

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

SEALED BID INVITATION
(Labor, - Filed Sub-Bids NOT Required)

SEALED BID NO. 6611-K6
DATE: August 4, 2016
CITY OF WORCESTER Christopher J. Gagliastro, MCPPO Purchasing Agent
BUYER: Kerrilyn Morin

INSTRUCTIONS TO BIDDERS

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 24, 2016 TIME: 10:00 A.M. LOCAL TIME

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

MARK SEALED ENVELOPE "**Sealed Bid No. 6611-K6 Roof Replacements – Fire Stations/WFD**"

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.

GENERAL

1. This Bid Invitation covers: provide all labor, equipment, materials and supervision necessary and proper for roof replacements at the Park Ave and Southeast Fire Stations as per the attached drawings & specifications prepared by Nault Architects, Inc. & the requirements of the City of Worcester.
2. A certified check or bid bond made payable to the "City Treasurer, City of Worcester" in the **Amount of 5%** of total bid **MUST ACCOMPANY** this bid.
3. All bids received will be publicly opened and read in the Bid Room at City Hall at date and time shown above. **NO BID WILL BE ACCEPTED AFTER TIME AND DATE SPECIFIED**
4. A copy of the contractor's DCAMM Certificate of Eligibility Forms Q7 and Update Form CQ3 must accompany this bid. Only contractors holding a Certificate of Eligibility from DCAMM in the category (ies) called for, and in a single project amount higher than the estimated project cost will be able to file a bid.

THE PROJECT CLASSIFICATION IS: **ROOFING**

5. **Any and all questions or clarifications regarding this bid must be sent in writing to: Kerrilyn Morin via email at morink@worcesterma.gov**
6. Please go to our website (www.worcesterma.gov) to obtain bid results following due date.
7. A pre-bid conference will be held on August 18, 2016 at 9:00 AM at the Southeast Fire Station, Grafton St. and then 9:45 AM at the Park Avenue Fire Station. Questions will not be entertained at this meeting.
Questions must be submitted as noted above.

8. Every general bid which is not accompanied by a bid deposit as prescribed by paragraph (1) section forty-four B, chapter 149 of General Laws as amended, or which otherwise does not conform with section forty-four A to forty-four L, inclusive, or which is on a form not completely filled in, or which is incomplete, conditional or obscure or which contains any addition not called for, shall be invalid; and the awarding authority shall reject every such general bid.
9. The bidder to whom a contract is awarded will be required to furnish and pay for a Performance Bond of a Surety Company authorized to do business in Massachusetts, for not less than 100% of the amount of the contract awarded satisfactory to the awarding authority of the City of Worcester, which besides bonding the contractor to well and faithfully perform all the terms and conditions of the contract, shall provide security for the payment for all labor performed or furnished and all materials used in the fulfillment of said contract.
10. The bidder to whom a contract is awarded will also be required to furnish and pay for a labor and materials or payment bond, of a surety company qualified to do business under the laws of the Commonwealth, for not less than 100% of the amount of the contract awarded, satisfactory to the awarding authority.
11. These bonds to be in forms as established by the City of Worcester.
12. Purchases made by the City of Worcester are exempt from the payment of Federal Excise Taxes and Massachusetts State Sales Tax and such taxes must not be included in the quoted price.
13. The City reserves the right to reject any and all bids, if deemed in the best interest of the City, as governed by section forty-four E of chapter 149 of the General Laws.
14. Bids may be withdrawn without penalty prior to the time and date specified. For any bid withdrawn after time and date specified, the bidder shall forfeit deposit on bid as liquidated damages.
15. The bidder must certify that no official or employee of the City of Worcester, Massachusetts, is financially interested in this proposal or in the contract which the bidder offers to execute or in expected profits to arise therefrom, unless there has been compliance with provisions of G. L. c. 43, sec. 27, and that this bid is made in good faith without fraud or collusion or connection with any other person submitting a proposal.
16. Bids must be submitted in accordance with provisions of Chapter 149 of General Laws as amended. In the event of any inconsistency between these specifications and the cited statute, the statute shall control. **No sub bids under this contract are required to be filed.**
17. The general contract will be awarded to the lowest responsible and eligible general bidder pursuant to section forty-four A of chapter 149 of the General Laws.
18. 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 within five (5) days, Saturdays, Sundays and legal holidays excluded, after presentation of the contract. 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, subject to the provisions of Sections 44A-44J, inclusive, of said Chapter 149 of the General Laws.
19. Before submitting a quotation, each bidder must make a careful study of these specifications and proposal, and fully assure himself as to the quality of the materials and character of the workmanship required.
20. The contractor must visit the place where the work is to be performed and materials delivered, and take into consideration the existing conditions and should his quotation be accepted, he will be held responsible for any omission, misunderstanding or error, whether it results from his failure to do so or not.
21. The proposal for this work must cover all contingencies, including all labor and materials, scaffolding, tools, transportation, etc., necessary for the complete installation of everything described, shown or reasonably implied herein.

22. Wherever the title “Contracting Officer” is used, it shall be interpreted as follows:
Contracting Officer: Christopher J. Gagliastro, Purchasing Agent
23. Any prospective bidder requesting a change in or interpretation of existing specifications or terms, and conditions must do so within five (5) days (Saturdays, Sundays and Holidays excluded) before scheduled bid opening date. All requests are to be in writing to the Purchasing Division. No changes will be considered or any interpretation issued unless request is in our hands within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date. The Purchasing Division shall respond in writing if the inquiry is received as described above. Oral clarifications or interpretations will be of no legal effect. **The City will not be responsible for any information, explanation or interpretation rendered in any fashion except as herein provided.**
24. Each bid shall be submitted upon the bid forms furnished by the City, copies of which are bound with the Bid. Wherever 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.
25. Section 39L of Chapter 30 of the Massachusetts General Laws prohibits the City 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 City, a certificate of the State Secretary stating that such corporation has complied with Massachusetts General Laws Chapter 156D, Part 15, subdivision A, s. 15.03, and Part 16, subdivision B, s. 16.22. 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 of a foreign corporation submitted without a Certificate may be invalid and may be rejected.
26. 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”.
27. 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.
28. All or a portion of the funding for this Project is from the United States Department of Housing and Urban Development (“HUD” or “Granting Authority”), through its Community Development Block Grant (“CDBG”) program, pursuant to a Grant Agreement between the Owner and HUD (“Grant Agreement”). The successful bidder shall comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570, including but not limited to subpart K and as further set forth at Exhibit A, as well as any and all requirements of the Granting Authority. The failure of the successful bidder to comply with such requirements shall constitute a material breach of the Agreement.
29. Minimum rates of wages for work performed under this contract will be as predetermined by the Massachusetts Department of Labor and Workforce Development, in accordance with the provisions of G.L. c. 149, Sec. 27, or the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act (40 U.S.C. sec. 3141, *et seq.*), as amended, whichever is greater.

[End of Instructions To Bidders Documents]

GENERAL CONDITIONS TO THE CONTRACT FOR CONSTRUCTION

ARTICLE 1 GENERAL PROVISIONS

1.1 THE CONTRACT DOCUMENTS

1.1.1 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, Instructions 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 City, or (4) a written order for a minor change in the Work issued by the City 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.

1.2 THE CONTRACT

1.2.1 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 not to the exclusion of any 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

1.3 THE WORK

1.3.1 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.

1.4 THE PROJECT

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

1.5 EXECUTION, CORRELATION AND INTENT

1.5.1 The Owner and Contractor shall sign the Owner-Contractor Agreement (“Agreement”) in duplicate. By executing the Agreement, 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.

1.5.2 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.

1.5.3 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.

1.5.4 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.

1.5.5 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.

1.5.6 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.

1.5.7 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.

1.6 OWNERSHIP AND USE OF DOCUMENTS

1.6.1 All Drawings and Specifications furnished by the City, and all copies thereof and the copyright therein, are the property of the City. 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 City 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 City's common law copyright or other reserved rights.

ARTICLE 2
ARCHITECT

2.1 DEFINITION

2.1.1 The term Architect refers to either, (a) a professionally licensed architect or architectural firm hired or used by the City, or in the absence of thereof, (b) the Contracting Officer identified in the Instruction to Bidders.

2.1.2 If an engineer is identified for the Project, rather than an architect, then all references to “Architect” shall be changed to “Engineer”.

2.2 ADMINISTRATION OF THE CONTRACT

2.2.1 The Architect will provide administration of the Contract, as herein described.

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 instruction 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, when applicable, the Design Services Agreement between the two.

2.2.3 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 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.

2.2.4 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.

2.2.5 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 issue Certificates for Payment in such amounts, as provided in Paragraph 9.4.

2.2.6 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.

2.2.7 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. Chapter 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.

2.2.8 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 shall be rendered in writing within a reasonable time.

2.2.9 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.

2.2.10 The Architect will have authority to reject Work that does not conform to the Contract Documents. Whenever, in his opinion, the Architect 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, whether or not such Work be then fabricated, installed or completed. However, neither the Architect's authority to act under this Subparagraph 2.2.10 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.

2.2.11 The Architect will review and approve or take other appropriate action upon the 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.

2.2.12 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.

2.2.13 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 Subparagraph 9.9.

ARTICLE 3 **OWNER**

3.1 DEFINITION

3.1.1 The term Owner means the City of Worcester.

3.2 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, all copies of Drawings and Specifications reasonably necessary for the execution of the Work.

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 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 (7) 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 City's additional services made necessary by such default, neglect or failure. Such action by the Owner and the amount that is charged to the Contractor are both subject to prior notice being given by the Architect. 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.

ARTICLE 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 City 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 City, having discovered such errors, inconsistencies or omissions, or if by reasonable 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 City 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 that is not clearly and consistently defined in detail in the Contract Documents, but shall request additional drawings or instructions from the City. If the Contractor proceeds with such Work without obtaining further drawings or instructions, he shall correct Work incorrectly done at his own expense.

4.3 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 City in his administration of the Contract, or by inspections, tests or approvals required or performed.

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 City 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 Owner 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 Owner, 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 Work of consistent character and quality of design. All components of the Work including, if applicable, visible items of mechanical and electrical equipment have been selected to have a coordinated design in relation to the overall appearance of the Work. 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 its 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 which 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 Owner, 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 performed 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:

- (1) Federal Excise Taxes as applied to articles which are taxable under Chapter 12 of the Internal Revenue Code of 1954, as amended.
- (2) 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. Mechanical and Electrical trades shall secure permits associated with, and required for, their work. The permit fee for the General Contractor shall be based on the total Contract Price. Cost of fees may be obtained by calling the City of Worcester Building Department at (508) 799-1210.

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 SUPERINTENDENCE

4.8.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site full time daily during the progress of the Work until the date of substantial completion, and for such additional time thereafter as the City may determine to be necessary for the expeditious completion of the Work. Only under extenuating circumstances, and with approval of the Architect and Owner, will the Contractor be allowed to substitute superintendents prior to the date of Substantial Completion. 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.

4.8.2 Where applicable, the Contractor shall retain a competent Registered Professional Engineer or Registered Land Surveyor, acceptable to the Architect, who shall establish 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, roads, 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.

4.8.3 The Contractor shall establish the building grades, lines, levels, column, wall and partition lines required by the various subcontractors in laying out their work.

4.8.4 Where applicable, 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.

4.9 PROGRESS SCHEDULE

4.9.1 The Contractor shall prepare and submit to the Architect a progress schedule as described in this document.

4.10 DOCUMENTS AND SAMPLES AT THE SITE

4.10.1 The Contractor shall maintain at the site for the Owner a 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.

4.10.2 Where applicable, refer to the Specifications Section entitled PROJECT CLOSEOUT, for additional requirements for Record Drawing and Maintenance and Operating Manuals.

4.11 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.11.1 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.

4.11.2 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.

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

4.11.4 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.

4.11.5 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.

4.11.6 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 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.

4.11.7 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.

4.11.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the Architect has approved the submittal. All such portions of the Work shall be in accordance with approved submittals.

4.12 USE OF SITE

4.12.1 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.

4.13 CUTTING AND PATCHING WORK

4.13.1 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.

4.13.2 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 of 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.

4.14 CLEANING UP

4.14.1 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 and vacuumed. 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 his expense.

4.14.2 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.

ARTICLE 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. Chapter 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 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 Owner will promptly reply to the Contractor in writing stating whether or not the Owner, after due investigation, has reasonable objection to any such proposed person or entity.

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

5.2.3 If the Owner has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner 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.

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 toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Said agreement shall preserve and protect the rights of the Owner 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 its sub-subcontractors.

ARTICLE 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.

6.2 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 and 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 4.14, the Owner may clean up and charge the cost thereof to the contractors responsible therefor as the Architect shall determine to be just.

ARTICLE 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.

7.3 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 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 RIGHTS AND REMEDIES

7.5.1 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.

ARTICLE 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.

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 Work.

8.2 PROGRESS AND COMPLETION

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

8.2.2 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. Chapter 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.

ARTICLE 9
PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

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. The format and number of copies of such Application 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 material 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 material 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 performing work on the Project 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 or 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 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 by M.G.L. Chapter 30, Section 39K.

9.5.2 The Contractor shall promptly pay each subcontractor employed upon the Work 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 the 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 payment 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 monies 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 opinion, he 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 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 is able to make such representation 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 of Payment previously certified, to such extent as may be necessary, in his 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;
- (7) persistent failure to carry out the Work in accordance with the Contract Documents; or (if applicable)
- (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. The Architect shall require written confirmation that the record drawings are "up-to-date" 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 Owner does not pay the Contractor as required by the provisions of M.G.L. Chapter 30, Section 39K, the Contractor may demand interest on such payment as provided under said statute.

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 designated 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 as provided in M.G.L. Chapter 30, Section 39K.

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, as noted in said final Certificate, is due and payable. The Architect's certification of the final Certificate for Payment will constitute 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 might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, 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 though no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner 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 or corrected and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, 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 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.

ARTICLE 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 one 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 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.

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 designated 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 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.

ARTICLE 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, occupational sickness or disease, or death of his employees;
- (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
- (4) claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offence directly or indirectly related to the employment of such person by the contractor or, (2) 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 - Bodily Injury & Property Damage combined single limit of \$ 1,000,000 (all owned, hired and non-owned autos).
- (4) Excess / Umbrella Liability – Per Occurrence / Aggregate: \$ 1,000,000 / \$ 1,000,000

- (5) Independent Contractors -Same limits as above
- (6) Products and Completed Operations -Same limits as above commencing with issuance of final Certificate of Payment.
- (7) Contractual Liability - Same limits as above.

