\$60.57
	12/01/2023	\$30.36	\$14.75	\$16.15	\$0.00	\$61.26
	06/01/2024	\$31.08	\$14.75	\$16.15	\$0.00	\$61.98
	12/01/2024	\$31.88	\$14.75	\$16.15	\$0.00	\$62.78
	06/01/2025	\$32.60	\$14.75	\$16.15	\$0.00	\$63.50
	12/01/2025	\$33.40	\$14.75	\$16.15	\$0.00	\$64.30
	06/01/2026	\$34.12	\$14.75	\$16.15	\$0.00	\$65.02
	12/01/2026	\$34.92	\$14.75	\$16.15	\$0.00	\$65.82

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2023	\$55.51	\$9.65	\$23.70	\$0.00	\$88.86
	01/01/2024	\$56.06	\$9.95	\$23.95	\$0.00	\$89.96
	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

#### Apprentice - *PAINTER Local 35 - BRIDGES/TANKS*

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.76	\$9.65	\$0.00	\$0.00	\$37.41
2	55	\$30.53	\$9.65	\$6.55	\$0.00	\$46.73
3	60	\$33.31	\$9.65	\$7.14	\$0.00	\$50.10
4	65	\$36.08	\$9.65	\$7.74	\$0.00	\$53.47
5	70	\$38.86	\$9.65	\$20.13	\$0.00	\$68.64
6	75	\$41.63	\$9.65	\$20.73	\$0.00	\$72.01
7	80	\$44.41	\$9.65	\$21.32	\$0.00	\$75.38
8	90	\$49.96	\$9.65	\$22.51	\$0.00	\$82.12

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.03	\$9.95	\$0.00	\$0.00	\$37.98
2	55	\$30.83	\$9.95	\$6.66	\$0.00	\$47.44
3	60	\$33.64	\$9.95	\$7.26	\$0.00	\$50.85
4	65	\$36.44	\$9.95	\$7.87	\$0.00	\$54.26
5	70	\$39.24	\$9.95	\$20.32	\$0.00	\$69.51
6	75	\$42.05	\$9.95	\$20.93	\$0.00	\$72.93
7	80	\$44.85	\$9.95	\$21.53	\$0.00	\$76.33
8	90	\$50.45	\$9.95	\$22.74	\$0.00	\$83.14

#### Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) * * If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2023	\$46.41	\$9.65	\$23.70	\$0.00	\$79.76
	01/01/2024	\$46.96	\$9.95	\$23.95	\$0.00	\$80.86
	07/01/2024	\$48.16	\$9.95	\$23.95	\$0.00	\$82.06
	01/01/2025	\$49.36	\$9.95	\$23.95	\$0.00	\$83.26

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.21	\$9.65	\$0.00	\$0.00	\$32.86
2	55	\$25.53	\$9.65	\$6.55	\$0.00	\$41.73
3	60	\$27.85	\$9.65	\$7.14	\$0.00	\$44.64
4	65	\$30.17	\$9.65	\$7.74	\$0.00	\$47.56
5	70	\$32.49	\$9.65	\$20.13	\$0.00	\$62.27
6	75	\$34.81	\$9.65	\$20.73	\$0.00	\$65.19
7	80	\$37.13	\$9.65	\$21.32	\$0.00	\$68.10
8	90	\$41.77	\$8.65	\$22.51	\$0.00	\$72.93

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.48	\$9.95	\$0.00	\$0.00	\$33.43
2	55	\$25.83	\$9.95	\$6.66	\$0.00	\$42.44
3	60	\$28.18	\$9.95	\$7.26	\$0.00	\$45.39
4	65	\$30.52	\$9.95	\$7.87	\$0.00	\$48.34
5	70	\$32.87	\$9.95	\$20.32	\$0.00	\$63.14
6	75	\$35.22	\$9.95	\$20.93	\$0.00	\$66.10
7	80	\$37.57	\$9.95	\$21.53	\$0.00	\$69.05
8	90	\$42.26	\$9.95	\$22.74	\$0.00	\$74.95

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	07/01/2023	\$44.47	\$9.65	\$23.70	\$0.00	\$77.82
PAINTERS LOCAL 35 - ZONE 2	01/01/2024	\$45.02	\$9.95	\$23.95	\$0.00	\$78.92
	07/01/2024	\$46.22	\$9.95	\$23.95	\$0.00	\$80.12
	01/01/2025	\$47.42	\$9.95	\$23.95	\$0.00	\$81.32

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.24	\$9.65	\$0.00	\$0.00	\$31.89
2	55	\$24.46	\$9.65	\$6.55	\$0.00	\$40.66
3	60	\$26.68	\$9.65	\$7.14	\$0.00	\$43.47
4	65	\$28.91	\$9.65	\$7.74	\$0.00	\$46.30
5	70	\$31.13	\$9.65	\$20.13	\$0.00	\$60.91
6	75	\$33.35	\$9.65	\$20.73	\$0.00	\$63.73
7	80	\$35.58	\$9.65	\$21.32	\$0.00	\$66.55
8	90	\$40.02	\$9.65	\$22.51	\$0.00	\$72.18

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.51	\$9.95	\$0.00	\$0.00	\$32.46
2	55	\$24.76	\$9.95	\$6.66	\$0.00	\$41.37
3	60	\$27.01	\$9.95	\$7.26	\$0.00	\$44.22
4	65	\$29.26	\$9.95	\$7.87	\$0.00	\$47.08
5	70	\$31.51	\$9.95	\$20.32	\$0.00	\$61.78
6	75	\$33.77	\$9.95	\$20.93	\$0.00	\$64.65
7	80	\$36.02	\$9.95	\$21.53	\$0.00	\$67.50
8	90	\$40.52	\$9.95	\$22.74	\$0.00	\$73.21

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, NEW) *	07/01/2023	\$45.01	\$9.65	\$23.70	\$0.00	\$78.36
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 2</i>	01/01/2024	\$45.56	\$9.95	\$23.95	\$0.00	\$79.46
	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.51	\$9.65	\$0.00	\$0.00	\$32.16
2	55	\$24.76	\$9.65	\$6.55	\$0.00	\$40.96
3	60	\$27.01	\$9.65	\$7.14	\$0.00	\$43.80
4	65	\$29.26	\$9.65	\$7.74	\$0.00	\$46.65
5	70	\$31.51	\$9.65	\$20.13	\$0.00	\$61.29
6	75	\$33.76	\$9.65	\$20.73	\$0.00	\$64.14
7	80	\$36.01	\$9.65	\$21.32	\$0.00	\$66.98
8	90	\$40.51	\$9.65	\$22.51	\$0.00	\$72.67

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.78	\$9.95	\$0.00	\$0.00	\$32.73
2	55	\$25.06	\$9.95	\$6.66	\$0.00	\$41.67
3	60	\$27.34	\$9.95	\$7.26	\$0.00	\$44.55
4	65	\$29.61	\$9.95	\$7.87	\$0.00	\$47.43
5	70	\$31.89	\$9.95	\$20.32	\$0.00	\$62.16
6	75	\$34.17	\$9.95	\$20.93	\$0.00	\$65.05
7	80	\$36.45	\$9.95	\$21.53	\$0.00	\$67.93
8	90	\$41.00	\$9.95	\$22.74	\$0.00	\$73.69

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	07/01/2023	\$43.07	\$9.65	\$23.70	\$0.00	\$76.42
PAINTERS LOCAL 35 - ZONE 2	01/01/2024	\$43.62	\$9.95	\$23.95	\$0.00	\$77.52
	07/01/2024	\$44.82	\$9.95	\$23.95	\$0.00	\$78.72
	01/01/2025	\$46.02	\$9.95	\$23.95	\$0.00	\$79.92

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT**

**Effective Date - 07/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.54	\$9.65	\$0.00	\$0.00	\$31.19
2	55	\$23.69	\$9.65	\$6.27	\$0.00	\$39.61
3	60	\$25.84	\$9.65	\$6.84	\$0.00	\$42.33
4	65	\$28.00	\$9.65	\$7.41	\$0.00	\$45.06
5	70	\$30.15	\$9.65	\$19.78	\$0.00	\$59.58
6	75	\$32.30	\$9.65	\$20.35	\$0.00	\$62.30
7	80	\$34.46	\$9.65	\$20.92	\$0.00	\$65.03
8	90	\$38.76	\$9.65	\$22.06	\$0.00	\$70.47

**Effective Date - 01/01/2024**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.81	\$9.95	\$0.00	\$0.00	\$31.76
2	55	\$23.99	\$9.95	\$6.66	\$0.00	\$40.60
3	60	\$26.17	\$9.95	\$7.26	\$0.00	\$43.38
4	65	\$28.35	\$9.95	\$7.87	\$0.00	\$46.17
5	70	\$30.53	\$9.95	\$20.32	\$0.00	\$60.80
6	75	\$32.72	\$9.95	\$20.93	\$0.00	\$63.60
7	80	\$34.90	\$9.95	\$21.53	\$0.00	\$66.38
8	90	\$39.26	\$9.95	\$22.74	\$0.00	\$71.95

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	06/01/2023	\$37.46	\$9.40	\$16.89	\$0.00	\$63.75
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
	06/01/2024	\$39.69	\$9.40	\$16.89	\$0.00	\$65.98
	12/01/2024	\$41.02	\$9.40	\$16.89	\$0.00	\$67.31
	06/01/2025	\$42.41	\$9.40	\$16.89	\$0.00	\$68.70
	12/01/2025	\$43.79	\$9.40	\$16.89	\$0.00	\$70.08
	06/01/2026	\$45.23	\$9.40	\$16.89	\$0.00	\$71.52
	12/01/2026	\$46.67	\$9.40	\$16.89	\$0.00	\$72.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
PANEL & PICKUP TRUCKS DRIVER	12/01/2021	\$35.78	\$13.41	\$16.01	\$0.00	\$65.20
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B						
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	08/01/2020	\$46.11	\$9.40	\$23.12	\$0.00	\$78.63
PILE DRIVER LOCAL 56 (ZONE 2)						
For apprentice rates see "Apprentice- PILE DRIVER"						
PILE DRIVER	08/01/2020	\$46.11	\$9.40	\$23.12	\$0.00	\$78.63
PILE DRIVER LOCAL 56 (ZONE 2)						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
<b>Apprentice - PILE DRIVER - Local 56 Zone 2</b>						
<b>Effective Date - 08/01/2020</b>						
Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<div> <b>Notes:</b> 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 </div>						
<b>Apprentice to Journeyworker Ratio:1:5</b>						
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PIPELAYER		06/01/2023	\$37.71	\$9.40	\$16.89	\$64.00
LABORERS - ZONE 2		12/01/2023	\$38.61	\$9.40	\$16.89	\$64.90
For apprentice rates see "Apprentice- LABORER"						
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PIPELAYER (HEAVY & HIGHWAY)		06/01/2023	\$37.71	\$9.40	\$16.89	\$64.00
LABORERS - ZONE 2 (HEAVY & HIGHWAY)		12/01/2023	\$38.61	\$9.40	\$16.89	\$64.90
		06/01/2024	\$39.94	\$9.40	\$16.89	\$66.23
		12/01/2024	\$41.27	\$9.40	\$16.89	\$67.56
		06/01/2025	\$42.66	\$9.40	\$16.89	\$68.95
		12/01/2025	\$44.04	\$9.40	\$16.89	\$70.33
		06/01/2026	\$45.48	\$9.40	\$16.89	\$71.77
		12/01/2026	\$46.92	\$9.40	\$16.89	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
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PLUMBER & PIPEFITTER		03/01/2023	\$51.50	\$9.80	\$17.42	\$78.72
PLUMBERS LOCAL 4		09/01/2023	\$52.90	\$9.80	\$17.42	\$80.12
		03/01/2024	\$54.30	\$9.80	\$17.42	\$81.52
		09/01/2024	\$55.70	\$9.80	\$17.42	\$82.92
		03/01/2025	\$57.10	\$9.80	\$17.42	\$84.32
		09/01/2025	\$58.50	\$9.80	\$17.42	\$85.72
		03/01/2026	\$59.90	\$9.80	\$17.42	\$87.12

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - PLUMBER/PIPEFITTER - Local 4**

**Effective Date - 03/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$20.60	\$9.80	\$0.00	\$0.00	\$30.40
2	50	\$25.75	\$9.80	\$0.00	\$0.00	\$35.55
3	60	\$30.90	\$9.80	\$0.00	\$0.00	\$40.70
4	70	\$36.05	\$9.80	\$7.71	\$0.00	\$53.56
5	80	\$41.20	\$9.80	\$7.71	\$0.00	\$58.71

**Effective Date - 09/01/2023**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$21.16	\$9.80	\$0.00	\$0.00	\$30.96
2	50	\$26.45	\$9.80	\$0.00	\$0.00	\$36.25
3	60	\$31.74	\$9.80	\$0.00	\$0.00	\$41.54
4	70	\$37.03	\$9.80	\$7.71	\$0.00	\$54.54
5	80	\$42.32	\$9.80	\$7.71	\$0.00	\$59.83

**Notes:**

Steps - 2000 hrs; Step 4 w/lic 75%, Step 5 w/lic 85%  
Step 4 w/lic \$52.59, Step 5 w/lic \$57.44

**Apprentice to Journeyworker Ratio:1:3**

PNEUMATIC CONTROLS (TEMP.)	03/01/2023	\$51.50	\$9.80	\$17.42	\$0.00	\$78.72
PLUMBERS LOCAL 4	09/01/2023	\$52.90	\$9.80	\$17.42	\$0.00	\$80.12
	03/01/2024	\$54.30	\$9.80	\$17.42	\$0.00	\$81.52
	09/01/2024	\$55.70	\$9.80	\$17.42	\$0.00	\$82.92
	03/01/2025	\$57.10	\$9.80	\$17.42	\$0.00	\$84.32
	09/01/2025	\$58.50	\$9.80	\$17.42	\$0.00	\$85.72
	03/01/2026	\$59.90	\$9.80	\$17.42	\$0.00	\$87.12
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY)	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
	06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
	12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
	06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
	12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
	06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
	12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWDERMAN & BLASTER	06/01/2023	\$38.46	\$9.40	\$16.89	\$0.00	\$64.75
LABORERS - ZONE 2	12/01/2023	\$39.36	\$9.40	\$16.89	\$0.00	\$65.65
For apprentice rates see "Apprentice- LABORER"						



Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$38.46	\$9.40	\$16.89	\$0.00	\$64.75
	12/01/2023	\$39.36	\$9.40	\$16.89	\$0.00	\$65.65
	06/01/2024	\$40.69	\$9.40	\$16.89	\$0.00	\$66.98
	12/01/2024	\$42.02	\$9.40	\$16.89	\$0.00	\$68.31
	06/01/2025	\$43.41	\$9.40	\$16.89	\$0.00	\$69.70
	12/01/2025	\$44.79	\$9.40	\$16.89	\$0.00	\$71.08
	06/01/2026	\$46.23	\$9.40	\$16.89	\$0.00	\$72.52
	12/01/2026	\$47.67	\$9.40	\$16.89	\$0.00	\$73.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$35.30	\$14.75	\$16.15	\$0.00	\$66.20
	12/01/2023	\$36.12	\$14.75	\$16.15	\$0.00	\$67.02
	06/01/2024	\$36.97	\$14.75	\$16.15	\$0.00	\$67.87
	12/01/2024	\$37.92	\$14.75	\$16.15	\$0.00	\$68.82
	06/01/2025	\$38.77	\$14.75	\$16.15	\$0.00	\$69.67
	12/01/2025	\$39.72	\$14.75	\$16.15	\$0.00	\$70.62
	06/01/2026	\$40.58	\$14.75	\$16.15	\$0.00	\$71.48
	12/01/2026	\$41.53	\$14.75	\$16.15	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS 170 - Dauphinis (Bellingham)</i>	01/01/2023	\$26.40	\$10.26	\$4.75	\$0.00	\$41.41
	12/01/2023	\$27.00	\$10.76	\$5.45	\$0.00	\$43.21
	01/01/2024	\$27.00	\$10.76	\$5.45	\$0.00	\$43.21
	12/01/2024	\$27.60	\$11.26	\$6.15	\$0.00	\$45.01
	01/01/2025	\$27.60	\$11.26	\$6.15	\$0.00	\$45.01

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
RECLAIMERS	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
LABORERS - ZONE 2	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	02/01/2023	\$48.53	\$12.78	\$20.20	\$0.00	\$81.51
ROOFERS LOCAL 33	08/01/2023	\$50.03	\$12.78	\$20.20	\$0.00	\$83.01
	02/01/2024	\$51.28	\$12.78	\$20.20	\$0.00	\$84.26
	08/01/2024	\$52.78	\$12.78	\$20.20	\$0.00	\$85.76
	02/01/2025	\$54.03	\$12.78	\$20.20	\$0.00	\$87.01
	08/01/2025	\$55.53	\$12.78	\$20.20	\$0.00	\$88.51
	02/01/2026	\$56.78	\$12.78	\$20.20	\$0.00	\$89.76

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - ROOFER - Local 33**

**Effective Date -** 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.27	\$12.78	\$5.59	\$0.00	\$42.64
2	60	\$29.12	\$12.78	\$20.20	\$0.00	\$62.10
3	65	\$31.54	\$12.78	\$20.20	\$0.00	\$64.52
4	75	\$36.40	\$12.78	\$20.20	\$0.00	\$69.38
5	85	\$41.25	\$12.78	\$20.20	\$0.00	\$74.23

**Effective Date -** 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.02	\$12.78	\$5.59	\$0.00	\$43.39
2	60	\$30.02	\$12.78	\$20.20	\$0.00	\$63.00
3	65	\$32.52	\$12.78	\$20.20	\$0.00	\$65.50
4	75	\$37.52	\$12.78	\$20.20	\$0.00	\$70.50
5	85	\$42.53	\$12.78	\$20.20	\$0.00	\$75.51

**Notes:** \*\* 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1  
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.  
(Hot Pitch Mechanics' receive \$1.00 hr. above ROOFER)

**Apprentice to Journeyworker Ratio:\*\***

ROOFER SLATE / TILE / PRECAST CONCRETE	02/01/2023	\$48.78	\$12.78	\$20.20	\$0.00	\$81.76
ROOFERS LOCAL 33	08/01/2023	\$50.28	\$12.78	\$20.20	\$0.00	\$83.26
	02/01/2024	\$51.53	\$12.78	\$20.20	\$0.00	\$84.51
	08/01/2024	\$53.03	\$12.78	\$20.20	\$0.00	\$86.01
	02/01/2025	\$54.28	\$12.78	\$20.20	\$0.00	\$87.26
	08/01/2025	\$55.78	\$12.78	\$20.20	\$0.00	\$88.76
	02/01/2026	\$57.03	\$12.78	\$20.20	\$0.00	\$90.01
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER	07/01/2023	\$42.55	\$10.64	\$17.54	\$2.05	\$72.78
SHEETMETAL WORKERS LOCAL 63	01/01/2024	\$43.80	\$10.64	\$17.54	\$2.05	\$74.03
	07/01/2024	\$45.05	\$10.64	\$17.54	\$2.05	\$75.28
	01/01/2025	\$46.30	\$10.64	\$17.54	\$2.05	\$76.53

Apprentice - SHEET METAL WORKER - Local 63

Effective Date - 07/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.15	\$4.79	\$4.76	\$0.92	\$29.62
2	50	\$21.28	\$5.32	\$5.29	\$1.03	\$32.92
3	55	\$23.40	\$5.85	\$5.82	\$1.13	\$36.20
4	60	\$25.53	\$6.38	\$6.35	\$1.23	\$39.49
5	65	\$27.66	\$6.92	\$6.88	\$1.33	\$42.79
6	70	\$29.79	\$7.45	\$7.41	\$1.44	\$46.09
7	75	\$31.91	\$7.98	\$7.94	\$1.54	\$49.37
8	80	\$34.04	\$8.51	\$15.42	\$1.64	\$59.61
9	85	\$36.17	\$9.04	\$15.95	\$1.74	\$62.90
10	90	\$38.30	\$9.58	\$16.48	\$1.85	\$66.21

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.71	\$4.79	\$4.76	\$0.92	\$30.18
2	50	\$21.90	\$5.32	\$5.29	\$1.03	\$33.54
3	55	\$24.09	\$5.85	\$5.82	\$1.13	\$36.89
4	60	\$26.28	\$6.38	\$6.35	\$1.23	\$40.24
5	65	\$28.47	\$6.92	\$6.88	\$1.33	\$43.60
6	70	\$30.66	\$7.45	\$7.41	\$1.44	\$46.96
7	75	\$32.85	\$7.98	\$7.94	\$1.54	\$50.31
8	80	\$35.04	\$8.51	\$15.42	\$1.64	\$60.61
9	85	\$37.23	\$9.04	\$15.95	\$1.74	\$63.96
10	90	\$39.42	\$9.58	\$13.92	\$1.85	\$64.77

Notes:

Apprentice to Journeyworker Ratio:1:3

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2021	\$36.24	\$13.41	\$16.01	\$0.00	\$65.66
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2021	\$36.53	\$13.41	\$16.01	\$0.00	\$65.95
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 669	04/01/2021	\$43.14	\$10.55	\$16.41	\$0.00	\$70.10

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**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**

STEAM BOILER OPERATOR	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
OPERATING ENGINEERS LOCAL 4	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TERRAZZO FINISHERS	02/01/2023	\$59.29	\$11.49	\$22.34	\$0.00	\$93.12
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2023	\$61.34	\$11.49	\$22.34	\$0.00	\$95.17
	02/01/2024	\$62.59	\$11.49	\$22.34	\$0.00	\$96.42
	08/01/2024	\$64.69	\$11.49	\$22.34	\$0.00	\$98.52
	02/01/2025	\$65.99	\$11.49	\$22.34	\$0.00	\$99.82
	08/01/2025	\$68.14	\$11.49	\$22.34	\$0.00	\$101.97
	02/01/2026	\$69.49	\$11.49	\$22.34	\$0.00	\$103.32
	08/01/2026	\$71.69	\$11.49	\$22.34	\$0.00	\$105.52
	02/01/2027	\$73.09	\$11.49	\$22.34	\$0.00	\$106.92

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$29.65	\$11.49	\$22.34	\$0.00	\$63.48
2	60	\$35.57	\$11.49	\$22.34	\$0.00	\$69.40
3	70	\$41.50	\$11.49	\$22.34	\$0.00	\$75.33
4	80	\$47.43	\$11.49	\$22.34	\$0.00	\$81.26
5	90	\$53.36	\$11.49	\$22.34	\$0.00	\$87.19

Effective Date - 08/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.67	\$11.49	\$22.34	\$0.00	\$64.50
2	60	\$36.80	\$11.49	\$22.34	\$0.00	\$70.63
3	70	\$42.94	\$11.49	\$22.34	\$0.00	\$76.77
4	80	\$49.07	\$11.49	\$22.34	\$0.00	\$82.90
5	90	\$55.21	\$11.49	\$22.34	\$0.00	\$89.04

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER	06/01/2023	\$47.58	\$9.40	\$17.97	\$0.00	\$74.95
LABORERS - FOUNDATION AND MARINE	12/01/2023	\$48.83	\$9.40	\$17.97	\$0.00	\$76.20
	06/01/2024	\$50.31	\$9.40	\$17.97	\$0.00	\$77.68
	12/01/2024	\$51.78	\$9.40	\$17.97	\$0.00	\$79.15
	06/01/2025	\$53.28	\$9.40	\$17.97	\$0.00	\$80.65
	12/01/2025	\$54.78	\$9.40	\$17.97	\$0.00	\$82.15
	06/01/2026	\$56.33	\$9.40	\$17.97	\$0.00	\$83.70
	12/01/2026	\$57.83	\$9.40	\$17.97	\$0.00	\$85.20

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER	06/01/2023	\$43.70	\$9.40	\$17.97	\$0.00	\$71.07
LABORERS - FOUNDATION AND MARINE	12/01/2023	\$44.95	\$9.40	\$17.97	\$0.00	\$72.32
	06/01/2024	\$46.43	\$9.40	\$17.97	\$0.00	\$73.80
	12/01/2024	\$47.90	\$9.40	\$17.97	\$0.00	\$75.27
	06/01/2025	\$49.40	\$9.40	\$17.97	\$0.00	\$76.77
	12/01/2025	\$50.90	\$9.40	\$17.97	\$0.00	\$78.27
	06/01/2026	\$52.45	\$9.40	\$17.97	\$0.00	\$79.82
	12/01/2026	\$53.95	\$9.40	\$17.97	\$0.00	\$81.32

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2023	\$43.58	\$9.40	\$17.97	\$0.00	\$70.95
	12/01/2023	\$44.83	\$9.40	\$17.97	\$0.00	\$72.20
	06/01/2024	\$46.31	\$9.40	\$17.97	\$0.00	\$73.68
	12/01/2024	\$47.78	\$9.40	\$17.97	\$0.00	\$75.15
	06/01/2025	\$49.28	\$9.40	\$17.97	\$0.00	\$76.65
	12/01/2025	\$50.78	\$9.40	\$17.97	\$0.00	\$78.15
	06/01/2026	\$52.33	\$9.40	\$17.97	\$0.00	\$79.70
	12/01/2026	\$53.83	\$9.40	\$17.97	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$53.69	\$14.75	\$16.15	\$0.00	\$84.59
	12/01/2023	\$54.93	\$14.75	\$16.15	\$0.00	\$85.83
	06/01/2024	\$56.21	\$14.75	\$16.15	\$0.00	\$87.11
	12/01/2024	\$57.65	\$14.75	\$16.15	\$0.00	\$88.55
	06/01/2025	\$58.93	\$14.75	\$16.15	\$0.00	\$89.83
	12/01/2025	\$60.37	\$14.75	\$16.15	\$0.00	\$91.27
	06/01/2026	\$61.65	\$14.75	\$16.15	\$0.00	\$92.55
	12/01/2026	\$63.09	\$14.75	\$16.15	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2021	\$36.82	\$13.41	\$16.01	\$0.00	\$66.24
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2023	\$55.81	\$9.40	\$18.42	\$0.00	\$83.63
	12/01/2023	\$57.06	\$9.40	\$18.42	\$0.00	\$84.88
	06/01/2024	\$58.54	\$9.40	\$18.42	\$0.00	\$86.36
	12/01/2024	\$60.01	\$9.40	\$18.42	\$0.00	\$87.83
	06/01/2025	\$61.51	\$9.40	\$18.42	\$0.00	\$89.33
	12/01/2025	\$63.01	\$9.40	\$18.42	\$0.00	\$90.83
	06/01/2026	\$64.56	\$9.40	\$18.42	\$0.00	\$92.38
	12/01/2026	\$66.06	\$9.40	\$18.42	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2023	\$57.81	\$9.40	\$18.42	\$0.00	\$85.63
	12/01/2023	\$59.06	\$9.40	\$18.42	\$0.00	\$86.88
	06/01/2024	\$60.54	\$9.40	\$18.42	\$0.00	\$88.36
	12/01/2024	\$62.01	\$9.40	\$18.42	\$0.00	\$89.83
	06/01/2025	\$63.51	\$9.40	\$18.42	\$0.00	\$91.33
	12/01/2025	\$65.01	\$9.40	\$18.42	\$0.00	\$92.83
	06/01/2026	\$66.56	\$9.40	\$18.42	\$0.00	\$94.38
	12/01/2026	\$68.06	\$9.40	\$18.42	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2023	\$47.88	\$9.40	\$18.42	\$0.00	\$75.70
	12/01/2023	\$49.13	\$9.40	\$18.42	\$0.00	\$76.95
	06/01/2024	\$50.61	\$9.40	\$18.42	\$0.00	\$78.43
	12/01/2024	\$52.08	\$9.40	\$18.42	\$0.00	\$79.90
	06/01/2025	\$53.58	\$9.40	\$18.42	\$0.00	\$81.40
	12/01/2025	\$55.08	\$9.40	\$18.42	\$0.00	\$82.90
	06/01/2026	\$56.63	\$9.40	\$18.42	\$0.00	\$84.45
	12/01/2026	\$58.13	\$9.40	\$18.42	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2023	\$49.88	\$9.40	\$18.42	\$0.00	\$77.70
	12/01/2023	\$51.13	\$9.40	\$18.42	\$0.00	\$78.95
	06/01/2024	\$52.61	\$9.40	\$18.42	\$0.00	\$80.43
	12/01/2024	\$54.08	\$9.40	\$18.42	\$0.00	\$81.90
	06/01/2025	\$55.58	\$9.40	\$18.42	\$0.00	\$83.40
	12/01/2025	\$57.08	\$9.40	\$18.42	\$0.00	\$84.90
	06/01/2026	\$58.63	\$9.40	\$18.42	\$0.00	\$86.45
	12/01/2026	\$60.13	\$9.40	\$18.42	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	12/01/2021	\$36.24	\$13.41	\$16.01	\$0.00	\$65.66
VOICE-DATA-VIDEO TECHNICIAN <i>ELECTRICIANS LOCAL 96</i>	09/04/2022	\$34.19	\$12.20	\$15.91	\$0.00	\$62.30

**Apprentice - VOICE-DATA-VIDEO TECHNICIAN - Local 96**

**Effective Date - 09/04/2022**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.10	\$12.20	\$4.27	\$0.00	\$33.57
2	55	\$18.80	\$12.20	\$4.32	\$0.00	\$35.32
3	60	\$20.51	\$12.20	\$15.50	\$0.00	\$48.21
4	65	\$22.22	\$12.20	\$15.55	\$0.00	\$49.97
5	70	\$23.93	\$12.20	\$15.60	\$0.00	\$51.73
6	75	\$25.64	\$12.20	\$15.65	\$0.00	\$53.49
7	80	\$27.35	\$12.20	\$15.70	\$0.00	\$55.25
8	85	\$29.06	\$12.20	\$15.75	\$0.00	\$57.01

**Notes:**

**Apprentice to Journeyworker Ratio:1:1**

WAGON DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY &amp; HIGHWAY)</i>	06/01/2023	\$37.71	\$9.40	\$16.89	\$0.00	\$64.00
	12/01/2023	\$38.61	\$9.40	\$16.89	\$0.00	\$64.90
	06/01/2024	\$39.94	\$9.40	\$16.89	\$0.00	\$66.23
	12/01/2024	\$41.27	\$9.40	\$16.89	\$0.00	\$67.56
	06/01/2025	\$42.66	\$9.40	\$16.89	\$0.00	\$68.95
	12/01/2025	\$44.04	\$9.40	\$16.89	\$0.00	\$70.33
	06/01/2026	\$45.48	\$9.40	\$16.89	\$0.00	\$71.77
	12/01/2026	\$46.92	\$9.40	\$16.89	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						



Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2023	\$54.28	\$14.75	\$16.15	\$0.00	\$85.18
	12/01/2023	\$55.53	\$14.75	\$16.15	\$0.00	\$86.43
	06/01/2024	\$56.83	\$14.75	\$16.15	\$0.00	\$87.73
	12/01/2024	\$58.28	\$14.75	\$16.15	\$0.00	\$89.18
	06/01/2025	\$59.58	\$14.75	\$16.15	\$0.00	\$90.48
	12/01/2025	\$61.03	\$14.75	\$16.15	\$0.00	\$91.93
	06/01/2026	\$62.33	\$14.75	\$16.15	\$0.00	\$93.23
	12/01/2026	\$63.78	\$14.75	\$16.15	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS LOCAL 4</i>	03/01/2023	\$51.50	\$9.80	\$17.42	\$0.00	\$78.72
	09/01/2023	\$52.90	\$9.80	\$17.42	\$0.00	\$80.12
	03/01/2024	\$54.30	\$9.80	\$17.42	\$0.00	\$81.52
	09/01/2024	\$55.70	\$9.80	\$17.42	\$0.00	\$82.92
	03/01/2025	\$57.10	\$9.80	\$17.42	\$0.00	\$84.32
	09/01/2025	\$58.50	\$9.80	\$17.42	\$0.00	\$85.72
	03/01/2026	\$59.90	\$9.80	\$17.42	\$0.00	\$87.12
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

\*\* Multiple ratios are listed in the comment field.

\*\*\* APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

\*\*\*\* APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

**SECTION 01 01 00**

**SUMMARY OF WORK**

**PART 1 – GENERAL**

**1.01. CONTRACT DOCUMENTS**

- A. The Contract Documents include the Drawings as enumerated on the Title Drawing, the general provisions of Contract, including General and Supplemental Conditions, and the provisions of this Project Manual and Addenda represent and describe the work and requirements of the Project.

**1.02. GENERAL REQUIREMENTS**

- A. Attention is directed to the general and supplementary conditions and Division 1 including all sub-divisions therein attached in this document and drawings, which are made a part of this section.

**1.03. SUBSTANTIAL COMPLETION**

- A. The Date of Substantial Completion shall be September 8, 2023.
- B. The Contractor shall obtain a Certificate of Occupancy on or before the Date of Substantial Completion.

**1.04. PROJECT DESCRIPTION**

- A. The project scope generally includes removing the existing overhead garage door, enlarging the existing overhead door opening, and any other related work necessary to complete all the Work of the respective Sections and indicated on the drawings.

**1.05. RELATED WORK UNDER OTHER CONTRACTS**

- A. Work by other contractors, which will be under separate contract, may take place during the work of this contract adjacent to and within the work areas of this site.
- B. Cooperate fully with other contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying work under this contract.

**1.06. QUALITY ASSURANCE**

- A. Requirements of Regulatory Agencies; perform demolition work in accordance with applicable rules, regulations, codes, and ordinances of local, state, and federal authorities.
- B. Obtain and pay for necessary building permits, licenses and certificates and give notices as required during the performance of the Work.
- C. Provide 4 copies of shop drawings and literature for Architects review and approval for the items referenced in the specifications.
- D. Provide schedule and work plan within one week of the contract signing.

- E. Attend weekly meetings (or as scheduled) with the Architect and Owner's Representative as scheduled.
- F. Provide all Closeout documents including final acceptance, warranties, guaranties, and bonds.

**1.07. RELATED WORK UNDER OTHER CONTRACTS**

- A. Work by other contractors, which will be under separate contract, may take place during the work of this contract adjacent to and within the work areas of this site. This work, under another contract, shall be coordinated between the different General Contractors. The security system will be installed by the Owner under separate Contract and the general Contractor shall work with the Owners vendor to coordinate their work with the General contractor's work.
- B. Cooperate fully with separate contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying the work under this contract.

**1.08. WORK SEQUENCE SCHEDULING AND COORDINATION**

- A. The Work shall be sequenced, scheduled, and coordinated to achieve the Date of Substantial Completion.
  - 1. All deliveries must be scheduled at a minimum of 48 hours in advance with the Architect and Owner.
  - 2. All existing utility tie-ins must be scheduled and coordinated at a minimum of 72 hours in advance with the Architect and Owner.
- B. The General Contractor and each Sub-Contractor shall establish and increase or decrease as appropriate the workforce, days of work, number of shifts, work hours, materials, tools, and equipment needed to maintain and achieve the Date of Substantial Completion.
- C. The General Contractor and each Sub-Contractor shall increase the workforce, days of work, number of shifts, work hours, materials, tools, and equipment needed to maintain the Date of Substantial Completion as necessary to accommodate any additional work authorized by Construction Change Directives and Change Orders modifications.
- D. General Contractor will be responsible for the proper conduct of the work to ensure that all trades work together, and in harmony, to achieve substantial and final completion as specified.

**1.09. WORK HOURS**

- A. Normal working hours are to be Monday through Friday from 7:00 AM to 3:30 PM, except Legal Holidays. Any working hours outside of these times shall be considered "Extended Hours" and treated as described below.
- B. Extended work hours shall require prior scheduling and coordination with the Architect and Owner at a minimum of 48 hours in advance. Extended work hours on Sundays and Legal Holidays may also require a permit from the Fire Department.
  - 1. Upon permission from the Architect and Owner, and prior to the start of any extended work, pay for all fees and obtain through the City of Worcester Fire Department a work permit for all Sundays and Legal Holidays.

- C. The Contractor shall pay any overtime required for the City's Clerk of Works/Owner's Representative to be on site for any work performed outside of normal working hours as defined above. No work shall take place outside of normal working hours without prior approval and the City's Clerk of Works/Owner's Representative on site.
- D. Any project related activities may not interfere with the enjoyment and use of abutting areas within the building or adjacent properties during any extended work hours.

**1.10. CONTRACTOR USE OF THE PREMISES**

- A. The General Contractor shall have use of the site from date of contract to the Date of Substantial Completion as described above in the Work Hours paragraph.
- B. Construction vehicle access and deliveries to the project shall be made during working hours.
- C. All contractor personnel shall enter and exit the construction area through Access Driveway.
- D. Do not close or obstruct the parking lot, driveways, or sidewalks without the proper permit. Conduct operations with minimum traffic interference.
- E. The General Contractor shall also be responsible for returning the public areas adjacent to each work area to their original state prior to the start of work in that area.
- F. The use of internal combustion engine driven power equipment is prohibited within the building. Alternate power sources, i.e., generators and compressors, may be placed outside the building to provide power to equipment. Placement of any alternate power sources shall be subject to prior Architect and Owner approval.
- G. There will be no washing of any vehicles at the project site. The contractor shall make necessary provisions to accommodate this work off site.
- H. All cleaning and washing of tools and/or equipment shall be performed in areas designated only by the Architect. This will be strictly enforced.

**1.11. CONTRACTOR USE OF CITY STREETS**

- A. The General Contractor's personnel, and all other personnel employed on the project, shall limit their parking on the site to within the areas designated for construction parking and as permitted by the General Contractor. Additionally, Contractor personnel may park as legally allowed within City Limits. Parking on street sidewalks is prohibited.
- B. Driveway entrances, walks, and yards to abutting properties shall be always kept unobstructed.

**1.12. WORK CONDITIONS**

- A. Neither the General Contractor, nor Sub-Contractors at any level, nor their employees shall bring illegal substances or alcoholic beverages on the premises.
- B. Vulgar, abusive, obscene language or behavior will not be tolerated.
- C. The Contractor's personnel engaging in the above shall be removed from the jobsite.
- D. Radios or any type of "music" broadcasting systems are not allowed.
- E. This site is smoke-free; therefore, smoking is prohibited within the site limits.

**1.13. PROJECT MANAGER, SUPERINTENDENTS, FIELD ENGINEER, AND FOREMAN**

- A. The General Contractor shall provide a qualified General Superintendent, who shall be present, full time, on site daily during all work in progress until the Date of Substantial Completion, and for such additional time thereafter as the Architect may determine. Only under extenuating circumstances, with the approval of the Architect and Owner, will the Contractor be allowed to substitute for the General Superintendent prior to the date of Final Completion.
- B. The General Superintendent shall supervise and direct the activities of other superintendents and foremen on site. He shall not perform the work of foremen, tradesmen, or home office staff.
- C. Each filed sub-bidder and each subcontractor shall provide a Lead Foreman, responsible to be on site full time during the workday.
- D. Each foreman, in addition to his regular duties shall be responsible for establishing, maintaining, and providing record drawings, which are required to be updated prior to submitting the current period's draft Application for Payment.
- E. The General Superintendent and Lead Foreman shall not be discharged or changed without prior written consent of the Architect, which will not be unreasonably withheld. The Architect will require that all as-built information be updated and current prior to granting consent.

**1.14. DAILY REPORTS AND WEEKLY OUTLINE SCHEDULE**

- A. The General Superintendent shall provide a "Daily Report" to the Clerk of Works containing the following:
  - 1. Name and manpower of each Contractor filed Sub-Contractor, and Sub Contractor.
  - 2. Equipment used.
  - 3. Delivery of products received on site.
  - 4. Weather conditions at start, and end of each day and any significant changes or events during the day.
  - 5. Significant problems, hazards or accidental injury occurring during each shift.
  - 6. Summary of progress made each day.
- B. A photocopy may be made of the same "Daily Report," containing the information above, that is used by the General Superintendent. The General Superintendent may obscure confidential portions of his "Daily Report" if desired. Reports are due the following day.
- C. The Superintendent shall provide the Clerk of Works a written "Weekly (look ahead) Outline Schedule" of work activities planned at the beginning of each week, for that week. The "Weekly Outline Schedule" may be a simple listing of each trade's activities delineating areas where work is to be scheduled. Note any significant milestones.

**1.15. CERTIFICATE OF SUBSTANTIAL COMPLETION**

- A. The Architect shall issue a Certificate of Substantial Completion for the work when and if all the following conditions have been met:
  - 1. The work is sufficiently complete to allow the Owner beneficial use of the premises. The work remaining to be done is not a danger to the proposed occupants and is of a minor nature.
  - 2. The work is sufficiently complete that the Architect may make affidavits to the Building Official as required by Controlled Construction provisions of the Building Code.