11.1.3 The insurance required by Subparagraph 11.1.1 shall include contractual liability insurance.

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 (30) days prior written notice has been given to the Owner.

11.1.4.1 These certificates shall set forth evidence of all coverage required above. The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending limits of coverage.

11.2 PROPERTY INSURANCE

11.2.1 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.

11.2.2 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.

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

11.3 ADDITIONAL INSURED

11.3.1 The Owner and any architect or engineer identified in the Contract Documents shall be named as additional insured (by policy endorsement) for the insurance coverage set forth in this Article.

ARTICLE 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 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 Workmen'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 his 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.

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.

ARTICLE 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 is found to be 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 is found not to be in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that the Owner or a separate contractor caused this condition, whereupon the Owner shall be responsible for such costs.

13.2 CORRECTON 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 any designated portion thereof, or within one year after acceptance by the Owner of any 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, if any of such 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 any 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 nonconforming and which have not been corrected under Subparagraphs 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 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 that 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. 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 sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's

liability with respect to his obligation other than specifically to correct the Work.

13.3 ACCEPTANCE OF DEFECTIVE, NON-CONFORMING OR INCOMPLETE WORK

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

SUPPLEMENTARY GENERAL CONDITIONS – PART I
STATUTORY PROVISIONS FOR MASSACHUSETTS
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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 budding 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 a 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)

- 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.
- k. 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.

EXHIBIT A HUD CDBG Requirements

In addition to the requirements set forth elsewhere in the Contract Documents, the Contractor shall comply with the following:

1. The Contractor shall comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570 (HUD regulations concerning Community Development Block Grants (hereinafter "CDBG")) including subpart K of these regulations.
2. If the Contractor (including any subcontractor, consultant or supplier) breaches this Agreement or violates the rules and regulations of the City and/or HUD, said City may withhold further funding, demand return of unexpended funds, terminate or suspend this Agreement and/or seek further administrative and/or legal relief to assure and guarantee full compliance with the intent and purposes of this Agreement and the CDBG Program. Additionally, the City may take any action authorized by 24 CFR 570.910, and made applicable by 24 CFR 570.501(b), to prevent a continuation of a performance deficiency, mitigate the adverse effects or consequences of a deficiency and/or prevent a recurrence of a deficiency.
3. The Contractor shall maintain and furnish to the City upon request any and all records required by this Agreement, or by applicable federal, state, or local laws, regulations, guidelines or orders, including but not limited to the following books of accounts and records; appropriation/expenditure records, encumbrance records (if applicable), cash receipts and disbursements register, journal, general ledger, purchase order log, voucher register, fixed asset register and cost accounts.
 - 3.1. Without limiting the generality of the foregoing, the Contractor shall for a period of six (6) years after the City's issuance of final completion for this Project, maintain records required by the federal regulations specified in 24 CFR 570.506, that are pertinent to this Agreement, including but not limited to (a) records providing a full description of each activity undertaken, (b) records demonstrating that each activity undertaken meets one of the National Objectives of the CDBG program, (c) records required to determine the eligibility of activities, (d) records required to document the acquisition, improvement, use or disposition of real property acquired or improved with CDBG assistance, (e) records documenting compliance with the fair housing and equal opportunity of the CDBG program, (f) financial records as required by 24 CFR 570.502, and 24 CFR 84.21-28, and (g) other records necessary to document compliance with Subpart K of 24 CFR Part 570.
 - 3.2. The Contractor shall maintain separate records for funding transactions relating to this Agreement, and promptly furnish to the City any and all documents necessary to accomplish the audit of this CDBG Program, as further described below.
 - 3.3. The Contractor shall require any and all of its subcontractors, suppliers and consultants (for the purpose of this section, "subcontractors") to comply with the requirements herein and this Agreement shall be incorporated into any written subcontract. The Contractor further guarantees and assumes sole responsibility to impose the herein cited requirements upon all such subcontractors, including but not limited to the availability of any and all such records upon request by the City.

4. The Contractor (and any subcontractors) shall comply with 24 CFR 84.21-28, 24 CFR 570.502 and 570.610, and adhere to the accounting principles and procedures required therein, use adequate internal controls, and maintain necessary source documentation for all costs incurred.

4.1. The records shall identify the source and application of funds for grant-supported activities. These records shall contain information pertaining to grant awards, authorizations, obligations, unobligated balances, assets, liabilities, outlays and income. The Contractor shall include earned and unearned grant funds as part of its records. The Contractor shall properly safeguard all accounting records and source documentation from theft, fire, heat and water damage.

4.2. Systems reviews, internal audits and financial and compliance audits to be made by the City, or its representative, to determine at minimum, the fiscal integrity of financial actions and reports and the compliance with laws, regulations and administrative requirements.

4.3. The Contractor shall require that any and all its subcontractors comply with the financial management and record keeping requirements set forth herein and that said requirements shall be incorporated into any written subcontract. The Contractor further guarantees and assumes sole responsibility to impose the herein cited requirements upon all such subcontractors.

5. Civil Rights

5.1. Compliance. The Contractor shall comply with any and all applicable state and local civil rights laws, ordinances, orders and regulations and with Title VI of the Civil Rights Act of 1964 as amended, Title VIII of the Civil Rights Act of 1968 as amended, Section 104(b) and Section 109 of Title I of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and Executive Order 11246 as amended by Executive Orders 11375, 11478, 12107 and 12086.

5.2. Nondiscrimination. The Contractor shall comply with the non-discrimination in employment and contracting opportunities laws, regulations, and executive orders referenced in 24 CFR 570.607, as revised by Executive Order 13279. The applicable non-discrimination provisions in Section 109 of the HCDA are still applicable. The Contractor shall further comply with all non-discrimination laws, ordinances, regulations, and orders of the Commonwealth of Massachusetts and the City of Worcester.

5.3. The Contractor shall furnish all notices, information and reports required by Executive Order No. 11246 of September 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto and will permit access to his books, records and accounts by the City and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders, and shall further comply with all applicable provisions of the law.

5.4. Section 504. The Contractor shall comply with all Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), which prohibits discrimination against the individuals with disabilities or handicaps in any Federally assisted program.

6. Affirmative Action.

6.1. Approved Plan. The Contractor agrees that it will carry out an Affirmative Action Program that complies with the President's Executive Order 11246 of September 24, 1966. The Contractor shall provide Affirmative Action guidelines to the City to assist in the formation of such program. The Contractor shall submit a plan for an Affirmative Action Program for approval prior to the award of funds.

6.2. Women- and Minority-Owned Businesses (hereinafter "W/MBE"). The Contractor shall use its best efforts to afford small businesses, minority business enterprises, and women's business enterprises the maximum practicable opportunity to participate in the performance of this Agreement. As used in this Agreement, the terms "small business" means a business that meets the criteria set forth in Section 3(a) of the Small Business Act, as amended (15 U.S.C. 632), and "minority and women's business enterprise" means a business at least fifty-one (51) percent owned and controlled by minority group members or women. For the purpose of this definition, "minority group members" are Afro-Americans, Spanish-speaking, Spanish surnamed or Spanish-heritage Americans, Asian-Americans, and American Indians. The Contractor may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

6.3. Access to Records. Without limiting other provisions contained in this Agreement regarding records, record access and record keeping, the Contractor shall furnish and cause each of its own subcontractors to furnish all information and reports required hereunder and shall permit access to its books, records and accounts by the City, HUD or its agent, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions stated herein.

6.4. Equal Employment Opportunity and Affirmative Action (hereinafter "EEO/AA") Statement. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that it is an Equal Opportunity or Affirmative Action employer.

7. Employment Restrictions

7.1. Labor Standards. The Contractor shall comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Contract Work Hours and Safety Standards Act (40 U.S.C. 327 *et seq.*) and all other applicable federal, state and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this Agreement. The Contractor shall comply with the Copeland Anti-Kick Back Act (18 U.S.C. 874 *et seq.*) and its implementing regulations of the U.S. Department of Labor at 29 CFR Part 5. The Contractor shall maintain documentation that demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the City for review upon request.

7.2. The Contractor and any and all subcontractors shall comply with the regulations of the Secretary of Labor contained in 29 CFR 3 (1964) made pursuant to 40 AZOTE, Section 276(c) (1964) which requires a weekly wage payment statement.

7.3. The Contractor shall assist and cooperate with the Department and the Secretary of Labor in obtaining the compliance of subcontractor with the Equal Opportunity clause and the rules, regulations and relevant orders of the Secretary of Labor; that it shall furnish the Department and the Secretary of Labor such information as they may require for the supervision of such compliance; and that it shall otherwise assist the Department in the discharge of its primary responsibility for securing compliance.

8. “Section 3” Clause

8.1. Compliance. Compliance with the provisions of Section 3 of the HUD Act of 1968, as amended, and as implemented by the regulations set forth in 24 CFR 135, and all applicable rules and orders issued hereunder prior to the execution of this Agreement, shall be a condition of this Agreement and upon the Contractor and any subcontractor. Failure to fulfill these requirements shall subject the Contractor and any subcontractor to those sanctions specified by the Grant Agreement and by applicable law. The Contractor certifies that no contractual or other disability exists that would prevent compliance with these requirements.

8.2. The Contractor-recipient shall comply with these “Section 3” requirements and to include the following language in all subcontracts executed under this Agreement:

“The work to be performed under this Agreement is a project assisted under a program providing direct Federal financial assistance from HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended (12 U.S.C. 1701). Section 3 requires that to the greatest extent feasible opportunities for training and employment be given to low- and very low-income residents of the project area, and that contracts for work in connection with the project be awarded to business concerns that provide economic opportunities for low- and very low-income persons residing in the metropolitan area in which the project is located.”

8.3. The Contractor shall ensure that opportunities for training and employment arising in connection with a housing rehabilitation (including reduction and abatement of lead-based paint hazards), housing construction, or other public construction project are given to low- and very low-income persons residing within the metropolitan area in which the CDBG-funded project is located; where feasible, priority should be given to low- and very low-income persons within the service area of the project or the neighborhood in which the project is located, and to low- and very low-income participants in other HUD programs; and award contracts for work undertaken in connection with a housing rehabilitation (including reduction and abatement of lead-based paint hazards), housing construction, or other public construction project to business concerns that provide economic opportunities for low- and very low-income persons residing within the metropolitan area in which the CDBG-funded project is located; where feasible, priority should be given to business concerns that provide economic opportunities to low- and very low-income residents within the service area or the neighborhood in which the project is located, and to low- and very low-income participants in other HUD programs.

8.4. Notifications. The Contractor shall send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or worker’s representative of its commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

8.5. Subcontracts. The Contractor shall include this Section 3 clause in every subcontract and shall take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the grantor agency. The Contractor shall not subcontract with any entity where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and shall not enter into any subcontract unless the entity has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

9. Conduct

9.1. Subcontracts

9.2. Content. The Contractor shall cause all of the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

9.3. Monitoring. The Contractor shall monitor all subcontracted services on a regular basis to assure contract compliance.

9.4. No covered persons who exercise or have exercised any functions or responsibilities with respect to CDBG-assisted activities, or who are in a position to participate in a decision-making process or gain inside information with regard to such activities, may obtain a financial interest in any contract, or have a financial interest in any contract, subcontract, or agreement with respect to the CDBG-assisted activity, or with respect to the proceeds from the CDBG-assisted activity, either for themselves or those with whom they have business or immediate family ties, during their tenure or for a period of one (1) year thereafter. For purposes of this paragraph, a “covered person” includes any person who is an employee, agent, consultant, officer, or elected or appointed official of the City, the Contractor, or any designated public agency.

9.5. Hatch Act. The Contractor shall insure that no funds provided, nor personnel employed under this Agreement, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V of the U.S.C.

9.6. Lobbying/Political Activity Prohibited. None of the funds, materials, property or services provided directly or indirectly under this Agreement may be used for any partisan political activity or to further the election or defeat of any candidate for public office, nor may any personnel employed in the administration of the Community Development Program be engaged in any way or to any extent in the conduct of political activities. None of the funds provided under this Agreement shall be used for publicity purposes designed to support or defeat legislation pending before the Congress or the General Court.

9.7. Lobbying. The Contractor hereby makes the following certifications.

9.7.1. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the

entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

9.7.2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and

9.7.3. It shall require that the language of paragraph (d) of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all Contractors shall certify and disclose accordingly:

9.7.4. Lobbying Certification. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

9.7.5. Copyright. If this contract results in any copyrightable material or inventions, the City and/or Granting Authority reserves the right to royalty-free, non-exclusive and irrevocable license to reproduce, publish or otherwise use and to authorize others to use, the work or materials for governmental purposes.



CITY OF WORCESTER
FORM FOR GENERAL BID

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 (5) percent of the value of the bid. No other form of bid security will be accepted.

By submitting this bid the undersigned represents to the Owner that it has examined and understands the Advertisement for Bids, Instructions to Bidders, contract forms, Conditions of the Contract (General and Supplementary), Drawings, Specifications and all other Contract Documents and has examined the site, as defined therein, and that this bid is made with distinct reference and relation to all said Contract Documents; but the undersigned declares that in regard to the conditions affecting the work to be done and the labor and materials needed, this bid is based solely on its own investigation and research and not in reliance upon any drawings, surveys, measurements, dimensions, calculations, estimates, or other tests or representations of any employee, officer, agent or consultant of the Owner. By submitting this bid, the undersigned agrees that it shall 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 undersigned 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: CITY OF WORCESTER

A. The Undersigned proposes to furnish all labor and materials required for the project **Roof Replacements – Fire Stations/WFD**, in Worcester, MA, in accordance with the accompanying plans and specifications prepared by Nault Architects, Inc. for the City of Worcester for the contract price specified below, subject to additions or deductions according to the terms of the specifications.

B. This bid includes addenda numbered: _____

C. The proposed contract price is:

Park Ave Fire Station

_____ Dollars
written amount

(\$ _____)
numerical amount

South East Fire Station

_____ **Dollars**
written amount

(\$ _____)
numerical amount

TOTAL COST

_____ **Dollars**
written amount

(\$ _____)
numerical amount

C-2 UNIT PRICES: N/A

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 below, 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 work countermanded, reduced, or omitted by the Owner.

The estimated quantities of Work shown here with each of the Unit Prices are to be extended out and the total value of each applicable Unit Price is to be included in any Subcontractor's and/or Contractor's bid in addition to all work described and shown elsewhere in the Contract Documents.