3. The mechanical and electrical systems are fully operational. Required inspections and tests have been successfully completed, and the Owner has been provided instructions regarding operation and maintenance of mechanical and electrical systems in the building.
4. The Contractor has made notifications required to pay cost of final billing for utilities and termination of property insurance.
5. The Owner has made notifications required to assume the future cost of utilities and provide property insurance.
6. The Building Official has issued a Certificate of Occupancy without restrictions or conditions relating to the contractor's work.

**1.16. CITY OF WORCESTER ORDINANCES, LICENSES, PERMITS, AND FEES**

- A. All Contractors shall comply with City Ordinances which may affect the work of this contract, and which have not been previously covered in the Contract Documents. Requirements and fees listed are those in effect as of this writing and each Contractor shall be responsible for verifying the requirements and fee cost as currently in effect and throughout the duration of this project. This includes, but is not limited to, the following:

1. Worcester Police Department:
  - a. Police Details  
Hourly rate for one-half day or full day.
  - b. Permits for Sunday and Holiday work.  
Fee Required.
2. Department of Public Works, Permits Division
  - a. Street Opening Permit Bond  
\$ 5,000.00
  - b. Barricade Placement by DPW  
1st \$85 per day  
Each additional \$ 40 per day
  - c. Drainlayers License  
New \$ 200.00  
Annual Renewal \$ 100.00
  - d. Drain Permit  
\$ 180.00
  - e. Main Inspection  
\$ 2.90 per Foot
  - f. Assessment  
To be Determined
  - g. Plan Review  
\$ 100.00
  - h. Street Obstruction  
\$ 150.00 each
  - i. Street Obstruction (Blanket Permit)  
\$ 1,000.00 per year

- j. Street Opening
    - Pavement older than 5 years \$ 156.00
    - Pavement 5 years old or less \$ 300.00
  - k. Driveway Opening
    - Permit \$ 156.00
  - l. Wastewater Discharge
    - Permit \$ 250.00
    - Inspection \$ 400.00
    - Sewer uses \$ 6.29/CCF
  - m. Water meter, etc. Contact the Water Department at 508-799-1492.
  - n. Traffic and Parking. Contact Department at 508-799-1468.
  - 3. Worcester Fire Department
    - a. Fire and Smoke Alarm
    - b. Automatic Sprinkler and Standpipes
    - c. Contact Worcester Fire Department at 508-799-1826.
  - 4. Department of Inspectional Services
    - a. Building Permit
      - Based on total contract price
      - \$11/\$1,000 up to the first million dollars.
      - \$8.00 per each \$1,000.00 over \$1,000,000.
      - Orders of Building Official under Chapter 1, 780 CMR.
      - Ticket violation under Chapter 33, 780 CMR.
    - b. Trash Control
      - Ticket for Violations
    - c. Environmental Control
      - Air, Water, Noise Pollution - Ticket for Violations
      - Conservation Commission Enforcement Officer
- 1.17. UTILITY COMPANY BACKCHARGES
- A. The Electric back charge from N-GRID or Verizon Communications are not known at this time, the Electrical Contractor shall file for all N-Grid and Verizon permits and submit all data and documents as required and shall pay the required permit and inspection fees. The actual cost of the N-Grid back charge shall be paid by the City directly. All related inspection costs or other fees shall be paid as part of the Contract.

**PART 2 – PRODUCTS                      NOT USED**

**PART 3 – EXECUTION                      NOT USED**

**END OF SECTION**

**SECTION 01 04 50**

**CUTTING AND PATCHING**

**PART 1 – GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02 SUMMARY**

- A. This Section specifies administrative and procedural requirements for cutting and patching work not specified elsewhere.
- B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
  - 1. Requirements of this Section apply to all Sections of the Specifications, including mechanical and electrical installations.
- C. Any finished new work required to be cut out due to lack of coordination and scheduling, will be repaired by the trade causing cutting and patching to be done. This work will be done at no additional cost to the Owner.

**1.03 SUBMITTALS**

- A. Cutting and Patching Proposal: Where approval of procedures for cutting and patching is required before proceeding, submit a proposal describing procedures seven (7) days in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:
- B. Describe the extent of cutting and patching required. Show how it will be performed and indicate why it cannot be avoided.
  - 1. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
  - 2. List products to be used and firms or entities that will perform Work.
  - 3. Indicate dates when cutting and patching will be performed.
  - 4. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
  - 5. Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with the original structure.
  - 6. Approval by the Architect to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of unsatisfactory work.



**1.04 QUALITY ASSURANCE**

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
  - 1. Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:
    - a. Foundation construction.
    - b. Bearing walls.
    - c. Structural concrete.
    - d. Lintels.
    - e. Structural decking.
    - f. Miscellaneous structural metals.
    - g. Piping, ductwork, and equipment.
- B. Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.
  - 1. Obtain approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:
    - a. Primary operational systems and equipment.
    - b. Air or smoke barriers.
    - c. Water, moisture, or vapor barriers.
    - d. Membranes and flashing.
    - e. Control systems.
    - f. Communication systems.
- C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.
  - 1. If possible, retain the original installer or fabricator to cut and patch the following categories of exposed Work, or if it is not possible to engage the original installer or fabricator, engage another recognized experienced and specialized firm:
    - a. Acoustical ceilings.
    - b. Carpeting.
    - c. Vinyl flooring.

**1.05 WARRANTY**

- A. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with material in such a manner so as not to void any existing warranties.

**PART 2 – PRODUCTS NOT USED**

**PART 3 – EXECUTION NOT USED**

**END OF SECTION**

**SECTION 01 20 00**

**PROJECT MEETINGS**

**PART 1 – GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02 SUMMARY**

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
  - 1. Pre-Construction Conference.
  - 2. Pre-Installation Conference.
  - 3. Bi-Weekly Progress Meetings.
  - 4. Coordination Meetings.
  - 5. Project Closeout Conference.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section 01 29 00 “Applications for Payment” for procedures on submitting requisitions.
  - 2. Division 1 Section 01 31 00 “Project Coordination” for procedures for coordinating project meetings with other construction activities.
  - 3. Division 1 Section 01 33 00 “Submittal Procedures” for submitting the Contractor's Construction Schedule.
  - 4. Division 1 Section 01 77 00 “Project Closeout” for procedures and issues surrounding Project Completion.

**1.03 PRE-CONSTRUCTION CONFERENCE**

- A. Schedule a pre-construction conference before starting construction, immediately after execution of the Agreement. The conference is to be held at the Project Site, or other agreed upon location, at a time convenient to both the Owner and Architect. Conduct the meeting to review responsibilities and personnel assignments. Submit agenda to Architect and Owner three (3) days prior to meeting date.
- B. Attendees: Authorized representatives of the Owner, Architect, and their consultants; the Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
  - 1. Introduction to All Project Members.
  - 2. Distribution of Contract Documents.
  - 3. Procedures Outlined for Contract Compliance Issues.
  - 4. Tentative Construction Schedule; Making Notes of Critical Dates.

5. Critical Work Sequencing.
  6. Pre-Installation Conferences.
  7. Work Hours.
  8. Use of the Premises.
  9. Deliveries.
  10. Security Procedures.
  11. Parking and Site Access Issues.
  12. Office, Work, and Storage Areas.
  13. Housekeeping & Cleaning of Construction Areas.
  14. Safety Procedures.
  15. First Aid.
  16. Procedures for Creating Monthly Cash Flow/Schedule.
  17. Procedures for processing Draft Application for Payment Periodic Submittals Certification Statement.
  18. Procedures for processing Applications for Payment.
  19. Procedures for RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
  20. Procedures for Keeping Logs on RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
  21. Project Coordination Procedures & Drawings.
  22. Project Meetings & Meeting Minutes.
  23. Unit Prices.
  24. Procedures for Submittals.
  25. Quality Control, Inspections, and Testing.
  26. Temporary Facilities.
  27. Preparation of Project Closeout Documents.
- D. The Contractor shall record and promptly distribute minutes of this meeting to all project members (in attendance or not), including the Architect and Owner, and as additionally directed by the Architect.
1. Meeting Minutes shall be in a standard type-written format to remain consistent for every project meeting and include, but not limited to, the following items:
    - a. Detailed notes from all discussions of project business items in chronological order.
    - b. Updated Project Contractor, Subcontractor, Vendor List.
    - c. Updated Construction Schedule.
- 1.04 PRE-INSTALLATION CONFERENCES
- A. Conduct a pre-installation conference at the Project Site before each construction activity that requires coordination with other constructions.
- B. Attendees: The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the Architect of scheduled meeting dates.
1. Review the progress of other construction activities and preparations for the activity under consideration at each pre-installation conference, including requirements for the following:
    - a. Contract Documents.
    - b. Options.
    - c. Related Change Orders.

- d. Purchases.
  - e. Deliveries.
  - f. Shop Drawings, Product Data, and quality-control samples.
  - g. Review of mockups or finish samples.
  - h. Possible conflicts.
  - i. Compatibility problems.
  - j. Time schedules.
  - k. Weather limitations.
  - l. Manufacturer's recommendations.
  - m. Warranty requirements.
  - n. Compatibility of materials.
  - o. Acceptability of substrates.
  - p. Temporary facilities.
  - q. Existing Occupancies.
  - r. Space and access limitations.
  - s. Governing regulations.
  - t. Safety.
  - u. Inspecting and testing requirements.
  - v. Required performance results.
  - w. Recording requirements.
  - x. Protection.
- 2. The Contractor shall record significant discussions and agreements and disagreements of each conference, and the approved schedule. The Contractor shall promptly distribute the record of the meeting to everyone concerned, including the Owner and the Architect.
  - 3. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

#### 1.05 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project Site weekly. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request. General Contractor to record minutes of all meetings.
- B. Attendees: In addition to representatives of the Owner and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
  - 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

2. Review the present and future needs of each entity present, including the following:
  - a. Interface Requirements.
  - b. Time & Project Progress.
  - c. Work Hours.
  - d. Updated Weekly Look-Ahead Schedule.
  - e. Critical Work Sequencing.
  - f. Off-Site Fabrication Problems.
  - g. Updated Pre-Installation Conference Schedule.
  - h. Deliveries.
  - i. Use of the Premises.
  - j. Security Procedures.
  - k. Parking Issues & Snow Removal.
  - l. Office, Work, and Storage Areas.
  - m. Housekeeping & Cleaning of Construction Areas.
  - n. Safety Procedures.
  - o. First Aid.
  - p. Draft Application for Payment Periodic Submittals Certification Statement (At Appropriately Timed Meeting Each Month).
  - q. Updated Submittal, RFI, SI, RFP, COP, CCD, and CO Logs.
  - r. New Submittals, RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
  - s. Any Project Coordination Issues or Drawings.
  - t. Quality Control, Inspections, and Testing.
  - u. Temporary Facilities.
  - v. Preparation of Project Closeout Documents.
3. The Contractor shall record and promptly distribute minutes of this meeting to all project members (in attendance or not), including the Architect and Owner, and as additionally directed by the Architect.
  - a. Meeting Minutes shall be in a standard type-written format to remain consistent for every project meeting and include, but not limited to, the following items:
    - 1) Detailed notes from all discussions of project business items in chronological order.
    - 2) Updated Project Contractor, Subcontractor, Vendor List.
    - 3) Updated Construction Schedule.
    - 4) Updated Weekly Look-Ahead Schedule.
    - 5) Updated Submittal, RFI, SI, RFP, COP, CCD, and CO Logs.

**1.06 COORDINATION MEETINGS**

- A. Conduct coordination meetings with all trades convenient for all parties involved. In addition, conduct coordination meetings when requested by the Architect or Clerk of Works.

**1.07 TIME OF PROGRESS AND COORDINATION MEETINGS**

- A. Conduct both meetings weekly on a day agreeable to all parties, at a designated location at the site, or other agreed upon location.

**1.07 PROJECT CLOSEOUT CONFERENCE**

- A. The Project Close-Out Conference shall be conducted at a time convenient for all parties involved prior to Substantial Completion. Refer to Section 01700 – Project Closeout for additional information for requirements.

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 01 25 00**

**SUBSTITUTION PROCEDURES**

**PART 1 – GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02 SUMMARY**

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. References Standards and Definitions: Refer to Section 014200 "Reference" for applicability of industry standards to products specified.
  - 1. Requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule are included under Section 013300 "Submittal Procedures".
  - 2. Procedural requirements governing the Contractor's selection of products and product options are included under Section 016000 "Product Requirements".

**1.03 DEFINITIONS**

- A. Definitions used in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered requests for substitutions. The following are not considered to be requests for substitutions:
  - 1. Specified options of products and construction methods included in the Contract Documents.
  - 2. The Contractor's determination of, and compliance with, governing regulations and orders issued by governing authorities.

**1.04 SUBMITTALS**

- A. Substitution Request Submittal: Requests for substitution will be considered if received within two (2) days after commencement of the Work. Requests received more than two (2) days after commencement of the Work may be considered or rejected at the discretion of the Architect.
  - 1. Submit three (3) copies of each request for substitution for consideration. Submit requests in the form and according to procedures required for Change-Order Proposals.
  - 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
  - 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
    - a. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.



- b. Samples, where applicable or requested.
  - c. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
  - d. Cost information, including a proposal of the net change, if any in the Contract Sum.
  - e. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
4. Architect's Action: Within five (5) days of receipt of a request for substitution the Architect will request additional information or documentation for evaluation necessary for the evaluation of the request. Within five (5) days of receipt of the request, or of receipt of additional information or documentation, whichever is later, the Architect will notify the Contractor of acceptance or rejection of the substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name. Acceptance will be in the form of a Change Order when a change in the Contract Sum or Contract Time is required; or in the form of the Architect's Supplementary Instructions when no change to the Contract Sum or Time is required.

#### 1.05 WORK CONDITIONS / SEQUENCE

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

### **PART 2 – PRODUCTS**

#### 2.01 SUBSTITUTIONS

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Conditions: The Architect will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect. If the following conditions are not satisfied, the Architect will return the requests without action except to record non-compliance with these requirements.
  - 1. Extensive revisions to the Contract Documents are not required.
  - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
  - 3. The request is timely, fully documented, and properly submitted.
  - 4. The request is directly related to an "or-equal" clause or similar language in the Contract Documents.
  - 5. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  - 6. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.

7. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
8. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

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**SECTION 01 26 00**

**CONTRACT MODIFICATION PROCEDURES**

**PART 1 – GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02 SUMMARY**

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections: The following sections contain requirements that relate to this Section:
  - 1. Division 1 Section 012900 "Payment Procedures" for administrative procedures governing applications for payment.
  - 2. Division 1 Section 013300 "Submittal Procedures" for requirements for the Contractor's Construction Schedule.
  - 3. Division 1 Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after award of the Contract.

**1.03 MINOR CHANGES IN THE WORK**

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect on the City's Form of Supplemental Instructions.

**1.04 REQUEST FOR PROPOSAL**

- A. Owner initiated Request for Proposal: Proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time will be issued by the Architect, with a detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.
  - 1. Proposal requests issued by the Architect are for information only. Do not consider them an instruction either to stop work in progress, or to execute the proposed change.

**1.05 PROPOSED CHANGE ORDER**

- A. Proposed Change Order: Using the form at the end of this section submit your proposal for the adjustment to the Contract Sum or Contract Time in response to a Request for Proposal or for Contractor initiated request for a change with Proposed Change Order.
  - 1. Unless otherwise indicated in the Request For Proposal, within twenty (20) days of receipt of the proposal request, submit to the Architect for the Owner's review an estimate of cost necessary to execute the proposed change.
    - a. Include a list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.

- b. Indicate delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
  - B. Contractor initiated request for change with Proposed Change Order: When latent or other unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
    - 1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
      - a. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
      - b. Indicate delivery charges, equipment rental, and amounts of trade discounts.
      - c. Comply with requirements in Section 01631 "Product Substitutions" if the proposed change in the Work requires the substitution of one product or system for a product or system specified.

**1.06 ALLOWANCES**

- A. Allowance Adjustment: Base each Change Order Proposal Request for an allowance cost adjustment solely on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place, with reasonable allowances, where applicable, for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
  - 1. Include installation costs in the purchase amount only were indicated as part of the allowance.
  - 2. When requested, prepare explanations and documentation to substantiate the margins claimed.
  - 3. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit, within twenty (20) days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Claims submitted later than twenty (20) days will be rejected.
  - 1. The Change Order cost amount shall not include the Contractor's indirect expense except when it is clearly demonstrated that either the nature or scope of work required was changed from that which could have been foreseen from information in Contract Documents.
  - 2. No change to the Contractor's indirect expense is permitted for selection of higher or lower priced materials or systems of the same scope and nature as originally indicated.

**1.07 CONSTRUCTION CHANGE DIRECTIVE**

- A. A Construction Change Directive shall be issued for all work involving a change in contract cost or time. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. The Construction Change Directive will contain a complete description of the change in the Work and designate the method to be followed to determine change in the Contract Sum or Contract Time or is for a lump sum amount approved by the Architect.
- B. Documentation: Maintain detailed records on a time, and material basis of work required by the Construction Change Directive, if so, directed by the Architect.
  - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**1.08 CHANGE ORDER PROCEDURES**

- A. Upon the Owner's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the Owner and Contractor.

**1.09 OVERHEAD AND PROFIT**

- A. Overhead and Profit will be as noted elsewhere in these specifications.
  - 1. Labor rates shall not exceed those shown in the contract specifications as set forth by the Department of Labor and Industries.
- B. In reviewing Change Orders, the Architect will exercise his right to request a complete breakdown from the contractor showing exact costs for labor and material, as well as delivery slips and invoices from suppliers and other subcontractors.

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
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**SECTION 012900**

**PAYMENT PROCEDURES**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.
- B. Related Sections: Sections which contain requirements that relate to this Section include, but are not limited to the following:
  - 1. Section 013300 – Submittal Procedures

**1.02. SUMMARY**

- A. This Section specifies administrative and procedural requirements governing the Progress Schedule, Schedule of Values, and Contractor's Applications for Payment.
  - 1. Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, List of Subcontracts, and Submittal Schedule.
- B. The Contractor's Construction Schedule and Submittal Schedule are included in Section 013300 "Submittals".

**1.03. PROGRESS SCHEDULE**

- A. Prepare the Progress Schedule in accordance with Article 8, Paragraphs 8.2.3 and 8.2.4 of the General Conditions for approval by the Architect.
  - 1. The Progress Schedule shall conform to the requirements in Section 013300, paragraph 1.4, Contractor's Progress Schedule, and the sample bound in the paragraph.

**1.04. SCHEDULE OF VALUES**

- A. Coordinate preparation of the Schedule of Values with preparation of the Progress Schedule.
  - 1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
    - a. Contractor's Progress Schedule.
    - b. Application for Payment forms.
    - c. List of products.
    - d. Schedule of allowances, if any.
    - e. Schedule of alternates, if any.
    - f. Schedule of unit prices, if any.
    - g. List of products.
    - h. List of principal suppliers and fabricators.
    - i. Schedule of submittals.
  - 2. Submit the Schedule of Values to the Architect as soon as possible, but no later than seven (7) days before the date scheduled for submittal of the initial Application for Payment.



- B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values. Provide at least one (1) line item for each Specification Section. Coordinate with the Architect for exact breakdown of major categories of work including, but not limited to major equipment and project closeout submittals.
1. Include the following Project identification on the Schedule of Values:
    - a. Project name and location.
    - b. Name of the Architect.
    - c. Project number.
    - d. Contractor's name and address.
    - e. Date of submittal.
  2. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:
    - a. Generic name.
    - b. Related Specification Section.
    - c. Description of Work.
    - d. Name of subcontractor.
    - e. Name of manufacturer or fabricator.
    - f. Name of supplier.
    - g. Change Orders (numbers) that have affected value.
    - h. Dollar value to nearest dollar.
    - i. Percentage of Contract Sum to the nearest percent, adjusted to total 100 percent.
  3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Breakdown shall be done by sequence. Coordinate with the Project Manual Table of Contents. Break principal subcontract amounts down into several line items, including but not limited to major equipment and project closeout submittals.
  4. Do not round amount off to the nearest whole dollar; carry all amounts out to the two (2) decimal places and the totals shall equal the Contract Sum.
  5. For each part of the Work where an Application for Payment may include materials or equipment, purchased, or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
  6. Margins of Cost: Show line items for indirect costs, and margins on actual costs, only to the extent that such items will be listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete, including its total cost and proportionate share of general overhead and profit margin for each item.
    - a. Temporary facilities, project closeout submittals, and other major cost items that are not direct cost of actual work-in-place shall be shown as separate line items in the Schedule of Values or distributed as general overhead expense, at the Contractor's option.
  7. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Application for Payment when Change Orders or Construction Change Directives result in a change to the Contract Sum.

**1.05. APPLICATIONS FOR PAYMENT**

- A. Draft Application Preparation: Submit three (3) **draft** copies of the (current) Application for Payment at the weekly project meeting for Architect's review seven (7) days in advance of the "Payment Application Time" as indicated in the Agreement.
  - 1. Draft Application for Payment transmittal shall include a fully executed Draft Cover Sheet or **Periodic Submittal Certification Statement** on Contractor letterhead (bound at the end of this section hereafter) certifying that the following Periodic Submittals are current for the appropriate period:
    - a. Originals of All Waivers of Mechanics Lien & Corresponding Logs Covering Status of All Waivers
    - b. Certified payrolls
    - c. Contract Compliance Submittals
    - d. Insurance and transfer title certificates for any material stored off site.
    - e. Updated as-built drawings of record reflecting Work for the current Application period.
- B. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
  - 1. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.
- C. Payment Application Times: Each progress payment date is as indicated in the Agreement. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- D. Payment Application Cover Sheet Form: Complete the enclosed **Application and Certification for Payment Cover Sheet** on Contractor letterhead (bound at the end of this Section hereafter) and transmit with each Payment Application Form submittal.
- E. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment. **No exceptions will be made.**
- F. Application Preparation: Complete every entry on the form, including notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.
  - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.
  - 2. Include only amounts of approved and fully executed Change Orders. Obtain approval from the Architect prior to inclusion into the Application.
  - 3. Each Application for Payment **must** be accompanied by an updated Progress Schedule. The format to which is subject to the Architect's approval.
- G. Payment for materials and/or equipment stored off site shall be considered upon the Owner's approved submission by the Contractor bill(s) of sale or such other documentation or procedures satisfactory to the Owner to establish the Owner's clear and legal title to such materials and/or equipment or otherwise provided to protect the Owner's interest. This shall include applicable insurance and transportation to the project site for those materials and/or equipment suitably stored off site under consideration for payment.

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1. Any Contractor making an application for payment pursuant to Section 00200 – General Conditions, paragraph 9.3.2, shall provide the following written documentation to the Architect through the General Contractor as delineated below and as otherwise maybe reasonably requested by the Owner:
  - a. Bill of Material, Purchase Order, or Invoice Number.
  - b. Product Description Listing.
  - c. Serial Numbers (If Applicable)
  - d. Materials and/or Equipment (wares) shall be segregated from all other stock or equipment and clearly labeled and/or marked as City of Worcester Property.
  - e. Wares shall always be available for inspection and in any event within twenty-four (24) hours after receiving prior notice from the Owner/Architect.
  - f. Provide written directions from the project site to the location of the stored wares.
  - g. Name of contact person at the storage site and applicable telephone numbers.
  - h. Method and mode of transportation from offsite storage location to the job site.
- H. Retainage: In accordance with the Supplemental General Conditions, the Awarding Authority (Owner) shall deduct a retainage not exceeding five (5) percent of the approved amount of the periodic payment. The aforesaid five (5) percent retainage deduction by the Owner is the only retainage authorized hereunder. The contractor shall not deduct any amounts from payments received on behalf of subcontractors, except those deductions specifically authorized by M.G.L. Chapter 30, Section 39(1)(a).
  1. Upon the initial and any subsequent Application for Payment; requesting or reflecting a “Release of Retainage” provide a Summary cover sheet indicating the derivation arithmetically, by each line item, of the total released to date and the of the current total retainage sum.
- I. Transmittal: Upon receipt of the required periodic submittals enumerated above and upon approval of the "Draft Application", submit six (6) fully executed and notarized original copies with Cover Sheet of the current Application for Payment to the Architect by means ensuring receipt within twenty-four (24) hours. One (1) copy shall be complete, including waivers of lien and similar attachments.
  1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.
  2. With each requisition, after the first requisition, submit one (1) copy of up-dated as-built drawings for all underground and concealed work, showing locations, depths, or elevations.
- J. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics lien from every entity who may lawfully be entitled to file a mechanics lien arising out of the Contract, and related to the Work covered by the payment.
  1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final or full waivers.
  3. The Owner reserves the right to designate which entities involved in the Work must submit waivers.

**WORCESTER FIRE STATION #2**  
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**JULY 26, 2023**

4. Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the previously paid application.
    - a. Submit final Application for Payment with, or preceded by, final waivers from every entity involved with performance of Work covered by the application that could lawfully be entitled to a lien.
  5. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
- K. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:
1. List of subcontractors; at all tiers.
  2. List of principal suppliers and fabricators.
  3. Approved Schedule of Values.
  4. Approved Contractor's Progress Schedule see Section 01300, Paragraph 1.4.
  5. Contractor's Construction Schedule (preliminary if not final).
  6. Schedule of principal products.
  7. Submittal Schedule (preliminary, if not final).
  8. List of Contractor's staff assignments.
  9. List of Contractor's principal consultants.
  10. Copies of building permits.
  11. Copies of authorizations, permits and licenses from governing authorities for performance of the Work.
  12. Initial progress report.
  13. Report on pre-construction meeting.
  14. Schedule of Pre-installation meetings.
  15. Certificates of insurance and insurance policies.
  16. Performance and payment bonds.
  17. Data needed to acquire Owner's insurance.
  18. Initial settlement survey and damage report, if required.
  19. List of Contractor's personnel names and titles assigned on the project and emergency telephone numbers.
- L. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit Application for Payment.
1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
  2. Administrative actions and Submittals that shall precede or coincide with this application include:
    - a. Occupancy permits and similar approvals.
    - b. Warranties (guarantees) and maintenance agreements.
    - c. Test/adjust/balance records.
    - d. Maintenance instructions.
    - e. Meter readings.
    - f. Start-up performance reports.
    - g. Changeover information related to Owner's occupancy, use, operation, and maintenance.
    - h. Final cleaning.
    - i. Application for reduction of retainage, and consent of surety

**WORCESTER FIRE STATION #2**  
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Mount Vernon Group Architects, Inc., Project No. 02023.04

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- j. Advice on shifting insurance coverage.
  - k. Final progress photographs.
  - l. List of incomplete work, recognized as exceptions to Architect's Certificate of Substantial Completion.
- M. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final payment Application for Payment include the following:
- 1. Completion of Project closeout requirements.
  - 2. Completion of items specified for completion after Substantial Completion
  - 3. Assurance that unsettled claims will be settled.
  - 4. Assurance that incomplete Work and Work not accepted will be completed without undue delay.
  - 5. Transmittal of required Project construction records to the Owner.
  - 6. Certified property survey.
  - 7. Proof that taxes, fees, and similar obligations have been paid.
  - 8. Removal of temporary facilities and services.
  - 9. Removal of surplus materials, rubbish, and similar elements.
  - 10. Change of door locks to Owner's access.
  - 11. Order of Conditions Certificate of Compliance, if applicable.

**PART 2 – PRODUCTS                      NOT USED**

**PART 3 – EXECUTION                      NOT USED**

**JULY 26, 2023**

**CONTRACTOR LETTER HEAD**

**APPLICATION AND CERTIFICATION FOR PAYMENT COVER SHEET**

PROJECT: \_\_\_\_\_ APPLICATION NO: \_\_\_\_\_

For  
Period

Ending: \_\_\_\_\_ AMOUNT CERTIFIED: \$ \_\_\_\_\_

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents; and the current Payment shown herein is now due.

The Contractor further certifies that the entire amount of all previous Payments received for labor performed and materials furnished have been promptly paid to all Subcontractors whose work was certified for payment on previous applications, less, where applicable, only an amount specified in any court proceeding barring such payment and/or an amount claimed due from the Subcontractor by the Contractor as expressly authorized by M.G. L. Chapter 30, Section 39F (1) (a). No other amounts have been deducted or retained from such payments by the contractor.

Contractor: \_\_\_\_\_ STATE OF: \_\_\_\_\_

Signed by: \_\_\_\_\_ COUNTY OF: \_\_\_\_\_

Date: \_\_\_\_\_ Subscribed and sworn to before me on this  
\_\_\_\_\_ Day of \_\_\_\_\_ 20\_\_.

Notary public: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**APPROVED FOR PAYMENT:**

Signed: \_\_\_\_\_  
By: James Bedard, Facilities Director

Signed: \_\_\_\_\_  
By: Robert Sherman., Architect

Date: \_\_\_\_\_

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**CONTRACTOR LETTER HEAD**

DRAFT APPLICATION FOR PAYMENT  
PERIODIC SUBMITTAL CERTIFICATION STATEMENT

Project Name: \_\_\_\_\_ Draft Application Date: \_\_\_\_\_

Draft Application No. \_\_\_\_\_ (Requisition No.)

For Period:  
Starting \_\_\_\_\_  
Through Period  
Ending \_\_\_\_\_

\_\_\_\_\_  
(Name of Contractor) \_\_\_\_\_,  
certifies that the "Draft Application for Payment" as herein submitted with all of the following Periodic Submittals fully and completely executed and current for the appropriate time period(s) as required.  
FURNISH THE FOLLOWING PERIODIC SUBMITTALS AND PROVIDE ALL REQUIRED INFORMATION FOR THE APPROPRIATE TIME PERIOD(S) AS REQUESTED. PLEASE SUBMIT ON SEPARATE SHEETS:

- I. **Original Waivers of Mechanic Lien:** List every entity who may be lawfully entitled to file a lien resulting out of this Contract, including but not limited to; contractors/subcontractors, at all tiers, vendors, and suppliers. Submit current originals of all Waivers covering all WORK completed through the period ending thirty (30) days prior to this periods "Application" date and as further required in I above.
- II. **Certified Payrolls:** All payroll reports have been submitted as required by the Contract Compliance Office.
- III. **Contract Compliance Reports:** All contract compliance reports have been submitted as required by the Contract Compliance Office.
- IV. **Insurance & Title Transfer Certificates** for material stored off site, if applicable.
- V. **Updated As-Built Drawings:** Record drawings have been submitted reflecting the work completed up to the time of Application.

This Draft Application for Payment Certification Statement and corresponding Periodic Submittals (attached) shall be reviewed by the Awarding Authority for completeness. Any deficiency, discrepancies or missing items shall cause this Draft Application for Payment to be returned to the Contractor with no action taken.

I, \_\_\_\_\_ hereby certify, that the Periodic  
(Name of contractor)

**WORCESTER FIRE STATION #2**  
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**JULY 26, 2023**

Submittals indicated herein have been reviewed by the undersigned and are complete and current as required under provisions of this Contract.

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(Name of Authorized Person)

(Date)

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(Title)

**END OF SECTION**



**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 013100**

**PROJECT MANAGEMENT AND COORDINATION**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02. SUMMARY**

- A. This Section specifies administrative and supervisory requirements necessary for project coordination including, but not limited to the following:
  - 1. Coordination and cutting, drilling, and patching.
  - 2. General installation provisions.
  - 3. Administrative and supervisory personnel.
  - 4. Cleaning and protection.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Project meetings, coordination meetings, and pre-installation conferences are included in Section "Project Meetings."
  - 2. Requirements for preparing and submitting the Contractor's Construction Schedule are included in Section "Submittals."

**1.03. COORDINATION**

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the specifications that depend on each other for proper installation, connection, and operation.
  - 1. Where installation of one part of the Work depends on installation of other components, either before or after its own installation, schedule construction operations in the sequence required to obtain the best results.
  - 2. Where availability of space is limited coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
  - 3. Make provisions to accommodate items scheduled for later installation.
  - 4. The General Contractor shall as part of his work provide for all cutting, patching, and drilling, not specified to be the work of others.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
  - 1. Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of schedules.
  - 2. Installation and removal of temporary facilities.
  - 3. Delivery and processing of submittals.
  - 4. Progress meetings.
  - 5. Project closeout activities.
  - 6. Coordinate with temp chiller supplier to coincide with General Contractor's crane equipment being onsite and all Work relating to offloading from chiller delivery truck.
- D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.

**1.04. SUBMITTALS**

- A. Coordination Drawings: Prepare coordination Drawings where careful coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components.
  - 1. Show the relationship of components shown on separate Shop Drawings.
  - 2. Indicate required installation sequences.
  - 3. Comply with requirements contained in Section 01300 – Submittals.
  - 4. Format to be as directed by the Architect.
  - 5. Provide site staging and lift plan.
- B. Staff Names: Within fifteen (15) days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their addresses and telephone numbers. Provide twenty-four (24) hour Emergency telephone numbers listed separately.
  - 1. Post copies of the list in the Project meeting room, the temporary field office, and each temporary telephone.
  - 2. The Contractor shall provide a copy of the list, and updates as its changes, to the Worcester Police Department and other City Departments as directed by the Architect.

**PART 2 – PRODUCTS                      NOT USED**

**PART 3 - EXECUTION**

**3.01 GENERAL INSTALLATION PROVISIONS**

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

- B. Manufacturer's Instructions: Comply with manufacturer's written instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than the requirements contained in Contract Documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
- F. Re-check measurements and dimensions, before starting each installation.
- G. Install each component during weather conditions that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the application indicated. Refer questionable mounting height decision to the Architect for final decision.

### 3.02 CLEANING AND PROTECTION

- A. During handling and installation clean and protect construction in progress and adjoining materials in place. Apply protective covering where required and as necessary to assure protection from damage or deterioration.
- B. Clean and maintain all completed construction as frequently as necessary through the remainder of the construction period.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in-progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
  - 1. Excessive vibration.
  - 2. Excessive static or dynamic loading.
  - 3. Excessive internal or external pressures.
  - 4. Excessively high or low temperatures.
  - 5. Thermal shock.
  - 6. Excessively high or low humidity.
  - 7. Air contamination or pollution.
  - 8. Air borne debris/dust or construction particulates.
  - 9. Water or ice.
  - 10. Solvents.
  - 11. Chemicals.
  - 12. Light.
  - 13. Puncture.
  - 14. Abrasion.

15. Heavy traffic.
16. Soiling, staining, and corrosion.
17. Bacteria.
18. Rodent and insect infestation.
19. Combustion.
20. Electrical current.
21. High-speed operation.
22. Improper lubrication.
23. Unusual wear or other misuse.
24. Contact between incompatible materials.
25. Destructive testing.
26. Misalignment.
27. Excessive weathering.
28. Unprotected storage.
29. Improper shipping or handling.
30. Theft.
31. Vandalism.

**END OF SECTION**

**SECTION 013300**

**SUBMITTAL PROCEDURES**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.
  - 1. The submittals enumerated below shall require review and/or approval by the Architect.

**1.02. SUMMARY**

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including:
  - 1. Contractor's Progress Schedule.
  - 2. Major delivery schedule.
  - 3. Existing utility tie-in's schedule.
  - 4. Submittal schedule.
  - 5. Pre-Installation Conference Schedule (By Specification Section).
  - 6. Daily construction reports.
  - 7. Shop drawings.
  - 8. Product data.
  - 9. Samples.
  - 10. Coordination Drawings.
  - 11. Quality assurance submittals.
  - 12. Submittal of three (3) sets of plans and specifications, complete with all addendums posted to the City of Worcester Building Department to obtain a building permit.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
  - 1. Product Substitution.
  - 2. Periodic Submittals.
  - 3. Permits.
  - 4. Applications for Payment.
  - 5. Performance and payment bonds.
  - 6. Insurance Certificates.
  - 7. List of Project Contractors, Subcontractors, Vendors, etc.
  - 8. List of Personnel and Emergency Telephone Numbers.
  - 9. City Ordinance Program Forms.
- C. The Schedule of Values submittal is included in Section 01027 "Applications for Payment".
- D. "Project Closeout", Section 01700, specifies requirements for submittal of Project Record Documents and warranties at project closeout.

**1.03. SUBMITTAL PROCEDURES/SHOP DRAWINGS**

- A. Submittal procedures shall be electronic for all submittals for approval and distribution unless otherwise noted. Provide to the owner one copy of all approved submittals in an organized manner with a submittal log. All color samples must be distributed as hard copies, and also electronically filed in order to track. Electronic files shall be clean, clear and readable. Plan files to be PDF and/or AutoCAD and be to scale as appropriate. Contractor to transmit and update each submittal and process electronically, maintain a log that is distributed and updated weekly. All e-mails to clearly identify the submittal number and shall include the log, Or the contractor to maintain a web-based system used for submittals, and the construction process.
- B. Distribution: Distribution of submittals shall be distributed as follows unless otherwise noted:
  - 1. Architect.
  - 2. Clerk of Works.
  - 3. Owner – electronic and paper copy.
  - 4. A minimum of Three (3) copies for the Contractor as necessary for distribution to subcontractors, suppliers, installers, manufacturers, fabricators, and any other applicable parties.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
- D. Processing: All Contractors are directed to the timeliness and critical importance of expediting the submittal process. Any lead times, which may impact sequencing, should be prioritized to meet the project schedule. Architect must be notified if any delays arise that will impact lead times.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
  - 3. To avoid the need to delay installation as a result of the time required to process submittals and to allow sufficient time for submittal review, all contractors' submittals shall be submitted for processing and have received final Architect's approval within 45 days from the date of Contract.
    - a. Allow ample time for initial review to achieve efficient construction sequencing. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
    - b. If an intermediate submittal is necessary, process the same as the initial submittal.
    - c. Allow ample time for reprocessing each submittal to achieve efficient construction sequencing.
    - d. No extension of Contract Time will be authorized because of the contractor's failure to transmit submittals to the Architect for processing sufficiently in advance of the scheduled Work.
- E. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

4. Provide a space approximately 4 by 5 inches on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
  5. Include the following information on the label for processing and recording action taken.
    - a. Project name.
    - b. Date.
    - c. Name and address of the Architect.
    - d. Name and address of the Contractor.
    - e. Name and address of the subcontractor.
    - f. Name and address of the supplier.
    - g. Name of the manufacturer.
    - h. Number and title of appropriate Specification Section.
    - i. Drawing number and detail references, as appropriate.
  - F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Architect using a transmittal form. The Architect will not accept submittals received from sources other than the Contractor.
  - G. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
- 1.04. CONTRACTOR'S PROGRESS SCHEDULE
- A. Bar (Gantt) Chart Schedule: Meeting the requirements of Section 00200 Paragraphs 4.10, 4.10.1, 8.2.3 through 8.2.9. Prepare a fully developed, horizontal bar type of chart titled: "Progress Schedule". A sample is attached at the end of this section, some requirements specified here are not shown in the sample.
  - B. Time, the horizontal (x) axis in this schedule shall show the start of on-site work through the Date of Substantial Completion, show the time for completion of punch list items, and show the time for general warranty and completion of commissioning.
  - C. Provide a separate time bar for each line in the approved "Schedule of Values" with the incremental value of work in place for each month. Work Completed (in place) must be 99% of contract value to achieve Substantial Completion. Provide a continuous vertical line to identify the first working day of each month.
  - D. At the bottom of the progress schedule provide:
    1. A first line showing the total value of the work planned to be completed (in place) for each month,
    2. A second line showing the cumulative total value of the work planned to be completed (in place) to date,
    3. A third line showing the actual total value of the work certified as completed (in place) on the Application and Certificate for Payment for the month, and
    4. A fourth line showing the actual total cumulative value of the work certified as completed (in place) on the Application and Certificate for payment to date.
    5. Refer to Division 1 Section 01027 "Applications for Payment" for cost reporting and payment procedures.



- E. Distribution: Following approval of the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to provide actual work in place and conform to schedule.
- F. Revisions: Revisions to values and or time shown in the Progress Schedule may only be made to reflect a Change Order and in accordance with Section 00200 Paragraph 8.2.7. When revisions are made, distribute to the same parties and post at the jobsite. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- G. Progress Schedule Updating: Revise the schedule after each meeting, where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

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Progress Schedule (as required by Article 8, Paragraphs 8.2.3 & 8.2.4 of the General Conditions)										
(Project Name)		(Architect)		(Date)		(Approved by Architect)				
(City of Worcester Dept. or Facility)		(Construction Manager)		(Revision Date)						
(Project Address)		(Contractor)		(Revised Through)						
Section Number	Section or Filled Sub-bid Section	Mar-98	Apr-98	May-98	Jun-98	Jul-98	Oct-98	Nov-98	Dec-98	Totals
		1	2	3	4	5	6	7	8	
01000	General Requirements	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$32,000
02000	Sitework	\$10,000	\$10,000						\$10,000	\$30,000
03000	Concrete		\$4,000	\$12,000			\$8,000			\$24,000
04000	Masonry			\$8,000	\$10,000	\$12,000				\$30,000
05000	Metals			\$20,000						\$20,000
05500	Metal Fabrications							\$7,000		\$7,000
06000	Wood & Plastics								\$4,000	\$4,000
07100	Waterproofing & Caulking				\$3,000					\$3,000
07600	Roofing & Flashing					\$12,000				\$12,000
08000	Doors & Windows						\$4,000			\$4,000
08520	Alum. Windows							\$8,000		\$8,000
08800	Glass & Glazing								\$1,000	\$1,000
09250	Gypsum Drywall						\$6,000	\$5,000		\$11,000
09310	Ceramic Tile							\$2,000		\$2,000
09511	Acoustical Ceilings							\$1,000	\$1,000	\$2,000
09650	Resilient Flooring								\$3,000	\$3,000
09900	Painting								\$2,000	\$2,000
10000	Specialties								\$14,000	\$14,000
14204	Hydraulic Elevators						\$8,000	\$8,000	\$8,000	\$24,000
15400	Plumbing			\$1,000	\$2,000			\$3,000	\$5,000	\$11,000
15600	HVAC					\$4,000	\$5,000		\$4,000	\$13,000
16000	Electrical			\$1,000	\$3,000			\$4,000	\$4,000	\$12,000
	Total Planned to be Completed This Month	\$14,000	\$18,000	\$46,000	\$22,000	\$32,000	\$35,000	\$42,000	\$60,000	
	Total planned to be Completed To Date	\$14,000	\$32,000	\$78,000	\$100,000	\$132,000	\$167,000	\$209,000	\$269,000	\$269,000
	Actual Total Completed This Month	\$11,000	\$22,000	\$38,000						
	Actual Total Completed To Date	\$11,000	\$33,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$470,000

1.05. SUBMITTAL SCHEDULE

- A. After development and acceptance of the Contractor's Progress Schedule, prepare a complete Submittal Schedule and promptly submit the schedule to the Architect.

- B. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with submittal dates.
- C. Submittal Schedule Updating: Revise the Submittal Schedule after each meeting or activity where revisions have been recognized or made. Issue the updated project schedule concurrently with each Application for Payment.

**1.06. DAILY CONSTRUCTION REPORTS**

- A. Prepare a daily construction report recording the following information concerning events at the site, and submit copies to the Architect and Clerk of Works at weekly intervals:
  - 1. List of subcontractors at the site.
  - 2. Count of personnel at the site.
  - 3. Accidents and unusual events.
  - 4. Meetings and significant decisions.
  - 5. Stoppages, delays, shortages, and losses.
  - 6. Emergency procedures.
  - 7. Services connected, disconnected.
  - 8. Equipment or system tests and startups.
  - 9. General daily work tasks and progress.

**1.07. SHOP DRAWINGS**

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- C. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates, and similar Drawings. Include the following information:
  - 1. Dimensions.
  - 2. Identification of products and materials included by sheet and detail number.
  - 3. Compliance with specified standards.
  - 4. Notation of coordination requirements.
  - 5. Notation of dimensions established by field measurement.

**1.08. PRODUCT DATA**

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.

1. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
  2. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
    - a. Manufacturer's printed recommendations.
    - b. Compliance with trade association standards.
    - c. Compliance with recognized testing agency standards.
    - d. Application of testing agency labels and seals.
    - e. Notation of dimensions verified by field measurement.
    - f. Notation of coordination requirements.
  - C. Do not submit Product Data until compliance with the requirements of the Contract Documents has been confirmed.
  - D. Unless non-compliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
  - E. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
    1. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
    2. Do not permit use of unmarked copies of Product Data in connection with construction.
- 1.09. SAMPLES
- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
  - B. Mount or display samples in the manner to facilitate review of qualities indicated. Prepare samples to match the Architect's sample. Include the following:
    1. Specification Section number and reference.
    2. Generic description of the sample.
    3. Sample source.
    4. Product name or name of the manufacturer.
    5. Compliance with recognized standards.
    6. Availability and delivery time.
  - C. Submit samples for review of size, kind, color, pattern, and texture. Submit samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
  - D. Preliminary Submittals: Submit a full set of choices where samples are submitted for selection of color, pattern, texture, or similar characteristics from a range of standard choices.
    1. Preliminary submittals will be reviewed and returned with the Architect's mark, indicating selection and other action.
  - E. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit three (3) sets. One (1) set will be returned marked with the action taken.

2. Maintain sets of samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.

- F. Unless non-compliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
  1. Sample sets may be used to obtain final acceptance of the construction associated with each set.

**1.10. QUALITY ASSURANCE SUBMITTALS**

- A. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.
- B. Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements; submit a notarized certification from the manufacturer certifying compliance with specified requirements.
  1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.

**1.11. ARCHITECT'S ACTION**

- A. Except for submittals of record or information, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return as noted in Paragraph 1.3A.
- B. Compliance with specified characteristics is the Contractor's responsibility.
- C. Action Stamp: The Architect will stamp each submittal with a uniform, self-explanatory action stamp. The Architect will mark the stamp appropriately to indicate the action taken:
- D. Final Unrestricted Release: When submittals are marked "Approved", the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend on that compliance.
  1. Final-But-Restricted Release: When submittals are marked "Approved as Noted", that Work covered by the submittal may proceed provided it complies with markings or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
  2. Returned for Resubmittal: When submittal is marked "Approved as Noted - Revise and Resubmit" or "Not Approved, Revise and Resubmit", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the markings and resubmit without delay. Repeat if necessary to obtain different action mark.
- E. The Contractor shall not use or permit to be used submittals marked "Approved as Noted - Revise and Resubmit" or "Not Approved, Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
- F. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned marked "Action Not Required".

**1.12. DRAWINGS TO BUILDING DEPARTMENT**

- A. The Contractor shall submit three (3) sets of fully addendum plans and specifications to the City of Worcester Building Department upon application for the building permit.
  - 1. Submit drawings to architect prior to permit application for "wet stamping" of architect and engineers professional seal to the drawings. Allow up to three (3) days for this process.
  - 2. Any reduction in addenda plan must be legible.

**PART 2 - PRODUCTS                      NOT USED**

**PART 3 - EXECUTION                      NOT USED**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 01 35 43**

**HAZARDOUS MATERIALS PROCEDURES**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

1. All the Contract Documents, including Drawings, General Conditions, and all Sections of Division 01 - General Requirements, apply to the Work of this Section.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein
  2. Section 02 41 13 – Selective Demolition
  3. DIVISION 03 – CONCRETE; including all Sections contained therein
  4. DIVISION 04 – MASONRY; including all Sections contained therein
  5. DIVISION 05 – METALS; including all Sections contained therein.
  6. DIVISION 06 – WOOD AND PLASTICS; including all Sections contained therein
  7. DIVISION 07 – THERMAL AND MOISTURE PROTECTION; including all Sections contained therein.
  8. DIVISION 08 – DOORS AND WINDOWS; including all Sections contained therein.
  9. DIVISION 09 – FINISHES; including all Sections contained therein.
  10. Section 21 00 00 – Fire Suppression
  11. Section 22 00 00 – Plumbing
  12. Section 23 00 00 - HVAC
  13. Section 26 00 00 – Electrical
  14. DIVISION 31 – EARTHWORK; including all Sections contained therein
  15. Section 32 12 00 – Site Improvements

**1.03 HAZARDOUS MATERIALS PROCEDURES**

- A. Asbestos:
  1. Asbestos Materials Exist On-Site: There are accessible and inaccessible asbestos containing materials (ACM). ACM affected by this project are included under this contract. Hidden ACM may only be found. Refer to items 2 and 3 below.
  2. The General Contractor shall retain the services of a licensed Asbestos Contractor to perform the work.
  3. Unknown and inaccessible ACM: It is possible that previously unknown ACM may be discovered in currently concealed locations.
  4. Notification: If the Contractor discover or encounter any ACM during the performance of the work, the General Contractor shall immediately:



- a. Stop work, notify the Owner and Architect about the presence of suspect ACM and request instructions for proper action, and
    - b. Take whatever steps and measures are necessary to reduce, control or eliminate the risk of exposure of workers and the public to the ACM.
  5. Responsible Person On-Site: The General Contractor shall designate one of its senior on-site employees to oversee coordination between the Architect and all subcontractors with respect to hazardous materials issues.
  6. Responsibility for Hazardous Material Discovery: It is the sole responsibility of the Contractor to undertake whatever measures, methods or procedures are necessary, required or otherwise appropriate to safeguard the health and safety of all workers and members of the public with respect to identification and discovery of previously unknown hazardous materials during the work of the Project.
  7. Indemnification: To the fullest extent permitted by law, the General Contractor shall indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses and expenses including, but not limited to, attorneys' fees arising out of or relating to the performance of the Work, including the discovery or identification of any hazardous materials, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to damage to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom; and is caused in whole or in part by any negligent act or omission of the General Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable regardless of whether or not it is caused in part by a party indemnified hereunder.
- B. Lead:
1. The Contractor shall be made aware that Lead Based Paint exists on painted surfaces throughout the building. No testing was performed.
  2. It is the Contractor responsibility to either test painted surfaces or assume that all existing painted surfaces are coated with Lead Paint. All costs for testing shall be the responsibility of the Contractor at no additional cost to the Owner.
  3. All the work of this Contract shall conform to the standard set by all applicable Federal, State and Local laws, regulations, ordinance, and guidelines in such from in which they exist at the time of the work on the Contract and as may be required by subsequent regulations.
  4. The Contractor are solely responsible for means and methods, and techniques used for Contractor and/or the Demolition and lead control. The Contractor shall collect, and control lead contaminated debris and to properly remove and dispose of lead contaminated soil around the building due to Contractor's and/or the Contractor's activities.
  5. The Contractor shall at his own cost and expense comply with all laws, ordinance, rules, and regulations of Federal, State, Regional and Local authorities during Demolition, prepping, sanding, cutting, burning, scraping, painting over, grinding and regarding handling, storing, and disposing of lead and lead contaminated waste material.
  6. The Contractor shall submit to the Architect prior to commencing of work the following:
    - a. Written respiratory and notification program
    - b. Written lead compliance program in accordance with OSHA regulations including:
      - 1) Training requirement certifications.

- 2) Supervisor qualifications.
  - 3) Written compliance program specific to this project
  - 4) Respirators fit test records.
  - 5) Medical surveillance certificates.
8. The EPA and the DEP require Demolition debris with lead to be tested in accordance with the Toxicity Characteristic Leaching Procedure (TCLP) to determine the potential for significant amounts of lead to leach out of the waste. If the results are below the DEP standard (5.0 ppm), the waste may be disposed of in a conventional landfill for Demolition debris. If, however, the TCLP results are above the DEP standard, the waste must be disposed of in a DEP approved, hazardous waste landfill. The Contractor shall at own cost and expense perform all required testing of waste by the TCLP. The Contractor must submit to the Owner copy of tests performed and all waste shipment records prior to disposing of debris. The Owner reserves the right to have own TCLP samples collected to verify results. All disposal costs shall be at the Contractor responsibility.
9. The following references are cited as current applicable publications. This project is subject to compliance with all regulations including but not limited to:
- a. Commonwealth of Massachusetts, Department of Labor, and Work Force Development 454 CMR 11.00, Structural Painting Safety Code, as currently amended.
  - b. Commonwealth of Massachusetts, Department of Environmental Protection, and Hazardous Materials Regulations at 310 CMR 30.00 as currently amended.
  - c. U. S. Department of Labor, Occupational Safety and Health Administration Title 29 CFR 1910.1025 and 29 CFR Part 1926.62.
  - d. Commonwealth of Massachusetts, Department of Labor, and Work Force Development 454 CMR 22.00.
  - e. Commonwealth of Massachusetts, Department of Environmental Protection, 310 CMR 6.0-8.0.
10. All above regulations are applicable to this project. Where there is a conflict between this section and the applicable regulations, the more stringent requirement shall prevail.
- C. PCB's:
1. The Contractor shall be made aware that building materials (Material) including but not limited to painted surfaces, caulking, glue, coatings, and other building materials are likely to contain >1 ppm of Polychlorinated Biphenyls PCB's.
  2. EPA does not require testing and therefore, no testing will be performed or permitted to be performed.
  3. All the work of this Contract shall conform to the standard set by all applicable Federal, State and Local laws, regulations, ordinance, and guidelines.
- E. Silica Dust:
1. The Contractor shall be made aware that building materials (Material) may contain Silica.
  2. Due to the difficulty associated with exhaustive testing, the Owner has elected to direct the Contractor to assume that Silica was found.
  3. The Contractor shall review and comply with most recent US Department of Labor Final Rule and shall take extra precautions to protect workers and other personnel on site.

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**JULY 26, 2023**

**PART 2 – PRODUCTS – NOT USED**

**PART 3 – EXECUTION – NOT USED**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
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**JULY 26, 2023**

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**SECTION 01 40 00**

**QUALITY REQUIREMENTS**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02. SUMMARY**

- A. This Section includes administrative and procedural requirements for Quality-Control Services.
- B. Quality-Control Services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by Architect.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
  - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified inspections, tests, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

**1.03. RESPONSIBILITIES**

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests, and other similar Quality-Control Services specified in individual Specification Sections and as required by governing authorities. Costs for these services are included in the Contract Sum.
  - 1. The Contractor shall employ and pay a qualified independent testing agency to perform specified Quality-Control Services.
  - 2. Where the Owner has engaged an independent testing agency for testing and inspecting part of the Work, and the Contractor is also required to engage a testing entity for the same or related part or element of the Work, the Contractor shall not employ the entity engaged by the Owner, unless agreed to in writing by the Owner.
  - 3. Re-testing: The Contractor is responsible for retesting where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.

- a. The cost of re-testing construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction.
    4. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
      - a. Provide access to the Work and furnish incidental labor, facilities, and equipment necessary to facilitate inspections and tests.
      - b. Take adequate quantities of representative samples of materials that require testing or assist the agency in taking samples.
      - c. Provide facilities for storage and curing of test samples.
      - d. Provide security and protection of samples and test equipment at the Project Site.
  - B. Owner Responsibilities: The Owner will engage and pay for the services of an independent testing agency to perform inspections, tests or other Quality-Control Services specified to be performed by independent testing agencies and not specified as the responsibility of the Contractor and/or are provided for by another identified entity. Costs for these services are not included in the Contract Sum.
    1. The Owner shall employ and pay for the services of a qualified independent testing agency, testing laboratory or other qualified entity to perform Quality-Control Services, which are the Owner's responsibility.
  - C. Duties of the Testing Agency: The independent agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with the Architect and the Contractor in performance of the agency's duties. The testing agency shall provide qualified personnel to perform required inspections and tests.
    1. The agency shall notify the Architect and the Contractor promptly of irregularities or deficiencies observed in the Work during the performance of its services.
    2. The agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
    3. The agency shall not perform any duties of the Contractor.
  - D. Coordination: Coordinate the sequence of activities to accommodate required services with a minimum of delay. Coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
    1. The Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities.
- 1.04. SUBMITTALS
- A. Unless the Contractor is responsible for this service, the independent testing agency shall submit a certified written report, in duplicate, of each inspection, test, or similar service to the Architect. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection, test, or similar service through the Contractor.
    1. Submit additional copies of each written report directly to the governing authority, when the authority so directs.

2. Report Data: Written reports of each inspection, test, or similar service include, but are not limited to, the following:
  - a. Date of issue.
  - b. Project title and number.
  - c. Name, address, and telephone number of testing agency.
  - d. Dates and locations of samples and tests or inspections.
  - e. Names of individuals making the inspection or test.
  - f. Designation of the Work and test method.
  - g. Identification of product and Specification Section.
  - h. Complete inspection or test data.
  - i. Test results and an interpretation of test results.
  - j. Ambient conditions at the time of sample taking and testing.
  - k. Comments or professional opinion on whether inspected or tested Work complies with Contract Document requirements.
  - l. Name and signature of laboratory inspector.
  - m. Recommendations on retesting.

**1.05. QUALITY ASSURANCE**

- A. Qualifications for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, that are prequalified as complying with the American Council of Independent Laboratories' "Recommended Requirements for Independent Laboratory Qualification" and that specialize in the types of inspections and tests to be performed.
  1. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State of Massachusetts.

**1.06. WORK CONDITIONS / SEQUENCE**

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

**PART 2 – PRODUCTS                      NOT USED**

**PART 3 - EXECUTION**

**3.01 REPAIR AND PROTECTION**

- A. General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities and protect repaired construction.

- C. Repair and protection is Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

**END OF SECTION**



**SECTION 014200**

**REFERENCES**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

**1.02. DEFINITIONS**

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.
- C. Directed: Terms such as directed, requested, authorized, selected, approved, required, and permitted mean directed by the Architect, requested by the Architect, and similar phrases.
- D. Approved: The term approved, when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.
- E. Regulations: The term regulations include laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. Furnish: The term furnish means supply and delivery to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations to the location within the project where the product will finally be installed.
- G. Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. Provide: The term provide means to furnish and install, complete and ready for the intended use.
- I. Installer: An Installer is the Contractor, or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged in performing.
  - 1. The term experienced, when used with the term Installer, means having a minimum of five (5) previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of the authority having jurisdiction.

2. Trades: Using terms such as carpentry is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as carpenter. It also does not imply that the requirements specified apply exclusively to tradespersons of the corresponding generic name.
3. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no choice or option. However, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor.
  - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
- J. Project site is the space available to the Contractor for performing construction activities either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is located.
- K. Testing Agencies: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret the results of those inspections or tests.

#### 1.03. SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16 Division format and MASTERFORMAT numbering system.
- B. Specification Content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in situations or circumstances. These conventions are explained as follows:
  1. Abbreviated Language: Language used in Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words that are implied, but not stated, shall be interpolated, as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
  2. Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor, or by others when so noted.
    - a. The words "shall be" are implied wherever a colon (:) is used within a sentence or phrase.

#### 1.04. INDUSTRY STANDARDS

- A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.

- C. **Conflicting Requirements:** Where compliance with two (2) or more standards is specified and where the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different but apparently equal and other uncertainties to the Architect for a decision before proceeding.
1. **Minimum Quantity or Quality Levels:** The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.
- D. **Copies of Standards:** Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
- E. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the Text provision. Refer to the "Encyclopedia of Associations", published by Gale Research Co., available in most libraries.
- F. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in Contract Documents, are defined to mean the associated names. Names and addresses are subject to change and are believed, but not ensured, to be accurate and up to date as of the date of Contract Documents.

<b>AA</b>	<b>Aluminum Association</b> <b>900 19th St., NW, Suite 300</b> <b>Washington, DC 20006</b>	<b>(202) 862-5100</b>
<b>AABC</b>	<b>Associated Air Balance Council</b> <b>1518 K St., NW</b> <b>Washington, DC 20005</b>	<b>(202) 737-0202</b>
<b>AAMA</b>	<b>American Architectural Manufacturers Association</b> <b>1540 E. Dundee Road, Suite 310</b> <b>Palatine, IL 60067</b>	<b>(708) 202-1350</b>
<b>AASHTO</b>	<b>American Association of State Highway and Transportation Officials</b> <b>444 North Capitol St., Suite 225</b> <b>Washington, DC 20001</b>	<b>(202) 624-5800</b>
<b>AATCC</b>	<b>American Association of Textile Chemists and Colorists</b> <b>P.O. Box 12215</b> <b>Research Triangle Park, NC</b>	<b>(919) 549-8141</b>

<b>ACI</b>	<b>American Concrete Institute</b> <b>P.O. Box 19150</b> <b>Detroit, MI 48219</b>	<b>(313) 532-2600</b>
<b>ACIL</b>	<b>American Council of Independent Laboratories</b> <b>1629 K St., NW</b> <b>Washington, DC 20006</b>	<b>(202) 887-5872</b>
<b>ACPA</b>	<b>American Concrete Pipe Association</b> <b>8300 Boone Blvd., Suite 400</b> <b>Vienna, VA 22182</b>	<b>(703) 821-1990</b>
<b>ADC</b>	<b>Air Diffusion Council</b> <b>One Illinois Center, Suite 200</b> <b>111 East Wacker Drive</b> <b>Chicago, IL 60601-4298</b>	<b>(312) 616-0800</b>
<b>AFBMA</b>	<b>Anti-Friction Bearing Manufacturers Association</b> <b>1101 Connecticut Ave., NW, Suite 700</b> <b>Washington, DC 20036</b>	<b>(202) 429-5155</b>
<b>AGA</b>	<b>American Gas Association</b> <b>1515 Wilson Blvd.</b> <b>Arlington, VA 22209</b>	<b>(703) 841-8400</b>
<b>AHA</b>	<b>American Hardboard Association</b> <b>520 North Hicks Road</b> <b>Palatine, IL 60067</b>	<b>(708) 934-8800</b>
<b>AHAM</b>	<b>Association of Home Appliance Manufacturers</b> <b>20 North Wacker Drive</b> <b>Chicago, IL 60606</b>	<b>(312) 984-5800</b>
<b>AI</b>	<b>Asphalt Institute</b> <b>Research Park Drive</b> <b>P.O. Box 14052</b> <b>Lexington, KY 40512-4052</b>	<b>(606) 288-4960</b>
<b>AIA</b>	<b>American Institute of Architects</b> <b>1735 New York Ave., NW</b> <b>Washington, DC 20006</b>	<b>(202) 626-7300</b>
<b>A.I.A.</b>	<b>American Insurance Association</b> <b>1130 Connecticut Ave., NW, Suite 1000</b> <b>Washington, DC 20036</b>	<b>(202) 828-7100</b>
<b>AIHA</b>	<b>American Industrial Hygiene Association</b> <b>P.O. Box 8390</b> <b>345 White Pond Drive</b> <b>Akron, OH 44320</b>	<b>(216) 873-2442</b>
<b>AISC</b>	<b>American Institute of Steel Construction</b> <b>One East Wacker Drive, Suite 3100</b> <b>Chicago, IL 60601-2001</b>	<b>(312) 670-2400</b>

<b>AITC</b>	<b>American Institute of Timber Construction</b> <b>11818 SE Mill Plain Blvd., Suite 415</b> <b>Vancouver, WA 98684</b>	<b>(206) 254-9132</b>
<b>ALI</b>	<b>Associated Laboratories, Inc.</b> <b>500 South Vermont Street</b> <b>Palatine, IL 60067</b>	<b>(708) 358-7400</b>
<b>ALSC</b>	<b>American Lumber Standards Committee</b> <b>P.O. Box 210</b> <b>Germantown, MD 20875</b>	<b>(301) 972-1700</b>
<b>AMCA</b>	<b>Air Movement and Control Association</b> <b>30 W. University Drive</b> <b>Arlington Heights, IL 60004-1893</b>	<b>(708) 394-0150</b>
<b>ANSI</b>	<b>American National Standards Institute</b> <b>11 West 42nd Street, 13th Floor</b> <b>New York, NY 10036</b>	<b>(212) 642-4900</b>
<b>AOAC</b>	<b>Association of Official Analytical Chemists</b> <b>2200 Wilson Blvd., Suite 400</b> <b>Arlington, VA 22201-3301</b>	<b>(703) 522-3032</b>
<b>AOSA</b>	<b>Association of Official Seed Analysts</b> <b>c/o Larry J. Prentice</b> <b>268 Plant Science 1ANR-UNL, Box 19281</b> <b>Lincoln, NE 68583-0911</b>	<b>(402) 472-8649</b>
<b>APA</b>	<b>American Plywood Association</b> <b>P.O. Box 11700</b> <b>Tacoma, WA 98411</b>	<b>(206) 565-6600</b>
<b>API</b>	<b>American Petroleum Institute</b> <b>1220 L St., NW</b> <b>Washington, DC 20005</b>	<b>(202) 682-8000</b>
<b>ARI</b>	<b>Air Conditioning and Refrigeration Institute</b> <b>1501 Wilson Blvd., 6th Floor</b> <b>Arlington, VA 22209</b>	<b>(703) 524-8800</b>
<b>ARMA</b>	<b>Asphalt Roofing Manufacturers Association</b> <b>6288 Montrose Rd.</b> <b>Rockville, MD 20852</b>	<b>(301) 231-9050</b>
<b>ASA</b>	<b>Acoustical Society of America</b> <b>500 Sunnyside Blvd.</b> <b>Woodbury, NY 11797</b>	<b>(516) 349-7800</b>
<b>ASC</b>	<b>Adhesive and Sealant Council</b> <b>1627 K Street, NW, Suite 1000</b> <b>Washington, DC 20006-1707</b>	<b>(202) 452-1500</b>

<b>ASHRAE</b>	<b>American Society of Heating, Refrigerating and Air-Conditioning Engineers</b> 1791 Tullie Circle, NE Atlanta, GA 30329	<b>(404) 636-8400</b>
<b>ASME</b>	<b>American Society of Mechanical Engineers</b> 345 East 47th St. New York, NY 10017	<b>(212) 705-7722</b>
<b>ASPE</b>	<b>American Society of Plumbing Engineers</b> 3617 Thousand Oaks Blvd., Suite 210 Westlake, CA 91362	<b>(805) 495-7120</b>
<b>ASSE</b>	<b>American Society of Sanitary Engineering</b> P.O. Box 40362 Bay Village, OH 44140	<b>(216) 835-3040</b>
<b>ASTM</b>	<b>American Society for Testing and Materials</b> 1916 Race St. Philadelphia, PA 19103-1187	<b>(215) 977-9679</b>
<b>ATIS</b>	<b>Alliance for Telecommunications Industry Solutions</b> 1200 G Street, NW, Suite 500 Washington, DC 20005	<b>(202) 628-6380</b>
<b>AWCMA</b>	<b>American Window Covering Manufacturers Association</b> 355 Lexington Avenue New York, NY 10017	<b>(212) 661-4261</b>
<b>AWI</b>	<b>Architectural Woodwork Institute</b> P.O. Box 1550 13924 Braddock Rd., Suite 100 Centreville, VA 22020	<b>(703) 222-1100</b>
<b>AWPA</b>	<b>American Wood Preservers' Association</b> 4128-1/2 California Ave. SW, No. 171 Seattle, WA 98116	<b>(206) 937-5338</b>
<b>AWPB</b>	<b>American Wood Preservers Bureau</b> 4 E. Washington Street Newnan, GA 30263	<b>(404) 254-9877</b>
<b>AWS</b>	<b>American Welding Society</b> 550 LeJeune Road, NW P.O. Box 351040 Miami, FL 33135	<b>(305) 443-9353</b>
<b>AWWA</b>	<b>American Water Works Association</b> 6666 West Quincy Avenue Denver, CO 80235	<b>(303) 794-7711</b>

<b>BHMA</b>	<b>Builders' Hardware Manufacturers Association</b> <b>355 Lexington Ave., 17th Floor</b> <b>New York, NY 10017</b>	<b>(212) 661-4261</b>
<b>BIA</b>	<b>Brick Institute of America</b> <b>11490 Commerce Park Drive</b> <b>Reston, VA 22091</b>	<b>(703) 620-0010</b>
<b>BIFMA</b>	<b>Business and Institutional Furniture Manufacturers Assoc.</b> <b>2335 Burton Street, SE</b> <b>Grand Rapids, MI 49506</b>	<b>(616) 243-1681</b>
<b>CAGI</b>	<b>Compressed Air and Gas Institute</b> <b>c/o John H. Addington</b> <b>Thomas Associates, Inc.</b> <b>1300 Sumner Avenue</b> <b>Cleveland, OH 44115-2851</b>	<b>(216) 241-7333</b>
<b>CAUS</b>	<b>Color Association of the United States</b> <b>409 West 44th Street</b> <b>New York, NY 10036</b>	<b>(212) 582-6884</b>
<b>CBM</b>	<b>Certified Ballast Manufacturers Association</b> <b>Hanna Building, No. 772</b> <b>1422 Euclid Avenue</b> <b>Cleveland, OH 44115-2851</b>	<b>(216) 241-0711</b>
<b>CCC</b>	<b>Carpet Cushion Council</b> <b>P.O. Box 546</b> <b>Riverside, CT 06878</b>	<b>(203) 637-1312</b>
<b>CDA</b>	<b>Copper Development Association</b> <b>2 Greenwich Office Park, Box 1840</b> <b>Greenwich, CT 06836</b>	<b>(203) 625-8210</b>
<b>CFFA</b>	<b>Chemical Fabrics &amp; Film Association, Inc.</b> <b>c/o Thomas Associates, Inc.</b> <b>1300 Sumner Avenue</b> <b>Cleveland, OH 44115-2851</b>	<b>(216) 241-7333</b>
<b>CGA</b>	<b>Compressed Gas Association</b> <b>1725 Jefferson Davis Highway, Suite 1004</b> <b>Arlington, VA 22202-4100</b>	<b>(703) 979-0900</b>
<b>CISCA</b>	<b>Ceiling and Interior Systems Construction Association</b> <b>5700 Old Orchard Road, 1st Floor</b> <b>Skokie, IL 60077</b>	<b>(708) 965-2776</b>
<b>CISPI</b>	<b>Cast Iron Soil Pipe Institute</b> <b>5959 Shallowford Road, Suite 419</b> <b>Chattanooga, TN 37421</b>	<b>(615) 892-0137</b>

<b>CRI</b>	<b>Carpet and Rug Institute</b> <b>P.O. Box 2048</b> <b>Dalton, GA 30722</b>	<b>(404) 278-3176</b>
<b>CRSI</b>	<b>Concrete Reinforcing Steel Institute</b> <b>933 Plum Grove Road</b> <b>Schaumburg, IL 60173</b>	<b>(708) 517-1200</b>
<b>DHI</b>	<b>Door and Hardware Institute</b> <b>14170 New Brook Drive</b> <b>Chantilly, VA 22022</b>	<b>(703) 222-2010</b>
<b>DIPRA</b>	<b>Ductile Iron Pipe Research Association</b> <b>245 Riverchase Parkway East, Suite O</b> <b>Birmingham, AL 35244</b>	<b>(205) 988-9870</b>
<b>DLPA</b>	<b>Decorative Laminate Products Association</b> <b>600 South Federal Street, Suite 400</b> <b>Chicago, IL 60605</b>	<b>(312) 922-6222</b>
<b>ECSA</b>	<b>Exchange Carriers Standards Association</b> <b>5430 Grosvenor Lane, Suite 200</b> <b>Bethesda, MD 20814</b>	<b>(301) 564-4505</b>
<b>EIA</b>	<b>Electronic Industries Association</b> <b>2001 Pennsylvania Avenue, NW</b> <b>Washington, DC 20006-1813</b>	<b>(202) 457-4900</b>
<b>EIMA</b>	<b>Exterior Insulation Manufacturers Association</b> <b>2759 State Road 580, Suite 112</b> <b>Clearwater, FL 34621</b>	<b>(813) 726-6477</b>
<b>EJMA</b>	<b>Expansion Joint Manufacturers Association</b> <b>25 North Broadway</b> <b>Tarrytown, NY 10591</b>	<b>(914) 332-0040</b>
<b>ETL</b>	<b>ETL Testing Laboratories, Inc.</b> <b>P.O. Box 2040</b> <b>Route 11, Industrial Park</b> <b>Cortland, NY 13045</b>	<b>(607) 753-6711</b>
<b>FCI</b>	<b>Fluid Controls Institute</b> <b>P.O. Box 9036</b> <b>Morristown, NJ 07960</b>	<b>(201) 829-0990</b>
<b>FCIB</b>	<b>Floor Covering Installation Board</b> <b>310 Holiday Avenue</b> <b>Dalton, GA 30720</b>	<b>(706) 226-5488</b>
<b>FGMA</b>	<b>Flat Glass Marketing Association</b> <b>White Lakes Professional Building</b> <b>3310 Southwest Harrison</b> <b>Topeka, KS 66611-2279</b>	<b>(913) 266-7013</b>



<b>FM</b>	<b>Factory Mutual Research Organization</b> <b>1151 Boston-Providence Turnpike</b> <b>P.O. Box 9102</b> <b>Norwood, MA 02062</b>	<b>(617) 762-4300</b>
<b>GA</b>	<b>Gypsum Association</b> <b>810 First Street, NE, Suite 510</b> <b>Washington, DC 20002</b>	<b>(202) 289-5440</b>
<b>HEI</b>	<b>Heat Exchange Institute</b> <b>c/o John H. Addington</b> <b>Thomas Associates, Inc.</b> <b>1300 Sumner Avenue</b> <b>Cleveland, OH 44115-2851</b>	<b>(216) 241-7333</b>
<b>HI</b>	<b>Hydronics Institute</b> <b>P.O. Box 218</b> <b>35 Russo Place</b> <b>Berkeley Heights, NJ 07922</b>	<b>(908) 464-8200</b>
<b>H.I.</b>	<b>Hydraulic Institute</b> <b>30200 Detroit Road</b> <b>Cleveland, OH 44145-1967</b>	<b>(216) 899-0010</b>
<b>HMA</b>	<b>Hardwood Manufacturers Assoc.</b> <b>400 Penn Center Blvd.</b> <b>Pittsburgh, PA 15235</b>	<b>(412) 829-0770</b>
<b>HPMA</b>	<b>Hardwood Plywood Manufacturers Assoc.</b> <b>1825 Michael Farraday Drive</b> <b>P.O. Box 2789</b> <b>Reston, VA 22090-2789</b>	<b>(703) 435-2900</b>
<b>IBD</b>	<b>Institute of Business Designers</b> <b>341 Merchandise Mart</b> <b>Chicago, IL 60654</b>	<b>(312) 647-1950</b>
<b>ICEA</b>	<b>Insulated Cable Engineers Association, Inc.</b> <b>P.O. Box 440</b> <b>South Yarmouth, MA 02664</b>	<b>(508) 394-4424</b>
<b>IEC</b>	<b>International Electrotechnical Commission</b> <b>(Available from ANSI)</b> <b>1430 Broadway</b> <b>New York, NY 10018</b>	<b>(212) 354-3300</b>
<b>IEEE</b>	<b>Institute of Electrical and Electronic Engineers</b> <b>345 East 47th Street</b> <b>New York, NY 10017</b>	<b>(212) 705-7900</b>
<b>IESNA</b>	<b>Illuminating Engineering Society of North America</b> <b>345 East 47th Street</b> <b>New York, NY 10017</b>	<b>(212) 705-7926</b>

<b>IGCC</b>	<b>Insulating Glass Certification Council c/o ETL Testing Laboratories, Inc. P.O. Box 2040 Route 11, Industrial Park Cortland, NY 13045</b>	<b>(607) 753-6711</b>
<b>IMSA</b>	<b>International Municipal Signal Association 165 East Union Street P.O. Box 539 Newark, NY 14513</b>	<b>(315) 331-2182</b>
<b>IRI</b>	<b>Industrial Risk Insurers 85 Woodland Street Hartford, CT 06102</b>	<b>(203) 520-7300</b>
<b>ISA</b>	<b>Instrument Society of America P.O. Box 12277 67 Alexander Drive Research Triangle Park, NC 27709</b>	<b>(919) 549-8411</b>
<b>KCMA</b>	<b>Kitchen Cabinet Manufacturers Association 1899 Preston White Drive Reston, VA 22091-4326</b>	<b>(703) 264-1690</b>
<b>LIA</b>	<b>Lead Industries Association, Inc. 295 Madison Avenue New York, NY 10017</b>	<b>(212) 578-4750</b>
<b>LPI</b>	<b>Lightning Protection Institute 3365 North Arlington Heights Road, Suite J Arlington Heights, IL 60004</b>	<b>(708) 255-3003</b>
<b>MCAA</b>	<b>Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850-4329</b>	<b>(301) 869-5800</b>
<b>ML/SFA</b>	<b>Metal Lath/Steel Framing Association (A Division of the National Association of Architectural Metal Manufacturers) 600 South Federal Street, Suite 400 Chicago, IL 60605</b>	<b>(312) 922-6222</b>
<b>MSS</b>	<b>Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180</b>	<b>(703) 281-6613</b>
<b>NAAMM</b>	<b>National Association of Architectural Metal Manufacturers 600 South Federal Street, Suite 400 Chicago, IL 60605</b>	<b>(312) 922-6222</b>

<b>NAIMA</b>	<b>North American Insulation Manufacturers Association</b> <b>44 Canal Center Plaza, Suite 310</b> <b>Alexandria, VA 22314</b>	<b>(703) 684-0084</b>
<b>NBHA</b>	<b>National Builders Hardware Association</b> <b>(Now DHI)</b>	
<b>NCMA</b>	<b>National Concrete Masonry Association</b> <b>P.O. Box 781</b> <b>Herndon, VA 22070-0781</b>	<b>(703) 435-4900</b>
<b>NCRPM</b>	<b>National Council on Radiation Protection</b> <b>and Measurements</b> <b>7910 Woodmont Avenue, Suite 800</b> <b>Bethesda, MD 20814</b>	<b>(301) 657-2652</b>
<b>NCSPA</b>	<b>National Corrugated Steel Pipe Association</b> <b>2011 Eye Street, NW</b> <b>Washington, DC 20006</b>	<b>(202) 223-2217</b>
<b>NEC</b>	<b>National Electrical Code (from NFPA)</b>	
<b>NECA</b>	<b>National Electrical Contractors Association</b> <b>7315 Wisconsin Avenue</b> <b>Bethesda, MD 20814</b>	<b>(301) 657-3110</b>
<b>NEMA</b>	<b>National Electrical Manufacturers Association</b> <b>2101 L Street, NW, Suite 300</b> <b>Washington, DC 20037</b>	<b>(202) 457-8400</b>
<b>NETA</b>	<b>International Electrical Testing Association</b> <b>P.O. Box 687</b> <b>Morrison, CO 80465</b>	<b>(303) 467-0526</b>
<b>NFPA</b>	<b>National Fire Protection Association</b> <b>One Batterymarch Park</b> <b>P.O. Box 9101</b> <b>Quincy, MA 02269-9101</b>	<b>(617) 770-3000</b> <b>(800) 344-3555</b>
<b>N.F.P.A.</b>	<b>National Forest Products Association</b> <b>1250 Connecticut Avenue, NW, Suite 200</b> <b>Washington, DC 20036</b>	<b>(202) 463-2700</b>
<b>NHLA</b>	<b>National Hardwood Lumber Association</b> <b>P.O. Box 34518</b> <b>Memphis, TN 38184-0518</b>	<b>(901) 377-1818</b>
<b>NKCA</b>	<b>National Kitchen Cabinet Association</b> <b>(Now KCMA)</b>	
<b>NLGA</b>	<b>National Lumber Grades Authority</b> <b>1055 West Hastings Street, Suite 260</b> <b>Vancouver, British Columbia</b> <b>Canada V6E 2E9</b>	<b>(604) 687-2171</b>

<b>NOFMA</b>	<b>National Oak Flooring Manufacturers Association</b> <b>P.O. Box 3009</b> <b>Memphis, TN 38173-0009</b>	<b>(901) 526-5016</b>
<b>NPA</b>	<b>National Particleboard Association</b> <b>18928 Premiere Court</b> <b>Gaithersburg, MD 20879</b>	<b>(301) 670-0604</b>
<b>NPCA</b>	<b>National Paint and Coatings Association</b> <b>1500 Rhode Island Avenue, NW</b> <b>Washington, DC 20005</b>	<b>(202) 462-6272</b>
<b>NRCA</b>	<b>National Roofing Contractors Association</b> <b>10255 West Higgins Road, Suite 600</b> <b>Rosemont, IL 60018-5607</b>	<b>(708) 299-9070</b>
<b>NSF</b>	<b>National Sanitation Foundation</b> <b>3475 Plymouth Road</b> <b>P.O. Box 1468</b> <b>Ann Arbor, MI 48106</b>	<b>(313) 769-8010</b>
<b>NWMA</b>	<b>National Woodwork Manufacturers Association</b> <b>(Now NWWDA)</b>	
<b>NWWDA</b>	<b>National Wood Window and Door Association</b> <b>1400 East Touhy Avenue, #G54</b> <b>Des Plaines, IL 60018</b>	<b>(708) 299-5200</b>
<b>PCA</b>	<b>Portland Cement Association</b> <b>5420 Old Orchard Road</b> <b>Skokie, IL 60077</b>	<b>(708) 966-6200</b>
<b>PCI</b>	<b>Precast/Prestressed Concrete Institute</b> <b>175 West Jackson Blvd.</b> <b>Chicago, IL 60604</b>	<b>(312) 786-0300</b>
<b>PDI</b>	<b>Plumbing and Drainage Institute</b> <b>c/o Sol Baker</b> <b>1106 West 77th Street, South Drive</b> <b>Indianapolis, IN 46260</b>	<b>(317) 251-6970</b>
<b>PEI</b>	<b>Porcelain Enamel Institute</b> <b>1101 Connecticut Avenue, NW, Suite 700</b> <b>Washington, DC 20036</b>	<b>(202) 857-1134</b>
<b>RFCI</b>	<b>Resilient Floor Covering Institute</b> <b>966 Hungerford Drive, Suite 12-B</b> <b>Rockville, MD 20805</b>	<b>(301) 340-8580</b>
<b>RIS</b>	<b>Redwood Inspection Service</b> <b>405 Enfrente Drive, Suite 200</b> <b>Novato, CA 94949</b>	<b>(415) 382-0662</b>