C-3 ALTERNATES: N/A

The owner may select at its option in the order below, any Alternate or combination of Alternates, or none of the Alternates, however, no single Alternate may be selected unless every Alternate preceding it has been selected. 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.

C-4 FOR COMPLETION:

Time is of the essence for this agreement. All work shall be completed within 6 weeks from issuance of a notice to proceed by the City.

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

paid by the general contractor and are included in the contract price

E. The bidder hereby certifies that it 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 on construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten 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.

F. 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 the penalty of perjury that the 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)

Social Security Number or
Federal Identification Number:

(Business Address)

(City, State, and Zip Code)

E-mail Address:

Telephone: (_____) _____

Fax: (_____) _____

GIVE FULL NAMES AND RESIDENCES OF ALL PERSONS INTERESTED IN THIS PROPOSAL.

(1) If a Proprietorship

Name of Owner _____

Business Address _____

Zip Code _____ Telephone No. _____

Home Address _____

Zip Code _____

(2) If a Partnership

Full names and addresses of all partners

<u>Name</u>	<u>Address</u>	<u>Zip Code</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

(3) If a Corporation

Full Legal Name _____

State of Incorporation _____ Qualified in Massachusetts ? Yes _____ No _____

Principal Place of Business _____

Street	P.O. Box
_____	_____
City/Town	State Zip
_____	_____

Telephone No. _____

Place of Business in Massachusetts _____

Street	P.O. Box
_____	_____
City/Town	State Zip
_____	_____

Telephone No. _____

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 MGL c. 30, section 39L to furnish the awarding authority a certificate of the Secretary of State stating that the corporation has complied with MGL c. 156D, Part 15, subdivision A, s. 15.03, and Part 16, subdivision B, s. 16.22

GIVE THE FOLLOWING INFORMATION REGARDING SURETY COMPANY THAT WILL SUPPLY THE REQUIRED 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. It is the contractor's responsibility to submit the required bond documentation in a form that is satisfactory to the City.

Full Legal Name of Surety Company _____

State of Incorporation _____ Admitted in Massachusetts ? Yes _____ No _____

Principal Place of Business _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Place of Business in Massachusetts _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Telephone No. _____

NOTE

The Office of the Attorney General, Washington, D.C. requires the following information on all bid proposals amounting to \$1,000.00 or more.

E.I. Number of bidder _____

This number is regularly used by companies when filing their "EMPLOYER'S FEDERAL TAX RETURN, U.S." Treasury Department Form 941.

AUTHORIZED SIGNATURE OF BIDDER _____ TITLE _____

PLEASE SIGN

DATE _____ BID SECURITY \$ _____

The name (s) of customer service representative (s) to be responsible for servicing this account in the event of contract award are:

NAME (PLEASE PRINT) _____ TEL. NO. _____

NAME (PLEASE PRINT) _____ TEL. NO. _____

PLEASE INDICATE YOUR FAX NUMBER FAX # _____

PLEASE INDICATE E-MAIL ADDRESS: E-MAIL: _____

IMPORTANT NOTICE TO BIDDERS

**** RESPONSIBLE EMPLOYER ORDINANCE**

and

MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION

**BIDDERS MUST COMPLETE FORMS EOO-101 AND REO-101,
WHICH ARE PART OF THE BID SUBMISSION**

GENERAL BIDDERS, PROPOSERS, TRADE CONTRACTORS, FILED SUBCONTRACTORS, AND NON-FILED SUBCONTRACTORS, AT EVERY TIER, MUST PROVIDE EVIDENCE OF COMPLIANCE WITH THE CITY OF WORCESTER'S RESPONSIBLE EMPLOYER ORDINANCE ("REO") (See, Supplementary General Conditions, Section 4.7).

PLEASE SEE THE FOLLOWING PAGES FOR FURTHER REO REQUIREMENTS.

ALSO INCLUDED IN THIS SECTION IS A COPY OF THE AGREEMENT BETWEEN THE CITY AND THE MASSACHUSETTS COMMISSION AGAINST DISCRIMINATION THAT GOVERN THE ACTIVITIES ADDRESSED BY THE M/WBE BUSINESS ENTERPRISE AND WORKER UTILIZATION PROGRAM AND ITS ASSOCIATED FORMS CONTAINED HEREIN.

Direct any questions about these forms and procedures to:

Kerrilyn Morin
Senior Buyer
City Hall – Room 201
455 Main Street
Worcester, MA 01608
(508) 799-1221

** This requirement applies to general bids over \$100,000 and all subcontractors at every tier exclusive of any pricing threshold.

**CITY OF WORCESTER
INITIAL STATEMENT AND CERTIFICATION OF COMPLIANCE
WITH THE RESPONSIBLE EMPLOYER ORDINANCE**

FORM REO 101 PAGE 1 OF 2

PROJECT:

CONTRACTOR:

ALL GENERAL BIDDERS, PROPOSERS, TRADE CONTRACTORS, SUBCONTRACTORS, INCLUDING SUBCONTRACTORS THAT ARE NOT SUBJECT TO G.L. c. 149, § 44F, UNDER THE GENERAL BIDDER FOR PROJECTS SUBJECT TO G.L. c. 149, § 44A(2) OR UNDER PROPOSERS FOR PROJECTS SUBJECT TO G.L. c. 149A, SHALL AS A CONDITION TO SUBMITTING A BID OR A PROPOSAL, OR OTHERWISE AS A CONDITION TO SUBCONTRACTING, VERIFY COMPLIANCE WITH THE FOLLOWING OBLIGATIONS AND SHALL CERTIFY SUCH COMPLIANCE ON A WEEKLY BASIS FOR THE DURATION OF THE PROJECT:

- 1) That the appropriate lawful Prevailing Wage Rates shall be paid to all employees and the Weekly Payroll Report Form and Statement of Compliance shall be submitted to the Contract Compliance Office on a weekly basis for the entire duration of the project;
- 2) That the contractor maintains or participates in a bona fide apprentice training program as defined by G.L. c.23, §§11H and 11I for each apprenticeable trade or occupation represented in its workforce that is approved by the Division of Apprentice Training (DAT) of the Dept. of Labor and Workforce Development of the Commonwealth, 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; *(COMPLIANCE WITH THE APPRENTICE TRAINING PROVISION IS CURRENTLY SUSPENDED-7/24/14)*
- 3) That appropriate industrial accident insurance coverage shall be furnished and maintained, for the duration of the project, for all its employees employed on the project in accordance with M.G.L. c. 152;
- 4) That the contractor/company will properly classify employees on the project 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, §148B on employee classification);
- 5) That at the time employees begin work at the worksite, each employee 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;
- 6) That the contractor/company is 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 pursuant to that statute by the Commonwealth Health Insurance Connector Authority;
- 7) That the contractor/company, for the duration of the contractor's/company's work on the project, shall make arrangements to ensure that each of its employees entering or leaving the project

**CITY OF WORCESTER
INITIAL STATEMENT AND CERTIFICATION OF COMPLIANCE
WITH THE RESPONSIBLE EMPLOYER ORDINANCE**

FORM REO 101 PAGE 2 OF 2

PROJECT: _____

CONTRACTOR: _____

individually completes the appropriate entries in a daily sign-in/sign-out log to be maintained by the contractor/company;

- 8) That the contractor/company is not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the city of Worcester

THE UNDERSIGNED ACKNOWLEDGES HE/SHE HAS READ THE ABOVE OBLIGATIONS AND CERTIFIES THE CONTRACTOR'S COMPLIANCE WITH THEM.

Signed as a True Statement under Oath:

(Bidder/Company)

By: _____
(Name/Signature)

Date: _____

By: _____
(Print Name and Corporate Title)

(Seal)

**CITY OF WORCESTER
RESPONSIBLE EMPLOYER ORDINANCE REQUIREMENTS (CONT'D)**

**FORM REO 103
PAGE 1 OF 1**

PROJECT:

CONTRACTOR:

POST CONTRACT AWARD SUBMISSIONS

THE SUCCESSFUL GENERAL CONTRACTOR, CONSTRUCTION MANAGER AT RISK, TRADE CONTRACTORS AND SUBCONTRACTORS, INCLUDING SUBCONTRACTORS THAT ARE NOT SUBJECT TO G.L. c. 149, §44F, UNDER THE GENERAL CONTRACTOR FOR PROJECTS SUBJECT TO G.L. c. 149, §44A(2) OR UNDER THE CONSTRUCTION MANAGER AT RISK FOR PROJECTS SUBJECT TO G.L. c. 149A, SHALL SUBMIT THE FOLLOWING INFORMATION AS OUTLINED BELOW FOR THE DURATION OF THE PROJECT:

1, PRIOR TO EACH EMPLOYEE BEGINNING WORK AT THE WORKSITE, SUBMIT DOCUMENTATION EVIDENCING THE EMPLOYEE'S SUCCESSFUL COMPLETION OF A COURSE IN CONSTRUCTION SAFETY AND HEALTH THAT IS APPROVED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. A QUALIFYING PROGRAM MUST BE A MINIMUM OF TEN HOURS IN DURATION.

2. ON A DAILY BASIS, SUBMIT DAILY SIGN-IN/SIGN-OUT LOGS THAT HAVE BEEN FILLED OUT BY EACH INDIVIDUAL EMPLOYEE ENTERING OR LEAVING THE WORKSITE. THE LOG SHALL INCLUDE THE FOLLOWING: THE LOCATION OF THE PROJECT; CURRENT DATE; PRINTED EMPLOYEE NAME; SIGNED EMPLOYEE NAME; AND THE TIME OF EACH ENTRY OR EXIT. THE LOG SHALL ALSO INCLUDE A PROMINENT NOTICE THAT EMPLOYEES ARE ENTITLED UNDER STATE LAW TO RECEIVE THE PREVAILING WAGE RATE FOR THEIR WORK ON THE PROJECT.

MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION

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 the Minority/Women Business Enterprise and Worker Utilization Program, and the Responsible Employer Ordinance. 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**

General Contractors, Trade Contractors, Filed Subcontractors and Non-Filed Subcontractors complete and submit this form as part of their bid on all City of Worcester construction projects.

Each additional subcontractor shall complete this form and submit it to the general contractor who shall forward it to the Contract Compliance Office, **PRIOR** to the subcontractor's beginning work on the project.

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. **RESPONSIBLE EMPLOYER ORDINANCE**

This Ordinance sets certain minimal requirements for all General Contractors, Trade Contractors, Filed Subcontractors and Non-Filed Subcontractors bidding on City of Worcester construction projects.

4. **SUCCESSFUL BIDDER'S OBLIGATION TO PROCEDURES AND FORMS, EOO-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.

CITY OF WORCESTER
MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION PROGRAM

AFFIDAVIT OF ACKNOWLEDGEMENT and CERTIFICATE OF COMPLIANCE

FORM EOO-101

TO ALL CONTRACTORS:

The Bidder or Proposer and all Trade Contractors and Subcontractors under the Bidder or Proposer must complete and submit this form as part of their bid.

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 General Contractors, Trade 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 5% women owned businesses. Further, each contractor shall make a good faith effort to maintain a workforce that is 10% minority and 5% 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 _____

Printed Name: _____ Title: _____

Address: _____ Date: _____

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 projects.

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 10 percent (10%) minority employee and 5 percent (5%) 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.
2. 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 there from 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 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.

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.

RESPONSIBLE EMPLOYER ORDINANCE

and

MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION

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 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 10% of total work hours to be worked by minorities and 5% 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 5% of the contract value to Women Business Enterprises.

VII. INITIAL STATEMENT and CERTIFICATION OF COMPLIANCE WITH THE RESPONSIBLE EMPLOYER ORDINANCE, REO-101 (Pages 1 & 2)

General Contractors, Trade Contractors, Filed Subcontractors and Subcontractors complete and submit this form as part of their bid on all City of Worcester construction projects subject to the provisions of G.L. Chapter 149 and Chapter 149A.

The REO requirements are applicable under Chapter 149 to contracts of \$100,000 or more. Under Chapter 149A the requirements are applicable only to contracts \$5M and above.

Note: Under the September 2012 revision of the REO, there is no minimum threshold for subcontractors. Hence all subcontractors, i.e., Trade Contractors, Filed Subcontractors and Non-Filed Subcontractors at every tier must comply with the requirements of the REO

The General Contractor shall forward all Trade Contractor's, Filed Subcontractor's and Subcontractor's REO-101 Forms and REO evidence to the Contract Compliance Office for approval, PRIOR to said subcontractors beginning work.

VIII. WEEKLY STATEMENT AND CERTIFICATION OF COMPLIANCE WITH THE RESPONSIBLE EMPLOYER ORDINANCE, REO-102

At the end of each week of work, ALL Contractors, Trade Contractors, Filed Subcontractors, and Non-Filed Subcontractors regardless of tier, subject to the provisions of G.L. Chapter 149 and Chapter 149A, shall complete and submit this form along with their certified payroll reports to the Contract Compliance Office.

IX. INITIAL STATEMENT AND ADDITIONAL CERTIFICATION OF COMPLIANCE WITH THE RESPONSIBLE EMPLOYER ORDINANCE, REO-103

General Contractors, Trade Contractors, Filed Subcontractors and Subcontractors complete and submit this form as part of their bid on all City of Worcester construction projects subject to the provisions of G.L. Chapter 149 and Chapter 149A.

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 General Contractor who, in turn will transmit this form to the Contract Compliance Office within two business days of contract execution and PRIOR to the subcontractor beginning work on the project.

X. WEEKLY CERTIFIED PAYROLL REPORT and WEEKLY WORKFORCE UTILIZATION REPORT.

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

Prevailing Wage Rates

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

RONALD L. WALKER, II
Secretary

WILLIAM D MCKINNEY
Director

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

Awarding Authority: City of Worcester
Contract Number: 6611-K6 **City/Town:** WORCESTER
Description of Work: Repair/replace roofs at the Park Ave and Southeast Fire Stations
Job Location: Various

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	08/01/2016	\$32.15	\$10.91	\$10.08	\$0.00	\$53.14
	12/01/2016	\$32.15	\$10.91	\$10.89	\$0.00	\$53.95
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	08/01/2016	\$32.22	\$10.91	\$10.08	\$0.00	\$53.21
	12/01/2016	\$32.22	\$10.91	\$10.89	\$0.00	\$54.02
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	08/01/2016	\$32.34	\$10.91	\$10.08	\$0.00	\$53.33
	12/01/2016	\$32.34	\$10.91	\$10.89	\$0.00	\$54.14
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
	12/01/2016	\$33.15	\$7.45	\$12.65	\$0.00	\$53.25
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS WORKER (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (WORCESTER)</i>	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 2</i>	06/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
	12/01/2016	\$33.15	\$7.45	\$12.65	\$0.00	\$53.25
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2016	\$41.62	\$6.97	\$16.21	\$0.00	\$64.80
	01/01/2017	\$42.92	\$6.97	\$16.21	\$0.00	\$66.10

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2016

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

Effective Date - 01/01/2017

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

Notes:

Apprentice to Journeyworker Ratio:1:5

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	03/01/2016	\$47.76	\$10.18	\$18.54	\$0.00	\$76.48
BRICKLAYERS LOCAL 3 (WORCESTER)	09/01/2016	\$48.66	\$10.18	\$18.62	\$0.00	\$77.46
	03/01/2017	\$49.23	\$10.18	\$18.62	\$0.00	\$78.03

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.88	\$10.18	\$18.54	\$0.00	\$52.60
2	60	\$28.66	\$10.18	\$18.54	\$0.00	\$57.38
3	70	\$33.43	\$10.18	\$18.54	\$0.00	\$62.15
4	80	\$38.21	\$10.18	\$18.54	\$0.00	\$66.93
5	90	\$42.98	\$10.18	\$18.54	\$0.00	\$71.70

Effective Date - 09/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.33	\$10.18	\$18.62	\$0.00	\$53.13
2	60	\$29.20	\$10.18	\$18.62	\$0.00	\$58.00
3	70	\$34.06	\$10.18	\$18.62	\$0.00	\$62.86
4	80	\$38.93	\$10.18	\$18.62	\$0.00	\$67.73
5	90	\$43.79	\$10.18	\$18.62	\$0.00	\$72.59

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

For apprentice rates see "Apprentice- LABORER"

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

For apprentice rates see "Apprentice- LABORER"

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

For apprentice rates see "Apprentice- LABORER"

CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75

For apprentice rates see "Apprentice- LABORER"

CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2016	\$37.10	\$9.80	\$16.82	\$0.00	\$63.72
	09/01/2016	\$38.08	\$9.80	\$16.82	\$0.00	\$64.70
	03/01/2017	\$39.05	\$9.80	\$16.82	\$0.00	\$65.67
	09/01/2017	\$40.06	\$9.80	\$16.82	\$0.00	\$66.68
	03/01/2018	\$41.06	\$9.80	\$16.82	\$0.00	\$67.68
	09/01/2018	\$42.10	\$9.80	\$16.82	\$0.00	\$68.72
	03/01/2019	\$43.13	\$9.80	\$16.82	\$0.00	\$69.75

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.55	\$9.80	\$1.63	\$0.00	\$29.98
2	60	\$22.26	\$9.80	\$1.63	\$0.00	\$33.69
3	70	\$25.97	\$9.80	\$11.93	\$0.00	\$47.70
4	75	\$27.83	\$9.80	\$11.93	\$0.00	\$49.56
5	80	\$29.68	\$9.80	\$13.56	\$0.00	\$53.04
6	80	\$29.68	\$9.80	\$13.56	\$0.00	\$53.04
7	90	\$33.39	\$9.80	\$15.19	\$0.00	\$58.38
8	90	\$33.39	\$9.80	\$15.19	\$0.00	\$58.38

Effective Date - 09/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.04	\$9.80	\$1.63	\$0.00	\$30.47
2	60	\$22.85	\$9.80	\$1.63	\$0.00	\$34.28
3	70	\$26.66	\$9.80	\$11.93	\$0.00	\$48.39
4	75	\$28.56	\$9.80	\$11.93	\$0.00	\$50.29
5	80	\$30.46	\$9.80	\$13.56	\$0.00	\$53.82
6	80	\$30.46	\$9.80	\$13.56	\$0.00	\$53.82
7	90	\$34.27	\$9.80	\$15.19	\$0.00	\$59.26
8	90	\$34.27	\$9.80	\$15.19	\$0.00	\$59.26

Notes:

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (WORCESTER)	01/01/2016	\$44.59	\$10.90	\$18.71	\$1.30	\$75.50
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Apprentice - CEMENT MASONRY/PLASTERING - Worcester

Effective Date - 01/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.30	\$10.90	\$12.21	\$0.00	\$45.41
2	60	\$26.75	\$10.90	\$13.71	\$1.30	\$52.66
3	65	\$28.98	\$10.90	\$14.71	\$1.30	\$55.89
4	70	\$31.21	\$10.90	\$15.71	\$1.30	\$59.12
5	75	\$33.44	\$10.90	\$16.71	\$1.30	\$62.35
6	80	\$35.67	\$10.90	\$17.71	\$1.30	\$65.58
7	90	\$40.13	\$10.90	\$18.71	\$1.30	\$71.04

Notes:

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

Apprentice to Journeyworker Ratio:1:3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CHAIN SAW OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$45.23	\$10.00	\$15.15	\$0.00	\$70.38
	12/01/2016	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	06/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
	12/01/2017	\$48.48	\$10.00	\$15.15	\$0.00	\$73.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$30.40	\$10.00	\$15.15	\$0.00	\$55.55
	12/01/2016	\$31.27	\$10.00	\$15.15	\$0.00	\$56.42
	06/01/2017	\$31.96	\$10.00	\$15.15	\$0.00	\$57.11
	12/01/2017	\$32.65	\$10.00	\$15.15	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2016

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

Effective Date - 01/01/2017

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

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN <i>LABORERS - ZONE 2</i>	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
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For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 2</i>	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 2</i>	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 2</i>	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 2)</i>	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
For apprentice rates see "Apprentice- PILE DRIVER"						
ELECTRICIAN <i>ELECTRICIANS LOCAL 96</i>	12/01/2015	\$39.37	\$8.41	\$13.68	\$0.00	\$61.46

Apprentice - ELECTRICIAN - Local 96

Effective Date - 12/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$15.75	\$8.41	\$0.47	\$0.00	\$24.63
2	43	\$16.93	\$8.41	\$0.51	\$0.00	\$25.85
3	48	\$18.90	\$8.41	\$10.82	\$0.00	\$38.13
4	55	\$21.65	\$8.41	\$11.20	\$0.00	\$41.26
5	65	\$25.59	\$8.41	\$11.75	\$0.00	\$45.75
6	80	\$31.50	\$8.41	\$12.58	\$0.00	\$52.49

Notes:

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

Apprentice to Journeyworker Ratio:2:3***

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

Apprentice - ELEVATOR CONSTRUCTOR - Local 41

Effective Date - 01/01/2016

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

Effective Date - 01/01/2017

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

Notes:

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

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER	01/01/2016	\$34.14	\$14.43	\$14.96	\$0.00	\$63.53
<i>ELEVATOR CONSTRUCTORS LOCAL 41</i>	01/01/2017	\$34.93	\$15.28	\$15.71	\$0.00	\$65.92

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

FENCE & GUARD RAIL ERECTOR	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
<i>LABORERS - ZONE 2</i>	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75

For apprentice rates see "Apprentice- LABORER"

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	05/01/2016	\$41.03	\$10.00	\$14.90	\$0.00	\$65.93
<i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2016	\$41.62	\$10.00	\$14.90	\$0.00	\$66.52
	05/01/2017	\$42.50	\$10.00	\$14.90	\$0.00	\$67.40
	11/01/2017	\$43.23	\$10.00	\$14.90	\$0.00	\$68.13
	05/01/2018	\$43.94	\$10.00	\$14.90	\$0.00	\$68.84

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	05/01/2016	\$42.47	\$10.00	\$14.90	\$0.00	\$67.37
<i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2016	\$43.07	\$10.00	\$14.90	\$0.00	\$67.97
	05/01/2017	\$43.96	\$10.00	\$14.90	\$0.00	\$68.86
	11/01/2017	\$44.69	\$10.00	\$14.90	\$0.00	\$69.59
	05/01/2018	\$45.41	\$10.00	\$14.90	\$0.00	\$70.31

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2016	\$21.88	\$10.00	\$14.90	\$0.00	\$46.78
	11/01/2016	\$22.23	\$10.00	\$14.90	\$0.00	\$47.13
	05/01/2017	\$22.76	\$10.00	\$14.90	\$0.00	\$47.66
	11/01/2017	\$23.18	\$10.00	\$14.90	\$0.00	\$48.08
	05/01/2018	\$23.61	\$10.00	\$14.90	\$0.00	\$48.51
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 96</i>	12/01/2015	\$39.37	\$8.41	\$13.68	\$0.00	\$61.46
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINT/COMMISSIONING <i>ELECTRICIANS LOCAL 96</i>	12/01/2015	\$39.37	\$8.41	\$13.68	\$0.00	\$61.46
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$36.71	\$10.00	\$15.15	\$0.00	\$61.86
	12/01/2016	\$37.75	\$10.00	\$15.15	\$0.00	\$62.90
	06/01/2017	\$38.59	\$10.00	\$15.15	\$0.00	\$63.74
	12/01/2017	\$39.42	\$10.00	\$15.15	\$0.00	\$64.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE 2</i>	06/01/2016	\$20.50	\$7.45	\$12.65	\$0.00	\$40.60
	12/01/2016	\$20.50	\$7.45	\$12.65	\$0.00	\$40.60
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE II</i>	03/01/2016	\$39.82	\$9.80	\$17.62	\$0.00	\$67.24

Apprentice - FLOORCOVERER - Local 2168 Zone II

Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.91	\$9.80	\$1.79	\$0.00	\$31.50
2	55	\$21.90	\$9.80	\$1.79	\$0.00	\$33.49
3	60	\$23.89	\$9.80	\$12.25	\$0.00	\$45.94
4	65	\$25.88	\$9.80	\$12.25	\$0.00	\$47.93
5	70	\$27.87	\$9.80	\$14.04	\$0.00	\$51.71
6	75	\$29.87	\$9.80	\$14.04	\$0.00	\$53.71
7	80	\$31.86	\$9.80	\$15.83	\$0.00	\$57.49
8	85	\$33.85	\$9.80	\$15.83	\$0.00	\$59.48

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$30.40	\$10.00	\$15.15	\$0.00	\$55.55
	12/01/2016	\$31.27	\$10.00	\$15.15	\$0.00	\$56.42
	06/01/2017	\$31.96	\$10.00	\$15.15	\$0.00	\$57.11
	12/01/2017	\$32.65	\$10.00	\$15.15	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 35 (ZONE 2)</i>	07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
	01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 07/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.98	\$7.85	\$0.00	\$0.00	\$27.83
2	55	\$21.98	\$7.85	\$3.66	\$0.00	\$33.49
3	60	\$23.98	\$7.85	\$3.99	\$0.00	\$35.82
4	65	\$25.97	\$7.85	\$4.32	\$0.00	\$38.14
5	70	\$27.97	\$7.85	\$14.11	\$0.00	\$49.93
6	75	\$29.97	\$7.85	\$14.44	\$0.00	\$52.26
7	80	\$31.97	\$7.85	\$14.77	\$0.00	\$54.59
8	90	\$35.96	\$7.85	\$15.44	\$0.00	\$59.25

Effective Date - 01/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.46	\$7.85	\$0.00	\$0.00	\$28.31
2	55	\$22.50	\$7.85	\$3.66	\$0.00	\$34.01
3	60	\$24.55	\$7.85	\$3.99	\$0.00	\$36.39
4	65	\$26.59	\$7.85	\$4.32	\$0.00	\$38.76
5	70	\$28.64	\$7.85	\$14.11	\$0.00	\$50.60
6	75	\$30.68	\$7.85	\$14.44	\$0.00	\$52.97
7	80	\$32.73	\$7.85	\$14.77	\$0.00	\$55.35
8	90	\$36.82	\$7.85	\$15.44	\$0.00	\$60.11

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 06/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$24.33	\$10.00	\$0.00	\$0.00	\$34.33
2	60	\$26.54	\$10.00	\$15.15	\$0.00	\$51.69
3	65	\$28.75	\$10.00	\$15.15	\$0.00	\$53.90
4	70	\$30.96	\$10.00	\$15.15	\$0.00	\$56.11
5	75	\$33.17	\$10.00	\$15.15	\$0.00	\$58.32
6	80	\$35.38	\$10.00	\$15.15	\$0.00	\$60.53
7	85	\$37.60	\$10.00	\$15.15	\$0.00	\$62.75
8	90	\$39.81	\$10.00	\$15.15	\$0.00	\$64.96

Effective Date - 12/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$25.01	\$10.00	\$0.00	\$0.00	\$35.01
2	60	\$27.29	\$10.00	\$15.15	\$0.00	\$52.44
3	65	\$29.56	\$10.00	\$15.15	\$0.00	\$54.71
4	70	\$31.84	\$10.00	\$15.15	\$0.00	\$56.99
5	75	\$34.11	\$10.00	\$15.15	\$0.00	\$59.26
6	80	\$36.38	\$10.00	\$15.15	\$0.00	\$61.53
7	85	\$38.66	\$10.00	\$15.15	\$0.00	\$63.81
8	90	\$40.93	\$10.00	\$15.15	\$0.00	\$66.08

Notes:

Apprentice to Journeyworker Ratio:1:6

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

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) ELECTRICIANS LOCAL 96	12/01/2015	\$39.37	\$8.41	\$13.68	\$0.00	\$61.46
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For apprentice rates see "Apprentice- ELECTRICIAN"

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

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING -WATER) PLUMBERS LOCAL 4	03/01/2016	\$42.36	\$9.35	\$14.26	\$0.00	\$65.97
	09/01/2016	\$42.96	\$9.35	\$14.26	\$0.00	\$66.57
	03/01/2017	\$43.61	\$9.35	\$14.26	\$0.00	\$67.22
	09/01/2017	\$44.21	\$9.35	\$14.26	\$0.00	\$67.82
	03/01/2018	\$44.86	\$9.35	\$14.26	\$0.00	\$68.47

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC MECHANIC <i>PLUMBERS LOCAL 4</i>	03/01/2016	\$42.36	\$9.35	\$14.26	\$0.00	\$65.97
	09/01/2016	\$42.96	\$9.35	\$14.26	\$0.00	\$66.57
	03/01/2017	\$43.61	\$9.35	\$14.26	\$0.00	\$67.22
	09/01/2017	\$44.21	\$9.35	\$14.26	\$0.00	\$67.82
	03/01/2018	\$44.86	\$9.35	\$14.26	\$0.00	\$68.47

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

HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	06/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
	12/01/2016	\$33.15	\$7.45	\$12.65	\$0.00	\$53.25

For apprentice rates see "Apprentice- LABORER"

INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (WORCESTER)</i>	09/01/2015	\$39.43	\$11.50	\$13.80	\$0.00	\$64.73
	09/01/2016	\$41.23	\$11.50	\$13.80	\$0.00	\$66.53
	09/01/2017	\$43.03	\$11.50	\$13.80	\$0.00	\$68.33
	09/01/2018	\$45.05	\$11.50	\$13.80	\$0.00	\$70.35
	09/01/2019	\$47.30	\$11.50	\$13.80	\$0.00	\$72.60

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

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.72	\$11.50	\$10.05	\$0.00	\$41.27
2	60	\$23.66	\$11.50	\$10.80	\$0.00	\$45.96
3	70	\$27.60	\$11.50	\$11.55	\$0.00	\$50.65
4	80	\$31.54	\$11.50	\$12.30	\$0.00	\$55.34

Effective Date - 09/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.62	\$11.50	\$10.05	\$0.00	\$42.17
2	60	\$24.74	\$11.50	\$10.80	\$0.00	\$47.04
3	70	\$28.86	\$11.50	\$11.55	\$0.00	\$51.91
4	80	\$32.98	\$11.50	\$12.30	\$0.00	\$56.78

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (WORCESTER AREA)</i>	03/16/2016	\$43.10	\$7.80	\$20.85	\$0.00	\$71.75
	09/16/2016	\$43.75	\$7.80	\$20.85	\$0.00	\$72.40
	03/16/2017	\$44.35	\$7.80	\$20.85	\$0.00	\$73.00

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Worcester

Effective Date - 03/16/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$25.86	\$7.80	\$20.85	\$0.00	\$54.51
2	70	\$30.17	\$7.80	\$20.85	\$0.00	\$58.82
3	75	\$32.33	\$7.80	\$20.85	\$0.00	\$60.98
4	80	\$34.48	\$7.80	\$20.85	\$0.00	\$63.13
5	85	\$36.64	\$7.80	\$20.85	\$0.00	\$65.29
6	90	\$38.79	\$7.80	\$20.85	\$0.00	\$67.44

Effective Date - 09/16/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.25	\$7.80	\$20.85	\$0.00	\$54.90
2	70	\$30.63	\$7.80	\$20.85	\$0.00	\$59.28
3	75	\$32.81	\$7.80	\$20.85	\$0.00	\$61.46
4	80	\$35.00	\$7.80	\$20.85	\$0.00	\$63.65
5	85	\$37.19	\$7.80	\$20.85	\$0.00	\$65.84
6	90	\$39.38	\$7.80	\$20.85	\$0.00	\$68.03

Notes:

Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 2	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
LABORER LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50

Apprentice - LABORER - Zone 2

Effective Date - 06/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$18.99	\$7.45	\$12.65	\$0.00	\$39.09
2	70	\$22.16	\$7.45	\$12.65	\$0.00	\$42.26
3	80	\$25.32	\$7.45	\$12.65	\$0.00	\$45.42
4	90	\$28.49	\$7.45	\$12.65	\$0.00	\$48.59

Effective Date - 12/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$19.44	\$7.45	\$12.65	\$0.00	\$39.54
2	70	\$22.68	\$7.45	\$12.65	\$0.00	\$42.78
3	80	\$25.92	\$7.45	\$12.65	\$0.00	\$46.02
4	90	\$29.16	\$7.45	\$12.65	\$0.00	\$49.26

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
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For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
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LABORER: CEMENT FINISHER TENDER LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
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For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
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LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 2	12/01/2015	\$31.35	\$7.45	\$12.60	\$0.00	\$51.40
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For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER LABORERS - ZONE 2	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
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For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
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LABORER: MULTI-TRADE TENDER LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
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For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
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LABORER: TREE REMOVER LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
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This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
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LASER BEAM OPERATOR LABORERS - ZONE 2	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
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For apprentice rates see "Apprentice- LABORER"

	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
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MARBLE & TILE FINISHERS BRICKLAYERS LOCAL 3 (WORCESTER) - MARBLE & TILE	08/01/2016	\$38.78	\$10.18	\$17.78	\$0.00	\$66.74
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	02/01/2017	\$39.24	\$10.18	\$17.78	\$0.00	\$67.20
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 08/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.39	\$10.18	\$17.78	\$0.00	\$47.35
2	60	\$23.27	\$10.18	\$17.78	\$0.00	\$51.23
3	70	\$27.15	\$10.18	\$17.78	\$0.00	\$55.11
4	80	\$31.02	\$10.18	\$17.78	\$0.00	\$58.98
5	90	\$34.90	\$10.18	\$17.78	\$0.00	\$62.86

Effective Date - 02/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.62	\$10.18	\$17.78	\$0.00	\$47.58
2	60	\$23.54	\$10.18	\$17.78	\$0.00	\$51.50
3	70	\$27.47	\$10.18	\$17.78	\$0.00	\$55.43
4	80	\$31.39	\$10.18	\$17.78	\$0.00	\$59.35
5	90	\$35.32	\$10.18	\$17.78	\$0.00	\$63.28

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH	03/01/2016	\$49.45	\$10.18	\$17.69	\$0.00	\$77.32
BRICKLAYERS LOCAL 3 (WORCESTER) - MARBLE & TILE	09/01/2016	\$50.35	\$10.18	\$17.77	\$0.00	\$78.30
	03/01/2017	\$50.92	\$10.18	\$17.77	\$0.00	\$78.87

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile (Wore)

Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.73	\$10.18	\$17.69	\$0.00	\$52.60
2	60	\$29.67	\$10.18	\$17.69	\$0.00	\$57.54
3	70	\$34.62	\$10.18	\$17.69	\$0.00	\$62.49
4	80	\$39.56	\$10.18	\$17.69	\$0.00	\$67.43
5	90	\$44.51	\$10.18	\$17.69	\$0.00	\$72.38

Effective Date - 09/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.18	\$10.18	\$17.77	\$0.00	\$53.13
2	60	\$30.21	\$10.18	\$17.77	\$0.00	\$58.16
3	70	\$35.25	\$10.18	\$17.77	\$0.00	\$63.20
4	80	\$40.28	\$10.18	\$17.77	\$0.00	\$68.23
5	90	\$45.32	\$10.18	\$17.77	\$0.00	\$73.27

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

Effective Date - 04/01/2015

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

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						

OILER (OTHER THAN TRUCK CRANES,GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$22.41	\$10.00	\$15.15	\$0.00	\$47.56
	12/01/2016	\$23.06	\$10.00	\$15.15	\$0.00	\$48.21
	06/01/2017	\$23.57	\$10.00	\$15.15	\$0.00	\$48.72
	12/01/2017	\$24.09	\$10.00	\$15.15	\$0.00	\$49.24
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

OILER (TRUCK CRANES, GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$26.29	\$10.00	\$15.15	\$0.00	\$51.44
	12/01/2016	\$27.04	\$10.00	\$15.15	\$0.00	\$52.19
	06/01/2017	\$27.64	\$10.00	\$15.15	\$0.00	\$52.79
	12/01/2017	\$28.25	\$10.00	\$15.15	\$0.00	\$53.40
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2016

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

Effective Date - 01/01/2017

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	07/01/2016	\$41.36	\$7.85	\$16.10	\$0.00	\$65.31
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2017	\$42.31	\$7.85	\$16.10	\$0.00	\$66.26

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 07/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.68	\$7.85	\$0.00	\$0.00	\$28.53
2	55	\$22.75	\$7.85	\$3.66	\$0.00	\$34.26
3	60	\$24.82	\$7.85	\$3.99	\$0.00	\$36.66
4	65	\$26.88	\$7.85	\$4.32	\$0.00	\$39.05
5	70	\$28.95	\$7.85	\$14.11	\$0.00	\$50.91
6	75	\$31.02	\$7.85	\$14.44	\$0.00	\$53.31
7	80	\$33.09	\$7.85	\$14.77	\$0.00	\$55.71
8	90	\$37.22	\$7.85	\$15.44	\$0.00	\$60.51

Effective Date - 01/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.16	\$7.85	\$0.00	\$0.00	\$29.01
2	55	\$23.27	\$7.85	\$3.66	\$0.00	\$34.78
3	60	\$25.39	\$7.85	\$3.99	\$0.00	\$37.23
4	65	\$27.50	\$7.85	\$4.32	\$0.00	\$39.67
5	70	\$29.62	\$7.85	\$14.11	\$0.00	\$51.58
6	75	\$31.73	\$7.85	\$14.44	\$0.00	\$54.02
7	80	\$33.85	\$7.85	\$14.77	\$0.00	\$56.47
8	90	\$38.08	\$7.85	\$15.44	\$0.00	\$61.37

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	07/01/2016	\$39.42	\$7.85	\$16.10	\$0.00	\$63.37
PAINTERS LOCAL 35 - ZONE 2	01/01/2017	\$40.37	\$7.85	\$16.10	\$0.00	\$64.32

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 07/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.71	\$7.85	\$0.00	\$0.00	\$27.56
2	55	\$21.68	\$7.85	\$3.66	\$0.00	\$33.19
3	60	\$23.65	\$7.85	\$3.99	\$0.00	\$35.49
4	65	\$25.62	\$7.85	\$4.32	\$0.00	\$37.79
5	70	\$27.59	\$7.85	\$14.11	\$0.00	\$49.55
6	75	\$29.57	\$7.85	\$14.44	\$0.00	\$51.86
7	80	\$31.54	\$7.85	\$14.77	\$0.00	\$54.16
8	90	\$35.48	\$7.85	\$15.44	\$0.00	\$58.77

Effective Date - 01/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.19	\$7.85	\$0.00	\$0.00	\$28.04
2	55	\$22.20	\$7.85	\$3.66	\$0.00	\$33.71
3	60	\$24.22	\$7.85	\$3.99	\$0.00	\$36.06
4	65	\$26.24	\$7.85	\$4.32	\$0.00	\$38.41
5	70	\$28.26	\$7.85	\$14.11	\$0.00	\$50.22
6	75	\$30.28	\$7.85	\$14.44	\$0.00	\$52.57
7	80	\$32.30	\$7.85	\$14.77	\$0.00	\$54.92
8	90	\$36.33	\$7.85	\$15.44	\$0.00	\$59.62

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS) LABORERS - ZONE 2	06/01/2016	\$31.65	\$7.45	\$12.65	\$0.00	\$51.75
	12/01/2016	\$32.40	\$7.45	\$12.65	\$0.00	\$52.50
For Apprentice rates see "Apprentice- LABORER"						
PAINTER / TAPER (BRUSH, NEW) *	07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 07/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.98	\$7.85	\$0.00	\$0.00	\$27.83
2	55	\$21.98	\$7.85	\$3.66	\$0.00	\$33.49
3	60	\$23.98	\$7.85	\$3.99	\$0.00	\$35.82
4	65	\$25.97	\$7.85	\$4.32	\$0.00	\$38.14
5	70	\$27.97	\$7.85	\$14.11	\$0.00	\$49.93
6	75	\$29.97	\$7.85	\$14.44	\$0.00	\$52.26
7	80	\$31.97	\$7.85	\$14.77	\$0.00	\$54.59
8	90	\$35.96	\$7.85	\$15.44	\$0.00	\$59.25

Effective Date - 01/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.46	\$7.85	\$0.00	\$0.00	\$28.31
2	55	\$22.50	\$7.85	\$3.66	\$0.00	\$34.01
3	60	\$24.55	\$7.85	\$3.99	\$0.00	\$36.39
4	65	\$26.59	\$7.85	\$4.32	\$0.00	\$38.76
5	70	\$28.64	\$7.85	\$14.11	\$0.00	\$50.60
6	75	\$30.68	\$7.85	\$14.44	\$0.00	\$52.97
7	80	\$32.73	\$7.85	\$14.77	\$0.00	\$55.35
8	90	\$36.82	\$7.85	\$15.44	\$0.00	\$60.11

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	07/01/2016	\$38.02	\$7.85	\$16.10	\$0.00	\$61.97
PAINTERS LOCAL 35 - ZONE 2	01/01/2017	\$38.97	\$7.85	\$16.10	\$0.00	\$62.92

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 07/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.01	\$7.85	\$0.00	\$0.00	\$26.86
2	55	\$20.91	\$7.85	\$3.66	\$0.00	\$32.42
3	60	\$22.81	\$7.85	\$3.99	\$0.00	\$34.65
4	65	\$24.71	\$7.85	\$4.32	\$0.00	\$36.88
5	70	\$26.61	\$7.85	\$14.11	\$0.00	\$48.57
6	75	\$28.52	\$7.85	\$14.44	\$0.00	\$50.81
7	80	\$30.42	\$7.85	\$14.77	\$0.00	\$53.04
8	90	\$34.22	\$7.85	\$15.44	\$0.00	\$57.51

Effective Date - 01/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.49	\$7.85	\$0.00	\$0.00	\$27.34
2	55	\$21.43	\$7.85	\$3.66	\$0.00	\$32.94
3	60	\$23.38	\$7.85	\$3.99	\$0.00	\$35.22
4	65	\$25.33	\$7.85	\$4.32	\$0.00	\$37.50
5	70	\$27.28	\$7.85	\$14.11	\$0.00	\$49.24
6	75	\$29.23	\$7.85	\$14.44	\$0.00	\$51.52
7	80	\$31.18	\$7.85	\$14.77	\$0.00	\$53.80
8	90	\$35.07	\$7.85	\$15.44	\$0.00	\$58.36

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B
12/01/2012 \$30.28 \$9.07 \$8.00 \$0.00 \$47.35

PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)
PILE DRIVER LOCAL 56 (ZONE 2)
For apprentice rates see "Apprentice- PILE DRIVER"
09/01/2013 \$37.01 \$9.80 \$18.17 \$0.00 \$64.98

PILE DRIVER
PILE DRIVER LOCAL 56 (ZONE 2)
09/01/2013 \$37.01 \$9.80 \$18.17 \$0.00 \$64.98

Apprentice - PILE DRIVER - Local 56 Zone 2

Effective Date - 09/01/2013

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

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

Apprentice to Journeyworker Ratio:1:3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER LABORERS - ZONE 2	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
PLUMBER & PIPEFITTER PLUMBERS LOCAL 4	03/01/2016	\$42.36	\$9.35	\$14.26	\$0.00	\$65.97
	09/01/2016	\$42.96	\$9.35	\$14.26	\$0.00	\$66.57
	03/01/2017	\$43.61	\$9.35	\$14.26	\$0.00	\$67.22
	09/01/2017	\$44.21	\$9.35	\$14.26	\$0.00	\$67.82
	03/01/2018	\$44.86	\$9.35	\$14.26	\$0.00	\$68.47