<b>RMA</b>	<b>Rubber Manufacturers Association</b> <b>1400 K Street, NW</b> <b>Washington DC 20005</b>	<b>(202) 682-4800</b>
<b>SDI</b>	<b>Steel Deck Institute</b> <b>P.O. Box 9506</b> <b>Canton, OH 44711</b>	<b>(216) 493-7886</b>
<b>S.D.I.</b>	<b>Steel Door Institute</b> <b>30200 Detroit Road</b> <b>Cleveland, OH 44145</b>	<b>(216) 889-0010</b>
<b>SGCC</b>	<b>Safety Glazing Certification Council</b> <b>c/o ETL Testing Laboratories</b> <b>Route 11, Industrial Park</b> <b>Cortland, NY 13045</b>	<b>(607) 753-6711</b>
<b>SHLMA</b>	<b>Southern Hardwood Lumber Manufacturers Association</b> <b>(Now HMA)</b>	
<b>SIGMA</b>	<b>Sealed Insulating Glass Manufacturers Association</b> <b>401 North Michigan Avenue</b> <b>Chicago, IL 60611</b>	<b>(312) 644-6610</b>
<b>SMA</b>	<b>Screen Manufacturers Association</b> <b>3950 Lake Shore Drive, Suite 502-A</b> <b>Chicago, IL 60613-3431</b>	<b>(312) 525-2644</b>
<b>SMACNA</b>	<b>Sheet Metal and Air Conditioning</b> <b>Contractors National Association</b> <b>4201 Lafayette Center Drive</b> <b>Chantilly, VA 22021</b>	<b>(703) 803-2980</b>
<b>SPIB</b>	<b>Southern Pine Inspection Bureau</b> <b>4709 Scenic Highway</b> <b>Pensacola, FL 32504</b>	<b>(904) 434-2611</b>
<b>SPRI</b>	<b>Single Ply Roofing Institute</b> <b>20 Walnut Street</b> <b>Wellesley Hills, MA 02189</b>	<b>(617) 237-7879</b>
<b>SSPC</b>	<b>Steel Structures Painting Council</b> <b>4400 Fifth Avenue</b> <b>Pittsburgh, PA 15213-2683</b>	<b>(412) 268-3327</b>
<b>SSPMA</b>	<b>Sump and Sewage Pump Manufacturers Association</b> <b>P.O. Box 298</b> <b>Winnetka, IL 60093</b>	<b>(708) 835-8911</b>
<b>SWI</b>	<b>Steel Window Institute</b> <b>c/o Thomas Associates, Inc.</b> <b>1300 Sumner Ave,</b> <b>Cleveland, OH 44115-2851</b>	<b>(216) 241-7333</b>

<b>SWPA</b>	<b>Submersible Wastewater Pump Association</b> <b>600 South Federal Street, Suite 400</b> <b>Chicago, IL 60605</b>	<b>(312) 922-6222</b>
<b>TIMA</b>	<b>Thermal Insulation Manufacturers Association</b> <b>29 Bank Street</b> <b>Stamford, CT 06901</b> <b>(Standards now issued by NAIMA)</b>	<b>(203) 324-7533</b>
<b>TPI</b>	<b>Truss Plate Institute</b> <b>583 D'Onofrio Drive, Suite 200</b> <b>Madison, WI 53719</b>	<b>(608) 833-5900</b>
<b>UFAC</b>	<b>Upholstered Furniture Action Council</b> <b>Box 2436</b> <b>High Point, NC 27261</b>	<b>(919) 885-5065</b>
<b>UL</b>	<b>Underwriters Laboratories, Inc.</b> <b>333 Pfingsten Road</b> <b>Northbrook, IL 60062</b>	<b>(708) 272-8800</b>
<b>USP</b>	<b>U.S. Pharmacopoeial Convention</b> <b>12601 Twinbrook Parkway</b> <b>Rockville, MD 20852</b>	<b>(301) 881-0666</b>
<b>WCLIB</b>	<b>West Coast Lumber Inspection Bureau</b> <b>P.O. Box 23145</b> <b>Portland, OR 97223</b>	<b>(503) 639-0651</b>
<b>WCMA</b>	<b>Wallcovering Manufacturers Association</b> <b>355 Lexington Avenue, 17th Floor</b> <b>New York, NY 10017</b> <b>(WCMA has moved from this location, perhaps to</b> <b>the Chicago area. Address and telephone</b> <b>number not confirmed.)</b>	<b>(212) 661-4261</b>
<b>WIC</b>	<b>Woodwork Institute of California</b> <b>P.O. Box 11428</b> <b>Fresno, CA 93773-1428</b>	<b>(209) 233-9035</b>
<b>WRI</b>	<b>Wire Reinforcement Institute</b> <b>1101 Connecticut Avenue NW, Suite 700</b> <b>Washington, DC 20036-4303</b>	<b>(202) 429-5125</b>
<b>WSC</b>	<b>Water Systems Council</b> <b>600 South Federal Street, Suite 400</b> <b>Chicago, IL 60605</b>	<b>(312) 922-6222</b>
<b>WSFI</b>	<b>Wood and Synthetic Flooring Institute</b> <b>4415 West Harrison Street, Suite 242-C</b> <b>Hillside, IL 60162</b>	<b>(708) 449-2933</b>

<b>WLPDIA</b>	<b>Western Lath, Plaster, Drywall Industries Association (Formerly California Lath &amp; Plaster Association) 8635 Navajo Road San Diego, CA 92119</b>	<b>(619) 466-9070</b>
<b>WWPA</b>	<b>Western Wood Products Association Yeon Building 522 SW 5th Avenue Portland, OR 97204-2122</b>	<b>(503) 224-3930</b>
<b>W.W.P.A.</b>	<b>Woven Wire Products Association 2515 North Nordica Avenue Chicago, IL 60635</b>	<b>(312) 637-1359</b>

- G. Federal Government Agencies: Names and titles of federal government standard or Specification-producing agencies are often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standard or Specification-producing agencies of the federal government. Names and addresses are subject to change but are believed to be, but are not assured to be, accurate and up to date as of the date of the Contract Documents.

<b>CE</b>	<b>Corps of Engineers (U.S. Department of the Army) Chief of Engineers – Referral Washington, DC 20314</b>	<b>(202) 272-0660</b>
<b>CFR</b>	<b>Code of Federal Regulations (Available from the Government Printing Office) North Capitol Street between G and H Streets, NW Washington, DC 20402 (Material is usually first published in the "Federal Register")</b>	<b>(202) 783-3238</b>
<b>CPSC</b>	<b>Consumer Product Safety Commission 5401 Westbard Avenue Bethesda, MD 20207</b>	<b>(301) 492-6580 (800) 638-2772</b>
<b>CS</b>	<b>Commercial Standard (U.S. Department of Commerce) Washington, DC 20230</b>	<b>(202) 482-2000</b>
<b>DOC</b>	<b>U.S. Department of Commerce 14th Street and Constitution Avenue, NW Washington, DC 20230</b>	<b>(202) 482-2000</b>
<b>DOT</b>	<b>Department of Transportation 400 Seventh Street, SW Washington, DC 20590</b>	<b>(202) 366-4000</b>
<b>EPA</b>	<b>Environmental Protection Agency 401 M Street, SW Washington, DC 20460</b>	<b>(202) 382-2090</b>

<b>FAA</b>	<b>Federal Aviation Administration (U.S. Department of Transportation) 800 Independence Avenue, SW Washington, DC 20590</b>	<b>(202) 366-4000</b>
<b>FCC</b>	<b>Federal Communications Commission 1919 M Street, NW Washington, DC 20554</b>	<b>(202) 632-7000</b>
<b>FHA</b>	<b>Federal Housing Administration (U.S. Department of Housing and Urban Development) Director, Manufactured Housing and Construction Standards Division 451 Seventh Street, SW, Room 9158 Washington, DC 20201</b>	<b>(202) 755-5210</b>
<b>FS</b>	<b>Federal Specification (from GSA) Specifications Unit (WFSIS) 7th and D Streets, SW Washington, DC 20407</b>	<b>(202) 708-9205</b>
<b>GSA</b>	<b>General Services Administration F and 18th Streets, NW Washington, DC 20405</b>	<b>(202) 708-5082</b>
<b>MIL</b>	<b>Military Standardization Documents (U.S. Department of Defense) Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120</b>	
<b>NIST</b>	<b>National Institute of Standards and Technology (U.S. Department of Commerce) Gaithersburg, MD 20899</b>	<b>(301) 975-2000</b>
<b>OSHA</b>	<b>Occupational Safety and Health Administration (U.S. Department of Labor) N3647 200 Constitution Avenue, NW Washington, DC 20210</b>	<b>(202) 219-8148</b>
<b>PS</b>	<b>Product Standard of NBS (U.S. Department of Commerce) Washington, DC 20230</b>	<b>(202) 482-2000</b>
<b>REA</b>	<b>Rural Electrification Administration (U.S. Department of Agriculture) 14th Street and Independence Avenue, SW Washington, DC 20250</b>	<b>(202) 447-2791</b>
<b>USDA</b>	<b>U.S. Department of Agriculture 14th Street and Independence Avenue, SW Washington, DC 20250</b>	<b>(202) 447-2791</b>



<b>USPS</b>	<b>U.S. Postal Service</b>	
	<b>475 L'Enfant Plaza, SW</b>	
	<b>Washington, DC 20260-0010</b>	<b>(202) 268-2000</b>

**1.05. GOVERNING REGULATIONS AND AUTHORITIES**

- A. Copies of Regulations: Obtain copies of governing regulations and retain them at the Project site to be available for reference by parties who have a reasonable need, if requested by the Architect.

**1.06. SUBMITTALS**

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

**PART 2 – PRODUCTS            NOT USED**

**PART 3 – EXECUTION        NOT USED**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 01 50 00**

**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02. SUMMARY**

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security, and protection.
- B. Temporary utilities required include, but are not limited to:
  - 1. Temporary power and lighting as specified in Division 260000.
  - 2. Temporary heat & winter conditions.
- C. Temporary construction and support facilities required include, but are not limited to:
  - 1. Waste disposal services.
  - 2. Temporary yard and storage on and off-site.
  - 3. Construction aids and miscellaneous services and facilities.
  - 4. Sweeping compound.
  - 5. Emergency portable generators of size required if permanent power is temporarily unavailable.
  - 6. Water service and distribution if water supply to adjacent occupied spaces is temporarily unavailable.
  - 7. Parking
- D. Security and protection facilities required include, but are not limited to:
  - 1. Temporary weather protection, enclosures, and covers.
  - 2. Temporary fire protection and fire watch if required by Worcester Fire Department.
  - 3. Barricades, warning signs, lights.
  - 4. Temporary partitions between occupied areas and construction areas, STC 48 or better.
- E. Where a distinction is made in this specification section between temporary services to be provided by a General Contractor and those to be provided by a Subcontractor, the purpose is only to clarify which costs are to be included by the applicable parties for inclusion in the applicable bids and contracts that would follow. These distinctions have no bearing upon the Contract between the Owner and General Contractor and do not limit in any way the General Contractor's responsibility to provide all such temporary services without additional cost to the Owner. For the sake of clarity in this specification section, the term General Contractor has been used for the person called the Contractor in other specification sections, when the intent is that that person shall provide a service directly at his own expense rather than at the expense of one of the Subcontractors from whom the Owner has taken filed sub-bids.

- F. The temporary services described in this specification section may not be adequate to provide for all of the needs of the General Contractor or all Subcontractors but are intended only to provide a basis for obtaining filed sub-bids. The General Contractor or any Subcontractor requiring additional temporary services for the proper execution of his work or because of climatic conditions shall arrange for and obtain such services at his own expense without further compensation by the Owner.
- G. The Contractor shall be responsible for restoring all landscaped areas affected by the work of this project to their original “like-new” state that existed prior to work commencing. This restoration work shall include, but not be limited to, planting beds with mulch, trees, shrubs, and lawn areas. Great care should be taken during the work not to damage nor destroy any landscaping impacted by this work. Any landscaping disturbed, damaged, or destroyed shall be restored, repaired, or replaced in-kind at no cost to the Owner.

**1.03. SUBMITTALS**

- A. Schedule: Submit a schedule indicating implementation and termination of each temporary utility within fifteen (15) days of the date established for Commencement of the Work.

**1.04. QUALITY ASSURANCE**

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
  - 1. Commonwealth of Massachusetts State Building Code requirements; 6th Edition.
  - 2. Federal, State and City Health and safety regulations.
  - 3. Utility company regulations.
  - 4. Police, Fire Department and Rescue Squad rules.
  - 5. Environmental protection regulations.
- B. Standards: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
  - 1. NFPA Code 241.
  - 2. NFPA 70.
  - 3. ANSI A10.
  - 4. NECA NJG-6.
- C. Electric Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70.
- D. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utilities prior to use. Obtain required certifications and permits.

**1.05. PROJECT CONDITIONS**

- A. Temporary Utilities: At the earliest feasible time, when acceptable to the Owner, change from use of temporary service to use of permanent service.

- B. Conditions of Use: Maintain temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload temporary facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, unsanitary conditions, or public nuisances to develop or persist on the site.
- C. Always maintain the continuity of all utility services across all Phases of the Construction Project, unless otherwise directed by the Architect or Owner.

## **PART 2 - PRODUCTS**

### **2.01 MATERIALS**

- A. General: Provide new materials suitable for the use intended, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

### **2.02 TEMPORARY WATER**

- A. Definitions:
  - 1. Water Access Point: A point, within the Project area, at which water is available during construction.
- B. Charges: The General Contractor shall pay for all facilities to provide water during construction, while the Owner will supply and pay for water during the construction. The General Contractors shall pay for backflow preventer if utilizing Owners Hydrant for water.
  - 1. The furnishing of water by the Owner shall be conditional upon all contractors being conservative and prudent in its use. In the event of any contractor is repeatedly wasted in the use of water thus provided, the Owner reserves the right to charge the General Contractor for wasteful usage at an equitable rate for the additional portion of water used.
- C. Temporary Water: The General Contractor shall be responsible for all facilities to provide water during construction as defined above and further specified as follows:
  - 1. Except under unusual circumstances, when otherwise specified or approved by the Architect, all water shall be of potable quality.
  - 2. The General Contractor shall provide all necessary piping, valving, hose bibbs, hosing, etc. to provide temporary water during construction from a water access point determined by the Owner's Representative. Any facilities running within the building are required not to leak. Any damage incurred due to leaks shall be repaired at the expense of the General Contractor.
  - 3. The General Contractor shall pay for and be responsible for the protection of Temporary Water, which he installs, from freezing and other damage.

### **2.03 TEMPORARY HEAT**

- A. Definitions:
  - 1. Temporary Heating & Ventilating: The General Contractor shall provide temporary heat and ventilation, as needed, to work areas outside the building to maintain the minimum temperatures described below. The General Contractor shall also provide temporary heat and ventilation, as needed, to work areas inside the building to maintain an indoor temperature of 68 degrees Fahrenheit during the winter months and 75 degrees Fahrenheit during the summer months.

- B. Charges: The General Contractor shall pay for all temporary heat and ventilation as defined above. The General Contractor shall pay for all fuel required for Temporary Heat and Ventilation. The Owner shall pay for all electrical energy use charges.
  - 1. The furnishing of electrical energy by the Owner shall be conditional upon being conservative and prudent in its use. If any contractor is repeatedly wasteful in the use of electrical energy thus provided, the Owner reserves the right to charge the General Contractor at an equitable rate for the additional portion of electrical energy used.
- C. Temporary Heating: Portable heating units shall be of sufficient capacity and number and shall be located so that damage to any part of the project from low temperature will be prevented and that concrete, masonry, and other components requiring curing shall be properly cured.
  - 1. Heaters for temporary heat shall be temporary steam generators, forced air heaters, or other type heaters located outside the building or vented to the outside of the building. Type(s) shall be such as to not damage or stain construction or any part of the existing building. Heaters must be UL approved.
  - 2. At no time will oil-burning "salamander" type heaters be used, nor will non-vented, open flame heaters be used inside the building.
  - 3. Propane-type heaters shall not be used at any time within the area of the building or near stockpiles of combustible materials.
  - 4. Temporary heating shall apply to winter conditions.
- A. Temporary Ventilation: Portable ventilation units shall be of sufficient capacity and number and shall be located so that damage to any part of the project from excess humidity will be prevented and that concrete, masonry, and other components requiring curing shall be properly cured.

## 2.04 TEMPORARY POWER AND LIGHTING

- A. Definitions:
  - 1. Temporary Electric: The furnishing, installing, maintenance, and removal of all wiring, fusing, switches, outlets, lamps, and accessory electrical devices required to provide lighting and power needed by all construction trades for the duration of construction.
- B. Charges: The General Contractor shall pay for all facilities for Temporary Electric. The Owner shall pay for all use charges for electrical energy.
  - 1. The furnishing of electrical energy by the Owner shall be conditional upon all contractors being conservative and prudent in its use. If any contractor is repeatedly wasteful in the use of electrical energy thus provided, the Owner reserves the right to charge the General Contractor at an equitable rate for the additional portion of energy consumed.
- C. Temporary Electricity: The General Contractor shall pay for and be responsible for Temporary Electric as defined above and further specified as follows:
  - 1. The General Contractor shall provide temporary electricity during construction from an electrical service access point determined by the Owner's Representative.
  - 2. The Temporary Electricity is expected to be used during normal working hours, as defined in Section 01010 – Summary of Work. No additional charge shall be made by the General Contractor for switching the system on and off to meet this time requirement.

3. Responsibility of compliance with local, state, and national codes for installation of the Temporary Electric service shall be borne by the General Contractor.
4. The General Contractor shall be responsible for servicing and maintaining all temporary lighting during the construction.
5. The General Contractor shall be responsible for paying for the following Temporary Electricity. This schedule will not necessarily provide for all the requirements of all contractors. The General Contractor or any Subcontractor having requirements for power, lighting, or service other than those provided herein, shall make the necessary arrangements to obtain such power, lighting, or service at his own expense.
  - a. The General Contractor shall obtain all necessary permits, shall furnish, and install the temporary electrical power and lighting systems, and shall pay for all labor, materials, and equipment required for this work. All such temporary electrical work shall meet the requirements of the Massachusetts Electrical Code and OSHA.
  - b. The Electrical Subcontractor shall furnish and install a feeder, or feeders, of sufficient capacity to provide additional lighting to the work areas, as required, to properly carry out the work. Temporary lighting shall be based on the following requirements:
    - 1) Rooms or spaces under 250 square feet: Two (2) 100-watt lamps.
    - 2) Rooms or spaces over 250 square feet and under 500 square feet: Four (4) 100-watt lamps.
    - 3) Rooms or spaces over 500 square feet and under 1,000 square feet: Two (2) 200-watt lamps.
    - 4) Rooms or spaces over 1,000 square feet: Two (2) 200-watt lamps for every 1,000 square feet or fraction thereof.
    - 5) Sufficient additional wiring outlets and lamps shall be installed to ensure proper lighting in stairwells, corridors, and passage areas.
    - 6) Temporary power, in addition to the lighting requirements, shall be provided throughout the building for electrically operated tools, based on a minimum of 0.50 watts per square foot.
    - 7) Outlets shall be located at convenient points so that extension cords not over 50 feet in length will reach all work requiring light or power.
    - 8) All Electrical Outlets shall be properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light, for connection of power tools and equipment.
    - 9) All Electrical Power Cords shall be grounded extension cords that are "hard-service" type where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress.
  - c. All necessary cables, load centers, switches, and accessories required for the temporary light and power installation shall be provided and installed by the General Contractor.
  - d. The General Contractor shall furnish and install all lamps, both initial and replacement, before the Date of Substantial Completion.
  - e. Temporary light and power requirements herein required are for the use of all trades working at the site.

- f. All Contractors and Subcontractors shall, individually, furnish all extension cords and lamps, sockets, motors, and accessories required for their work.
  - 1) All Electrical Power Cords shall be grounded extension cords that are “hard-service” type where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress.
- g. Any of the Contractors or Subcontractors shall reimburse the General Contractor for any of the following:
  - 1) Any temporary wiring of a special nature, other than that specified above, required for their work.
  - 2) Any temporary wiring of construction offices and buildings used by them.
  - 3) Any temporary wiring for protective night lighting.
- h. The General Contractor shall be responsible for removing all temporary wiring, service equipment, and accessories when and as directed to by the General Contractor.
- i. The provisions of the Massachusetts Electrical Code shall be strictly complied to, with special respect to Article 305 of said code, and the following precautions shall be taken:
  - 1) Open conductors shall be fastened at the ceiling height at minimum of 10 feet intervals. Conductors may not be laid on the floor, and receptacles or fixed equipment circuits shall contain a separate equipment-grounding conductor if run as open wiring. Receptacles shall be of the grounding type. Branch circuits shall also be of the grounding type, unless installed in a complete metallic conductor and receptacles electrically connected to the grounding conductor. Neither bare conductors nor earth returns shall be used for wiring of any temporary circuits. Grounding circuits shall never be interrupted.
  - 2) All 15 and 20 amp receptacle outlets on single phase circuits which are used for construction purposes shall be equipped with ground-fault circuit interrupters, reset button, and pilot lights; as required by Article 210 of the Massachusetts Electrical Code.
  - 3) All outlets shall be properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets.

## 2.05 TEMPORARY SANITARY FACILITIES

- A. The General Contractor shall provide ample toilet facilities with proper enclosures for the use of workmen employed on the work to be as located within the construction areas on site were permitted by the Architect.
  - 1. Provide the Architect with a schedule of maintenance and cleaning. Provide toilet facilities with hand washing sanitizer dispenser, paper towels, and cleaners.
  - 2. Toilet facilities shall be installed and maintained in conformity with the governing laws and building code. They shall be properly lit, ventilated, and kept clean at all times.
  - 3. At no time shall any Contractor Personnel use toilet facilities outside the work areas or in any Owner-occupied parts of the building.



**2.06 TEMPORARY WEATHER PROTECTION**

**A. Definitions:**

1. Weather Protection: The furnishing, installing, maintenance, and removal of temporary closures, covers, shields, and any other weather protection devices as required to protect work in place and permit construction to proceed during cold or inclement weather.

**B. Weather Protection Standard:** The following weather protection standards pursuant to Chapter 597 of the Acts of 1980, modifying Sections 44F and G of Chapter 149 of the General Laws, are hereby incorporated into this specification, and shall be considered supplementary to the temporary heating and temporary enclosure requirements. Under the provisions of Chapter 149, Section 44F(I) and Section 44G, Paragraph D, of the General Laws, General Contractors are required to provide weather protection to allow building construction to be carried on during the months of November through March. These standards do not require enclosures for heat for operations that are not economically feasible to protect in the judgment of the Awarding Authority, including for example, site work, excavation, pile driving, steel erection, erection of certain exterior panels, roofing, and the like.

1. The General Contractor shall provide and install weather protection.
2. Weather protection shall be provided during the months of November through March.
3. The temperature at the working surface shall be at least forty degrees Fahrenheit (40° F). This provision does not supersede any specific greater requirements for the methods of construction or curing of materials.
4. Weather protection materials, equipment, and the installation thereof, shall comply with all safety rules and regulations including the provisions for adequate ventilation and fire protection devices.
5. At completion of work, the General Contractor shall remove temporary weather protection and restore all surfaces to first class condition.
6. The General Contractor may choose, if the Awarding Authority approves, to use the permanent heating system for temporary heat after the building is enclosed and the system has been tested and is ready to operate.
  - a. The General Contractor shall thoroughly clean and restore to first class condition, acceptable to the Awarding Authority, all portions of the permanent heating system that are used for heating during construction.
  - b. Use of the permanent heating system for weather protection shall not affect any heating system guarantee that may be due to the Awarding Authority; such guarantee shall begin to run only when the Awarding Authority accepts the building.
7. Reporting Requirements:
  - a. Within thirty (30) calendar days after the Contract Award the General Contractor shall submit, in writing to the Awarding Authority for approval, its proposed plan for weather protection. Refer to Section 01300 – Submittals for additional information regarding the appropriate procedure in preparing this submittal.
  - b. The General Contractor shall furnish and install accurate Fahrenheit thermometers at places designated by the Awarding Authority to determine whether the required temperature is being maintained.

**C. Temporary Covers and Enclosures:**

1. Except as otherwise specified herein below, all costs of closing openings in new construction and the exterior of the existing buildings open to the weather, including temporary covers and enclosures, shall be borne by the General Contractor. Enclosures must be built around various portions of the new construction and new exterior openings in the existing building as the work progresses if, and as necessary to totally insure against the intrusion of rain, snow, and other moisture which might damage the new or existing materials or finishes and as necessary to maintain the minimum temperatures specified.
  - a. Where roofs, exterior walls, windows, or other elements of new or existing buildings or structures providing weather protection are to be temporarily opened to the weather, they shall be fully enclosed or covered with securely attached and well-draining enclosures whenever inclement weather is occurring or is threatening, to assure absolute weather protection. All damage to the new or existing buildings or structures, including all materials and finishes thereon, caused by inadequate protection shall be made good by the General Contractor without further cost to the Owner.
2. All such weather tight enclosures shall provide a reasonable open area to permit drying of new wet materials while at the same time making it possible to maintain the required interior temperatures. The General Contractor shall provide sufficient continuous ventilation until the time that the "wet" work of the project has dried sufficiently to receive finished woodwork and other materials subject to moisture damage, at which time the ventilation shall be maintained at approximately the anticipated conditions of final use of the project.
3. The permanent doors and frames shall not be used as temporary enclosures prior to the time of delivery of finished woodwork or acoustical materials. Temporary wood or plywood doors with wood frames and proper hardware to make the doors self-closing shall be provided, instead, at the door openings.
4. As parts of the temporary enclosures, the permanent doors, windows, and fixed glass may be used, provided sufficient ventilation area is available and that extreme care is taken to prevent damage to the same. Where available ventilation area is limited, intake and discharge fans may be used to increase air movement through the construction areas. Before delivery of finished woodwork or other materials subject to moisture damage, the permanent windows, roof accessories, fixed glass, doors, and entrances must be in place. Spark-proof fans shall also be provided to remove toxic or obnoxious fumes from enclosed areas as may be required.
5. Once temporary enclosures are in place, a temperature of at least 55 degrees Fahrenheit shall be maintained within all interior workspaces. From the time of delivery of the first shipment of finished woodwork or other finished materials subject to moisture damage, a temperature of at least 60 degrees Fahrenheit shall be maintained within all interior spaces. Temperatures shall be maintained at this level until the time of substantial completion of the project or occupancy by the Owner, whichever is sooner, and shall not be discontinued until definite arrangements for same have been made by the Owner.

**D. Weather Protection by Subcontractors:** The General Contractor shall provide at his own expense all Weather Protection as defined above except as follows:

1. Each Subcontractor shall pay for and be responsible for the weather protection of his tools, devices, equipment, appliances, and appurtenances to use in the accomplishment of his work and for weather protection of materials furnished by him until such materials are incorporated as a physical part of the Project.

2. Protection and heating of aggregates and water for concrete and mortars shall be the responsibility and at the expense of the respective Subcontractors furnishing concrete and mortars.
3. Construction Water Facilities, furnished and installed by the General Contractor, shall be protected against freezing by the Contractor at his own expense.
4. Hoses, piping, and accessory devices installed and connected by others to the water facilities furnished by the Contractor shall be protected against freezing by the installer at his own expense.

**2.07 TEMPORARY FIRE PROTECTION**

- A. The General Contractor shall take all necessary precautions for the prevention of fire during construction. He shall be responsible for ensuring that the area within the contract limits is kept orderly and clean and that combustible rubbish is promptly removed from the site. Combustible materials shall be stored on site in a manner and at locations approved by the Architect. The General Contractor shall comply with all suggestions regarding fire protection made by the Insurance Company with which the Owner maintains his fire insurance.
- B. The General Contractor shall provide and maintain in good working order, under all conditions, readily available to all portions of the site and work, suitable and adequate fire protection equipment, and services. Such facilities shall include, but are not limited to, the furnishing and maintaining in good working order a minimum of two (2) standard, Underwriters' Laboratories labeled, 2-1/2 gallon capacity fire extinguishers per floor.
- C. Smoking shall be prohibited on the premises and signs to this effect shall be posted conspicuously.
- D. Fires shall not be built on the premises.

**2.08 TEMPORARY CRANES, LIFTS, DERRICKS, AND HOISTING SERVICES**

- A. The General Contractor shall furnish, install, operate, and maintain in safe condition all crane services outside of the building for his own use and for the use of all Subcontractors on the project to properly carry out and complete the work, except as may otherwise be specifically provided for in any of the trade sections of the Specifications.
- B. All crane services shall be provided at no cost to the Subcontractors for their work.
- C. Each Subcontractor shall, however, provide their own lifts, derricks, hoisting services, etc. (excluding crane services outside the building) for their own work outside and inside the building to properly complete their work.
- D. All cranes, lifts, derricks, and hoisting equipment, machinery, and operation shall comply in all respects to the governing laws and codes.

**2.09 TEMPORARY STAGING AND SCAFFOLDING**

- A. The General Contractor shall furnish, erect, and maintain in safe condition all exterior and interior staging and scaffolding required for his own use.
- B. Each of the Subcontractors shall furnish, erect, and maintain in safe condition all exterior and interior staging and scaffolding for their own use.

- C. All staging and scaffolding shall be enclosed at the ground by a temporary construction fence as defined elsewhere in this Section.
  - D. Staging and scaffolding shall comply in all respects to the governing laws and codes.
- 2.10 TEMPORARY BRACING, SHORING, SHEETING, AND TIE-DOWNS
- A. The General Contractor shall take all precautions to protect the Work against collapse or other damage by earth or construction loads, high winds, snow and rain loads, damage by adverse weather conditions or geological disturbances, or other cause, by temporary bracing shoring, sheeting, guying, lacing, covering, weighting, and other reasonable and prudent means.
- 2.11 TEMPORARY STAIRS, LADDERS, RAMPS, PLATFORMS, ETC.
- A. The General Contractor shall provide and maintain all necessary temporary stairs, ladders, ramps, platforms, and other temporary construction required for the proper execution of the work, all of which shall comply with requirements of the governing laws and codes and/or as required by local building officials.
  - B. As soon as the permanent ladders and hatches are installed, the General Contractor shall provide temporary protective measures acceptable to the Architect to maintain their new condition until substantial completion, so to assure that such items will not be damaged as the remaining work progresses.
- 2.12 TEMPORARY FENCING, BARRIERS, AND PARTITIONS
- A. Protection: The General Contractor shall be fully responsible for the security of the work areas of the site and for patrolling and protecting the work under construction and his and the Owner's materials stored or otherwise located on the site.
  - B. Temporary Barricading: In addition, the General Contractor shall provide other temporary fencing, barricading, and overhead protection of substantial nature to protect workmen, other personnel, and the public against various hazards and attendant nuisances that come about as the work progresses such as, but not necessarily limited to, falling materials, dangerous excavations, dangerous projections, or obstructions, stored or stockpiled materials, etc. Comply fully with recommendations of the Association of General Contractors and provisions of the governing laws and codes.
  - C. Note: As part of requirement for overhead protection, include substantial, well-constructed, walkways cover sufficient to assure pedestrian safety, in accordance with recommendations of the Association of General Contractors and provisions of the governing laws and codes.

- D. In addition, the General Contractor shall provide all necessary protective barriers within the existing building as required to assure the safety of persons and property wherever work on this Contract is being carried out. Include substantial, well-constructed, protective barriers at all construction work-limit-lines separating Contract work areas from areas occupied by the Owner. Also include flameproof dust-curtaining and block or filter mechanical return air systems in a safe manner, in cooperation with Mechanical trade, between areas where dust effusive work is being carried out and other interior areas of the new addition and existing building to prevent passage of dirt and dust. Barriers, curtaining, etc., must be self-supporting, and must not depend on building construction for primary structure or anchorage. Locations and quantities of barriers and dust curtaining shall always be subject to Owner's and Architect's approval, but such approval, or lack of inspection or approval, by the Owner or the Architect, shall not be construed as relieving the Contractor of any of his responsibilities under the Contract.

**2.13 TEMPORARY STORAGE FACILITIES**

- A. Space for storage of materials shall be confined to the construction areas outside the building and as designated and/or approved by the Architect.
- B. Locations where construction equipment may be stored during non-working hours shall be as acceptable to the Owner. Construction equipment shall not present a hazard when stored.

**2.14 NOISE, DUST, AND POLLUTION CONTROL**

- A. All work performed under the Contract shall conform to the requirements of Chapter III, Section 31C and Section 142D of the General Laws, Commonwealth of Massachusetts and Rules and Regulations adopted thereto by the Commonwealth of Massachusetts, Department of Public Health, and the requirements of local noise, dust, and pollution control laws, ordinances, and regulative agencies applicable to the work.
- B. The General Contractor shall provide temporary partitions to prevent noise, dust, pollution or order from entering occupied spaces. Temporary partitions shall have STC of 50. Submit location plan and type of construction for temporary partitions for approval.
- C. Control of air borne dust or pollution from the site with spray or as otherwise may be necessary to prevent the migration of any dust or pollutants.
- D. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, or pollution.
  2. Vacuum equipment shall be equipped with HEPA filters.
  3. Vacuum carpeted areas.
  4. Wet mop floors to eliminate trackable dirt.
  5. Sweeping shall be allowed only with the use of a non-oil based sweeping compound followed by vacuuming any remaining residue.
  6. Wipe down walls and doors of demolition enclosure.
- E. Disposal: Remove and transport debris, in a manner that will prevent spillage on adjacent surfaces and areas, to the construction dumpster(s).

- F. Cleaning: Clean areas adjacent to the work area of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

**2.15 WATER CONTROL**

- A. The General Contractor shall be responsible for site drainage and snow removal within the limit-of-work lines and shall maintain such drainage and removal during the life of the Contract in a manner approved by the Owner and Architect, and so as not to adversely affect the adjacent areas.
- B. Water from the Work of this Project shall be disposed of in such a manner as not to be a threat to public health nor cause damage to public or private property. It shall not be disposed of over surfaces of roads, walks, and streets, nor be permitted to cause any interference with the normal use of the same.
- C. Removal of snow and ice from within the limit-of-work lines at the site as required to maintain the continual progress of the work, including that required to keep work areas, access roads, and storage areas clear, free, and in use, and as required to prevent damage to existing construction and new work in places.

**2.16 CONSTRUCTION CLEANING AND CONSTRUCTION DUMPSTERS**

- A. The General Contractor shall provide and pay for temporary dumpster type trash containers outside the building for use by all Subcontractors, and shall have the containers replaced, hauled away, and the contents legally disposed of at sufficient intervals to maintain them at all times in sufficiently empty condition that they are ready to receive trash and debris.
- B. All construction dumpsters shall be in the parking lot within the construction staging area and were permitted by the Owner.
- C. Each Contractor on the project shall be responsible for removing their own trash and debris from the building to the construction dumpster(s).
- D. Waste materials and rubbish, which might otherwise raise dust, shall be sprinkled during handling and loading to minimize this effect. Debris shall be carried out of the structure in containers or dropped in fully enclosed chutes and shall not be passed through, or thrown from, windows or other wall openings, and in no case shall the debris or trash be permitted to drop freely from the openings.
- E. The Work Areas shall be inspected daily and all debris, waste, rubbish, etc. shall be removed and placed in a dumpster.
- F. All waste materials and rubbish shall be disposed of legally, off site.

**2.17 TEMPORARY RODENT AND PEST CONTROL**

- A. Rodent and Pest Control: Provide rodent control as necessary to prevent infestation of construction and storage areas. Employ methods and use materials, which will not adversely affect conditions at the site or on adjoining properties. Should rodenticides be considered necessary submit copies of proposed program to Owner and Architect. Use of rodenticide shall comply with manufacturer's published instructions and recommendations. Clearly indicate:
  - 1. Area or areas to be treated.
  - 2. Rodenticides to be used.

3. Manufacturer's printed instructions.
4. Pollution preventive measures to be employed.

**2.18 WATCHMEN, FLAGMEN, AND POLICE DETAILS**

- A. The General Contractor shall provide the services of flagmen, traffic directors, and police details as necessary and as required by authorities having jurisdiction. Please refer to Section 01010 – Summary of Work for additional information regarding the police details and the appropriate pay rates.

**2.19 PARKING**

- A. Parking will be permitted on site or as directed by the owner.

**PART 3 - EXECUTION**

**3.01 OPERATION, TERMINATION AND REMOVAL**

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition, until removal. Protect from damage. If damage occurs, repair it immediately upon discovery. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour per day basis.
- C. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended. Clean and renovate permanent facilities that have been used during construction period, including:
  1. Replace air filters and clean inside of ductwork and housings.
  2. Replace worn parts.
  3. Replace lamps.

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 01 60 00**

**PRODUCT REQUIREMENTS**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

**1.02. SUMMARY**

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
- B. Reference Standards and Definitions: Refer to Section 014200 "References" for the applicability of industry standards to products specified.
- C. The Contractor's Construction Schedule and the Submittal Schedule are specified under Section 013300 "Submittals Procedures".
- D. Administration procedures for handling requests for substitutions made after award of the Contract are specified under Section 012500 "Substitution Procedures".

**1.03. DEFINITIONS**

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties", "systems", "structure", "finishes", "accessories", and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
  - 1. "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material", "equipment", "system", and terms of similar intent.
    - a. "Named Products" are items identified by the manufacturer's product name, including make or model number or other designation, shown or listed in the manufacturer's published product literature that is current as of the date of the Contract Documents.
  - 2. "Materials" are products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
  - 3. "Equipment" is a product with operational parts, whether motorized or manually operated, that require service connections, such as wiring or piping.

**1.04. SUBMITTALS**

- A. Product List: Prepare a schedule in tabular form showing each product listed. Include the manufacturer's name and proprietary product names for each item listed.
  - 1. Coordinate product list with the Contractor's Construction Schedule and the Schedule of Submittals.
  - 2. Form: Prepare product list with information on each item tabulated under the following column headings:

- a. Related Specification Section number.
    - b. Generic name used in Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Specific Product "Material Safety Data Sheet" reference.
  3. Submittal: Within twenty (20) days after date of commencement of the Work, submit four (4) copies of an initial product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
    - a. At the Contractor's option, the initial submittal may be limited to product selections and designations that must be established early in the Contract period.
  4. Architect's Action: The Architect will respond in writing to Contractor. No response constitutes no objection to listed manufacturers or products but does not constitute a waiver of the requirement that products comply with Contract Documents. The Architect's response will include the following:
    - a. A list of unacceptable product selections, containing a brief explanation of reasons for this action.
- 1.05. MATERIAL SAFETY DATA SHEETS MANUAL
- A. Within ten (10) days after submission of Product List Schedule and before materials may be delivered to jobsite, submit one (1) or more 8 ½ x 11 paper size three (3) ring binder with the Product List Schedule and Material Safety Data Sheet for each product. Using the Product List Schedule as table of contents arrange Materials Safety Data Sheets in table of contents order.
  - B. Submit one (1) copy of materials Safety Data Sheet Manual to Clerk of the Works and Architect.
    1. Provide one (1) copy of Material Safety Data Sheets for insertion in Manual for products listed on additional Product List Schedules.
  - C. This requirement is in addition to any obligation the Contractor has to maintain Material Safety Data Sheets at job site or elsewhere.
- 1.06. QUALITY ASSURANCE
- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
    1. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources producing products that possess these qualities, to the fullest extent possible.
  - B. Compatibility of Options: When the Contractor is given the option of selecting between two (2) or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

**1.07. PRODUCT DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.
  - 1. Schedule delivery to minimize long-term storage at the site.
  - 2. Coordinate delivery with installation time.
  - 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  - 5. Store products at the site in a manner that will facilitate inspection.
  - 6. Store and maintain products within acceptable environmental ranges and conditions required by manufacturer's instructions.