Apprentice - PLUMBER/PIPEFITTER - Local 4

Effective Date - 03/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$16.94	\$9.35	\$0.00	\$0.00	\$26.29
2	50	\$21.18	\$9.35	\$0.00	\$0.00	\$30.53
3	60	\$25.42	\$9.35	\$0.00	\$0.00	\$34.77
4	70	\$29.65	\$9.35	\$4.55	\$0.00	\$43.55
5	80	\$33.89	\$9.35	\$4.55	\$0.00	\$47.79

Effective Date - 09/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.18	\$9.35	\$0.00	\$0.00	\$26.53
2	50	\$21.48	\$9.35	\$0.00	\$0.00	\$30.83
3	60	\$25.78	\$9.35	\$0.00	\$0.00	\$35.13
4	70	\$30.07	\$9.35	\$4.55	\$0.00	\$43.97
5	80	\$34.37	\$9.35	\$4.55	\$0.00	\$48.27

Notes:
 Steps - 2000 hrs; Step 4 w/license-75; Step 5 w/license-85
 Step 4 with lic\$45.67 Step 5 with lic\$49.90

Apprentice to Journeyworker Ratio:1:3

PNEUMATIC CONTROLS (TEMP.) PLUMBERS LOCAL 4	03/01/2016	\$42.36	\$9.35	\$14.26	\$0.00	\$65.97
	09/01/2016	\$42.96	\$9.35	\$14.26	\$0.00	\$66.57
	03/01/2017	\$43.61	\$9.35	\$14.26	\$0.00	\$67.22
	09/01/2017	\$44.21	\$9.35	\$14.26	\$0.00	\$67.82
	03/01/2018	\$44.86	\$9.35	\$14.26	\$0.00	\$68.47

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

PNEUMATIC DRILL/TOOL OPERATOR LABORERS - ZONE 2	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75

For apprentice rates see "Apprentice- LABORER"

POWDERMAN & BLASTER LABORERS - ZONE 2	06/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
	12/01/2016	\$33.40	\$7.45	\$12.65	\$0.00	\$53.50

For apprentice rates see "Apprentice- LABORER"

POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$30.40	\$10.00	\$15.15	\$0.00	\$55.55
	12/01/2016	\$31.27	\$10.00	\$15.15	\$0.00	\$56.42
	06/01/2017	\$31.96	\$10.00	\$15.15	\$0.00	\$57.11
	12/01/2017	\$32.65	\$10.00	\$15.15	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 170</i>	05/01/2016	\$24.72	\$9.67	\$7.89	\$0.00	\$42.28
	12/01/2016	\$24.75	\$9.67	\$7.89	\$0.00	\$42.31
	01/01/2017	\$24.75	\$9.96	\$7.89	\$0.00	\$42.60
	02/02/2017	\$24.81	\$9.96	\$7.98	\$0.00	\$42.75
	03/01/2017	\$24.84	\$9.96	\$8.07	\$0.00	\$42.87
	04/01/2017	\$24.88	\$9.96	\$8.17	\$0.00	\$43.01
	05/01/2017	\$24.92	\$9.96	\$8.26	\$0.00	\$43.14
	12/01/2017	\$24.95	\$9.96	\$8.26	\$0.00	\$43.17
	01/01/2018	\$24.95	\$10.24	\$8.26	\$0.00	\$43.45
	02/02/2018	\$25.01	\$10.24	\$8.36	\$0.00	\$43.61
	03/01/2018	\$25.04	\$10.24	\$8.46	\$0.00	\$43.74
	05/01/2018	\$25.09	\$10.24	\$8.56	\$0.00	\$43.89
	12/01/2018	\$25.12	\$10.24	\$8.56	\$0.00	\$43.92
	01/01/2019	\$25.12	\$10.41	\$8.56	\$0.00	\$44.09
	12/01/2019	\$25.15	\$10.41	\$8.56	\$0.00	\$44.12
01/01/2020	\$25.15	\$10.46	\$8.56	\$0.00	\$44.17	
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) <i>CARPENTERS -ZONE 2 (Residential Wood)</i>	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER **	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81
** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. <i>CARPENTERS -ZONE 2 (Residential Wood)</i>						
As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.						

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CARPENTER (Residential Wood Frame) - Zone 2

Effective Date - 05/01/2011

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

Notes:

Apprentice to Journeyworker Ratio:1:5

RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) <i>ROOFERS LOCAL 33</i>	08/01/2016	\$41.11	\$11.00	\$13.00	\$0.00	\$65.11
	02/01/2017	\$42.26	\$11.00	\$13.00	\$0.00	\$66.26
	08/01/2017	\$43.36	\$11.00	\$13.00	\$0.00	\$67.36
	02/01/2018	\$44.51	\$11.00	\$13.00	\$0.00	\$68.51
	08/01/2018	\$45.61	\$11.00	\$13.00	\$0.00	\$69.61
	02/01/2019	\$46.76	\$11.00	\$13.00	\$0.00	\$70.76

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ROOFER - Local 33

Effective Date - 08/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.56	\$11.00	\$3.44	\$0.00	\$35.00
2	60	\$24.67	\$11.00	\$13.00	\$0.00	\$48.67
3	65	\$26.72	\$11.00	\$13.00	\$0.00	\$50.72
4	75	\$30.83	\$11.00	\$13.00	\$0.00	\$54.83
5	85	\$34.94	\$11.00	\$13.00	\$0.00	\$58.94

Effective Date - 02/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.13	\$11.00	\$3.44	\$0.00	\$35.57
2	60	\$25.36	\$11.00	\$13.00	\$0.00	\$49.36
3	65	\$27.47	\$11.00	\$13.00	\$0.00	\$51.47
4	75	\$31.70	\$11.00	\$13.00	\$0.00	\$55.70
5	85	\$35.92	\$11.00	\$13.00	\$0.00	\$59.92

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE	08/01/2016	\$41.36	\$11.00	\$13.00	\$0.00	\$65.36
ROOFERS LOCAL 33	02/01/2017	\$42.51	\$11.00	\$13.00	\$0.00	\$66.51
	08/01/2017	\$43.61	\$11.00	\$13.00	\$0.00	\$67.61
	02/01/2018	\$44.76	\$11.00	\$13.00	\$0.00	\$68.76
	08/01/2018	\$45.86	\$11.00	\$13.00	\$0.00	\$69.86
	02/01/2019	\$47.01	\$11.00	\$13.00	\$0.00	\$71.01
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER	07/01/2016	\$32.28	\$10.54	\$14.90	\$1.70	\$59.42
SHEETMETAL WORKERS LOCAL 63	01/01/2017	\$33.03	\$10.54	\$14.90	\$1.70	\$60.17

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 63

Effective Date - 07/01/2016

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

Effective Date - 01/01/2017

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

Notes:

Apprentice to Journeyworker Ratio:1:3

SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 2	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SIGN ERECTOR - Local 35 Zone 2

Effective Date - 06/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

Notes:
Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

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

Apprentice - SPRINKLER FITTER - Local 669

Effective Date - 01/01/2016

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

Notes:

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
STEAM BOILER OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TERRAZZO FINISHERS <i>BRICKLAYERS LOCAL 3 (WORCESTER) - MARBLE & TILE</i>	08/01/2016	\$49.70	\$10.18	\$19.22	\$0.00	\$79.10
	02/01/2017	\$50.27	\$10.18	\$19.22	\$0.00	\$79.67

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 08/01/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.85	\$10.18	\$19.22	\$0.00	\$54.25
2	60	\$29.82	\$10.18	\$19.22	\$0.00	\$59.22
3	70	\$34.79	\$10.18	\$19.22	\$0.00	\$64.19
4	80	\$39.76	\$10.18	\$19.22	\$0.00	\$69.16
5	90	\$44.73	\$10.18	\$19.22	\$0.00	\$74.13

Effective Date - 02/01/2017

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.14	\$10.18	\$19.22	\$0.00	\$54.54
2	60	\$30.16	\$10.18	\$19.22	\$0.00	\$59.56
3	70	\$35.19	\$10.18	\$19.22	\$0.00	\$64.59
4	80	\$40.22	\$10.18	\$19.22	\$0.00	\$69.62
5	90	\$45.24	\$10.18	\$19.22	\$0.00	\$74.64

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2016	\$37.20	\$7.45	\$14.00	\$0.00	\$58.65
	12/01/2016	\$38.20	\$7.45	\$14.00	\$0.00	\$59.65
For apprentice rates see "Apprentice- LABORER"						
TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2016	\$35.92	\$7.45	\$14.00	\$0.00	\$57.37
	12/01/2016	\$36.92	\$7.45	\$14.00	\$0.00	\$58.37
For apprentice rates see "Apprentice- LABORER"						
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2016	\$35.80	\$7.45	\$14.00	\$0.00	\$57.25
	12/01/2016	\$36.80	\$7.45	\$14.00	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	08/01/2016	\$33.02	\$10.91	\$10.08	\$0.00	\$54.01
	12/01/2016	\$33.02	\$10.91	\$10.89	\$0.00	\$54.82
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2016	\$48.08	\$7.45	\$14.40	\$0.00	\$69.93
	12/01/2016	\$49.08	\$7.45	\$14.40	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2016	\$50.08	\$7.45	\$14.40	\$0.00	\$71.93
	12/01/2016	\$51.08	\$7.45	\$14.40	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2016	\$40.15	\$7.45	\$14.40	\$0.00	\$62.00
	12/01/2016	\$41.15	\$7.45	\$14.40	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2016	\$42.15	\$7.45	\$14.40	\$0.00	\$64.00
	12/01/2016	\$43.15	\$7.45	\$14.40	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	08/01/2016	\$32.44	\$10.91	\$10.08	\$0.00	\$53.43
	12/01/2016	\$32.44	\$10.91	\$10.89	\$0.00	\$54.24
VOICE-DATA-VIDEO TECHNICIAN <i>ELECTRICIANS LOCAL 96</i>	12/01/2015	\$26.83	\$8.41	\$12.35	\$0.00	\$47.59

Apprentice - VOICE-DATA-VIDEO TECHNICIAN - Local 96

Effective Date - 12/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$13.42	\$8.41	\$3.78	\$0.00	\$25.61
2	55	\$14.76	\$8.41	\$3.82	\$0.00	\$26.99
3	60	\$16.10	\$8.41	\$12.03	\$0.00	\$36.54
4	65	\$17.44	\$8.41	\$12.07	\$0.00	\$37.92
5	70	\$18.78	\$8.41	\$12.11	\$0.00	\$39.30
6	75	\$20.12	\$8.41	\$12.15	\$0.00	\$40.68
7	80	\$21.46	\$8.41	\$12.19	\$0.00	\$42.06
8	85	\$22.81	\$8.41	\$12.23	\$0.00	\$43.45

Notes:

Apprentice to Journeyworker Ratio:1:1

WAGON DRILL OPERATOR <i>LABORERS - ZONE 2</i>	06/01/2016	\$31.90	\$7.45	\$12.65	\$0.00	\$52.00
	12/01/2016	\$32.65	\$7.45	\$12.65	\$0.00	\$52.75
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WATER METER INSTALLER <i>PLUMBERS LOCAL 4</i>	03/01/2016	\$42.36	\$9.35	\$14.26	\$0.00	\$65.97
	09/01/2016	\$42.96	\$9.35	\$14.26	\$0.00	\$66.57
	03/01/2017	\$43.61	\$9.35	\$14.26	\$0.00	\$67.22
	09/01/2017	\$44.21	\$9.35	\$14.26	\$0.00	\$67.82
	03/01/2018	\$44.86	\$9.35	\$14.26	\$0.00	\$68.47
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$26.11	\$7.25	\$1.78	\$0.00	\$35.14
	08/28/2016	\$26.61	\$7.50	\$1.80	\$0.00	\$35.91
	09/03/2017	\$27.14	\$7.75	\$1.81	\$0.00	\$36.70
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$36.98	\$7.25	\$8.12	\$0.00	\$52.35
	08/28/2016	\$37.70	\$7.50	\$8.87	\$0.00	\$54.07
	09/03/2017	\$38.45	\$7.75	\$9.53	\$0.00	\$55.73
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$30.46	\$7.25	\$8.34	\$0.00	\$46.05
	08/28/2016	\$31.05	\$7.50	\$8.89	\$0.00	\$47.44
	09/03/2017	\$31.66	\$7.75	\$9.44	\$0.00	\$48.85
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$23.93	\$7.25	\$1.72	\$0.00	\$32.90
	08/28/2016	\$24.39	\$7.50	\$1.73	\$0.00	\$33.62
	09/03/2017	\$24.88	\$7.75	\$1.75	\$0.00	\$34.38
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$36.98	\$7.25	\$12.29	\$0.00	\$56.52
	08/28/2016	\$37.70	\$7.50	\$12.95	\$0.00	\$58.15
	09/03/2017	\$38.45	\$7.75	\$13.61	\$0.00	\$59.81
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$32.63	\$7.25	\$9.05	\$0.00	\$48.93
	08/28/2016	\$33.26	\$7.50	\$9.63	\$0.00	\$50.39
	09/03/2017	\$33.92	\$7.75	\$10.21	\$0.00	\$51.88
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$23.93	\$7.25	\$1.72	\$0.00	\$32.90
	08/28/2016	\$24.39	\$7.50	\$1.73	\$0.00	\$33.62
	09/03/2017	\$24.88	\$7.75	\$1.75	\$0.00	\$34.38
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$19.58	\$7.25	\$1.59	\$0.00	\$28.42
	08/28/2016	\$19.96	\$7.50	\$1.60	\$0.00	\$29.06
	09/03/2017	\$20.35	\$7.75	\$1.61	\$0.00	\$29.71
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$43.51	\$7.25	\$15.06	\$0.00	\$65.82
	08/28/2016	\$44.35	\$7.50	\$15.83	\$0.00	\$67.68
	09/03/2017	\$45.23	\$7.75	\$16.61	\$0.00	\$69.59

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - LINEMAN (Outside Electrical) - East Local 104

Effective Date - 08/30/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.11	\$7.25	\$3.28	\$0.00	\$36.64
2	65	\$28.28	\$7.25	\$3.35	\$0.00	\$38.88
3	70	\$30.46	\$7.25	\$3.41	\$0.00	\$41.12
4	75	\$32.63	\$7.25	\$4.98	\$0.00	\$44.86
5	80	\$34.81	\$7.25	\$5.04	\$0.00	\$47.10
6	85	\$36.98	\$7.25	\$5.11	\$0.00	\$49.34
7	90	\$39.16	\$7.25	\$7.17	\$0.00	\$53.58

Effective Date - 08/28/2016

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.61	\$7.50	\$3.30	\$0.00	\$37.41
2	65	\$28.83	\$7.50	\$3.36	\$0.00	\$39.69
3	70	\$31.05	\$7.50	\$3.43	\$0.00	\$41.98
4	75	\$33.26	\$7.50	\$5.00	\$0.00	\$45.76
5	80	\$35.48	\$7.50	\$5.06	\$0.00	\$48.04
6	85	\$37.70	\$7.50	\$5.13	\$0.00	\$50.33
7	90	\$39.92	\$7.50	\$7.20	\$0.00	\$54.62

Notes:

Apprentice to Journeyworker Ratio:1:2

TELEDATA CABLE SPLICER
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 01/01/2016 \$28.98 \$4.25 \$3.12 \$0.00 \$36.35

TELEDATA LINEMAN/EQUIPMENT OPERATOR
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 01/01/2016 \$27.31 \$4.25 \$3.07 \$0.00 \$34.63

TELEDATA WIREMAN/INSTALLER/TECHNICIAN
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 01/01/2016 \$27.31 \$4.25 \$3.07 \$0.00 \$34.63

TREE TRIMMER
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 01/31/2016 \$18.51 \$3.55 \$0.00 \$0.00 \$22.06

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

TREE TRIMMER GROUNDMAN
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 01/31/2016 \$16.32 \$3.55 \$0.00 \$0.00 \$19.87

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

Additional Apprentices 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. Apprentices 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.