**1.08. WORK CONDITIONS / SEQUENCE**

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.
  - 1. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
- B. Product Selection Procedures: Product Selection is governed by the Contract Documents and governing regulations; not by previous project experience. Procedures governing product selection include the following:
  - 1. Where products or manufacturers are specified by name, accompanied by the term "or equal" or "or approved equal", comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
  - 2. Non-proprietary Specifications: When Specifications list products or manufacturers that are available and may be incorporated in the Work, they do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
  - 3. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.

4. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated. General overall performance of a Product is implied where the product is specified for a specific application.
  - a. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
5. Compliance with Standards, Codes, and Regulations: Where the Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standards, codes, or regulations specified.
6. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.
  - a. Where no product available within the specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category, or for non-compliance with specified requirements.
7. Visual Selection: Where specified product requirements include the phrase "... as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Architect will select the color, pattern, and texture from the product line selected.

### **PART 3 - EXECUTION**

#### **3.01 INSTALLATION OF PRODUCTS**

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.
  1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

**END OF SECTION**

**SECTION 01 74 00**

**WARRANTIES AND BONDS**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

**1.02. SUMMARY**

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
  - 1. Refer to the General Conditions for terms of the Contractor's special warranty on workmanship and materials.
- B. General Closeout requirements and procedures are included in Section 017000 "Project Closeout".
  - 1. Specific requirements for warranties on products and installations specified to be warranted are included in the individual Sections of Divisions 2 through 16.
  - 2. Certifications and other commitments and agreements for continuing services to the Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- D. Separate Prime Contracts: Each prime contractor is responsible for warranties related to its own contract.

**1.03. DEFINITIONS**

- A. Standard Product Warranties are pre-printed written warranties published by individual manufacturers for products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

**1.04. WARRANTY REQUIREMENTS**

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove, and replace construction that has been damaged because of such failure or must be removed and replaced to provide access for correction of warranted construction.

- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation, as determined by the Architect.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with the requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with the requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept the Work for the Project where a special warranty, certification or similar commitment on the Work or part of the Work is required, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

**1.05. SUBMITTALS**

- A. Submit written warranties to the Architect bound in the Project Closeout Manual as described in Section 017700 – Closeout Procedures. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
  - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within ten (10) days of completion of that designated portion of the Work.
- B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier, or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties, submit a draft to the Architect, for approval prior to final execution.
- C. Prepare a written document utilizing the appropriate form, ready for execution by the Contractor, or by the Contractor and subcontractor, supplier, or manufacturer. Submit a draft to the Architect for approval prior to final execution.
  - 1. Refer to individual Sections of Divisions 2 through 16 for specific content requirements and particular requirements for submitting special warranties.

**PART 2 – PRODUCTS                      NOT USED**

**PART 3 - EXECUTION**

**3.01 WARRANTIES**

- A. Schedule: Provide warranties on products and installations as specified in the appropriate Sections of the Specification.
  - 1. When products, equipment, or materials fail and/or continue to be a repetitive source of problems, with no satisfactory resolution (e.g., HVAC Equipment) during the warranty period, the Owner reserves the right to extend the period of the initial warranty period. If no satisfactory resolution can be reached during this resolution period, then the Owner reserves the right to demand for the full replacement of the item in question, including all associated work required to execute this replacement at no cost to the Owner.

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 017700**  
**CLOSEOUT PROCEDURES**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections are hereby made a part of this Section.

**1.02. SUMMARY**

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Contractor's monetized punchlist.
  - 3. Project Record Document Submittal.
  - 4. Project Closeout Manual Submittal.
  - 5. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

**1.03. SUBSTANTIAL COMPLETION**

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request for which the architect shall review and/or approve.
  - 1. The contractor shall prepare and submit a monetized punchlist. No exceptions will be considered.
  - 2. In the Application for Payment that coincides with, or first allows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
    - a. If 100 percent completion cannot be shown, the contractor shall provide his monetized punchlist including, but not limited to, the following:
      - 1) A list of incomplete items.
      - 2) The value of each incomplete item.
      - 3) A Reason each item is not complete.
  - 3. Advise the Owner of pending insurance changeover requirements.
  - 4. Submit application for reduction of retainage.
  - 5. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents, as further described below.
  - 6. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 7. Submit record drawings, maintenance manuals, damage or settlement surveys, and similar final record information, as further described below.

8. Deliver tools, spare parts, extra stock, and similar items.
  9. Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
  10. Complete startup testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
  11. Complete final cleanup requirements, including touch-up painting.
  12. Touch-up and otherwise repair and restore, marred, exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Architect will repeat inspection when requested and assured that the Work has been substantially completed.
  2. Results of the completed inspection will form the basis of requirements for final acceptance.
- 1.04. FINAL ACCEPTANCE
- A. Preliminary procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted.
  2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed, and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
  4. Submit consent to surety of final payment.
  5. Submit a final liquidated damages settlement statement.
  6. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Re-inspection Procedure: The Architect will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.
1. Upon completion of re-inspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
  2. If necessary, the re-inspection will be repeated.

**1.05. RECORD DOCUMENTS**

- A. General: Maintain a complete set of Record Documents at the site. Do not use Record Documents for construction purposes. Provide access to Record Documents for Architect and Owner's reference. Generally, without limitation, Record Documents shall include the following:
  - 1. Record Drawings: Maintain a clean set of Contract Drawings and shop drawings, updated weekly to show actual installation. Give particular attention to concealed items.
  - 2. Record Project Manual: Maintain a clean Project Manual, including Addenda, Change Orders, Architect Field Orders, and other modifications, updated weekly to show changes in actual work performed. Give particular attention to substitutions, selection of options, and similar information.
  - 3. Record Product Data: Maintain one copy of each approved Product Data submittal, updated weekly to show changes from products delivered, work performed, and from manufacturer's recommended installation instructions.
  - 4. Record Samples: Maintain one copy of each approved Sample submitted.
  - 5. Record Field Test Reports: Maintain one copy of each Field Test Report.
  - 6. Daily Progress Reports: Maintain one copy of each Daily Progress Report.
- B. Maintenance of Documents and Samples: Store documents and samples in Contractor's field office apart from documents used for construction. Provide files and racks for document storage. Provide locked cabinet or secure storage space for storage of samples. File documents and samples in accordance with CSI format. Maintain documents in clean, dry, legible condition and in good order. Do not use Record Documents for construction purposes. Always make documents and samples available for inspection by Architect.
- C. Recording: Label each document "PROJECT RECORD" in neat large, printed letters. Record all information concurrently with the progress of construction. Do not conceal any work until required information is recorded.
- D. Drawings: Legibly update all Drawings to record actual construction, including the following:
  - 1. Field changes of dimension and detail.
  - 2. Changes made by Field Order or Change Order.
  - 3. Details not in original Contract Documents.
- E. Specifications and Addenda: Legibly mark each Section to record:
  - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment installed.
  - 2. Changes made by Field Order or by Change Order.
- F. Submittal: At Contract Closeout, deliver Record Documents to Architect. Accompany submittal with transmittal letter in duplicate, indicating the date, Project title and number, Contractor's name and address, title and number of Record Document, and signature of Contractor or his authorized representative.

**1.06. PROJECT CLOSEOUT MANUAL**

- A. General: Prepare and submit Project Closeout Manual as specified in this Section and as approved by the Architect for format. Organize data into suitable sets, bound and indexed using the specification's Table of Contents as a guide. Mark appropriate identification on front and spine of each binder. Include the following types of information:
  - 1. Contact Persons' Names
  - 2. Telephone Numbers
  - 3. Pager or Beeper Numbers
  - 4. Cellular Phone Numbers
  - 5. Description of each warranty item covered.
  - 6. Instructions Describing Protocol for Requesting Warranty Service.
  - 7. Emergency Numbers – 911, Fire, Rescue, Police.
  - 8. Utility Company Contacts.
- B. Instruct Owner's personnel in use and layout of manual.
- C. Format of Data: Prepare data in form of user's guide-type manual for use by Owner's personnel. Format shall be 8-1/2 in. x 11 in., 20-pound minimum, white, typed pages. Text shall be printed or neatly typewritten. Drawings shall be bound with text, with reinforced punched binder tabs. Fold larger drawings to the size of text pages. Provide flyleaf for each separate section. Provide typed descriptions of each product and piece of major equipment. Provide indexed tabs to divide sections. Provide reference in each section to other binders for actual Operating and Maintenance Data. Coordinate Project Closeout Manual with Operating and Maintenance Data.
  - 1. Binders: Provide commercial quality three-ring binders with durable and cleanable plastic covers, with maximum ring size of three (3) inches. Only use one (1) binder for this manual.
  - 2. Binder Cover: Identify each volume with typed or printed title "PROJECT CLOSEOUT MANUAL". List title of Project, identity of separate structure as applicable, and identity of general subject matter covered in the manual.
- D. Submittal of Project Closeout Manual: Submit two copies of preliminary draft of proposed formats and outlines of contents prior to start of Work.
  - 1. The Architect will review draft and return one copy with comments.
  - 2. Submit one copy of complete data in final form 15 days prior to final inspection or acceptance. Copy will be returned after final inspection or acceptance, with comments.
  - 3. Submit three copies of approved data in final form ten days after final inspection or acceptance.

**1.07. OPERATING AND MAINTENANCE DATA**

- A. General: Prepare and submit Operating and Maintenance Data as specified in this Section and referenced in other pertinent Sections of Specifications. Organize Operating and Maintenance Data into suitable sets, bound and indexed. Mark appropriate identification on front and spine of each binder. Include the following types of information:
  - 1. Emergency instructions.
  - 2. Spare parts list.
  - 3. Copies of warranties.
  - 4. Wiring diagrams.
  - 5. Inspection procedures.

- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.
  - C. Preparation of data shall be done by personnel trained and experienced in maintenance and operation of described products.
  - D. Format of Data: Prepare data in form of instructional manual for use by Owner's personnel. Format shall be 8-1/2 in. x 11 in., 20-pound minimum, white, typed pages. Text shall be manufacturer's printed data, or neatly typewritten. Drawings shall be bound with text, with reinforced punched binder tabs. Fold larger drawings to the size of text pages. Provide flyleaf for each separate product or each piece of operating equipment. Provide typed description of product and major component parts of equipment. Provide indexed tabs.
    - 1. Binders: Provide commercial quality three-ring binders with durable and cleanable plastic covers, with maximum ring size of two (2) inches. When multiple binders are used, correlate the data into related consistent groupings.
    - 2. Binder Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List title of Project, identity of separate structure as applicable, and identity of general subject matter covered in the manual.
  - E. Content of Manual: Neatly typewritten table of contents for each volume, arranged in systematic order, indicating Contractor name and address, and a list of each product, indexed to content of the volume. Provide a separate list with each product, name, address, and telephone number of subcontractor or installer, and local source of supply for parts and replacement.
    - 1. Provide in each volume a copy of each warranty, bond, and service contract issued.
  - F. Submittal of Maintenance and Operating Manual: Submit two copies of preliminary draft of proposed formats and outlines of contents prior to start of Work.
    - 1. The Architect will review the draft and return one copy with comments.
    - 2. Submit one copy of complete data in final form 15 days prior to final inspection or acceptance. Copy will be returned after final inspection or acceptance, with comments.
    - 3. Submit three copies of approved data in final form ten days after final inspection or acceptance.
- 1.08. INSTRUCTION OF OWNER'S PERSONNEL
- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in the operation, adjustment and maintenance of products, equipment, and systems.
  - B. Operating and maintenance manual shall constitute the basis of instruction.
    - 1. Review contents of manual with personnel in full detail to explain all aspects of operation and maintenance.
- 1.09. WARRANTIES AND BONDS
- A. General: Assemble warranties, bonds, and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors into the Project Closeout Manual.
  - B. Refer to Section 017400 – Warranties and Bonds for additional requirements.

**1.10. FINAL CLEANING**

- A. General: General cleaning during construction operations is specified as Work of Section 015000 – Temporary Facilities & Controls.
- B. Employ experienced workers or professional cleaners for Final Cleaning. Clean each surface to the condition expected in a normal building cleaning and maintenance program. Comply with manufacturer's instructions and recommendations.

**PART 2 - PRODUCTS**

**2.01 CLEANING MATERIALS**

- A. General: Provide cleaning materials that will not create hazards to health or property and will not damage surfaces or finishes.
- B. Use cleaning materials and methods recommended by the manufacturer of surface to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

**PART 3 - EXECUTION**

**3.01 FINAL CLEANING**

- A. Employ skilled workers for final cleaning.
- B. Clean and restore general work areas and adjoining surfaces and other work soiled or damaged during installation; replace work damaged beyond successful restoration. Where performance of subsequent work could result in damage to the complete unit or element, provide protective covering and other provisions to minimize potential for damage.
- C. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- D. Special Cleaning for Windows: New glass installed as part of this project shall be thoroughly cleaned inside and out by professional window cleaners at the conclusion of all other work and prior substantial completion. All damaged, broken, or scratched items shall be replaced without costs to Owner, as described under the appropriate Trade Section(s).
- E. Complete the following cleaning operations prior to requesting inspection for Certification of Substantial Completion:
  - 1. Concrete and masonry shall be cleaned free of all foreign matter. If, in the opinion of the Architect, further cleaning of specific areas is required they shall be scrubbed with water or other cleaning agents. Acid cleaners shall not be used, except as may otherwise specifically be permitted in the trade sections.
  - 2. Metal surfaces, hardware, fixtures, appliances, equipment, and similar items shall be cleaned free of all foreign matter and, if necessary, shall be lightly scrubbed at specific stains with clean water, mild soap, and soft rags, thoroughly rinsed and wiped with clean, soft white rags. Abrasive cleaners shall not be used.
  - 3. Architectural woodwork shall be thoroughly dusted and cleaned of all stains, spots, etc., using methods and cleaning agents, which will not damage the various finishes.

4. Ceramic tile, porcelain, and other surfaces with integral finishes, shall be washed with clean water, mild soap, and soft rags, thoroughly rinsed, and then wiped with clean, soft white rags. Abrasive cleaners shall not be used.
  5. Resilient flooring shall be given final cleaning and buffing.
  6. Carpeting shall be vacuum cleaned and shall have all spots and stains removed.
  7. Painted surfaces shall be cleaned free of all foreign matter, and if necessary, shall be lightly scrubbed at specific stains with clean water, mild soap, and soft rags, thoroughly rinsed, and wiped with clean, soft white rags.
  8. All advertising matter and temporary instructional material shall be removed from exposed surfaces throughout.
  9. Remove labels that are not permanent.
  10. Clean interior and exterior finishes to a clean, dust-free condition. Remove stains, films, and similar foreign substances.
  11. Vacuum and mop hard floor surfaces.
  12. Clean plumbing fixtures to a sanitary condition.
  13. Clean site areas of rubbish, litter, and other foreign substances.
  14. Sweep paved areas broom clean, rake ground surfaces clean.
- F. Before final completion and Owner-occupancy, inspect sight-exposed interior and exterior surfaces and work areas to verify that Work is clean.

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 02 28 20**

**ASBESTOS REMEDIATION**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

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

**1.02 DESCRIPTION OF WORK**

- A. The Work of this Section shall include, but not be limited to, furnishing and installation of the following:
  - 1. The General Contractor shall retain the services of a Massachusetts licensed asbestos abatement contractor to perform all related work.
  - 2. All labor, material, equipment, and services specified herein or reasonably necessary for and incidental to removal and legal disposal of Asbestos Containing Materials (ACM).
  - 3. The complete isolation of the Work area for the duration of the Work so as to prevent asbestos contaminated dust or debris from passing beyond the isolated areas, removal, and disposal of ACM.
  - 4. A lump sum bid for all required services included in Part 3. Unit prices included at the end of this Section shall be part of this bid subject to addition and deductions to the lump sum bid.

**1.03 RELATED WORK SPECIFIED ELSEWHERE**

- A. Carefully examine all the Contract Documents for requirements which effect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.
  - 2. Section 02 41 13 – Selective Demolition
  - 3. DIVISION 03 – CONCRETE; including all Sections contained therein.
  - 4. DIVISION 04 – MASONRY; including all Sections contained therein.
  - 5. DIVISION 05 – METALS; including all Sections contained therein.
  - 6. DIVISION 06 – WOOD AND PLASTICS; including all Sections contained therein.
  - 7. DIVISION 07 – THERMAL AND MOISTURE PROTECTION; including all Sections contained therein.
  - 8. DIVISION 08 – DOORS AND WINDOWS; including all Sections contained therein.
  - 9. DIVISION 09 – FINISHES; including all Sections contained therein.
  - 10. Section 21 00 00 – Fire Suppression
  - 11. Section 22 00 00 – Plumbing
  - 12. Section 23 00 00 - HVAC
  - 13. Section 26 00 00 – Electrical

- 14. DIVISION 31 – EARTHWORK; including all Sections contained therein.
- 15. Section 32 12 00 – Site Improvements

1.04 POTENTIAL ASBESTOS HAZARDS

- A. The disturbance or dislocation of ACM may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health hazard to Workers, and building occupants. Apprise all Workers, supervisory personnel, subcontractors, and consultants who will be at the job site of the seriousness of the hazard and of proper Work procedures, which must be followed.
- B. Where in the performance of the Work, Workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified ACM, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable federal, state, and local agencies.
- C. If the Contractor failed to comply with the requirements of the specifications, the Owner's Representative (Project Monitor) may present a written stop of Work order. The Contractor must immediately and automatically stop all Work until authorized in writing by the Project Monitor to commence Work. All costs related to delays shall be at the Contractor's expense.

1.05 DEFINITIONS

- A. Abatement: Procedures to control fiber release from ACM. Includes encapsulation, enclosure, and removal.
- B. Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time.
- C. Asbestos: The name given to a number of naturally occurring hydrated mineral silicates that possess a unique crystalline structure are incombustible and are separable into fibers. Asbestos includes Chrysotile, Crocidolite, Amosite, Anthophyllite, and Actinolite.
- D. ACM: Any material containing 1% or more by weight of asbestos of any type or mixture of types. State laws may vary in their definition of asbestos containing material.
- E. Authorized Visitor: The Owner, the Designer, or a representative of any regulatory or other agency having jurisdiction over the project.
- F. Designer: Commonwealth of Massachusetts licensed Designer Ammar Dieb, Universal Environmental Consultants (AD-900326).
- G. Enclosure: All herein specified procedures necessary to complete enclosure of all ACM behind airtight, impermeable, permanent barriers.
- H. Friable Asbestos Material: Material that contains more than one percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- I. Removal: All herein specified procedures necessary to strip all ACM from the designated areas and to dispose of these materials at an acceptable site.
- J. Visible Emissions: Any emissions containing particulate asbestos material that are visually

detectable without the aid of instruments. This does not include condensed uncombined water vapor.

**1.06 CONTRACTOR USE OF PREMISES**

- A. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain and pay for such storage off site.

**1.07 ADMINISTRATIVE AND SUPERVISORY PERSONNEL**

- A. Provide a full time Site Supervisor with all appropriate state licenses, experienced in administration and supervision of asbestos abatement projects including Work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Competent Person as required by 29CFR 1926 for the Contractor and is the Contractor's representative responsible for compliance with all applicable federal, state, and local regulations. This person must have completed a course at an EPA Training Center or equivalent certificate course in asbestos abatement procedures, have had a minimum of two years on the job training and meet any additional requirements set forth in 29 CFR 1926 for a Competent Person. The Site Supervisor must be certified by the Commonwealth.
- B. Contractor shall provide proof of such certification to the Designer not less than 10 days (Document Submission Date) prior to commencing any Work. The accredited Supervisor must be at the Work site at all times while Work is in progress.

**1.08 SPECIAL REPORTS**

- A. Except as otherwise indicated, submit special reports directly to the Project Monitor within one day of occurrence requiring special report, with copies to all others affected by the occurrence.
- B. When an event of unusual and significant nature occurs at the site (examples: failure of negative pressure system, rupture of temporary enclosures, unauthorized entry into work areas), prepare and submit a special report listing date and time of event, chain of events, response by Contractor's personnel, evaluation of results, and similar pertinent information. When such events are known or predictable in advance, advise the Project Monitor in advance at earliest possible date.
- C. Prepare and submit special reports of significant accidents, at the site and anywhere else work is in progress related to this project. Record and document data and actions; comply with industry standards. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss.

**1.09 PERMITS AND NOTIFICATIONS**

- A. Secure all permits related to asbestos removal, hauling, and disposition and provide timely notification as may be required by federal, state, and local authorities including the Health department. Notify the Regional Office of the United States Environmental Protection Agency (USEPA) in accordance with 40 CFR 61.22 (d)(1) and provide copies of the notification to the Designer and the State Environmental Regulatory Agency 10 Working days prior to

commencement of the Work.

- B. No later than the Document Submission Date, notify the local fire and police department, in writing, of proposed asbestos abatement Work. Advise the fire department of the nature of the asbestos abatement Work, and the necessity that all firefighting personnel who may enter the Work site in the case of fire wear self-contained breathing apparatus. Provide one copy of the notices to the Designer prior to commencing the project.
- C. Submit proof to the Designer that all required permits, site location, and arrangements for transport and disposal of ACM have been obtained.

#### 1.10 RESPIRATORY PROGRAM

- A. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1926.1101 (h), 1926.103, and 1910.134.

#### 1.11 CODES AND REGULATIONS

- A. Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.
- B. The Contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations pertaining to Work practices, hauling, disposal, and protection of Workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records or personnel as required by the applicable federal, state, and local regulations. The Contractor shall hold the Owner, Designer and, Owner's Representative harmless for failure to comply with any applicable Work, hauling, disposal, safety, health, or other regulation on the part of himself, his employees, or his subcontractors.

#### 1.12 REFERENCE STANDARDS

- A. Unless otherwise indicated, all referenced standards shall be the latest edition available at the time of bidding. Any requirements of these specifications shall in no way invalidate the minimum requirements of the referenced standards. Comply with the provisions of the following codes and standards, except as otherwise shown or specified. Where conflict exists, the more stringent requirements shall apply.
- B. U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA) requirements, which govern asbestos abatement work or hauling and disposal of asbestos waste materials.

#### 1.13 SUBMITTALS

- A. Submit all required licenses and certification required under MGLC.149 S 44D and 453 CMR 6.00.
- B. Submit a copy of the written respirator program.
- C. Submit manufacturer's certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. Manufacturer's brochures

without certifications are not acceptable.

- D. Submit a detailed plan of the Work procedures to be used in the removal of materials containing asbestos. Such plan shall include location of asbestos control areas, decontamination units, layout of decontamination units, location of access routes to asbestos control areas, interface of trades involved in the construction, sequencing of asbestos related Work, disposal plan, type of wetting agent and asbestos sealer to be used, air monitoring, and a detailed description of the method to be employed in order to control pollution.
  - E. Submit a plan for emergency actions.
  - F. Submit the name, address, and telephone number of the testing laboratory selected for the personal air monitoring of airborne concentrations of asbestos fibers to meet Federal and State OSHA regulations, including Short Term Exposure Limit sampling (STEL). The laboratory must have satisfactorily completed the NIST Proficiency Analytical Testing (PAT) Program and be licensed by the appropriate state agency. Submit the certification that persons counting the samples have been judged proficient by successful completion of the NIOSH 582 course (or equivalent) or be listed in the AIHA Asbestos Analysts Registry (AAR). All OSHA required air monitoring should be done in accordance with the most current NIOSH 7400 method.
  - G. Submit the design of the negative pressure system.
    - 1. Number of negative air machines required and the calculations necessary to determine the number of machines.
    - 2. Description of projected airflow within the Work area and methods required providing adequate airflow in all portions of the Work area.
    - 3. Manufacturers product data and certifications for the machines to be used.
    - 4. Location of machines in the Work area.
    - 5. Location of pressure differential measurement equipment.
    - 6. Manufacturers product data on equipment used to monitor pressure differential.
  - H. Submit for approval the form of security and safety log, which will be maintained on the project.
  - I. Submit written evidence that the landfill to be used for disposal of asbestos is approved for disposal of asbestos by the Department of Environmental Protection.
  - J. Submit proof that training requirements as specified in 29CFR 1926.1101 (k) (3) and by appropriate state agencies has been complied with.
  - K. Submit a description of the plans for construction of decontamination enclosure systems and for isolation of the Work areas in compliance with this specification and applicable regulations.
  - L. Submit a schedule including Work dates, shift time, number of employees, dates of start and completion of all Work, asbestos abatement, inspection and clearance monitoring, each phase of refinishing, and final inspections). Schedule shall be updated with each partial payment request.
  - M. Submit copies of all notifications.
  - N. Submit copy of asbestos license.
- 1.13 REPORTING
- A. Maintain on site a daily log documenting the dates and time of the following items, as well as other

significant events:

1. Minutes of meetings: purpose, attendees, and brief discussion
  2. Visitations: authorized and unauthorized
  3. Personnel: by name, entering and leaving the Work area
  4. Special or unusual events
- B. Documentation with confirmation signature of Owner's on-site representative of the following:
1. Inspection of Work area preparation prior to start of removal and daily thereafter.
  2. Removal of waste materials from Work area and transport and disposal at approved site.
- C. Provide two bound copies of this log to the Owner's Representative with the application for final payment.
- D. 15% of the Contract will be held until original copies of the Waste Shipment Records are submitted.

#### 1.14 AIR MONITORING

- A. Throughout the entire removal and cleaning operations, air monitoring will be conducted to ensure that the Contractor is complying with the EPA and OSHA regulations and any applicable state and local government regulations. The Owner will provide a Project Monitor (Universal Environmental Consultants) to take air samples at the job site at no cost to the Contractor.
- B. The purpose of the Owner's air monitoring will be to detect faults in the Work area isolation such as:
1. Contamination of the building outside of the Work area with airborne asbestos fibers,
  2. Failure of filtration or rupture in the negative pressure system,
  3. Contamination of the exterior of the building with airborne asbestos fibers.
  4. Should any of the above occur, the Contractor should immediately cease asbestos activities until the fault is corrected. Work shall not recommence until authorized by the Designer.

#### 1.15 AIRBORNE FIBER COUNTS

- A. If any air sample taken outside of the work area exceeds the base line established below, immediately and automatically stop all work. If this air sample was taken inside the building and outside of critical barriers around the work area, immediately erect new critical barriers to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (e.g. wall, ceiling, and floor).
1. Decontaminate the affected area in accordance with the procedures outlined in DECONTAMINATION OF WORK AREA.
  2. Respiratory protection shall be worn in affected area.
  3. Leave critical barriers in place until completion of work and ensure that the operation of the negative pressure system in the work area results in a flow of air from the balance of the building into the affected area.
  4. After certification of visual inspection in the work area, remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area as set forth in WORK AREA CLEARANCE.
  5. A final inspection after removal of poly shall be completed by the Contractor's Supervisor and

the Project Monitor.

- B. The following procedure will be used to resolve any disputes regarding fiber types when a project has been stopped due to excessive airborne fiber counts. "Airborne Fibers" referred to above include all fibers regardless of composition as counted in the NIOSH 7400 Procedure. If work has stopped due to high airborne fiber counts, air samples will be secured in the same area by the Project Monitor for analysis by electron microscopy. "Airborne Fibers" counted in samples analyzed by Scanning or Transmission Electron microscopy shall be only asbestos fibers, but of any diameter and length. Subsequent to analysis by electron microscopy the number of "Airborne Fibers" shall be determined by multiplying the number of fibers, regardless of composition, counted by the NIOSH 7400 procedure by a number equal to asbestos fibers counted divided by all fibers counted in the electron microscopy analysis.
- C. If Electron microscopy is used to arrive at the basis for determining "Airborne Fiber" counts in accordance with the above paragraph, and if the average of airborne asbestos fibers in all samples taken outside the work area exceeds the base line, then the cost of such analysis will be borne by the Contractor, at no additional cost to the Owner. PART 2 – PRODUCTS

## 2.01 MATERIALS

- A. Plastic Sheet: 9-mil minimum thickness, unless otherwise specified, in sizes to minimize the frequency of joints.
- B. Tape: Capable of sealing joints of adjacent sheets of plastic and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under dry and wet conditions, including use of amended water. Provide tape, which minimizes damage to surface, finishes.
- C. Cleaning Materials: Use materials recommended by manufacturer of surface to be cleaned. Use cleaning materials only on surfaces recommended by the cleaning material manufacturer.
- D. Impermeable Containers: Suitable to receive and retain any asbestos containing or contaminated materials until disposal at an approved site. Containers must be both air and watertight.
- E. Provide metal or fiber drums with tightly fitting lids and double thickness 6 mil plastic bags capable of being sealed and sized to fit within the drums.

## 2.02 EQUIPMENT

- A. Supply the required number of asbestos air filtration units to the site in accordance with these specifications. Each unit shall include the following:
  - 1. Cabinet: Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. Cabinet shall be factory sealed to prevent asbestos containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.
  - 2. Fans: Rate capacity of fan according to useable air moving capacity under actual operating conditions. Use centrifugal type fan.
  - 3. HEPA Filters: The final filter shall be the HEPA type. The filter media (folded into closely pleated panels) must be completely sealed on all edges with a structurally rigid frame. A

- continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.
4. Each filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles. Testing shall be in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Each filter shall bear a UL 586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, airflow rating, efficiency, and resistance.
  5. Prefilters: Prefilters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of prefiltration are required. The first stage prefilter shall be a low efficiency type (e.g., for particles 10 um and larger). The second stage (or intermediate) filter shall have a medium efficiency (e.g., effective for particles down to 5 um). Prefilters and intermediate filters shall be installed either on or in the intake grid of the unit and held in place with special housings or clamps.
  6. Instrumentation: Each unit shall be equipped with a Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed. A table indicating the useable air handling capacity for various static pressure readings on the Magnehelic gauge shall be affixed near the gauge for reference, or the Magnehelic reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point. Provide units equipped with an elapsed time meter to show the total accumulated hours of operation.
  7. Safety and Warning Devices: The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter. Units shall be equipped with automatic shutdown system to stop fan in the event of a major rupture in the HEPA filter or blocked air discharge. Indicator lights are required to indicate normal operation, too high a pressure drop across the filters (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).
  8. Electrical Components: Provide electrical components, which are approved by the National Electrical Manufacturers Association (NEMA), and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.
- B. Provide and display danger signs at each location where airborne concentrations of asbestos fibers may be in excess of 0.01 fibers/cc. Post signs at such a distance from such a location so that an employee may read the signs and take necessary protective steps before entering the area marked by the signs. Post signs at all approaches to Work areas or areas containing excessive concentrations of airborne asbestos fibers.
- C. The sign shall also contain a pictorial representation of possible danger or hazard, such as a skull and cross bone, or other suitable warning as approved by the Designer. Sign shall meet the requirements of 29CFR1926.200.
- D. A sample of the signs to be used shall be submitted to the Designer for approval prior to beginning Work area preparation.
- 2.03 PERSONNEL DECONTAMINATION UNIT
- A. Prior to any asbestos abatement work, including placement of plastic on walls that will contact or disturb asbestos containing surfaces, or removal of light fixtures or any items on asbestos



containing surfaces, construct a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, Changing Room, Shower Room, and Equipment Room. Require all persons without exception to pass through this decontamination unit for entry into and exiting from the work area for any purpose. Do not remove equipment or materials through Personnel Decontamination Unit. Provide temporary lighting within decontamination units.

- B. Build suitable framing or use existing rooms, with the Project Monitor's written approval, connected with framed in tunnels if necessary; line with 6 mil plastic; seal with tape at all lap joints in the plastic for all enclosures and decontamination enclosure system rooms. Decontamination units and access tunnels constructed outside must be constructed with tops made of 5/8" plywood or approved equal. In all cases, access between contaminated and uncontaminated rooms or areas shall be through an airlock. In all cases, access between any two rooms within the decontamination enclosure systems shall be through a curtained doorway.
- C. Provide a changing (clean) room for the purpose of changing into protective clothing. Construct using polyethylene sheeting, at least 6-mil in thickness, to provide an airtight seal between the Clean Room and the rest of the building. Locate so that access to work area from Clean Room is through Shower Room. Separate Clean Room from the building by a sheet polyethylene flapped doorway.
- D. Require workers to remove all street clothes in this room, dress in clean disposable coveralls, and don respiratory protection equipment. Do not allow asbestos contaminated items to enter this room. Require workers to enter this room either from outside the structure dressed in street clothes, or naked from the showers.
- E. An existing room may be utilized as the changing room if it is suitably located and of a configuration whereby workmen may enter the Clean Room directly from the Shower Room. Protect all surfaces of room with sheet plastic. Authorization for this must be obtained from the Project Monitor in writing prior to start of construction.
  - 1. Maintain floor of changing room dry and clean at all times. Do not allow overflow water from shower to wet floor in Changing Room.
  - 2. Damp-wipe all surfaces twice after each shift change with a disinfectant solution.
  - 3. Provide a continuously adequate supply of disposable bath towels.
  - 4. Provide posted information for all emergency phone numbers and procedures.
  - 5. Provide one storage locker per employee.
  - 6. Provide all other components indicated on the contract drawings.
- F. Provide a completely watertight operational shower to be used for transit by cleanly dressed workers heading for the work area from the changing room, or for showering by workers headed out of the Work Area after undressing in the Equipment Room.
- G. Construct room by providing a shower pan and 2 shower walls in a configuration that will cause water running down walls to drip into pan. Install a freely draining wooden floor in shower pan at elevation of top of pan.
  - 1. Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
  - 2. Separate this room from the Clean and Equipment Rooms with airtight walls fabricated of 6-

- milpolyethylene.
3. Provide showerhead and controls.
  4. Provide temporary extensions of existing hot and cold water and drainage, as necessary for a complete and operable shower.
  5. Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.
  6. Arrange so that water from showering does not splash into the Clean or Equipment Rooms.
  7. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
  8. Provide flexible hose shower head Pump wastewater to drain and provide 20 micron and 5-micron wastewater filters in line to drain or waste water storage. Locate filter hose inside shower unit so that water lost during filter changes is caught by shower pan and pumped to exterior filtering system.
- H. Provide equipment room for contaminated area; work equipment; footwear and additional contaminated work clothing are to be left here. This is a change and transit area for workers. Separate this room from the work area by a 6-mil polyethylene flap doorway.
1. Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
  2. Separate this room from the Shower Room and work area with airtight walls fabricated of 6-mil polyethylene.
- I. Separate work area from the Equipment Room by polyethylene barriers. If the airborne asbestos level in the work area is expected to be high, add an intermediate cleaning space between the Equipment room and the work area. Damp- wipe clean all surfaces after each shift change.
- 2.04 EQUIPMENT DECONTAMINATION UNITS
- A. In areas with only one access, it may be impossible to utilize a separate Equipment Decontaminate Unit. In this case, all equipment and waste materials will exit through the Personnel Decontamination Chambers.
  - B. When two accesses to the work area are available, provide an Equipment Decontamination Unit consisting of a serial arrangement of rooms, Clean Room, Holding Room, Wash Room for removal of equipment and material from work area. Do not allow personnel to enter or exit work area through Equipment Decontamination Unit.
  - C. Provide an enclosed shower unit located in work area just outside Wash Room as an equipment, bag, and container cleaning station.
  - D. Provide Wash Room for cleaning of bagged or contained asbestos containing waste materials passed from the work area. Construct Wash Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that packaged materials, after being wiped clean can be passed to the Holding Room. Separate this room from the work area by flaps of 6 mil polyethylene sheeting, or rigid self-closing doors.
  - E. Provide Holding Room as a drop location for bagged ACM passed from the Wash Room. Construct Holding Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that bagged materials cannot be passed from the Wash

Room through the Holding Room to the Clean Room.

- F. Provide Clean Room to isolate the Holding Room from the building exterior. Construct Clean Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and locate to provide access to the Holding Room from the building exterior. Separate this room from the exterior by flaps of 6 mil polyethylene sheeting, or rigid self-closing doors.

**2.05 PERSONNEL PROTECTION**

- A. Prior to commencement of work, the workers shall be instructed in, and shall be knowledgeable of, the hazards of asbestos exposure; use and fitting of respirators; protective dress; use of showers; entry and exit from work areas, and all aspects of work procedures and protective measures.
- B. It is the responsibility of the Contractor to assure that all personnel entering the work area wear approved respirator and protective clothing
- C. All asbestos abatement workers shall receive training and shall be accredited as required by 40 CFR 763.90(g). Training and accreditation shall be in accordance with 40 CFR 763, Appendix C to Subpart E. Training shall also be provided to meet the requirements of OSHA Regulations contained in 29 CFR 1926.
- D. Prior to the start of work, the Contractor shall provide medical examinations for all employees in accordance with 29CFR 1926.1101 (m). All employees hired by the Contractor after start of work shall have medical examinations in accordance with this paragraph before being put to work.
- E. Maintain complete and accurate records of employee's medical examinations, during employment, for a period of 30 years after termination of employment and make records of the required medical examinations available for inspection and copying to: The Assistant Secretary of Labor for Occupational Safety and Health, the Director of The National Institute for Occupation Safety and Health (NIOSH), authorized representatives of either of them, and an employee's physician upon the request of the employee or former employee.
- F. Provide personnel exposed to airborne concentrations of asbestos fibers with fire retardant disposable protective whole-body clothing, head covering, gloves, and foot coverings. Provide gloves to protect hands. Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape. Contractor shall require and monitor the use of complete protective clothing. A competent person designated by the contractor in accordance with 29CFR 1926.1101 shall periodically examine protective clothing worn by employees in the work area for rips or tears. When rips or tears are detected, they shall be immediately mended or replaced.
- G. Provide goggles to personnel engaged in asbestos operations when the use of a full-face respirator is not required.
- H. Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear, whenever they are required to enter the work area, to a maximum of 3 changes for 3 visitors per day. One of the sets of protective clothing must be available for full time use by the Project Monitors.
- I. Provide all persons with personally issued and marked respiratory equipment approved by NIOSH and OSHA. The appropriate respiratory protection will be selected according to the most recent Massachusetts regulations.

- J. Once all visible asbestos material has been removed during decontamination, cartridge type respirators will be allowed during the final cleanup, provided the measured airborne concentrations do not exceed 0.1 fibers per cubic centimeter. Where respirators with disposable filters are employed, provide sufficient filters for replacement as required by the worker or applicable regulation.
- K. If the permissible respirators fail to provide sufficient protection against volatile emitted by any sealant used, the services of a qualified Project Monitor will be procured, at the Contractor's expense, to determine proper respiratory protection. The Owner will not be liable for the cost of increased respiratory protection.
- L. Select respirators from those approved by the Mine Safety and Health Administration (MSHA), Department of Labor, or the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. All personal wearing negative pressure respirators shall have respirator fit tests within the last six months and signed statements shall be available.

### **PART 3 – EXECUTION**

#### **3.01 SCOPE OF WORK**

- A. The asbestos abatement project will be performed in one phase. It is the asbestos contractor's responsibility to comply with the phasing schedule. Commencement of asbestos abatement in each phase may change. Changing, decreasing, and increasing of phases, size, location, and scope of Work shall not constitute compensation by the Owner or any of his representatives. The Designer shall determine hours of Work. The Contractor will be required to perform Work in multiple areas at the same time at no additional cost to the Owner.

<u>Location</u>	<u>Type of Material</u>	<u>Estimated Quantity</u>
Interior	Flooring Materials/Mastic	Refer to Drawings
	Pipe and Hard Joint Insulation	Refer to Drawings
Exterior	Caulking	Refer to Drawings

#### **Specific Notes:**

1. It is the Asbestos Contractor's responsibility to inspect the site and confirm condition and quantities prior to the submission of his/her bid package. It is also the Asbestos Contractor's responsibility to review the demolition drawings, notes, and phasing configurations. The contractor must include in his/her bid the entire scope of work listed above. The Contractor must agree and accept all unit prices listed at the end of this section. Means and methods of removal will be at the discretion of the contractor with prior approval. Perform all work at no additional cost to the owner.
2. Remove and dispose as ACM of flooring materials listed above, including but not limited to vinyl floor tiles, carpet, resilient baseboard, stair treads, transition strips, leveling compound, leveler, and mastic.
3. Remove and dispose as ACM of pipe and hard joint insulation that might be disturbed.
4. Remove and properly dispose of caulking. Caulking was found to contain asbestos and

assumed to contain >1ppm of PCB's.