CORI COMPLIANCE / GENDER IDENTIFY & EXPRESSION

Vendors entering into contracts with the City of Worcester must affirm that their policies regarding CORI information are consistent with the CORI hiring standards set by the City of Worcester. The City’s CORI hiring policy may be downloaded from City of Worcester website www.worcesterma.gov. Questions pertaining to the City’s CORI hiring policy are to be directed to the Equal Employment Opportunity Officer, Executive Office of Human Resources at 508-799-1030 ext. 14.

CERTIFICATION

All Vendors must check one of the three lines below.

- 1. _____ CORI checks are not performed on any Applicants.
- 2. _____ CORI checks are performed on some or all Applicants. The Vendor, by affixing a signature below, affirms under penalties of perjury that its CORI policy is consistent with the standards set forth with the CORI hiring standards set by the City of Worcester.
- 3. _____ CORI checks are performed on some or all Applicants. The Vendor’s CORI policy is not consistent with the standards set forth with the CORI hiring standards set by the City of Worcester. (a copy of the Vendor’s written CORI policy must accompany this form).

(Typed or printed name of person signing quotation, bid or proposal)

Signature

Name of Business

A Vendor with a CORI policy that does NOT conform to the City standards must check Line 3. Vendors who check Line 3 will not be permitted to enter into contracts with the City, absent a waiver granted by the City. For any waiver to be granted, a written request should accompany bid submission explaining in detail why the vendor fails or refuses to comply with the City’s CORI hiring standards.

Gender Identity Standards Applicable to Vendors

The city will do business only with vendors that have adopted and employ Gender Identity policies, practices and standards that are consistent with city standards.

The city may review all vendors’ Gender Identity policies and practices for consistency with city standards.

By signing this bid, vendor confirms that their Gender Identity policies, practices and standards are consistent with those of the City of Worcester. For further information please refer to the Ordinance Relative to Gender Identity and Expression found at www.worcesterma.gov or call the LGBTQ Liaison/Director of Human Rights & Disabilities at 508-799-1152.

CITY OF WORCESTER MINORITY AND WOMEN BUSINESS ENTERPRISE PROGRAM

VENDOR/SERVICE PROVIDER CERTIFICATION

TO BE AWARDED A VENDOR/SERVICE CONTRACT, ALL PARTS OF THIS FORM THAT APPLY TO YOUR BID MUST BE COMPLETED AND SUBMITTED WITH YOUR BID.

Bidder is a Minority Business Enterprise (MBE) - see reverse for definition Yes _____ No _____

Bidder is a Woman Business Enterprise (WBE) - see reverse for definition Yes _____ No _____

IF SUBCONTRACTING any portion of the service covered by this bid, the successful bidder shall demonstrate a good faith effort to seek and use TEN PERCENT (10%) Minority and FIVE PERCENT (5%) Women-owned Businesses.

A. YOUR INTENT TO SUBCONTRACT. CHECK (✓) THE APPROPRIATE BOX:

- No work will be subcontracted. Complete Section "C" only.
 Some work will be subcontracted. Complete Section "B" and "C"

B. LIST SUBCONTRACTORS Engaged to do any portion of this Bid.

Check (✓) the appropriate box and give complete information.

MBE WBE OTHER _____

Firm Name: _____

Street Address: _____

City/State/Zip _____

Work subcontracted: _____ Dollar Value \$ _____

Check (✓) the appropriate box and give complete information.

MBE WBE OTHER _____

Firm Name: _____

Street Address: _____

City/State/Zip _____

Work subcontracted: _____ Dollar Value \$ _____

C. ITEM/SERVICE BID ON: _____ BID NO.: _____

Firm Name: _____

Street Address: _____

City/State/Zip _____

For purposes of the City’s classification and reporting program, the following definitions apply:

Minority Business Enterprise (MBE) – a for profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by minority group members. “Minority group members” are U.S. citizens who are African-American, Latin American, Native American, Asian-Pacific American and Asian-Indian American. “Ownership” by minority individuals means the business is at least 51% owned by such individuals or, in the case of a publicly owned business, at least 51% of the stock is owned by one or more such individuals. Further, those minority group members control the management and daily business operations.

Women Business Enterprise (WBE) – a for profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by women group members. “Ownership” by women means the business is at least 51% owned by women or, in the case of a publicly owned business, at least 51% of the stock is owned by one or more women. Further, those women group members control the management and daily business operations.

IMPORTANT NOTICE TO BIDDERS

City of Worcester Environmentally Preferable Purchasing Policy

The purchase and use of products and services can have a profound impact on the environment. The City of Worcester recognizes the positive impact that it can make on the environment through the purchasing decisions that it makes. It is the intent of the City of Worcester to integrate environmental considerations into every aspect of acquisition. Although the environment may not be the core of our professional mission, the integration of these factors will result in economic, health, and environmental gains that will further our goals.

Overall Statement of Policy

The City will seek to reduce the environmental damages associated with purchases by increasing acquisition of environmentally preferable products and services to the extent feasible, consistent with price, performance, availability, and safety considerations.

Environmental factors will be taken into account as early as possible in the acquisition-planning and decision-making process.

Responsibility for environmentally preferable purchasing will be shared among the program, acquisition, and procurement personnel.

Definitions

"Recycled Material" means material and by-products which have been recovered or diverted from solid waste for the purpose of recycling. It does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

"Post-Consumer Recycled Material" means material and by-products which have served their intended end-use by a consumer and have been recovered or diverted from solid waste. It does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

"Environmentally preferable products" means products that have a lesser or reduced effect on human health and the environment when compared with competing products that serve the same purpose.

Policy Statement

Bidders able to supply products containing recycled materials or environmentally preferable products which meet performance requirements are encouraged to offer them in bids and proposals. To this extent, the City reserves the right to award under the following circumstances:

- When the bidder submits an offer to supply an environmentally preferable product or recycled material.
- When the bidder documents the offer of environmentally preferable products or recycled materials.
- An environmentally preferred product or recycled material may be considered best value even when the price is greater than that of a non-environmentally preferred product or service by an amount not to exceed ten per cent.

STATE LAW MANDATES THAT TO DO BUSINESS WITH THE CITY OF WORCESTER the Massachusetts Revenue Enforcement and Protection Program of 1983 requires that the following be supplied with your bid:

DATE: _____

Pursuant to Mass. G.L. Ch. 62C, Section 49A, I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all Massachusetts State Tax Returns and paid all Massachusetts State and City Taxes required under law.

COMPANY NAME: _____

STREET ADDRESS: _____

CITY OR TOWN: _____

STATE: _____ ZIP CODE: _____

TELEPHONE NO.: _____ FAX NO. _____

SOCIAL SECURITY OR FEDERAL IDENTIFICATION NO.: _____

AUTHORIZED SIGNATURE: _____

FAILURE TO COMPLETE THIS FORM MAY RESULT IN REJECTION OF BID AND/OR REMOVAL FROM CITY BID LIST.

RIGHT TO KNOW

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L. C111f 228, 9 and 10 and the regulations contained in 441 CMR SS21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. C111F S7 and the regulation contained in 441 CMR S21-05. Failure to submit a MSDS and/or labels on each container will place the vendor in noncompliance with the purchase order and/or contract. Failure to furnish MSDS's and/or labels on each container may result in Civil or Criminal penalties, including bid debarment and action to prevent the vendor from selling said substances, or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 1.1F or M.G.L. are cautioned to obtain and read the law and rules and Regulations referenced above. Copies can be obtained from the State House Book Store, Secretary of State, State House, Room 117, Boston, MA (617) 727-2834 for \$2.00 plus \$.65 postage. In addition, copy of "Right to Know" law is available in Purchasing Department for review.

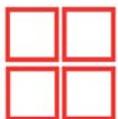
Fire Station Roof Repairs

Park Ave and Southeast Stations
424 Park Ave and 745 Grafton St.
Worcester, MA

August, 2016



DOCUMENTS PREPARED BY



NAULT ARCHITECTS INC.

71 HOPE AVENUE WORCESTER, MA 01603

TEL / FAX: (508) 755-6134 / (508) 754-4661

Established 1886

E-mail: naultarchitects@verizon.net

SECTION 00.01.00

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- A2.1 - Southeast Station Roof Details
- A2.2 - Southeast Station Side Entry Soffit

END OF SECTION

SECTION 01.11.00

SUMMARY OF WORK

I PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. This section supplements the Conditions of the Contract, Prime Requirements, Drawings, and all other parts of the Contract Documents.
- B. This Contractor must be familiar with all other Divisions and Sections of the Specifications which affect the work of this Section.

1.02 REQUIREMENTS INCLUDED

- A. Work under this Contract.
- B. Examination of Site and Documents.
- C. Contract Method.
- D. Work Sequence.
- E. Supervision of Work.
- F. Prime Contractor's Use of Premises.
- G. Coordination.
- H. Project Meetings.
- I. Permits, Inspection, and Testing Required by Governing Authorities.
- J. Cutting, Coring, Patching, Unless Otherwise Indicated.
- K. Debris Removal.
- L. Field Measurements.
- M. Safety Regulations.
- N. OSHA Safety and Health Course Documentation.
- O. Damage Responsibility.
- P. Owner Furnished Products.
- Q. Asbestos and Hazardous Materials.
- R. Special Requirements.
- S. List of Drawings.

1.03 WORK UNDER THIS CONTRACT

- A. The work to be done under this contract consists of executing and completing all work required for Roof Repairs at the Park Ave Station at 424 Park Ave, Worcester, MA and Southeast Fire Stations at 745 Grafton Street for the Worcester Fire Department (WFD).
- B. The scope of work, without limiting the generality thereof, includes all labor, materials, equipment and services required to perform the work described fully in the Drawings and Specifications and includes, but is not limited to the following major work:
 - 1. Stripping the Park Ave Station's shingle roof completely to the deck and installing a new shingle roofing system, complete with all underlayments, flashings and accessories.
 - 2. Selective repairs to the Southeast Station's metal roof system, involving removal of portions of the roofing to install new underlayments, and the reinstallation of portions of the metal roofing and replacement of other portions of the metal roofing.
- C. The following major elements will be performed by the Owner, under separate contracts, for which the Prime Contractor has a coordinating responsibility:

1. Contractors are alerted to the fact that WFD will likely have other construction projects underway at these locations, by other contractors under separate contract. The contractors for this project shall coordinate with, and accommodate the Owner's contractors, as directed by the Owner.
 2. Contractors are reminded that this is an active fire station which will remain in service 24/7 during the performance of the work. Contractors shall coordinate the set up of staging, position of equipment, dumpsters, containers and lay-down of materials, with the WFD and accommodate their needs. Materials and equipment on site shall be moved by the contractor if directed by the WFD, at no cost.
 - (a) Under no circumstance shall the apparatus bays be blocked at any time.
- D. The following major elements will be furnished by the Owner, for installation by the Contractor or sub-contractors:
1. None. The contractor shall furnish all elements required for the project.
- E. Reference to Drawings: The work to be done under this Contract is shown on the Drawings listed at the end of this Section.
- F. Prevailing Wage: The Massachusetts Standard Labor Wage rates, as outlined in the exhibits, will be used in the construction of this project

1.04 EXAMINATION OF SITE AND DOCUMENTS

- A. A pre-bid meeting will be held at the job site on the date and at the time indicated in the Invitation to Bid.
- B. Bidders may also visit the site on a non-holiday weekday acceptable to the Owner, between the hours of 9:00 AM and 3:00 PM to visually inspect the location of the work and existing conditions that may affect new work.
- C. The bidders are expected to examine and to be thoroughly familiar with all contract documents and with the conditions under which the work is to be carried out. The Owner and Designers will not be responsible for errors, omissions, and/or charges for extra work arising from the Prime Contractor's or Subcontractor's failure to familiarize themselves with the contract documents. The Prime Contractor and Subcontractors acknowledge that they are familiar with the conditions and requirements of the contract documents where they require, in any part of the work a given result to be produced, and that the contract documents are adequate and will produce the required results.

1.05 CONTRACT METHOD

- A. Work under this contract shall be lump sum price, for the scopes of work as described in these specifications and shown on the Drawings.

1.06 WORK SEQUENCE

- A. The Work will be conducted in the following sequence of demolition/construction:
 1. Actual sequence of the work will be left to the discretion of the Contractor, who will prepare a construction schedule showing the sequence and duration of work, for review and approval by the Owner.
 2. Work on both buildings may occur at the same time, provided the contractor dedicates 2 separate crews, one for each building. Once work starts on a building, it must be completed in a continuous and expeditious manner.