**3.02 JOB CONDITIONS**

- A. Do not commence asbestos abatement Work until:
  - 1. Arrangements have been made for disposal of waste at an acceptable site. Submittal must be made no later than the Document Submission Date.
  - 2. Arrangements have been made for containing and disposal of wastewater resulting from wet stripping or filtering through a 5-micron filter.
  - 3. Work areas and decontamination enclosure systems and parts of the building required to remain in use are effectively segregated.
  - 4. Tools, equipment, and material waste receptors are on hand.
  - 5. Arrangements have been made for building security.
  - 6. All other preparatory steps have been taken and applicable notices posted, and permits obtained.
  - 7. Pre-clean all areas prior to abatement.
  - 8. Clean all routes used to transport ACM.
- B. The contractor is required to set up and test the emergency generator in the presence of the Project Monitor.
- C. All materials resulting from demolition Work, except as specified otherwise shall become the property of the Contractor and shall be disposed of as specified herein.

**3.03 INSPECTION AND PREPARATION**

- A. Examine the areas and conditions under which asbestos will be abated and notify the Designer in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Before any Work commences, post danger signs in and around the Work Area to comply with 29-CFR 1926.1101 (k)(l) as required by federal and state regulations, and as specified herein.
- C. Pre-clean each area prior to setting up containment and remove all visible ACBM debris.
- D. Clean all routes used to transport the ACM bags from the abated areas.
- E. Asbestos abatement activities shall be performed using the glovebag method, mini-containment or full containment depending on each scope of work. Type of enclosures will be determined by the contractor and the on-site project monitor at no additional cost to the owner.

**3.04 WORK PROCEDURE**

- A. Perform asbestos related Work in accordance with 29CFR 1926.1101 and as specified herein. Use wet removal procedures. Personnel shall wear and utilize protective clothing and equipment as specified herein. Eating, smoking, or drinking shall not be permitted in the asbestos control area. Removal of lights and other objects in contact with asbestos containing materials is considered as asbestos abatement activities. Thus, individuals involved in such activities must meet all

requirements of federal and state regulations for asbestos abatement Workers, including training and medical examinations. Provide and post, in the Equipment Room and the Clean Room, the decontamination and Work procedures to be followed by Workers, as described hereinafter.

- B. Each Worker and authorized visitor shall, upon entering the job site, remove street clothes in the Clean Change Room and put on a respirator and clean protective clothing before entering the equipment room or the Work area. All Workers shall remove gross contamination before leaving the Work area. All clothing (coveralls, head covers, boots, etc.) shall be removed and properly disposed of before leaving equipment room. Naked, with the exception of their respirators, the Workers shall proceed to the Shower Room. Under the shower, respirators will be removed and cleaned. Cleaned respirators will be placed in suitable clean plastic bags and carried by employees to Clean Room. Soap, towels, etc., shall be furnished by the Contractor. The Contractor shall maintain proper sanitary conditions. The contractor's designated competent person shall insure that these practices are being adhered to.
- C. Following showering and drying off, each Worker and authorized visitor shall dispose of towels as contaminated waste and proceed directly to the Clean Change Room and dress in clean clothes at the end of each day's Work, or before eating, smoking, or drinking. Before re-entering the Work area from the Clean Change Room, each Worker and authorized visitor shall put on the applicable respirator and shall dress in clean protective clothing. Contaminated Work footwear shall be stored in the equipment room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste.
- D. Contaminated Work footwear shall be stored in the equipment room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste or double bag for use at next site.
- E. Workers removing waste containers from the Equipment Decontamination Enclosure shall enter the holding area from outside wearing a respirator and dressed in clean coveralls. No Worker shall use this system as a means to leave or enter the washroom or the Work area.
- F. Workers shall not eat, drink, smoke, or chew gum or tobacco in asbestos abatement Work areas.
- G. Workers shall be fully protected with respirators and protective clothing immediately prior to the first disturbance of asbestos containing or contaminated materials and until final cleanup is completed. This includes the removal of any equipment in contact with ACM such as lights, HVAC grills, etc.

### 3.05 PREPARATIONN OF THE WORK AREA

- A. Seal off the Work area by sealing large openings such as open doors, elevator doors, and passageways with a critical barrier. The critical barrier shall constitute the outermost boundary of the asbestos abatement project Work area. Plastic sheeting on open framing is not a suitable critical barrier. Critical barriers may be erected of a suitable solid construction material such as plywood, sheetrock, gypsum board, or other related materials.
- B. Prior to any asbestos abatement clean the areas using HEPA filtered vacuum equipment and wet cleaning methods as appropriate. Methods that raise dust, such as dry seeping or vacuuming with equipment not equipped with HEPA filters will not be permitted. Dispose of all cloths, which are used for cleaning as contaminated waste.
- C. Shut down electric power. Provide temporary power and lighting and ensure safe installation of

temporary power sources and equipment per applicable electrical code requirements. Provide 24-volt safety lighting and provide ground-fault interrupter circuits as power source for lights and electrical equipment.

- D. Seal off all openings, including but not limited to corridors, doorways, windows, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with 6-mil plastic sheeting and sealed with tape.
- E. Maintain emergency and fire exits from the Work areas, or establish alternative exits satisfactory to the local fire officials. Coordinate project with local fire and police departments, and Owner's Representative.
- F. Pre-clean non-removable furniture, book shelving, equipment, heat fans, fire alarms, pipes, ductwork, wires and conduits, lockers, skylights, speakers, and other fixed objects within the proposed Work areas, using HEPA filtered vacuum equipment and wet cleaning methods as appropriate prior to abatement activities, and enclose with minimum 6 mil plastic sheeting sealed with tape.

### 3.06 MAINTENANCE OF ENCLOSURE SYSTEMS

- A. Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery. Visually inspect enclosures at the beginning of each Work period.
- B. Use smoke methods to test effectiveness of barriers when directed by the Project Monitor.

### 3.07 CONTROL ACCESS

- A. Permit access to the work area only through the Decontamination Unit. All other means of access shall be closed off and sealed and warning signs displayed on the clean side of the sealed access.
- B. Large openings such as open doorways and passageways shall be sealed as a critical barrier. The critical barrier shall constitute the outmost boundary of the asbestos abatement project work area.
- C. Where the area adjacent to the work area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with nominal 2 by 4-inch (minimum) wood or metal studs 16 inches on centers, securely anchored to prevent movement, covered with minimum 1/4-inch-thick hardboard, 1/2-inch gypsum wall board, or 1/2-inch plywood.
- D. Plastic sheeting on open framing is not a suitable critical barrier. All cracks, seams, and openings in critical barriers shall be caulked or otherwise sealed, so as to prevent the movement of asbestos fibers out of the work area.

### 3.08 ISOLATION OF WORK AREA

- A. Completely separate the work area from other portions of the building, and the outside by sheet plastic barriers at least 6 mil in thickness, or by sealing with duct tape.
- B. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors and speakers, and other openings into the work area with duct tape alone or with polyethylene sheeting at least 6-mil in thickness, taped securely in place with

duct tape. Maintain seal until all work including work area decontamination is completed. All lighting fixtures shall have had power shut off.

**3.09 NEGATIVE PRESSURE**

- A. Establish negative pressure in the work area by installation of High Efficiency Particulate Air (HEPA) filter air-purifying devices. Comply with ANSI Z9.2, Local Exhaust Ventilation Requirements. Maintain system in operation 24 hours per day until decontamination of the work area is completed and area has been certified clean by air monitoring tests and visual inspections. Discharge of asbestos fibers to the outside of the building will not be permitted.
- B. Size negative air pressure system(s) to provide a minimum of one air change every 15 minutes for the area under negative pressure. Locate the exhaust unit(s) so that makeup air enters the work area primarily through the decontamination unit and traverses the work area as much as possible. The intent is to provide the air change specified in each work area (room), not just the specified negative pressure. Place the end of the unit or its exhaust duct through an opening in the plastic barrier or wall covering. Seal the plastic around the unit or duct with tape. Wherever possible, the units shall exhaust to the outside of the building. Whenever impossible to duct outside, the HEPA units will be run in tandem.

**3.10 REMOVAL OF ASBESTOS CONTAINING MATERIALS**

- A. Thoroughly wet ACM to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water or removal Encapsulant. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for water or removal Encapsulant to penetrate material thoroughly. If a removal Encapsulant is used, apply in strict accordance with manufacturer's written instructions.
- B. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels.
- C. Remove saturated ACM in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags bend over and seal with minimum three wraps of duct tape. Clean outside and move to wash down station adjacent to material decontamination unit.

**3.11 DECONTAMINATION OF WORK AREA**

- A. Maintain premises and public properties free from accumulation of waste, debris, and rubbish, caused by operations. Remove visible accumulations of asbestos material and debris. Wet clean all surfaces within the Work area.
- B. Remove the plastic sheets from walls and floors only. Take proper care in folding up plastic sheeting to minimize dispersal of residual asbestos containing debris.
- C. Leave the windows, doors, and HVAC vents sealed. Maintain HEPA filtered negative air pressure systems, air filtration and decontamination enclosure systems in service.
- D. Remove all debris from floor of Work area. This includes all trash, scraps of lumber, pipes, etc. and all visible asbestos debris. The asbestos debris is primarily deteriorated pipe insulation that has fallen to the ground. Dispose of all debris removed as asbestos contaminated waste. HEPA



vacuum the entire floor.

- E. In areas that have dirt floors, remove at least one inch of dirt or until visually clean.
- F. Clean all surfaces in the Work area and any other contaminated areas with water and with HEPA filtered vacuum equipment. After cleaning the Work area, wait 24 hours to allow for settlement of dust, and again wet clean and clean with HEPA filtered vacuum equipment all surfaces in the Work area. After completion of the second cleaning operation, perform a complete visual inspection of the Work area to ensure that the Work area is free of visible asbestos debris. The negative pressure system may be shut down only after clean air has been achieved.
- G. Include sealed drums and all equipment used in the Work area in the cleanup and remove from Work areas, via the equipment decontamination enclosure system, at an appropriate time in the clean sequence.
- H. Conduct cleaning and disposal operations to comply with applicable ordinances and antipollution laws. Do not burn or bury rubbish and waste materials on job site. Do not dispose of volatile wastes in storm or sanitary drains. Do not dispose of wastes into streams or waterways.
- I. Store volatile wastes in covered metal containers during Work hours and remove from premises at end of Workday. Prevent accumulation of wastes, which create hazardous conditions. Provide adequate ventilation during use of volatile or noxious substances.
- J. If the Project Monitor, within 24 hours after the second cleaning, finds visible accumulations of asbestos debris in the Work area, repeat the wet cleaning until the Work area is in compliance, at no additional expense to the Owner.
- K. Remove the first layer of plastic sheet from walls and floors only. Take proper care in folding up plastic sheeting to minimize dispersal of residual asbestos containing debris.
- L. Leave the windows, doors, and HVAC vents sealed. Maintain HEPA filtered negative air pressure systems, air filtration and decontamination enclosure systems in service.
- M. Following the final visual inspection by the Project Monitor, after the removal of ACM and decontamination of Work areas, and while space enclosures systems remain in place, seal all surfaces from which ACM has been removed to assure immobilization of any remaining fibers. Use a colored sealant so that complete coverage may be ensured by a visible inspection by the Project Monitor to verify that asbestos-containing material has been adequately removed. Apply sealer in accordance with manufacturer's recommendations using airless spray equipment.
- N. Clearance air test samples will be taken by Project Monitor 24 hours after the encapsulation. Aggressive air sampling will be conducted using 20" rotating fans, leaf blowers, or other devices as selected by the Project Monitor. If the Work area is found visually clean and encapsulated, clearance air samples will be made to determine fiber concentrations. Analysis will be made using Phase Contrast Microscopy.

### 3.12 WORK AREA CLEARANCE

- A. The Work is complete when the Work area is visually clean and airborne fiber levels have been reduced to the level specified below. When this has occurred, the Asbestos Contractor will notify the Project Monitor that the area is ready for clearance.

- B. The number and volume of air samples taken, and analytical methods used by the Project Monitor will be in accordance with the schedule given below. Sample volumes given may vary depending upon the analytical instruments used.
  - C. Phase Contrast Microscopy (PCM) will be used for all testing.
  - D. Costs for the initial testing required for clearance will be paid by the Owner. Should the initial testing fail, the Asbestos Contractor will reimburse the Designer for the cost of all additional testing based on \$90.00 per hour for project monitor and \$30.00 per PCM sample and \$150.00 per TEM air sample.
- 3.13 DISPOSAL OF ASBESTOS CONTAINING MATERIAL AND ASBESTOS CONTAMINATED WASTE
- A. As the Work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labeled containers of asbestos waste and dispose of such containers at an authorized disposal site in accordance with the requirements of disposal authority.
  - B. Comply with 29 CFR 1926.1101.
  - C. Seal all asbestos and asbestos contaminated waste material in rigid fiber or metal drums lined with double thickness 6mil, sealable plastic bags. Label the drums and the plastic bags; transport and dispose of all in accordance with the applicable OSHA and EPA regulations. At the conclusion of the job, place all polyethylene material, tape, cleaning material and clothing in the plastic lined drum. Seal, correctly label and dispose of as asbestos waste material.
  - D. Transport the sealed drums to the approved waste disposal site. The sealed plastic bags may be removed from the drums and placed into the burial site unless the bags have been broken or damaged. Leave damaged bags in the drums and bury the entire contaminated drum. Uncontaminated drums may be recycled. The sealed bags or drums must be covered the day of disposal. Contractor shall obtain trip tickets at the landfill to document disposal of asbestos containing materials. A form must be signed, not initialed, by all parties. Copies of all trip tickets shall be submitted to the Designer.
  - E. If a rental vehicle is used to transport asbestos waste, Contractor shall provide to the vehicle's owner a written statement as to the intended use of the vehicle. A copy of such notice, signed by the vehicle owner, shall be provided to the Designer prior to transporting materials in the vehicle. Two layers of 6-mil plastic sheet shall be placed on the floor and walls of the rental vehicle prior to loading any containers of asbestos waste.
- 3.14 DISPOSAL OF NON-CONTAMINATED WASTE
- A. Remove from the site all non-contaminated debris and rubbish resulting from abatement operations. Transport materials removed from demolished areas and dispose of offsite in a legal manner.
- 3.15 FINAL CLEAN UP
- A. Employ experienced workers or professional cleaners for final cleaning. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials, from exposed to view interior and exterior finished surfaces. Polish surfaces so designated.

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

**END OF SECTION**

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
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**JULY 26, 2023**

**SECTION 02 41 13**

**SELECTIVE DEMOLITION**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02 DESCRIPTION OF WORK**

- A. The Work of this Section includes, but is not limited to, labor and materials of the following:
  - 1. Remove existing overhead door, door tracks, and related attachments.
  - 2. Remove existing overhead door opener and salvage for future installation by Owner.
  - 3. Remove existing brick and CMU to enlarge the existing overhead door opening.
  - 4. Cutting of new openings in existing walls as required to complete the Work, in coordination with the Work of Sections 01 51 11 – Cutting and Patching
  - 5. Scheduling and sequencing operations without interrupt utilities serving occupied areas. If interruption is required, obtain written permission from the utility company and the Owner. Provide temporary services as necessary to serve occupied and usable facilities when permanent utilities must be interrupted, or schedule interruption when the least amount of inconvenience will result.

**1.03 RELATED WORK SPECIFIED ELSEWHERE**

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.
  - 2. Section 04 20 00 – Unit Masonry
  - 3. Section 05 12 00 - Structural Steel
  - 4. Section 23 00 00 - HVAC
  - 5. Section 26 00 00 - Electrical

**1.04 DEFINITIONS**

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to the Owner, ready for reuse, at a location designated by the Owner. Protect from weather until accepted by Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated. Protect from weather until reinstallation.

- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed, and salvaged, or removed and reinstalled.

**1.05 MATERIALS OWNERSHIP**

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques, antiques, and other items of interest or value to the Owner that may be encountered during selective demolition remain property of the Owner. Carefully remove each item or object in a manner to prevent damage and deliver promptly to a location acceptable to the Owner.

**1.06 SUBMITTALS**

- A. Provide submittals in accordance with requirements of Section 01 30 00 of the Contract Documents
- B. Provide qualification data for demolition firms, professional engineers, and refrigerant recovery technicians.
- C. Provide schedule of demolition activities, including but not limited to, the following:
  - 1. Detailed sequence of demolition and removal work, with starting and ending dates for each activity. Schedule shall ensure that the Owner's building and on-site operations are uninterrupted.
  - 2. Interruption of utility services, including dates and duration of interruption.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Means of protection for items to remain.
- D. Provide an inventory list of items that have been removed and salvaged following completion of the Work of this Section.
- E. Provide photographs and videotapes showing existing conditions of adjoining construction and site improvements, prior to commencement of the Work of this Section that may be misconstrued as damage caused by the Work of this Section.

**1.07 QUALITY ASSURANCE**

- A. Examination of Existing Conditions: The Contractor shall examine the Contract Drawings for demolition and removal requirements and provisions for new work. Verify all existing conditions and dimensions before commencing work. The Contractor shall visit the site and examine the existing conditions as he finds them and shall inform herself/himself of the character, extent and type of demolition and removal work to be performed. Submit any questions regarding the extent and character of the demolition and removal work in the manner and within the time established for receipt of such questions during the bidding period.
- B. Demolition Firm Qualifications: An experienced firm that specializes in demolition work similar in material and extent to that indicated for this Project.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI A10.6 and NFPA 241.

- E. Pre-demolition Conference: Review methods and procedures related to selective demolition including, but not limited to, the following:
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review structural load limitations of existing structure.
  - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 5. Review areas where existing construction is to remain and require protection.

**1.08 PROJECT CONDITIONS**

- A. Owner Occupancy:
  - 1. The existing North Andover Middle School will be occupied during the Work of this Contract. Ensure any impact or disruption to these occupants is kept to a minimum. The General Contractor shall employ all measures necessary to protect the existing buildings and adjacent property from damage caused by the Work of this Contract.

**1.09 WARRANTY**

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

**1.10 PRE-INSTALLATION MEETING**

- A. The General Contractor shall schedule a pre-installation meeting to establish compliance and expectation of Work, maintain optimum working conditions, and coordinate the Work of this Section with related and adjacent Work. The meeting shall be attended by the General Contractor, Architect, and related Subcontractors.

**PART 2 - PRODUCTS**

**2.01 GENERAL**

- A. All Repair materials shall be compatible with existing materials to remain and shall be as approved by the Architect.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate, and measure the nature and extent of conflict. Promptly submit a written report to Designer.
- E. Engage the services of a professional engineer registered in the Commonwealth of Massachusetts to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.
  - 1. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
- G. Utility Services:
  - 1. Existing utility services shall be maintained to existing facilities. Provide a minimum three (3) day notice of service shutdown to the Owner.
  - 2. Shutting off all utilities shall be conducted by the Contractor in compliance with requirements of authorities having jurisdiction.
- H. Site Access and Temporary Controls:
  - 1. Existing streets and walk shall remain open all the time. Maintain all existing building access and egress capabilities as required by local authorities having jurisdiction.
  - 2. Provide and maintain temporary protection, including chain link fencing as necessary.
  - 3. Provide and maintain protection around existing trees and plantings located on adjacent property.
- I. Temporary Facilities:
  - 1. Provide and maintain temporary barricades to prevent injury to people.
  - 2. Provide and maintain temporary weather protection as required.
  - 3. Provide and maintain protection of existing finished work to remain.
  - 4. Provide and maintain protection of existing interior furnishings and equipment.
  - 5. Provide and maintain protection of exterior site improvements to remain, including on adjacent property.
- J. Provide and maintain temporary weather-tight enclosure for building exterior as required.
- K. Provide and maintain temporary shoring of existing structural building components to remain, including but not limited to, structural steel, brick masonry walls, and concrete floors and wood roof framing.
- L. Items to be removed and salvaged shall be cleaned, stored, and transported to the Owner's designated storage area.
- M. Items to be removed and reinstalled shall be cleaned, repaired, stored, and reinstalled as required.
- N. Existing items to remain shall be protected against damage during construction.
- O. Cleaning and Disposal: All waste and debris caused by the Work of this Section shall be legally disposed of offsite, daily, at a facility licensed to receive and process building demolition debris.



Burning shall not be permitted. Provide original Bills of Lading to the Owner in accordance with the requirements of the Owner.

### 3.02 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Comply with requirements for access and protection in accordance with the requirements of Division 01.
  - 2. Always maintain adequate passage to and from all exits. Before any work is done which significantly alters access or egress patterns, consult with the Designer, and obtain approval of code required egress. Under no condition does it block or interfere with the free flow of people at legally required exits, or in any way alter the required condition of such exits.
- B. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  - 1. Strengthen or add new support when required during the progress of selective demolition.
  - 2. Remove temporary shoring, bracing and structural supports when no longer required.
  - 3. Post warning signs and place barricades as applicable during placement and removal of temporary shoring.
- C. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area(s).
  - 1. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction. Provide temporary barricades as required to limit access to demolition areas.
  - 2. Protect existing site improvements, appurtenances, and landscaping to remain.
- D. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.

### 3.03 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.

2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering, and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until the work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
  5. Maintain adequate ventilation when using cutting torches.
  6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  9. All waste and debris caused by the Work of this Section shall be removed and legally disposed of daily, in accordance with requirements of Section 01 50 00 - Temporary Facilities and Controls.
- B. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack items in crates after cleaning. Identify contents of containers.
  3. Store items in a secure area until delivery to Owner.
  4. Transport items to storage area designated by the Owner.
  5. Protect items from damage during transport and storage.
- C. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, support, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Designer, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

- E. Items for Re-use and Preservation of Existing Surfaces to Remain:
  - 1. The Contractor shall inspect closely each item specifically designated to be relocated, re-used, or turned over to the Owner prior to its removal, and immediately report damages and defects to the Designer and Owner. The Contractor shall be responsible for any subsequent damage to the same other than latent defects not readily apparent from close inspection and shall bear responsibility for its repair or same replacement as directed by the Designer.
- F. Unless special surface preparation is specified under other Specification Sections, leave existing surfaces that are to remain in a condition suitable to receive new materials and/or finishes.

### 3.04 PROTECTION OF PUBLIC AND PROPERTY

- A. Provide all measures required by federal, state, and municipal laws, regulations, and ordinances for the protection of surrounding property, the public, and workmen during all demolition and removal operations. Measures are to be taken, but not limited to installation of sidewalks, sheds, barricades, fences, warning lights and signs, trash chutes and temporary lighting.
- B. Protect all walks, roads, streets, curbs, pavements, trees, and plantings, on and off premises, and bear all costs for correcting such damage as directed by the Designer.
- C. Demolition shall be performed in such a manner that will ensure the safety of adjacent property. Protect adjacent property from damage and protect persons occupying adjacent property from injuries which might occur from falling debris or other cause and so as not to cause interference with the use of other portions of the building, of adjacent buildings or the free access and safe passage to and from the same.
- D. Every precaution shall be taken to protect against movement or settlement of the building, of adjacent buildings, sidewalks, roads, streets, curbs, and pavements. Provide and place at the Contractor's own expense, all necessary bracing and shoring in connection with demolition and removal work.
- E. Remove portions of structures with care by using tools and methods that will not transfer heavy shocks to existing and adjacent building structures, both internal and external of the work area.
- F. Provide and maintain in proper condition, suitable fire resistive dust barriers around areas where interior demolition and removal work is in progress. Dust barriers shall prevent dust migration to adjacent areas. Remove dust barriers upon completion of major demolition and removal in the work area.

### 3.05 DISCOVERY OF HAZARDOUS MATERIALS

- A. If hazardous materials, such as chemicals, asbestos-containing materials, or other hazardous materials are discovered during work, cease work in the affected area only and immediately notify the Designer of such discovery. Do not proceed with work in such areas until instructions are issued by the Designer. Continue working in other areas.
- B. If unmarked containers are discovered during work, cease work in the affected area only and immediately notify the Designer of such discovery. Do not proceed with work in such areas until instructions are issued by the Designer. Take immediate precautions to prohibit endangering the containers' integrity. Continue working in other areas.

**3.06 CUTTING**

- A. Perform all cutting of existing surfaces in a manner which will ensure a minimal difference between the cut area and new materials when patched. Use extreme care when cutting existing surfaces containing concealed utility lines which are indicated to remain and bear full responsibility for repairing or replacement of all such utilities that are accidentally damaged.
- B. Provide a flush saw cut edge where pavement, curb, and concrete removals abut new construction work or existing surfaces to remain undisturbed.

**3.07 DISPOSAL OF DEMOLISHED MATERIALS**

- A. General: Comply with requirements of Division 1, and the following.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

**3.08 CLEANING**

- A. Cleaning adjacent structures and improvements of dust, dirt, and debris caused by the Work of this Section. Premises shall be left in a clean condition and ready to accept alteration work and new construction.

**3.09 RUBBISH REMOVAL**

- A. The General Contractor shall remove and dispose daily of all waste and debris in accordance with the requirements of Section 01 50 00 – Temporary Facilities and Controls.

**END OF SECTION**

**SECTION 04 20 00**

**UNIT MASONRY**

**PART 1 - GENERAL**

**1.01. RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

**1.02. DESCRIPTION OF WORK**

- A. The Work of this Section shall include, but not be limited to, furnishing and installation of the following:
  - 1. Brick and Concrete Masonry Units (CMU) infill to match existing.

**1.03. RELATED WORK SPECIFIED ELSEWHERE**

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.
  - 2. Section 02 41 13 - Selective Demolition
  - 3. Section 05 12 00 - Structural Steel
  - 4. Section 23 00 00 - HVAC
  - 5. Section 26 00 00 - Electrical

**1.04. SUBMITTALS**

- A. Provide submittals in accordance with requirements of Section 01 33 00 – Submittal Procedures and in accordance with requirements of the Contract Documents.
- B. Submit manufacturer's product data for each product indicated.
- C. Provide samples for verification, including but not limited to, the following, or as otherwise requested by the Architect:
  - 1. Replacement brick: To match existing size, texture, and color.
- D. Qualification Data for restoration contractor, including field supervisor.
- E. Restoration Program: Provide detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials on building and Project site.
  - 1. If materials and methods other than those indicated are proposed for any phase of restoration work, provide a written description, including evidence of successful use on comparable projects, and a testing program to demonstrate their effectiveness for this Project.

**1.05. DELIVERY, STORAGE, AND HANDLING**

- A. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
- B. Store materials on elevated platforms, under cover, and in a dry location. Do not use materials that have become damp.

**1.06. PROJECT CONDITIONS**

- A. Perform the Work of this Section in accordance with written requirements of the approved manufactures of materials to be utilized to complete the Work of this Section, including hot and cold weather requirements.

**1.07. SEQUENCING AND SCHEDULING**

- A. Order repair and replacement materials as soon as possible, to avoid delaying completion of the Work.
- B. Perform brick repair and restoration in accordance with written requirements of the approved manufacturer of materials to be utilized to complete the Work of this Section.

**1.10. PRE-INSTALLATION MEETING**

- A. The General Contractor shall schedule a pre-installation meeting to establish compliance and expectation of Work, maintain optimum working conditions, determine acceptable mock-ups, and coordinate the Work of this Section with related and adjacent Work. The meeting shall be attended by the General Contractor, Architect, and related subcontractors.

**PART 2 - PRODUCTS**

**2.01 CONCRETE MASONRY UNITS (CMU)**

- A. Provide CMU to conform with ASTM C90 and to match the size, finish, and texture of existing CMU. Provide CMU to comply with the following properties:
  - 1. Provide units with nominal 8 in. high x 16 in. long face dimensions (7-5/8 in. x 15-5/8 in. actual), unless indicated otherwise. Provide thicknesses indicated, or if not indicated, as necessary to create properly supported, structurally safe walls built within the height to width limitations required by codes and recommended by the National Concrete Masonry Association.
  - 2. Provide special shaped units for lintels, bond beams, corners, jambs, headers, control joints and other conditions. Never expose cores. Provide bullnose units full wall height at all vertical and horizontal corners, and door jambs, where CMU is exposed.
  - 3. Provide normal weight units, except provide units with weight as standard with manufacturer for all units in fire-rated assemblies.

**2.02 BRICK**

- A. Provide brick to conform with ASTM C 216, Type FBS Grade SW and to match the size, finish, texture, and color of existing brick. Provide brick to comply with the following properties:

1. Grade SW for all Work
2. Color/Finish/Texture: To match existing.
3. Lintel brick shall be solid brick units: Use solid bricks where required so cores shall not be visible after final installation.
4. Minimum Compressive Strength: 9000 psi
5. Maximum saturation coefficient: 0.78

**2.03 REINFORCING, TIES AND ANCHORS**

- A. Horizontal joint reinforcing and masonry to masonry ties shall be truss type, welded wire units fabricated from 9-gauge, ASTM A 82 cold-drawn galvanized steel wire with deformed side wires and smooth cross wires spaced 16 in. O.C. Provide prefabricated corners and tees.
- B. Exterior brick masonry veneer wall anchors and tie systems that comply with ACI 530.1/ASCE 6/TMS 602 and 780 CMR 13, as follows:
  1. Provide one-piece self-drilling screw, zinc barrel, shall fully penetrate masonry or steel stud back-up. No. 304 Pos-I-Tie, as manufactured by Heckmann, or equal by Hohmann & Barnard, Inc., and Tru Supply Company, with tapcon screw for anchors to masonry backup, and self-drilling screw for anchors to metal stud backup.
  2. No. 75 Pos-I-Tie, 5 in. one-piece self-drilling screw, zinc barrel, shall fully penetrate masonry or steel stud back-up.
  3. Masonry ties shall be 3/16 in. diameter, stainless steel, by length required, to provide a minimum of 2 inches embedment in mortar. Provide ties as follows or otherwise required to complete the Work:
    - a. No. 304 Pos-I-Tie® triangle wire tie, as manufactured by Heckmann, or equal by Hohmann & Bernard and Masonpro.
    - b. No. 304 Pos-I-Tie® single wire tie, as manufactured by Heckmann, or equal by Hohmann & Bernard and Masonpro.
    - c. Masonry Veneer Seismic Ties: Continuous wire in mortar joint, anchored to Pos-I-Tie® Triangle Tie with welded No. 370 Seismic clip, as manufactured by Heckmann, or equal by Hohmann & Bernard or Masonpro.
    - d. Where details or installation conditions require, provide ties fabricated of shape and size to suit conditions and provide adequate anchorage.
  4. Provide one-piece, flexible stainless steel helical ties for pinning existing brick to existing wall, TorkFix as manufactured by HeliFix or equal by Hohmann & Barnard or Heckman. The helical ties shall comply with the following properties:
    - a. Material: Austenitic stainless-steel Grade 304
    - b. Diameter: 11/64 in.
    - c. Length: Façade thickness + cavity width backup penetration of 1-1/2 in.
    - d. Hole Diameter: 7/16 in.
    - e. Hole Depth: Length of helical tie + 2-1/2 in.

- C. Provide minimum 22 gauges, hot dip galvanized steel dovetail slots No. 305, and hot dip galvanized flexible dovetail brick tie No. 315, as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro. Dovetail brick ties shall be provided at all locations of masonry veneer over concrete. Provide temporary, removable filler to keep dovetail slots clear and free from concrete, mortar, or grout. Finish shall be hot dip galvanized after fabrication in accordance with ASTM A 153.
- D. Furnish weld-on ties for masonry anchors for installation under the Work of Section 05 12 00 – Structural Steel Framing, as follows, or as otherwise required to provide anchorage in accordance with requirements of the Contract Documents.
  - 1. Masonry perpendicular to column flange: 12 gauge, 1-1/4 in. wide, No. 353 as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
  - 2. Masonry parallel to column flange: 12 gauge, 1-1/2 in. wide, No. 354 as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
  - 3. Masonry perpendicular to column web: 1/4 in. diameter by 8 in. long, No. 359, and 3/16 in. diameter by 12 in. long, No. 301W, both as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
- E. Provide joint stabilization anchors to connect masonry to other materials and to allow in-plane movement while resisting out-of-plane movement and to maintain alignment of expansion joints and control joints while allowing movement within the plane of the wall. Provide joint stabilization anchors with two, 8-gauge steel wires enclosed in a 1/32 in. sheet metal sleeve separated at the center by a plastic sleeve, D/A 2200 as manufactured by Dur-O-Wal or equal by Heckmann Building Products, Inc. and Masonpro. Provide mill galvanized units for interior partitions and stainless-steel units for exterior wall applications.
- F. Provide miscellaneous hot-dip galvanized steel straps, bars, rods, and similar items, fabricated from not less than 16-gauge sheet steel or 3/16 in. diameter steel wire, to provide a complete installation in accordance with requirements of the Contract Documents.
- G. Provide structural break away anchors for lateral bracing of CMU fire walls as called for on the Drawings. Structural ties shall be minimum 1/8 in. rolled strip zinc alloy, Type 70 X as manufactured by Heckmann Building Products Inc. or equal by Hohmann & Barnard, Inc. and Masonpro. The melting point of the zinc strips shall be below 800 degrees Fahrenheit.
- H. Provide vertical reinforcing steel bars in accordance with requirements of Section 04 21 11 - Reinforced Unit Masonry.
- I. Provide hot-dipped galvanized, ASTM A153, class B2, 1.5 oz./ft.2 zinc coating on all ties, reinforcing, anchors and similar items which extend into an exterior wall assembly, except items of stainless steel. Semi-exposed areas shall be considered exterior.
- J. Provide reinforcing, ties, and anchors for all Work of this Section, including but not limited to, concrete masonry, clay brick veneer, and cast stone utilizing the appropriate type for each condition, including stainless steel for cast stone, in accordance with requirements of this Section, Section 04 21 11 – Reinforced Unit Masonry, and Cast Stone Institute Technical Manual.
  - 1. All ties for use at cast stone masonry shall be designed by the approved cast stone manufacturer.



**2.04 MORTAR AND GROUT MIXES**

- A. Provide pre-packaged mortar cement consisting of a controlled blend of Portland cement and Type S hydrated lime, Blue Circle Eaglebond or equal by Cemex and Lehigh Hanson. Mortar cement shall comply with requirements of ASTM C150, Type II, and shall be free from water soluble salts and alkalis. Provide mortar complying with ASTM C270 property specifications. When mixing use known volume measures; do not batch by shovel. Mortar aggregate shall be well graded, complying with ASTM C 144.
  - 1. Provide type N mortar for masonry above grade and interior and exterior Work, except as indicated otherwise and below.
  - 2. Provide type S mortar for reinforced and load bearing masonry, and elsewhere as indicated.
- B. Mortar pigment shall be natural and synthetic oxides of iron and chrome, compounded for use in mortar. Use only pigments with proven record of satisfactory performance as manufactured by Davis Colors or equal by Solomon Colors and Stoopan & Meeus. Mortar colors shall be selected by the Architect from the approved manufacturer's complete selection of standard and premium colors.
  - 1. Provide mortar color to match existing.
  - 2. Provide a minimum of three cement colors as necessary to provide mortar color as selected by the Architect from the approved manufacturer's complete selection of standard colors.
- C. Provide grout complying with requirements of ASTM C 476 and with consistency appropriate to conditions so that grout shall completely fill all spaces intended to receive grout. Grout aggregate shall comply with requirements of ASTM C 404
- D. Do not use admixtures or antifreeze agents. Do not use masonry cement. Do not use calcium chloride or any compounds or mortar ingredients containing chlorides.
- E. Lime shall be hydrated, Type S, complying with ASTM C 207.
- F. Mortar to be used in the architectural CMU, used the same integral water repellent that is used by the manufacturer of the CMU.
- G. Water shall be clean and potable.

**PART 3 - EXECUTION**

**3.01 PROTECTION**

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from stone restoration work.
  - 1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
- B. Prevent mortar from staining face of surrounding masonry and other surfaces.
  - 1. Cover sills, ledges, and projections to protect from mortar droppings.
  - 2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
  - 3. Immediately remove mortar in contact with exposed masonry and other surfaces.
  - 4. Clean mortar splatters from scaffolding at end of each day.

**3.02 MIXING PROCEDURE FOR MORTAR**

- A. Measure material by volume or equivalent weight. In measuring by volume, use a container to measure ingredients. Do not measure by shovel.
- B. Rebuilding/Setting Mortar
  - 1. Mix ingredients in a clean mechanical mixer for a minimum of 3 minutes, maximum of 5, with the minimum amount of water to produce a workable consistency.
  - 2. Mortar that has stiffened because of evaporation of water from the mortar may be retempered only once, and only during the first hour of placement to restore the required consistency. Use mortar within 2 1/2 hours of its initial mixing; tempering is permitted only once and during the first hour only. Limit amount of mortar batched at one time to stay within these requirements.
- C. Pointing Mortar
  - 1. Add sufficient water to dry mix to produce a damp mix that will retain its shape when pressed into a ball by hand. Mix from 3 to 7 min. in a mechanical mixer.
  - 2. Let mortar stand for not less than 1 hour nor more than 1 1/2 hours for prehydration. Add sufficient water to bring mortar to proper consistency for tuck-pointing, somewhat drier than mortar used for laying units.
  - 3. Use mortar within 2 1/2 hours of its initial mixing; tempering is permitted only once after bringing mortar to proper consistency. Limit amount of mortar batched at one time to stay within these requirements.
- D. For prepackaged masonry repair mortar, mix with water or manufacturer's polymer in proportions defined by manufacturer to provide the required consistency.

**3.03 REPLACING MASONRY UNITS**

- A. The Contractor is responsible for performing Work in a safe manner. Provide temporary shoring or other supports as required to prevent displacement of existing masonry that is to remain. Perform the removal Work with such care as may be required to prevent failure of the masonry or damage to adjoining masonry that is to remain. Follow method of operation and/or bracing scheme required to be provided in Article 1.04 titled "Submittals".
- B. Remove the deteriorated and damaged masonry units to their full depth, including the surrounding joint mortar. Wet masonry to reduce dust. Install helical masonry ties at perimeter of replacement prior to removal as indicated in details on the Drawings. Wherever possible without damaging masonry, use a rotary power masonry saw for cutting Work. Masonry saw shall have a vacuum attachment to reduce dust. For SHPO designated/landmark buildings, removal of perimeter brick in the area designated for removal shall be done by first cutting the joint utilizing methods specified in Art. 3.04,B.,2. Leave square corners at adjoining masonry that is to remain. Clean joints and cavities by flushing with water or compressed air.

- C. Dampen contact surfaces slightly before application of mortar, making sure there is no free water. Install matching masonry units with Type N mortar. Install units to match and align with existing masonry. Maintain bonding and coursing pattern of existing masonry. Use presoaked wood wedges where necessary to properly set the units and maintain uniform matching joints. Backpack and fill joints full of mortar. Finish joints to match existing adjoining joints as described in Art. 3.04- Repointing Joints. Fill open joints in backup. In solid masonry construction, ensure that entire collar joint is filled between the backup and the face masonry. Collar joint is likely to vary substantially, up to 3" in locations.
- D. Install accessories as indicated on Drawings. In cavity wall construction provide mortar mesh directly on flashing, such as at base of wall, and at relieving angles and lintels, with flashing extending at least 6" above top of mortar mesh.
- E. Area Face Brick Replacement
  - 1. Single wythes of brick shall be replaced in 4 foot lengths maximum unless indicated otherwise by the "methods of operation" submitted by the Contractor's Engineer as required to be submitted in the Article 1.04 titled "Submittals".
  - 2. Install reinforcement every 16" each way and secure it to backup masonry as indicated on Drawings.
- F. Replacement by Brick Stitching
  - 1. Remove and replace existing brick to their full depth with new face brick, one brick each on both sides of crack in masonry. Also, remove and replace all existing pushed-out, missing, split or otherwise defective face bricks to match the adjoining existing good sound masonry. If the existing masonry work has a solid masonry common-bond pattern, existing sound header bricks shall remain. However, any cracked, defective or loose header brick shall be replaced. All new brick work shall be toothed into existing good work. At horizontal and diagonal cracks, the replacement of bricks shall be done in 4-foot lengths maximum unless indicated otherwise by the "methods of operation" submitted by the Contractor's Engineer as required to be submitted in Article 1.04 titled "Submittals". Existing mortar bed for replaced brick shall be thoroughly removed and the back parged with a coat of new mortar to fill the collar joint.

### 3.04 FINAL CLEANING

- A. After repairs have completely cured and hardened, thoroughly clean exposed stone surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.
  - 1. Do not use metal scrapers or brushes, or acidic or alkaline cleaners.

### 3.05 RUBBISH REMOVAL

- A. The General Contractor shall remove and dispose daily of all waste and debris in accordance with the requirements of Section 01 50 00 – Temporary Facilities and Controls.

## END OF SECTION

**WORCESTER FIRE STATION #2**  
**SOUTH DIVISION BUILDING RENOVATION**  
**180 SOUTHBRIDGE ST., WORCESTER, MA 01608**  
Mount Vernon Group Architects, Inc., Project No. 02023.04

**JULY 26, 2023**

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**SECTION 05 12 00**

**STRUCTURAL STEEL**

**PART 1 - GENERAL**

**1.1 WORK INCLUDED**

- A. Provide all labor, materials, equipment, services and accessories necessary to furnish and install the work of this Section, complete and functional, as indicated in the Contract Documents and as specified herein. Steel sections indicated on the Architectural Drawings but not indicated on the Structural Drawings shall be made part of Section Metal Fabrications.
- B. The work of this Section consists of furnishing and erecting all structural steel work as shown on the Drawings and as specified herein or both. Structural steel work is that work defined in AISC "Code of Standard Practice" plus the steel work listed below and shown on the Structural Drawings, which includes, but is not limited to, the following:
  - 1. Shear plates / bearing plates - if attached to new / existing structural steel columns or beams.
  - 2. Fasteners and connecting materials for framing structural steel to structural steel (i.e., shop and field bolted and/or welded connections of columns, base plates, tubes, beams, hangers, etc.)
  - 3. Selection of bolted/welded structural connections, as indicated on the Drawings, in accordance with AISC.
  - 4. Columns, beams, girders, purlins, girts, posts, channels, angles, plates, frames, anchors, rods, hangers, etc.
  - 5. Galvanizing of all exposed exterior elements, unless otherwise noted, and any other steel indicated on the drawings.
  - 6. Temporary connections, shoring and bracing of existing structure, as required.
  - 7. Stiffener plates, where indicated.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.

**1.3 REFERENCE SPECIFICATIONS**

**STRUCTURAL STEEL**

- A. "Code of Standard Practice for Steel Buildings and Bridges," and "Specifications for Structural Steel Buildings, Allowable Stress Design and Plastic Design", Seismic Provisions for Structural Steel Buildings”, by the American Institute of Steel Construction, latest edition.
- B. "Code for Welding in Building Construction" by the American Welding Society".
- C. ASTM listed standards by the American Society for Testing and Materials.
- D. In case of conflict between the Reference Specification and the Project Specification, the Project Specification shall govern. In case of conflict between Reference Specifications, the more stringent shall govern.
- E. When compliance with any Specification is specified herein for materials (or a product, manufactured or fabricated), the Contractor, if requested shall furnish an affidavit from the manufacturer (or fabricator) certifying that the materials (or product) delivered to the job meets the requirements specified. However, such certification shall not relieve the Contractor from the responsibility of complying with any added requirements specified herein.

#### 1.4 SUBMITTALS

- A. Submit complete Shop Drawings in accordance with the provisions of Section 013000 – SUBMITTAL.
  - 1. No variance from design sizes and details will be permitted on submitted Shop Drawings, but requests for modification of connections of details to better suit their shop practice, or for any other reasons, will be considered by the Architect.
  - 2. Fabrication of any material or performing of any work prior to the final review of the Shop Drawings will be entirely at the risk of the Contractor.
  - 3. Shop Drawings shall include all information necessary for fabrication of the component parts of the structure. They shall indicate size and weight of members - type and location of shop and field connections, the type, size and extent of all welds, and the welding sequence when required. The welding symbols used on the Shop Drawings shall be as adopted by the American Welding Society.
  - 4. Review of Shop Drawings shall be for size and arrangement of principle and auxiliary members and strength of representative connections based on sample checks. Any errors in dimensions shown on Shop Drawings shall be the responsibility of the Contractor.
  - 5. Prior to the submission of structural steel shop drawings, all dimensions pertaining to existing conditions (particularly the dimension between existing columns where new or repositioned steel beam will be placed) shall be field-verified by the contractor.

#### 1.5 TESTING AND INSPECTION

### STRUCTURAL STEEL

- A. All materials and workmanship under this Section shall be subject to inspection in the mill, shop or field by qualified inspectors paid directly by the Owner. Structural Tests and Inspections shall be in accordance with Chapter 17 of the International Building Code.
- B. However, such inspection, wherever conducted, shall not relieve Contractor of his responsibility to furnish materials and workmanship in accordance with Contract requirements, nor shall inspector's acceptance of materials or workmanship prevent later rejection of same by the Owner or Architect if defects are discovered.
- C. Inspection of welding work shall consist of non-destructive spot testing done by magnetic, magnetic particle or ultrasonic method, whichever is most effective for joint to be tested.
- D. Inspection of bolting work shall be in accordance with "Specification for Structural Joints Using ASTM A325 or A490 Bolts" by the American Institute of Steel Construction.
- E. The Contractor shall give proper notice to inspection agencies approved by the Architect and shall allow access and full facilities as required for this inspection.
- F. Regardless of any testing done, the Contractor is responsible for completing the structural steel work in complete compliance with these Specifications.
- G. The Contractor must set up a quality control program in the shop and in the field to ensure compliance with the Specifications.
- H. Report in writing to the Architect the results of the Contractor's inspection.
- I. When the Contractor is satisfied that the work has been satisfactorily completed, notify the Architect, who will make arrangements with the independent testing engineer retained and paid by the Owner to verify that the work complies with these Specifications.

**1.6 STORAGE AND HANDLING**

- A. Care and protection shall be given to all structural steel during handling and storage. If items are to be stored prior to installation, they shall not be placed in contact with the ground and they shall be protected from the elements and kept dry.
- B. Do not store materials on the structure in a manner that may cause distortion or damage to supporting structural elements.

**PART 2 - PRODUCTS**

**2.1 MATERIALS**

**STRUCTURAL STEEL**

- A. Unless otherwise noted, structural steel wide flanged shapes shall conform to ASTM A992, Grade 50. Unless otherwise noted, steel channels, plates, and angles shall be in accordance with the requirements of ASTM A36.
- B. Bolts, nuts and washers shall comply with the requirements of ASTM, F3125, A325 or A490 Bolts. Bolts shall be A325N with washer. Connections shall be bearing type with shear planes through threads.
- C. Weld and joint details shall comply with the requirements of the "Code for Welding in Building Construction" by the American Welding Society.

## 2.2 FABRICATION

- A. All structural steel shall be fabricated in accordance with Reference Specifications, approved Shop Drawings, and as hereinafter specified.
- B. The selection of members and connections for any portions of the structure not indicated on the Drawings shall be completed by the fabricator. Connections shall be capable of supporting the maximum reactions given in typical detail noted on the drawings for the specific beam size.
- C. All shop connections shall be welded or bolted.
- D. All field connections shall be bolted unless otherwise indicated on the Drawings.
- E. Unless otherwise noted, diameter of holes in bolted parts shall be 1/16" greater than the nominal diameter of the bolt. No unfair holes will be accepted, and enlargement of holes shall not be accomplished by burning. Burrs resulting from drilling or punching shall be ground to the surface of the material. Shearing and punching shall be done cleanly so as not to deform or mar adjacent surfaces.
- F. Provide holes and connections as required for site assembly of steel work. Holes shall be drilled or punched and reamed in the shop. Show sizes and locations of all such holes on the Shop Drawings.
- G. Corrective work for structural steel members or assemblages having fabrication errors, or which exceed permissible tolerances shall be corrected only if permitted by the Architect. All corrective work shall be in accordance with AISC and AWS requirements. When requested by the Architect or testing agency, the Contractor shall submit to the Architect, for approval, drawings showing details of proposed corrective work and shall receive reviewed drawings prior to performing the corrective work. All corrective work shall be solely at Contractor's expense.



- H. All structural steel members shall have assigned positions and an identification mark or symbol, plainly indicated thereon near one end. Marks shall agree with those given on the shop drawings and erection drawings relating to or calling for the member.

## 2.3 PROTECTIVE COATINGS

- A. All structural steel surfaces including connections shall receive a power tool cleaning in accordance with SSPC-SP3, "Power Tool Cleaning", except galvanized members shall receive SSPC-SP6, "Commercial Blast Cleaning".
- B. All new structural steel shall be shop-primed, unless noted otherwise to be galvanized.
- B. Refer to Architectural Drawings for exposed steel elements requiring finish painting.
- C. Hot Dip Galvanizing: Items exposed to the exterior or indicated on the drawings shall be hot-dipped galvanized after fabrication. A galvanizing bath shall be a combination nickelzinc mixture. Prior to galvanizing, the steel shall be immersed in a pre flux solution of zinc ammonium chloride. The use of the wet kettle process shall be prohibited. Galvanize all ferrous fasteners, clips, sleeves, anchors and accessories in contact with galvanized items.
  - 1. Galvanizing shall comply with ASTM A123, A153 or A386 as applicable.
  - 2. Items to be galvanized shall be galvanized after fabrication. Where the size of assembly is too large for complete unit galvanizing, these assemblies shall be galvanized prior to fabrication, in as large sections as practical and then only with the written approval of the Architect.
  - 3. Where galvanizing prior to completing fabrication cannot be avoided, joints shall be welded after fabrication, ground smooth and finished with four (4) full coats of California Products Corp. WW Totrust, Sealube ZRC, Zirp by Duncan or equal.
- D. Shop Coating of Hot Dip Galvanized Steel:
  - 1. Shop priming of galvanized steel: Where hot dip galvanized steel is to be primed prior to receiving a shop or field applied topcoat, it shall be primed by the galvanizer within twelve hours of galvanizing. The primer shall be a polyamide epoxy applied to a minimum D.F.T. of 2.5 mils and force cured in a facility capable of maintaining 130 degrees F.
  - 2. Shop painting of galvanized steel: Where hot dip galvanized steel is to receive a factory applied topcoat, it shall first be primed as stated above and shall then be coated by the galvanizer in a dedicated coating facility. The factory-applied topcoat shall be an aliphatic polyurethane applied to a D.F.T. of 2-4 mils and force cured in a facility capable of maintaining 130 degrees F. The galvanizer shall assume sole source responsibility for the coating system.

## **PART 3 - EXECUTION**

### STRUCTURAL STEEL

**3.1 ERECTION**

- A. All structural steel shall be anchored and erected in accordance with Reference Specifications, approved Shop Drawings, and as hereinafter specified.
- B. All work shall be accurately set to established lines and elevations and rigidly fastened in place with suitable attachments to the construction of the building. Errors in shop fabrication or deformation resulting from handling and transportation shall be reported immediately to the Architect, and approval of the method of erection shall be obtained. Approved corrections shall be made at no additional cost to the Owner.
- C. Temporary bracing, guying, and support shall be provided to keep the structure safe and aligned at all times during construction, and to prevent danger to persons and property. Check all temporary loads and stay within safe capacity of all building components. All work shall be in conformance with AISC, "Code of Standard Practice", Latest Edition.
- D. Except as otherwise indicated, all field connections shall be bolted in accordance with the AISC "Specifications for Structural Joints using ASTM A325 Bolts". Except as otherwise indicated, bolts shall be bearing type and need only be tightened to the snug tight condition as defined in Section 8.c of the bolt specification.
- E. Do not cut or alter any member in the field without Architect's written review for each specific condition.
- F. All welding shall be in accordance with Referenced Specifications and shall be done only by experienced welders who have, within one (1) year previously, been qualified by tests as prescribed in AWS "Standard Qualifications Procedure" for the type of work required.
- G. Galvanized elements shall be touched up (brush only) with 4 mils minimum of a zinc-rich paint at areas scarred by bolting or welding.

**3.2 HOISTING OF STEEL**

- A. All hoisting and rigging of structural steel members required for this project shall be provided, furnished, and installed in safe conditions. All crane work must include an approved lift plan. Coordinate all crane activity and schedules with the Owner.

**END OF SECTION**



# APPENDIX A -ASBESTOS ANALYSIS REPORT

EMSL Analytical, Inc.

10-39 45th Road Long Island City, NY 11101

Tel/Fax: (212) 290-0051 / (212) 290-0058

<http://www.EMSL.com> / [manhattanlab@emsl.com](mailto:manhattanlab@emsl.com)

EMSL Order: 032302639

Customer ID: ATC62

Customer PO: 11-81-0030

Project ID:

**Attention:** Eric Kubic  
Atlas Technical  
73 William Franks Drive  
West Springfield, MA 01089

**Phone:** (413) 781-0070  
**Fax:** (413) 781-3734  
**Received Date:** 03/21/2023 10:19 AM  
**Analysis Date:** 03/22/2023  
**Collected Date:** 02/23/2023

**Project:** 183/ Worcester Fire Department/ Southbridge Street, Worcester, MA

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01A 032302639-0001	District Chief bunk room - Green 9"x9" floor tile	Green Non-Fibrous Homogeneous		20% Quartz 73.0% Non-fibrous (Other)	7% Chrysotile
01B 032302639-0002	District Chief bunk room - Green 9"x9" floor tile				Positive Stop (Not Analyzed)
02A 032302639-0003	District Chief bunk room - Green 9"x9" floor tile mastic	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<1% Chrysotile
Result includes a small amount of inseparable attached material					
02B 032302639-0004	District Chief bunk room - Green 9"x9" floor tile mastic	Black/Green Non-Fibrous Homogeneous	1% Cellulose	3% Quartz 2% Ca Carbonate 94.0% Non-fibrous (Other)	<1% Chrysotile
03A-Caulk 032302639-0005	Garage bay 2 - Exterior door casing caulking	Clear Non-Fibrous Homogeneous		8% Quartz 20% Ca Carbonate 72.0% Non-fibrous (Other)	None Detected
03A-Joint Compound 032302639-0005A	Garage bay 2 - Exterior door casing caulking	Gray/Tan/White Non-Fibrous Homogeneous		60% Ca Carbonate 37.0% Non-fibrous (Other)	3% Chrysotile
03B-Caulk 032302639-0006	Garage bay 2 - Exterior door casing caulking	Clear Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	None Detected
03B-Joint Compound 032302639-0006A	Garage bay 2 - Exterior door casing caulking				Positive Stop (Not Analyzed)
04A 032302639-0007	District chief bunk room - black 4" vinyl base	Black Non-Fibrous Homogeneous		3% Quartz 12% Ca Carbonate 85.0% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Long Island City, NY AIHA LAP, LLC-IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ Y022, CT PH-0170, MA AA000170

Initial report from: 03/22/2023 18:27:43



# EMSL Analytical, Inc.

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<http://www.EMSL.com> / [manhattanlab@emsl.com](mailto:manhattanlab@emsl.com)

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**Project:** 183/ Worcester Fire Department/ Southbridge Street, Worcester, MA

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
04B 032302639-0008	District chief bunk room - black 4" vinyl base	Black Non-Fibrous Homogeneous		18% Ca Carbonate 82.0% Non-fibrous (Other)	None Detected
05A 032302639-0009	District chief bunk room - black 4" vinyl base adhesive	Tan Non-Fibrous Homogeneous		98.0% Non-fibrous (Other)	2% Chrysotile
05B 032302639-0010	District chief bunk room - black 4" vinyl base adhesive				Positive Stop (Not Analyzed)
06A 032302639-0011	Garage bay 2 - concrete plank ceiling deck	Gray Non-Fibrous Homogeneous		28% Quartz 40% Ca Carbonate 6% Mica 26.0% Non-fibrous (Other)	None Detected
06B 032302639-0012	Garage bay 2 - concrete plank ceiling deck	Gray/Tan Non-Fibrous Heterogeneous		35% Quartz 50% Ca Carbonate 1% Mica 14.0% Non-fibrous (Other)	None Detected
07A 032302639-0013	Exterior of garage bays - sandstone mortar	Tan Non-Fibrous Homogeneous		35% Quartz 40% Ca Carbonate 6% Mica 19.0% Non-fibrous (Other)	None Detected
07B 032302639-0014	Exterior of garage bays - sandstone mortar	Gray/Tan Non-Fibrous Heterogeneous		30% Quartz 45% Ca Carbonate 3% Mica 22.0% Non-fibrous (Other)	None Detected
08A 032302639-0015	Garage bay 2 - CMU wall mortar	Gray Non-Fibrous Homogeneous		20% Quartz 44% Ca Carbonate 8% Mica 28.0% Non-fibrous (Other)	None Detected
08B 032302639-0016	Garage bay 2 - CMU wall mortar	Tan Non-Fibrous Homogeneous		23% Quartz 40% Ca Carbonate 6% Mica 31.0% Non-fibrous (Other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Long Island City, NY AIHA LAP, LLC-IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ NY022, CT PH-0170, MA AA000170

Initial report from: 03/22/2023 18:27:43



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Atlas Technical  
73 William Franks Drive  
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**Phone:** (413) 781-0070

**Fax:** (413) 781-3734

**Received Date:** 03/21/2023 10:19 AM

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**Project:** 183/ Worcester Fire Department/ Southbridge Street, Worcester, MA

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
08C 032302639-0017	Main bunk room - CMU wall mortar	Gray/Tan Non-Fibrous Heterogeneous		40% Quartz 35% Ca Carbonate 4% Mica 21.0% Non-fibrous (Other)	None Detected
09A 032302639-0018	Exterior - above garage bay 2 - Brick wall mortar	Tan Non-Fibrous Homogeneous		25% Quartz 38% Ca Carbonate 7% Mica 30.0% Non-fibrous (Other)	None Detected
09B 032302639-0019	Exterior - west side of building - Brick wall mortar	Tan Non-Fibrous Homogeneous		20% Quartz 38% Ca Carbonate 6% Mica 36.0% Non-fibrous (Other)	None Detected
09C 032302639-0020	Exterior - south side of building - Brick wall mortar	Gray/Tan Non-Fibrous Heterogeneous		60% Quartz 20% Ca Carbonate 7% Mica 13.0% Non-fibrous (Other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Long Island City, NY AIHA LAP, LLC-IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ Y022, CT PH-0170, MA AA000170

Initial report from: 03/22/2023 18:27:43



# EMSL Analytical, Inc.

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EMSL Order: 032302639

Customer ID: ATC62

Customer PO: 11-81-0030

Project ID:

**Attention:** Eric Kubic  
Atlas Technical  
73 William Franks Drive  
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**Phone:** (413) 781-0070

**Fax:** (413) 781-3734

**Received Date:** 03/21/2023 10:19 AM

**Analysis Date:** 03/22/2023

**Collected Date:** 02/23/2023

**Project:** 183/ Worcester Fire Department/ Southbridge Street, Worcester, MA

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

## Report Comments:

Sample Receipt Date: 03/21/2023

Sample Receipt Time: 10:19 AM

Analysis Completed Date: 03/22/2023

Analysis Completed Time: 3:06 PM

## Analyst(s):

Jessica Macdonald PLM (7)

Meah Cross Sevilla PLM (12)

## Samples Reviewed and approved by:

Charles Johnson, Asbestos Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Long Island City, NY AIHA LAP, LLC-IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ NY022, CT PH-0170, MA AA000170

Initial report from: 03/22/2023 18:27:43



Page 1 Of 1

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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<http://www.EMSL.com>[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order: 202302646  
CustomerID: ATC62  
CustomerPO: 11-81-0030  
ProjectID:

Attn: **Eric Kubic**  
**Atlas Technical**  
**73 William Franks Drive**  
**West Springfield, MA 01089**

Phone: (413) 781-0070  
Fax: (413) 781-3734  
Received: 3/21/2023 11:00 AM  
Collected: 2/23/2023

Project: **Worcester Fire Dept. Southbridge St., Worcester, MA**

**Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>Lead Concentration</i>
FDPB-01	202302646-0001	2/23/2023	3/22/2023	0.2385 g	0.013 % wt
Site: Gray Concrete Ceiling Plank Paint - Garage Bay 2					
FDPB-02	202302646-0002	2/23/2023	3/22/2023	0.2807 g	0.013 % wt
Site: Gray Wood 2" X 6" Paint - Garage Bay 2					
FDPB-03	202302646-0003	2/23/2023	3/22/2023	0.2626 g	0.014 % wt
Site: Gray CMU Wall Paint - Garage Bay 2					
FDPB-04	202302646-0004	2/23/2023	3/22/2023	0.2811 g	10 % wt
Site: Yellow Steel Lintel Paint - Garage Bay 2					
FDPB-05	202302646-0005	2/23/2023	3/22/2023	0.2645 g	0.032 % wt
Site: Brown CMU Wall Paint - Bunkroom					

Owen McKenna, Lead Laboratory Director  
or other approved signatory

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\* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA LAP, LLC-ELLAP Accredited #100194, A2LA Accredited - Certificate #2845.01

Initial report from 03/22/2023 17:56:37



## Page

of

Project Address: Southbridge Street, Worcester, MA

Project Manager: Christopher Godfrey

Results To: [Eric.kubic@oneatlas.com](mailto:Eric.kubic@oneatlas.com)

Date: 2/23/2023

Special Instructions or Comments:

[illegible]

Date: 6-28-23

Date: 10/17

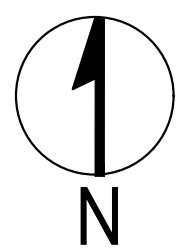
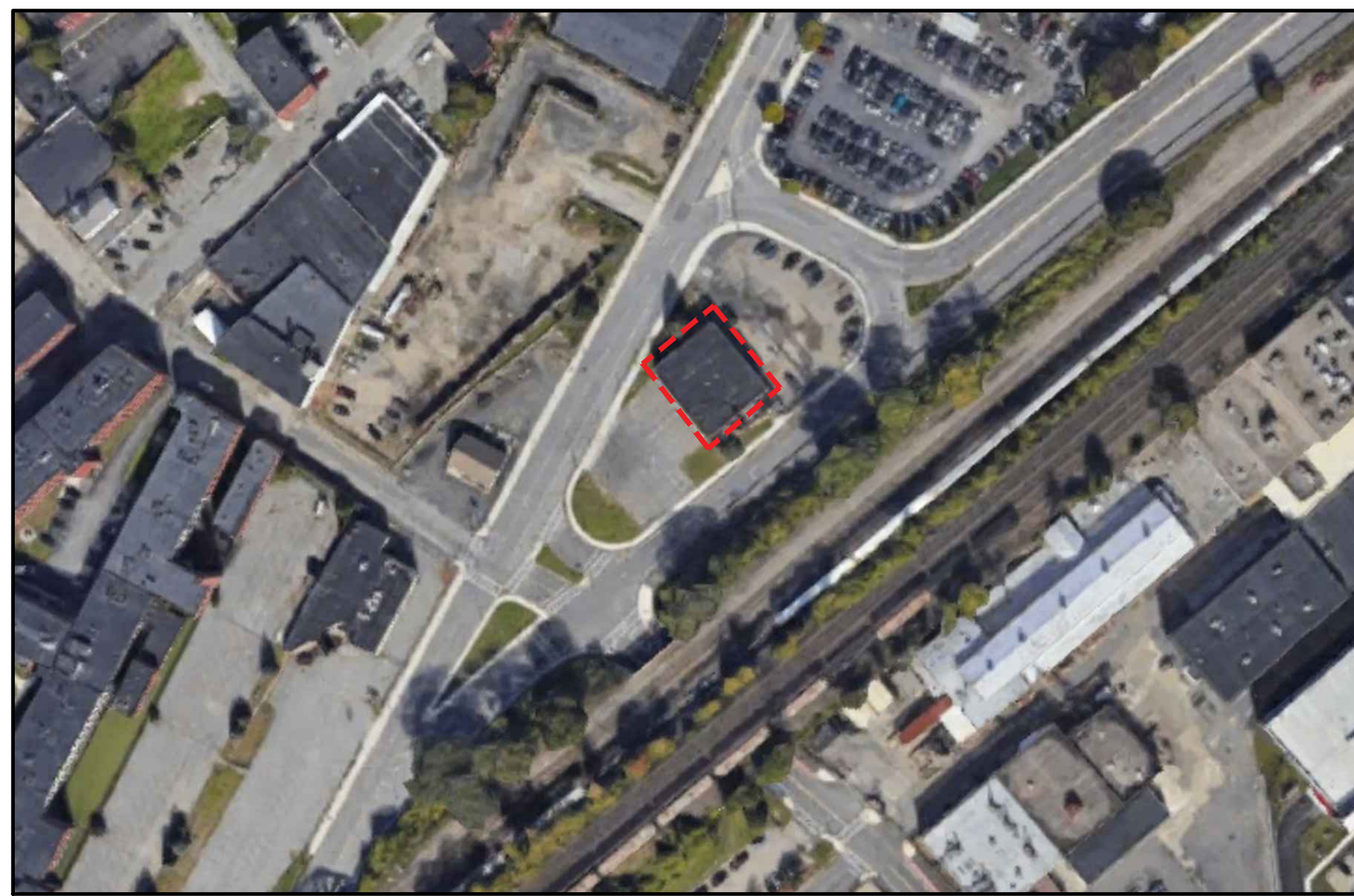


# WORCESTER FIRE STATION No.2

## SOUTH DIVISION BUILDING RENOVATION

180 SOUTHBRIDGE ST. WORCESTER, MA 01608

LOCATION PLAN



OWNER

CITY OF WORCESTER

WORCESTER, MA

455 Main Street, Worcester, MA 01608

ARCHITECT



MOUNT VERNON GROUP  
ARCHITECTS

178 Albion Street, Suite 240 Wakefield, MA 01880

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CONSULTANTS

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**MECHANICAL, PLUMBING &  
FIRE PROTECTION**  
**SEAMAN ENGINEERING CORP.**  
22 West Street, Unit C  
Millbury, MA 01527  
(508) 865-1400

### SYMBOLS:

	ACOUSTICAL TILE		FACE BRICK		ROUGH LUMBER		CAULKING		INTERIOR ELEVATION: ELEVATION IDENTIFICATION (UNFOLD ELEV. CLOCKWISE NO NUMBER MEANS ELEVATION NOT SHOWN.) SHEET WHERE ELEV. IS DRAWN
	ALUMINUM		GLASS (ELEVATION INDICATION)		SHEET METAL (ELEVATION INDICATION)		COMPRESSIBLE FILLER		EXTERIOR ELEVATION: ELEVATION IDENTIFICATION
	BRASS / BRONZE		GLAZED BRICK		SHINGLE / SIDING (ELEVATION INDICATION)		ROD STOCK		EXTERIOR ELEVATION: ELEVATION IDENTIFICATION
	BRICK (ELEVATION INDICATION)		GYPSUM BOARD GYPSUM LATH, MASONITE &		STEEL / OTHER METALS		SEALANT		EXTERIOR ELEVATION: ELEVATION IDENTIFICATION
	CARPET & PAD		INSULATION (BATT / LOOSE FILL)		STRUCTURAL GLAZED TILE		PARTITION TYPE		KEYED NOTE
	CERAMIC TILE		MASONRY BLOCK		WOOD STUD PARTITION		CENTER LINE OF COLUMN GRIDS EXISTING COLUMN NAME		DOOR TAG
	CERAMIC TILE (ELEVATION INDICATION)		METAL LATH & PLASTER		HARDWOOD		CENTER LINE OF COLUMN GRIDS NEW COLUMN NAME		1 HR SEPARATION WALL
	CONCRETE		METAL STUD PARTITION		MEDIUM DENSITY FIBERBOARD		WALL SECTION: SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN		2 HR FIRE WALL
	CONCRETE / PLASTER (ELEVATION INDICATION)		NEW CONC SLAB PATCH		PLYWOOD		BUILDING SECTION: SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN		3 HR FIRE WALL
	EARTH / COMPACT FILL		PLASTIC		RIGID INSULATION		ROOM IDENTIFICATION: ROOM NAME FIN. LEGEND ROOM NO.		DETAIL: DETAIL IDENTIFICATION CUT ON ONE SHEET, SHOWN ON ANOTHER
							PROPERTY LINES, MATCH LINES (USE WITH		
							NEW VERTICAL ELEVATION: FLOOR/LEVEL IDENTIFICATION ELEVATION IDENTIFICATION		EXISTING VERTICAL ELEVATION: FLOOR/LEVEL IDENTIFICATION ELEVATION IDENTIFICATION

### ABBREVIATIONS:

ACOUST.	ACOUSTICAL	CONTR.	CONTRACTOR	FLUOR.	FLUORESCENT	MACH.	MACHINE	REQD.	REQUIRED	W.	WIDE, WIDE FLANGE
A.D.	AREA DRAIN	CORR.	CORRIDOR	F.P.	FIRE PROOFING	MAS.	MASONRY	RESIL.	RESILIENT	WI	WITH
ADJ.	ADJUSTABLE	C.R.	COLD ROLLED	F.S.	FIRE SHIELD	MAT.	MATERIAL	RET.	RETAINING	W.C.	WATER CLOSET
AFF	ABOVE FINISHED FLOOR	CRS.	COURSES	F.SZ.	FULL SIZE	MAX.	MAXIMUM	RM.	ROOM	WD.	WOOD
ALU.	ALUMINUM	CSK.	COUNTERSINK	FT.	FEET/FOOT	MECH.	MECHANICAL	R.O.	ROUGH OPENING	W.D.	WINDOW DIMENSION
ALUM.	ALUMINUM	CTOP	COUNTERTOP	FT.2	SQUARE FEET	MEMBR.	MEMBRANE	R.W.L.	RAIN WATER LEADER	W.I.	WROUGHT IRON
ANCH.	ANCHOR	CU.	CUBIC	FT.3	CUBIC FEET	M.D.	METAL DOOR	RB.	RESILIENT BASE	WIND.	WINDOW
APPROX.	APPROXIMATELY	C.U.H.	CABINET UNIT HEATER	F.O.	FRAMED OPENING	MFR.	MANUFACTURER	SCHED.	SCHEDULE	W.O.	WINDOW OPENING
@	AT	D.A.	DOUBLE ACTING	FUR.	FURRING	MIN.	MINIMUM	SECT.	SECTION	W.P.	WATERPROOFING
BD.	BOARD	D.A.F.S.	DIRECT APPLIED FINISH SYSTEM	GA.	GAUGE	MISC.	MISCELLANEOUS	SH.	SHelves	WT.	WEIGHT
BKSP.	BACKSPASH	DET.	DETAIL	GALV.	GALVANIZED	M.LDG.	MOLDING	SHT.	SHEET	W.W.M.	WELDED WIRE MESH
BKT.	BRACKET	D.F.	DRINKING FOUNTAIN	G.C.	GENERAL CONTRACTOR	M.O.	MASONRY OPENING	S.I.G.S.	SILICON IMPREGNATED GYPSUM SHEATHING	X	INDICATES TIMES OR BY
BLDG.	BUILDING	DN.	DOWN	GL.	GLASS	M.T.	METAL THRESHOLD	SLD.	SLIDING	YD.	YARD
BLK.	BLOCK	DO.	DITTO (REPEAT)	GR.	GRADE	MTD.	MOUNTED	SQ.	SQUARE	Z	ZEE (STRUCTURAL SHAPE)
BLKG.	BLOCKING	D.O.	DOOR OPENING	G.S.U.	GLAZED STRUCTURAL UNIT	MTL.	METAL	SIM.	SIMILAR		
BM.	BEAM	DSP.	DISPENSER	GYP.	GYPSUM	MISC.	MISC. METAL CONTRACTOR	SLID.	SLIDING		
BOT.	BOTTOM	D.W.	DRY WALL	G.W.B.	GYPSUM WALLBOARD	NAT.	NATURAL	SPEC.	SPECIFICATIONS		
B.O.B.	BOTTOM OF BEAM	DWG.	DRAWING	H.C.	HANDICAP	N.C.	NONCORROSIVE	STOR.	STORAGE		
B.O.P.	BOTTOM OF PIPES	EA.	EACH	H.C.P.	HANDICAP	N.I.C.	NOT IN CONTRACT	S.T.	STRUCTURAL TUBE		
B.O.D.	BOTTOM OF DUCT	ED.	EDUCATION	H.D.	HANDICAP	NO.#	NUMBER	S.S.	STAINLESS STEEL		
		EDSP.	ENDSPASH	HD	HIGH DENSITY	NOM.	NOMINAL	STD.	STANDARD		
CG	CORNER GUARD	E.I.	EXPANSION JOINT	HDWR.	HOLLOW METAL	O.A.	OVERALL	STL.	STEEL		
CAB.	CABINET	EL.	ELEVATION (GRADE)	IN.	INSIDE DIAMETER	O.C.	ON CENTER	STRUC.	STRUCTURAL		
C.B.	CHALK BOARD	ELEC.	ELECTRICAL	IN.2	SQUARE INCHES	O.D.	OUTSIDE DIAMETER	SUSP.	SUSPENDED		
CEM.	CEMENT	ELEV.	ELEVATION (FACADE)	IN.3	CUBIC INCHES	O.H.	OPPOSITE HAND	T.	TREADS		
CER.C.T.	CERAMIC TILE	ELEV.	ELEVATION	HT.	HEIGHT	OPER.	OPERATE	T.BLE.	TABLE		
C.G.	CORNER GUARD	EQ.	EQUAL	HVAC	HEATING, VENTILATING & AIR CONDITIONING	OPNG.	OPENING	T.B.	TACK BOARD		
C.I.	CAST IRON	E.S.	EACH SIDE	I.D.	INSIDE DIAMETER	OVHD.	OVERHEAD	T.C.	TERRA COTTA		
C.I.P.	CAST IN PLACE	E.T.R.	EXISTING TO REMAIN	IN.	INCH INCHES	OZ.	OUNCE(S)	TEL.	TELEPHONE		
C.J.	CONTROL JOINT	EXH.	EXHAUST	IN.2	SQUARE INCHES	PARTN.	PARTITION	TERR.	TERRAZZO		
CLG.	CEILING	EXIST.	EXISTING	IN.3	CUBIC INCHES	PERIM.	PERIMETER	T&G.	TONGUE & GROOVE		
CLKG.	CHALKING	EXP.JT.	EXPANSION JOINT	INCAN.	INCANDESCENT	PERP.	PERPENDICULAR (TO)	THK.	THICKNESS		
CLR.	CLEAR	EXT.	EXTERIOR	INFIL.	INFILTRATION	P.L.	PLASTIC LAMINATE	THRESH.	THRESHOLD		
CLOS.	CLOSET	EXTIN.	EXTINGUISHER	INSUL.	INSULATION	PL.	PLATE	TILT.	TOILET		
C.M.U.	CONC. MASONRY UNIT	F.C.P.	FIBER CEMENT PANEL	INT.	INTERIOR	PLAS.	PLASTER	T.O.B.	TOP OF BLOCKING		
C.O.	CLEAR OPENING	F.D.C.	FIRE DEPT. CONNECTION	INV.	INVERT	PLUMB.	PLUMBING	T.O.C.	TOP OF CONCRETE		
COL.	COLUMN	F.D.V.	FIRE DEPT. VALVE	JST.	JOIST	PLYWD.	PLYWOOD	T.O.S.	TOP OF STEEL		
CONC.	CONCRETE	F.B.	FLAT BAR	JT.	JOINT	P.NL.	PANEL	T.W.	TOP OF WALL		
C.H.P.	CONC. HOUSEKEEPING PAD	F.C.	FIRE CODE	LAM.	LAMINATED	POL.	POLISHED	TPP.	TYPICAL		
COND.	CONDITION	F.D.	FLOOR DRAIN	L.B.#	POUND	PR.	PAIR	TWR.	TOWER		
CONST.	CONSTRUCTION	F.E.C.	FIRE EXTINGUISHER	L.C.	LEAD COATED	PTD.	PAINTED	U.C.	UNDERCUT		
CONT.	CONTINUOUS	F.F.	FACTORY FINISH	L.D.P.	LAMINATED DRYWALL PART.	QTY.	QUANTITY	U.L.	UNDERWRITERS LABORATORY		
		F.H.	FLAT HEAD	L.G.H.	LENGTH	R.	RADIUS	U.O.N.	UNLESS OTHERWISE NOTED		
		F.H.C.	FIRE HOSE CABINET	L.G.M.F.	LIGHT GAGE METAL FRAMING	R.D.	RADIATOR ENCLOSURE	U.P.R.	UPPER		
		FIN.	FINISH	L.O.W.	LIMIT OF WORK	REFG.	REFRIGERATOR	U.V.	UNIT VENTILATOR		
		FL.	FLOOR	L.P.	LOW POINT			V.C.	VINYL CLAD		
		FLASH.	FLASHING	L.W.T.	LIGHT WEIGHT			VENT.	VENTILATOR		
				LVR.	LOUVER			VERT.	VERTICAL		
								VEST.	VESTIBULE		
								V.W.C.	VINYL WALL COVERING		

### DRAWING LIST:

#### ARCHITECTURAL

A0.00	COVER SHEET
A1.01	EXISTING/DEMOLITION FLOOR PLANS & ELEVATION, DEMO NOTES, PARTIAL FLOOR PLANS & ELEVATION, DOOR INFO & NEW WORK NOTES

#### STRUCTURAL

S1.01	GENERAL NOTES, PART. PLANS, & DETAILS
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NORTH ARROW

CONSULTANTS

REVISIONS

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.04

PROJECT NAME/LOCATION

WORCESTER FIRE  
STATION #2 SOUTH  
DIVISION BUILDING  
RENOVATION

180 SOUTHBRIDGE ST.  
WORCESTER, MA 01608

DRAWING TITLE

COVER SHEET



178 Albion Street  
Suite 240  
Wakefield, Massachusetts 01880

781 213 5030 T  
781 213 5040 F  
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE AS INDICATED

DRAWN BY HC

CHECKED FXT

DATE JULY 26, 2023

DRAWING NUMBER

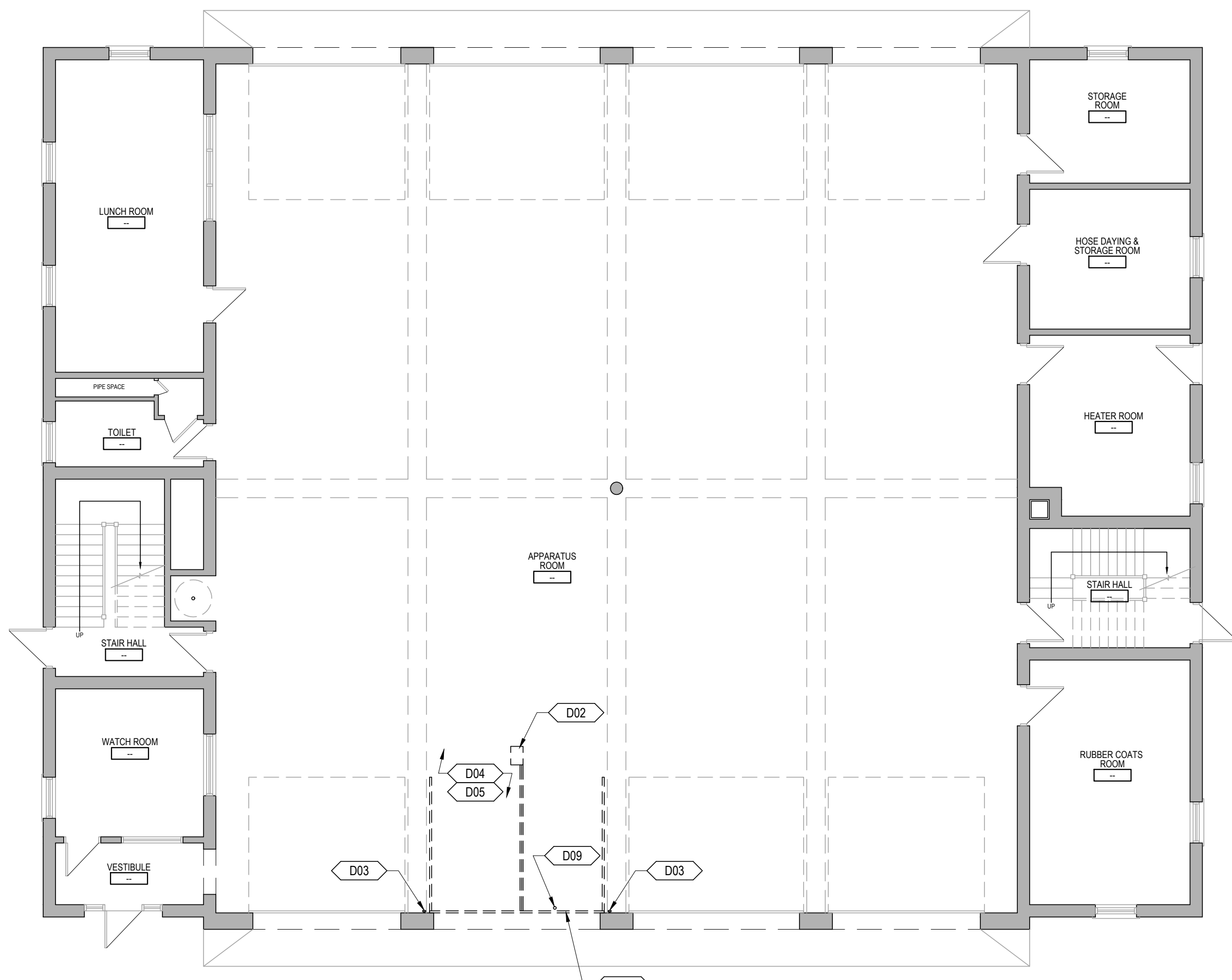
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JULY 26, 2023

A0.00





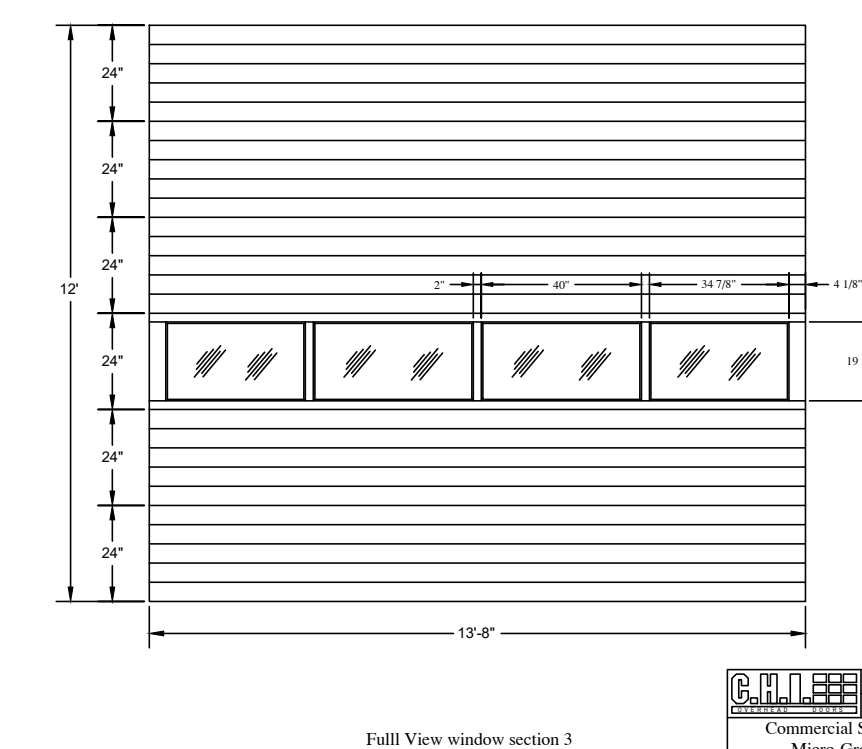
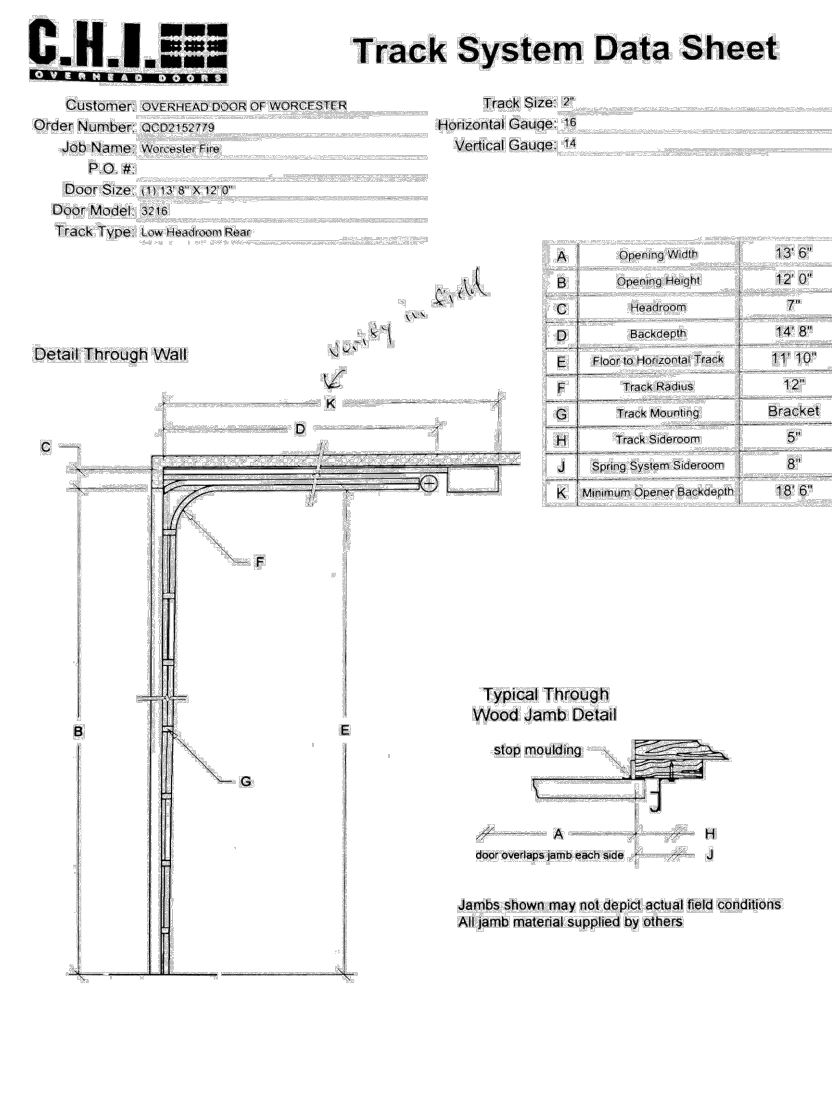
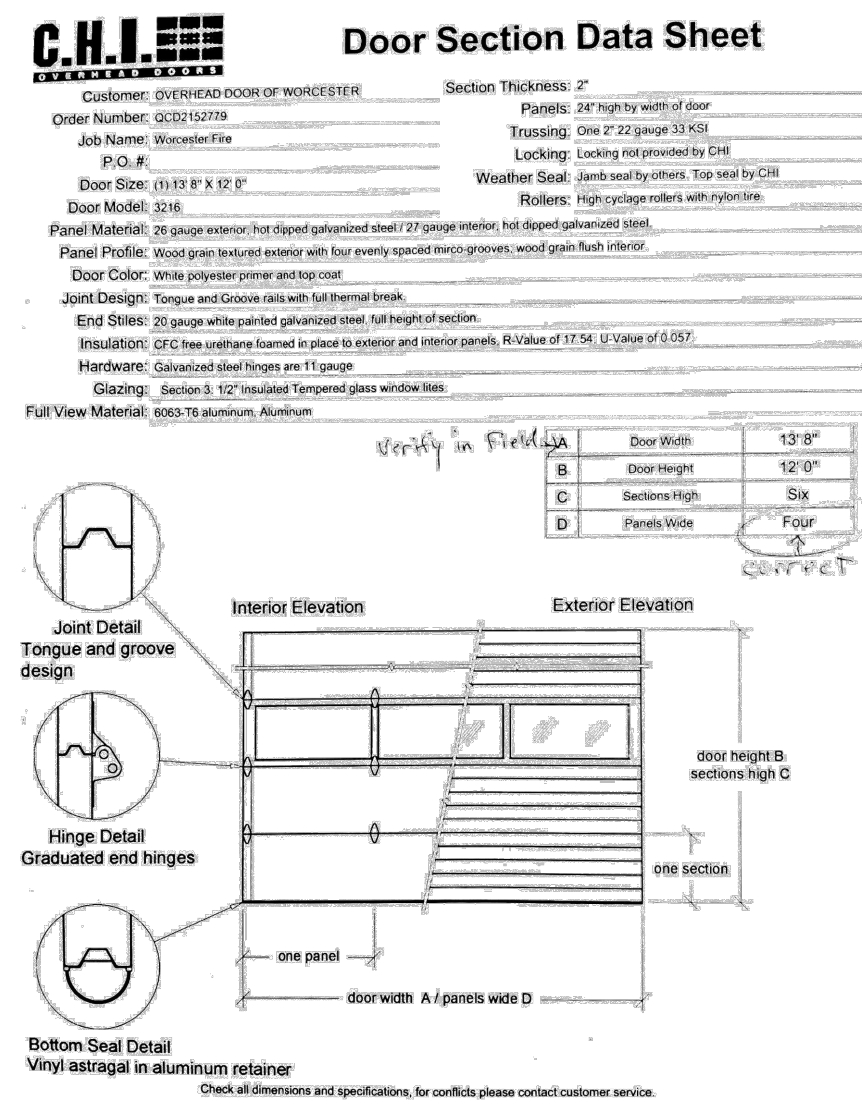
3 EXISTING / DEMOLITION SOUTHWEST ELEVATION  
SCALE: 1/4"=1'-0"



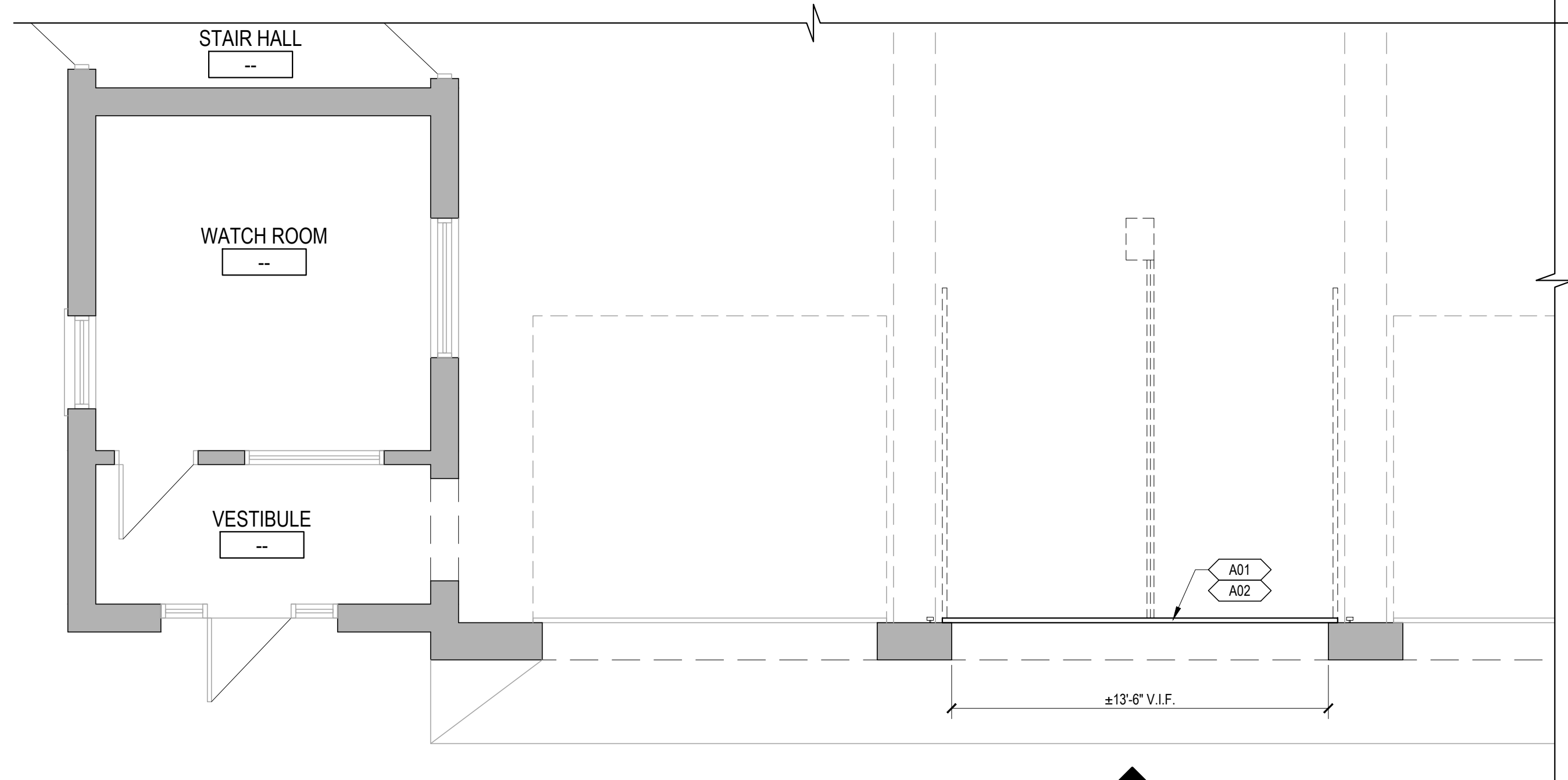
1 EXISTING / DEMOLITION FIRST FLOOR PLAN  
SCALE: 1/8"=1'-0"

#### NEW WORK KEY NOTES

- A01 NEW OVERHEAD DOOR & ASSOCIATED TRACK SYSTEM TO BE INSTALLED BY VENDOR. GC TO COORDINATE INSTALLATION WITH VENDOR.
- A02 INSTALLED STEEL BEAM HEADER PER STRUCTURAL DRAWINGS. NEW PORTION OF MASONRY WALL OPENING TO BE FINISHED TO MATCH EXISTING ADJACENT WALL FINISH.
- A03 EXISTING "LADDER 3" SIGNAGE TO BE REINSTALLED AT NEW LOCATION SPECIFIED BY OWNER.



7 OVERHEAD DOOR ELEVATION & DATA SHEET FOR DOOR & TRACK  
SCALE: 1/4"=1'-0"



4 PARTIAL FIRST FLOOR PLAN  
SCALE: 1/4"=1'-0"



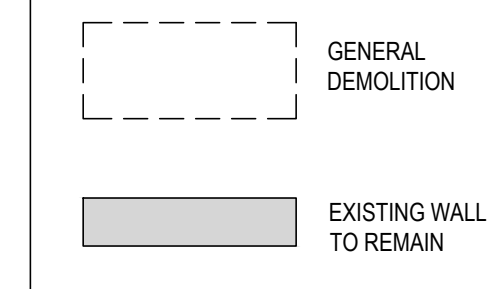
6 PARTIAL SOUTHWEST ELEVATION  
SCALE: 1/4"=1'-0"

#### DEMOLITION GENERAL NOTES

SEE SPECIFICATIONS FOR MORE INFORMATION

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO ANY DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES RELATING TO THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL BE AWARE OF SELECTIVE DEMOLITION AT ALL SECTIONS OF WORK. REVIEWING ALL NEW RENOVATION DETAILS TO DETERMINE WHAT IS TO BE REMOVED OR TO REMAIN AND WILL BE RESPONSIBLE FOR REPLACEMENT IN-KIND ALL WORK INADVERTENTLY REMOVED.
- ALL REQUIRED DEMOLITION NOT SPECIFICALLY DESIGNATED AS BEING THE WORK OF OTHER TRADES SHALL BE PERFORMED BY THE GENERAL CONTRACTOR.
- SUBCONTRACTORS TO RELEASE, REMOVE AND LOWER TO THE FLOOR ALL COMPONENTS, SYSTEMS AND ASSEMBLIES AS INDICATED, SPECIFIED, OR AS REQUIRED TO DO THEIR RESPECTIVE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DISASSEMBLING / CUTTING OR OTHERWISE MODIFYING EQUIPMENT AS REQUIRED TO PASS THROUGH EXISTING OPENINGS. G.C. SHALL ALSO BE RESPONSIBLE FOR REMOVALS AND LEGALLY DISPOSING OF ALL MATERIALS SO TREATED.
- THE CONTRACTOR SHALL REMOVE ITEMS TO BE DEMOLISHED AS INDICATED ON THE DRAWINGS WITH CARE BEING TAKEN NOT TO DAMAGE ADJACENT WALLS, CEILINGS, FLOORS, FINISHES, CASEWORK OR MILLWORK SCHEDULED TO REMAIN. THE WORK AREA WILL BE LEFT CLEAN AND READY TO RECEIVE NEW WORK.
- PATCH AND REPAIR SCOPE OF ALL EXISTING TO REMAIN WALLS, FLOORING, AND CEILING DAMAGED DURING DEMOLITION OR REMOVAL OF EXISTING CONSTRUCTION. THIS INCLUDES PATCH & REPAIR DUE TO WORK PERFORMED BY ALL SUB-CONTRACTORS. REFER TO DEMO AND ARCHITECTURAL DRAWINGS FOR OTHER AREAS OF PATCHING, REPAIR AND INFILL.
- PROVIDE SMOOTH CLEAN SURFACES PREPARED TO RECEIVE INFILL AND/OR FINISHES (AS SCHEDULED) AT ALL MISCELLANEOUS OPENINGS, DEPRESSIONS OR VOIDS LEFT AFTER DEMOLITION. CONTRACTOR TO PROVIDE INFILL AND PATCHING OF ALL SUCH AREAS TO MATCH EXISTING ADJACENT SURFACES.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BARRICADES TO DIVIDE AREAS (CONSTRUCTION AND NORMAL USE) TO PROTECT USERS DURING CONSTRUCTION.
- G.C. SHALL COORDINATE AND PERFORM ALL ASSOCIATED WORK WITH M / E / P CONTRACTORS FOR ALL REQUIRED PENETRATIONS REQUIRING MISCELLANEOUS BLOCKING OR INFILL TO ACCOMMODATE M / E / P WORK.

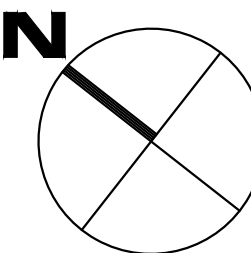
#### DEMOLITION LEGEND



#### DEMOLITION KEY NOTES

- D01 EXISTING OVERHEAD DOOR & ASSOCIATED TRACK SYSTEM TO BE REMOVED IN ENTIRETY. ABATEMENT TO BE DONE FOR EX. OVERHEAD DOOR CASING CAULKING. REFER TO SPECIFICATION SECTIONS 01 35 43-HAZARDOUS MATERIALS PROCEDURES & 02 28 20-ASBESTOS REMEDIATION.
- D02 EXISTING DOOR OPERATOR MOTOR & OPERATOR & ASSOCIATED MOUNTING BRACKETS TO BE REMOVED WITH CARE AND STORED IN SECURE LOCATION FOR LATER REUSE.
- D03 EXISTING SENSING EDGE & PHOTO ELECTRIC SAFETY SENSOR TO BE REMOVED AND SALVAGED WITH CARE AS REQUIRED FOR NEW WORK THEN REINSTALLED.
- D04 PORTION OF EXISTING MASONRY WALL TO BE REMOVED AS INDICATED ON ELEVATION & AS REQUIRED FOR NEW WORK. GC TO COORDINATE WITH VENDOR. REMOVE EXISTING WF14 STEEL BEAM HEADER WITH CARE. STORE IN SECURE LOCATION. CLEAN & PREP FOR LATER POSSIBLE REPOSITIONING & REUSE. SEE STRUCTURAL DRAWINGS.
- D05 EXISTING "LADDER 3" SIGNAGE TO BE REMOVED WITH CARE FOR NEW WORK, STORED IN SECURE LOCATION & LATER REINSTALL AT NEW LOCATION.

NORTH ARROW



CONSULTANTS

REVISIONS

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.04

PROJECT NAME/LOCATION

WORCESTER FIRE  
STATION #2 SOUTH  
DIVISION BUILDING  
RENOVATION

180 SOUTHBRIDGE ST.  
WORCESTER, MA 01608

DRAWING TITLE

EX/DEMO FLR PLANS &  
ELEV., DEMO NOTES, PART.  
FLR PLANS & ELEV., DOOR  
INFO & NEW WORK NOTES

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DRAWING INFORMATION

SCALE AS INDICATED

DRAWN BY HC

CHECKED FXT

DATE JULY 26, 2023

DRAWING NUMBER

A1.01



GENERAL NOTES

GENERAL:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS AND NEW DOOR HEIGHT REQUIREMENTS FOR NEW FIRETRUCK.
- SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND A STAMPED ACCEPTANCE RECEIVED BEFORE FABRICATION CAN PROCEED. ERECTION SHALL BE EXECUTED FROM ACCEPTED SHOP DRAWINGS ONLY.
- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS (UNLESS OTHERWISE NOTED) OF THE FOLLOWING BUILDING CODES AND STANDARDS:
  - THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE, 9TH EDITION
  - THE INTERNATIONAL BUILDING CODE, 2015 EDITION
  - THE INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION
  - ACI 530 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES\*

EXISTING CONSTRUCTION:

- ALL INFORMATION RELATING TO THE EXISTING STRUCTURAL CONDITIONS HAS BEEN DERIVED FROM EXISTING STRUCTURAL DRAWINGS AND OBSERVATIONAL SITE VISITS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND MEMBER SIZES AS INDICATED ON THE DRAWINGS, IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL TEMPORARY BRACING AND SHORING METHODS, AS REQUIRED, TO PREVENT DANGER TO PERSONS AND PROPERTY.
- ANY DIMENSION NOTED (+) ON PLAN SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR, IN THE FIELD, PRIOR TO THE SUBMISSION OF STRUCTURAL STEEL SHOP DRAWINGS.

DESIGN LOADS:

(2015 INTERNATIONAL BUILDING CODE WITH MA BUILDING CODE SUPPLEMENT, 9TH ED.)

- BUILDING ROOF LOADS (PER SECTIONS 1606 THRU 1608) (UNALTERED)
  - GROUND SNOW LOAD,  $P_g = 50$  PSF (PER SECTION 1608)
    - FLAT-ROOF SNOW LOAD,  $P_f = 42$  PSF (MIN.) PLUS SNOWDRIFT LOADING WHERE APPLICABLE
    - SNOW EXPOSURE FACTOR,  $C_e = 1.0$
    - SNOW LOAD IMPORTANCE FACTOR,  $I_s = 1.2$
    - THERMAL FACTOR,  $C_t = 1.0$
  - ROOFING AND INSULATION: 10 PSF
  - SERVICES: 5 PSF
  - CEILINGS (WHERE THEY OCCUR): 3 PSF
  - STRUCTURE: ACTUAL WEIGHTS OF MATERIALS
- BUILDING SECOND FLOOR LOADS (PER SECTIONS 1606 & 1607) (UNALTERED)
  - LIVE LOAD: 50 PSF
  - CEILING: 3 PSF
  - SERVICES: 7 PSF
  - STRUCTURE: ACTUAL WEIGHTS OF MATERIALS
- WIND DESIGN (PER SECTION 1609 AND IBC 2015)
  - ULTIMATE DESIGN WIND SPEED,  $V_{ult}$  (3-SECOND GUST) = 134 MPH
  - NOMINAL DESIGN WIND SPEED,  $V_{nsd} = 104$  MPH
  - RISK CATEGORY = 4
- LEVEL 2 WORK ALTERATIONS - NO SEISMIC UPGRADES REQUIRED.

STRUCTURAL STEEL:

- ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS SHALL CONFORM TO THE REQUIREMENTS OF AISC 360-10 AND AISC 360-10. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
  - STRUCTURAL STEEL W- AND WT-SHAPES: ASTM A992 (GRADE 50)
  - STRUCTURAL PLATES: ASTM A36
  - STRUCTURAL ANGLES: ASTM A36
- ALL STRUCTURAL STEEL SHALL BE SHOP-PRIMED.
- ALL EXPOSED STRUCTURAL STEEL AND THEIR ASSOCIATED CONNECTIONS, INCLUDING ANY DUNNAGE, SCREEN SUPPORTS, AND LOOSE LINTELS, SHALL BE HOT-DIPPED GALVANIZED. REFER TO ARCHITECTURAL DRAWINGS FOR COLOR GALVANIZING REQUIREMENTS.
- SHOP OR FIELD WELDED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" BY THE AMERICAN WELDING SOCIETY AND SHALL USE E70 SERIES ELECTRODES. WHERE NO WELD SIZE IS INDICATED ON PLANS, DETAILS, OR SECTIONS, PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND). ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS. ALL CERTIFICATIONS MUST BE CURRENT (I.E. WITHIN 12 MONTHS OF PERFORMANCE OF WELDING).
- SHOP OR FIELD BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125, GRADE A325 OR GRADE A490. WHERE NO BOLT SIZE IS INDICATED ON PLANS, DETAILS, OR SECTIONS, PROVIDE A MINIMUM OF (2) - 3/4" Ø GRADE A325 BOLTS.

QUALITY ASSURANCE:

- THE OWNER WILL EMPLOY AND PAY FOR THE SERVICES OF AN INDEPENDENT TESTING AGENCY TO PROVIDE QUALITY ASSURANCE TESTING AND INSPECTIONS FOR WORK SPECIFIED IN CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE, INCLUDING MASSACHUSETTS AMENDMENTS. THE TESTING AGENCY SHALL BE LICENSED IN MASSACHUSETTS AND ALL TESTING AND INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF AN ENGINEER REGISTERED IN MASSACHUSETTS.
- FAILURE OF QUALITY ASSURANCE TESTING AND INSPECTIONS TO DETECT ANY DEFECTIVE WORK OR MATERIAL SHALL NOT IN ANY WAY PREVENT LATER REJECTION WHEN SUCH DEFECT IS NOTED, NOR SHALL IT OBLIGATE THE OWNER'S REPRESENTATIVE FOR FINAL ACCEPTANCE.
- THE TESTING AGENCY AND ITS REPRESENTATIVES ARE NOT AUTHORIZED TO REVOKE, ALTER, RELAX, ENLARGE OR RELEASE ANY PORTION OF THE WORK, PERFORM ANY DUTIES OF THE CONTRACTOR, OR BE A PARTY TO SCHEDULING OF WORK.
- RECORDS OF INSPECTIONS SHALL BE KEPT AVAILABLE TO THE BUILDING OFFICIAL DURING PROGRESS OF THE WORK AND FOR TWO YEARS AFTER COMPLETION OF THE PROJECT. RECORDS SHALL BE PRESERVED BY THE INDEPENDENT TESTING AGENCY.
- REFER TO LIST OF REQUIRED SPECIAL INSPECTIONS BELOW:

LIST OF SPECIAL INSPECTIONS:

- STRUCTURAL STEEL:
  - GRADE
  - PLACEMENT
  - BOLTED AND WELDED CONNECTIONS

CONTRACTOR TO PROVIDE TEMPORARY SHORING OF EXISTING MASONRY WALL, AS REQUIRED, FOR REPOSITIONING OF EXISTING STEEL BEAM.

REPOSITIONED EX. WF14 STEEL BEAM ALONG WITH EX. WT SHAPE & EX. PLATE FOR RAISED 12'-0" HIGH (MIN.) CLEAR OPENING BELOW

PROPOSED B.O. STEEL PLATE EL. = 474'-11 1/2"

B.O. EX. STEEL PLATE EL. = 473'-11 1/2"

EX. PC TEE WELDED TO EX. BEAM AND EX. PLATE (TO BE RAISED OR REPLACED IN KIND)

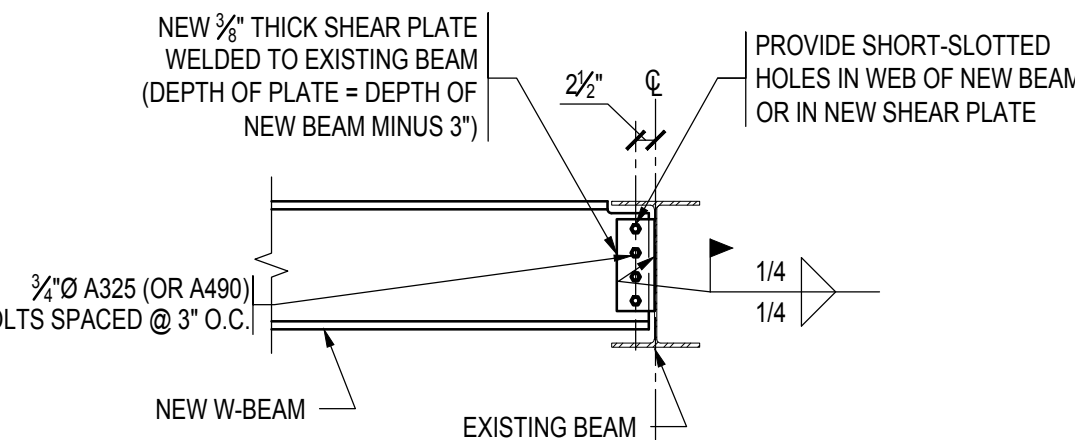
EX. 5/16" x 15' x 15' WIDE PLATE (TO BE RAISED OR REPLACED IN KIND)

SECTION 1

1/2"=1'-0"

SECTION 2

1/2"=1'-0"

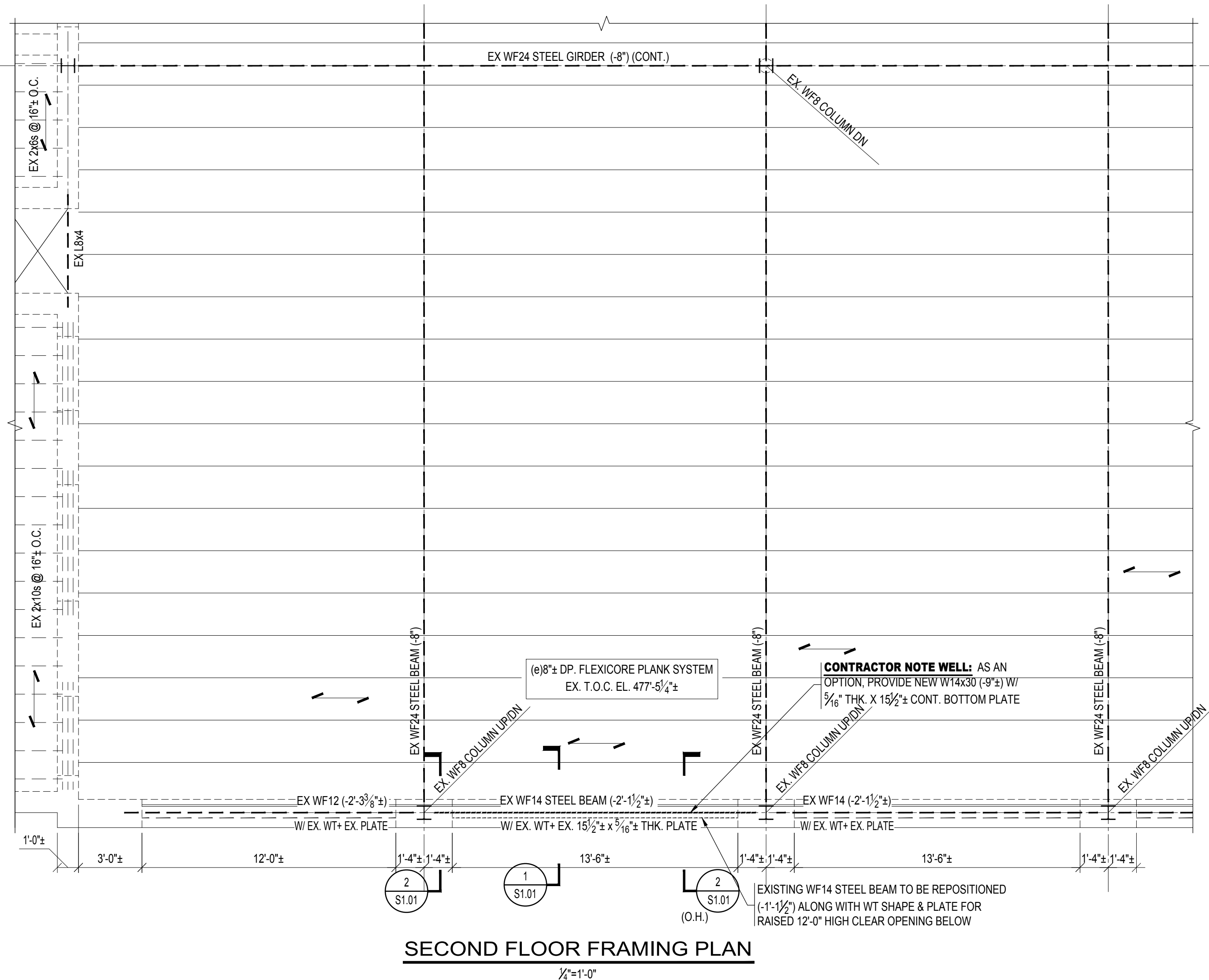


MINIMUM SHEAR CONNECTION REQUIREMENTS (ASD LOADS)			
BEAM DEPTH	MINIMUM SHEAR CAPACITY (KIPS)	MINIMUM NUMBER OF ROWS OF BOLTS	BOLT HOLE TYPE
W10s AND LESS	16.5	2	STANDARD OR SHORT-SLOTTED
W12s AND W14s	28.8	3	STANDARD OR SHORT-SLOTTED

NOTES:

- SIMILAR AT BEAM TO COLUMN CONNECTIONS.
- THE STEEL FABRICATOR SHALL DESIGN ALL CONNECTIONS FOR SHEAR REACTIONS GIVEN ON PLANS OR IN SECTIONS. IF NO REACTION IS GIVEN, THE MINIMUM SHEAR CAPACITIES IN THE TABLE TO THE RIGHT SHALL BE MAINTAINED.
- THE STEEL FABRICATOR HAS THE OPTION TO USE ALTERNATE CONNECTION TYPES IN LIEU OF SINGLE PLATE CONNECTIONS, PROVIDED THAT THE MINIMUM SHEAR CAPACITIES AND NUMBERS OF BOLTS AS DEFINED IN THE TABLE ARE MAINTAINED, AND THE STEEL FABRICATOR PROVIDES FULL CALCULATIONS OR REFERENCES TO AISC STANDARD CONNECTION TABLES.
- WHERE SHORT-SLOTTED HOLES ARE USED, THE HOLE MAY BE HORIZONTALLY SLOTTED IN EITHER THE BEAM WEB OR THE SHEAR PLATE AT THE FABRICATOR'S PREFERENCE.
- MINIMUM SHEAR CONNECTION REQUIREMENTS ARE FOR ALLOWABLE STRENGTH DESIGN (ASD).

TYPICAL W-BEAM TO EX. BEAM/COLUMN SHEAR CONNECTION

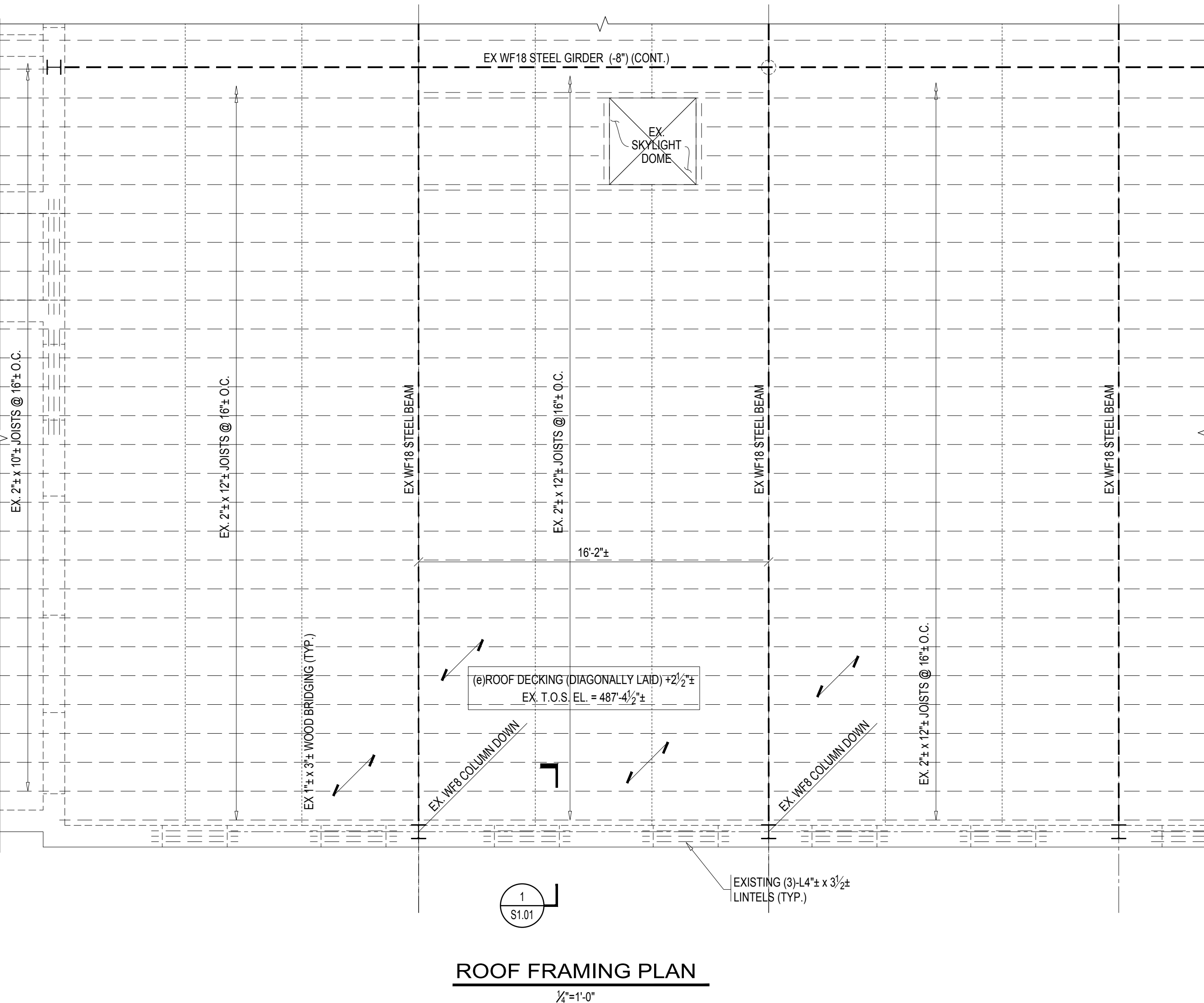


SECOND FLOOR FRAMING PLAN

1/2"=1'-0"

SECOND FLOOR FRAMING PLAN NOTES:

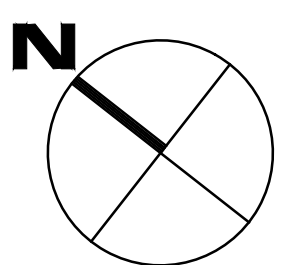
- REFER TO GENERAL NOTES ON THIS DRAWING.
- IF EXISTING STEEL IS RE-USED, CLEAN THE STEEL OF LOOSE DEBRIS WITH MECHANICAL ABRASION. CONTRACTOR SHALL PROVIDE A ZINC RICH PRIMER 4-MILS MINIMUM AND BRUSH-APPLIED ALONG THE PLATE. COLOR GALV. TO BE SPECIFIED BY ARCHITECT.
- REGARDLESS OF STEEL USED OR RE-USED, PROVIDE NEW 3/4" THK. SHEAR PLATES AT ENDS OF BEAM PER TYPICAL DETAIL ON THIS DRAWING.



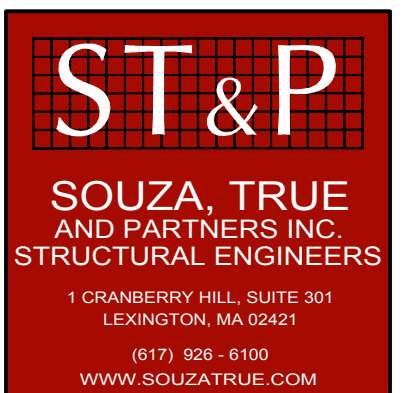
ROOF FRAMING PLAN

1/2"=1'-0"

NORTH ARROW



CONSULTANTS



REVISIONS

NO.	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.04

PROJECT NAME/LOCATION

WORCESTER FIRE STATION #2 SOUTH DIVISION BUILDING RENOVATION

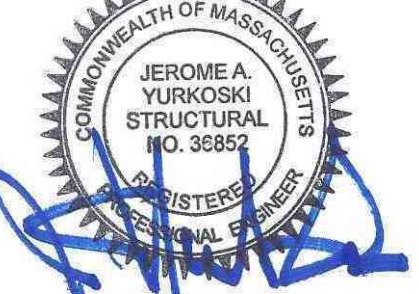
180 SOUTHBRIDGE ST.  
WORCESTER, MA 01608

DRAWING TITLE

GENERAL NOTES,  
PART PLANS,  
& DETAILS



STAMP



DRAWING INFORMATION

SCALE	AS INDICATED
DRAWN BY	OTP
CHECKED	JAY
DATE	JULY 26, 2023

DRAWING NUMBER

S1.01