1.07 SUPERVISION OF WORK

- A. For this project, the Prime Contractor responsible for the complete coordination of the work, shall have DCAMM Certification as a Prime Contractor in the category of **Roofing**.
- B. The Prime Contractor shall be held directly responsible for the correct installation of all work performed under this Contract. The Prime Contractor must make good repair, without expense to the Owner, of any part of the new work, or existing work to remain, which may become inoperative on account of leaving the work unprotected or unsupervised during construction of the system or which may break or give out in any manner by reason of poor workmanship, defective materials or any lack of space to allow for expansion and contraction of the work during the Prime Contractor's warranty period, from the date of final acceptance of the work by the Owner.
- C. The Prime Contractor shall furnish a competent Massachusetts licensed superintendent satisfactory to the Owner and to the Designer. The licensed superintendent shall supervise all work under this contract and who shall remain on duty at the site throughout the Contract period while work is in progress.
 - 1. Submit the name and resume of the superintendent for approval to the Architect. Include experience with projects of equal size and complexity.

1.08 PRIME CONTRACTOR'S USE OF PREMISES

- A. Use of the Site: Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public (if applicable).
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Shutdown of utilities is not anticipated for this scope of work, and will not be permitted.
- C. The Prime Contractor can gain access to the premises during the hours specified below. In addition the Prime Contractor and his personnel will limit themselves only within the working premises during working hours. If work needs to be scheduled during times other than those listed below, Prime Contractor shall inform the Owner one week prior to work.
 - 1. Deliveries: 7:00 AM to 6:00 PM.
 - 2. Work on site: 8:00 AM to 4:00 PM
 - 3. Weekends: with Owner's consent.
 - 4. Holidays: with Owner's consent.
- D. The Prime Contractor shall verify that Subcontractors have visited the site and included all costs associated with the location of the project, and any restriction or limitations the location of the project may pose.
- E. All contractors shall at all times conduct their operations in a courteous, professional manner while on the project or in the vicinity of the project. Harassment, offensive language or behavior will not be permitted on the site.
- F. The Owner can neither accept nor assume responsibility for the security of the Contractor's material or equipment which is lost, stolen or vandalized. The Contractor is advised to exert caution in placement and storage of his equipment and material.

- G. Parking: Parking spaces on site are very limited and the Owner may not provide designated parking spaces near the construction site for the Contractor's use. The Contractor shall state his/her parking and staging area requirements during the Pre-construction Meeting. The area(s) for materials storage will then be agreed to between the Contractor and the Owner.
- H. Radios, tape players, "boom boxes", or other audio entertainment equipment, including personal entertainment devices, shall not be allowed on the project site.
- I. The Contractor shall not permit smoking within the building. Locate smoking areas away from entries, outdoor intakes, and operable windows, including adjacent buildings.
- J. The Contractor shall not allow the use of intoxicating beverages or non-prescription controlled substance drugs upon or about the work site.
- K. The Contractor shall provide and maintain in good serviceable condition at all times, warning signs and non-combustible barriers, forms and fire resistive tarps or plastic, each of which shall be approved by the Owner, shall be suitable for the purpose, and shall be installed adjacent to each work area, for complete enclosure and/or isolation of all excavations, wells, pits, manholes, shafts, overhead areas, etc., which are associated with the work under the contract. Barriers shall be a secure fence, guardrail, cover, or similar assembly designed and erected to provide protection for concrete, protection from the weather, and to prevent accidental access. Barrier tape and/or sawhorses shall not be used as a means of such access protection.

1.09 COORDINATION

- A. The Prime Contractor shall be responsible for the proper fitting of all the work and for the coordination of the operations of all Subcontractors or material and persons engaged upon the work. The Prime Contractor shall do, or cause his agents to do, all cutting, fitting, adjusting, and repair necessary in order to make the several parts of the work come together properly.
 - 1. Examine Contract Documents in advance of start of construction and identify in writing questions, irregularities or interference to the designer in writing. Failure to identify and address such issues in advance becomes the sole responsibility of the Prime Contractor. A conflict that would cause the reduction of the normal ceiling height of any occupied space is considered to be an interference.
- B. Execute the work in an orderly and careful manner with due regard to the occupants of the facility, the public, the employees, and the normal function of the facility.
- C. The work sequence shall follow planning and schedule established by the Prime Contractor as approved by the Designer and the Owner. The work upon the site of the project shall commence promptly and be executed with full simultaneous progress. Work operations which require the interruption of utilities, service, and access shall be scheduled so as to involve minimum disruption and inconvenience, and to be expedited so as to insure minimum duration of any periods of disruption or inconvenience.
- D. The Prime Contractor shall review the tolerances established in the specifications for each type of work and as established by Subcontractor organizations. The Prime Contractor shall coordinate the various Subcontractors and resolve any conflicts that may exist between Subcontractor tolerances without additional cost to the Owner.

1.10 PROJECT MEETINGS

- A. Project meetings shall be held at intervals appropriate for the overall progress of the work, subject to the discretion of the Owner.
- B. Attendees: In addition to the Project Manager and Designer, each contractor, subcontractor, supplier, and 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 Project and authorized to conclude matters relating to the Work.

- C. In order to expedite construction progress on this project, the Prime Contractor shall order all materials immediately after the approval of shop drawings and shall obtain a fixed date of delivery to the project site for all materials ordered which shall not impede or otherwise interfere with construction progress. The Prime Contractor shall present a list and written proof of all materials and equipment ordered (through purchase orders). Such list shall be presented at the meetings and shall be continuously updated.
- D. Scheduling shall be discussed with all concerned parties, and methods shall be presented by the Prime Contractor, which shall reflect construction completion not being deferred or foreshortened. Identify critical long-lead items and other special scheduling requirements. The project schedule is to include time for submission of shop drawing submittals, time for review, and allowance for resubmittal and review.

1.11 PERMITS, INSPECTION, AND TESTING REQUIRED BY GOVERNING AUTHORITIES

- A. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having any jurisdiction require any portion of the Work to be inspected, tested, or approved, the Prime Contractor shall give the Designer, the Owner or his/her designated representative, and such Authority timely notice (5 business days minimum) of its readiness so the Designer may observe such inspecting, testing, or approval.
- B. Prior to the start of construction, the Prime Contractor shall complete application to the applicable Building Code enforcement authority for a Building Permit. Such Permit shall be displayed in a conspicuous location at the project site. The building permit fee shall be paid by the Contractor.
- C. Unless otherwise specified under the Sections of the Specifications, the Prime Contractor shall pay such proper and legal fees to public officers and others as may be necessary for the due and faithful performance of the work and which may arise incidental to the fulfilling of this Contract. As such, all fees, charges, and assessments in connection with the above shall be paid by the Prime Contractor.
- D. Prime Contractor and specialized Subcontractors as applicable shall identify all permits (other than Prime building permit) required from Authorities having jurisdiction over the Project for the construction and occupancy of the work. The Prime Contractor shall prepare the necessary applications and submit required plans and documents to obtain such permits in a timely manner, and shall furnish the required information to the Building Official and obtain the required permits as early as practicable after award of the Contract.
- E. Prior to the start of construction, the Prime Contractor shall complete applicable applications, permits, and notifications to the MADEP, such as the Demolition/Construction form BWP AQ-06, and pay the required fees. These forms must be submitted at least 10 working days in advance of any regulated activity on the site. Demolition permits must be submitted for any work involving demolition, new construction and renovation.

1.12 CUTTING, CORING, AND PATCHING, UNLESS OTHERWISE INDICATED

- A. The Prime Contractor shall perform and/or coordinate all cutting, coring, fitting and patching of the work.
- B. The Prime Contractor shall coordinate that the work of the Subcontractor is not endangered by any cutting, coring, excavating, or otherwise altering of the work and shall not allow the cutting or altering the work of any Subcontractor except with the written consent of the Designer.
- C. Performance:
 - 1. Execute cutting and patching by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs.
 - 2. Employ original installer or fabricator to perform cutting and patching for:

- (a) Weather-exposed or moisture-resistant elements.
 - (b) Sight-exposed finished surfaces.
3. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes.
 4. Restore work which has been cut or removed; install new products matching existing to provide completed Work in accordance with requirements of Contract Documents.
 5. Fit work airtight to pipes, sleeves, conduit, and other penetrations through surfaces.
 6. Patch with seams which are durable and as invisible as possible. Flash and seal all penetration of exterior work. Comply with specified tolerances for the work
- D. Existing Utilities Services:
1. Interruptions to critical existing utility services will not be allowed except as scheduled per Section 01.50.00 - Temporary Facilities and Controls.
 2. The Prime Contractor shall locate and record on Drawings all existing utilities along the course of the work by such means as the Designer and the Owner may approve, and shall preserve such marked locations until the work has progressed to the point where the encountered utility is fully exposed and protected as required. It shall be the Prime Contractor's responsibility to notify the proper authorities and/or utility company before interfering therewith.
 3. All exposed conduits, wires, and/or cables shall be provided with sufficient protection and support to prevent failure, fraying, or damage due to construction operations.

1.13 DEBRIS REMOVAL

- A. The Prime Contractor shall coordinate the removal of all demolition and construction waste including waste by all Subcontractors from the job site on a daily basis.
- B. Debris shall be legally disposed of in a D.E.P. approved disposal site.
- C. The Prime Contractor shall bear responsibility for maintaining the building and site clean and free of debris, leaving all work in clean and proper condition satisfactory to the Owner and the Designer. The Prime Contractor shall ensure that each of the Subcontractors clean up during and immediately upon completion of their work. Clean up includes the following tasks:
 1. Removing all rubbish, waste, tools, equipment, appurtenances caused by and used in the execution of work.
 2. Sweeping for nails with magnetic rollers, regularly during the day whenever work is performed. Sweeping at the end of the day is not sufficient.
- D. Prevent the accumulation of debris at the construction site, storage areas, parking areas, and along access roads and haul routes.
- E. Provide containers for deposit of debris and schedule periodic collection and disposal of debris.
- F. Prohibit overloading of trucks to prevent spillage on access and haul routes.
- G. The Prime Contractor shall be responsible for proper disposal of all construction debris leaving the site.

1.14 FIELD MEASUREMENTS

- A. Although care has been taken to ensure their accuracy, the dimensions shown for existing items and structures are not guaranteed. It is the responsibility of the Prime Contractor to verify these dimensions in the field before fabricating any construction component. No claims for extra payment due to incorrect dimensions will be considered by the Owner.

1.15 SAFETY REGULATIONS

- A. This project is subject to compliance with Public Law 91 596 "Occupational Safety and Health Act" latest edition (OSHA 29 CFR 1926), with respect to all rules and regulations pertaining to construction, including Volume 36, numbers 75 and 105, of the Federal Register, as amended, and as published by the U.S. Department of Labor.
- B. Hazardous Waste Generation: Any work generating Hazardous or so-called Universal Wastes will comply with all requirements of 310 CMR 30.000. The proper storage, use and disposal of any hazardous chemicals or substances brought on site by the Contractor are the responsibility of Contractor. The Owner will not be responsible for any hazardous materials left on site, the cost to remove these materials will be the Contractor's responsibility. All hazardous wastes generated as a result of demolition and remodeling shall be contained, collected, segregated, labeled per all applicable federal EPA, Massachusetts DEP, and Federal DOT regulations or other applicable local, state or federal hazardous waste regulations, pending the appropriate disposition.

1.16 OSHA SAFETY AND HEALTH COURSE DOCUMENTATION

- A. OSHA Safety and Health Course Documentation Records: Chapter 306 of the Massachusetts Acts of 2004 requires that everyone employed at the jobsite must complete a minimum 10-hour long course in construction safety and health approved by the U.S. Occupational Safety and Health Administration (OSHA) prior to working at the jobsite. Compliance is required of Prime Contractors' and Subcontractors' on-site employees at all levels whether stationed in the trailer or working in the field. Unless the Massachusetts Attorney General's office indicates otherwise, this requirement does not apply to home-office employees visiting the site or to suppliers' employees who are making deliveries.
- B. OSHA 10 cards for anyone working on site are to be submitted prior to the first requisition.
- C. Documentation records shall be initially compiled by the Prime Contractor and Subcontractors, and the Prime Contractor shall create and maintain a copy of the documentation on site at all times.

1.17 DAMAGE RESPONSIBILITY

- A. The Prime Contractor shall repair, at no cost to the Owner, any damage to building elements, site appurtenances, landscaping, utilities, etc. caused during demolition operation and work of this Contract.

1.18 OWNER FURNISHED PRODUCTS

- A. Products indicated "N.I.C." (Not in Contract), or "E. O." (Equipment by Owner), or "O.F.O.I." (Owner Furnished Owner Installed), or other similar acronyms as defined in the contract documents will be furnished and installed by the Owner. Coordination and provision of service lines for such products shall be included under these Construction Contract Documents, if indicated. Final connections from service lines to equipment will be by the Owner, unless otherwise indicated

1.19 ASBESTOS AND HAZARDOUS MATERIALS

- A. Contractors are advised that the existing roofing has not been tested for the presence of asbestos, and is the original roofing installed on the building in 1978. For the purpose of bidding, contractors shall assume that

the shingles, underlayment and mastics contain asbestos and remove them accordingly, following the procedures set forth by the DEP.

1. Abatement of these materials by a licensed Asbestos Abatement Contractor is not required under this Contract. However, with regards to removal of the roofing materials, the Contractor shall be aware that this material contains asbestos and shall comply with all applicable regulations. Specifically, the General Contractor shall comply with OSHA 29 CFR 1926.1101 Regulations with regards to protection of employees when performing this work and Massachusetts Department of Environmental Protection (DEP) 310 CMR 7.15 (10) "Requirements for the Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials". All costs associated with compliance with these regulations and proper disposal of the material shall be borne by the General Contractor. The General Contractor shall provide a work plan to the Architect which outlines their means and methods for compliance with the aforementioned regulations and the proposed waste disposal site for the asbestos roofing material.
 - B. If other unanticipated asbestos-containing materials or other Hazardous Materials not included in Contract are discovered at any time during the course of work, the Prime Contractor shall cease work in the affected areas only and continue work in other areas, at the same time notify the Designer of such discovery. Do not proceed with work in such affected areas until written instructions are received. If removal is required, payment will be made in accordance with the contract unit prices bid for each respective material. In the absence of unit prices, costs shall be negotiated or otherwise established prior to commencement of removal, in accordance with provisions of the Contract.
 - C. The Owner or Designer will work with the Contractor to initiate removal or encapsulation of the asbestos. An extension of the completion date may be granted equal to the time lost. Proper notification must be made to the MADEP through the ANF-001 form, and the Owner.

1.20 LIST OF DRAWINGS (8 ½" x 11", included in project manual).

- A1.0 - Park Ave Station Roof Plan
- A1.1 - Park Ave Station Roof Details
- A1.2 - Park Ave Station Roof Details
- A2.0 - Southeast Station Roof Plan
- A2.1 - Southeast Station Roof Details
- A2.2 - Southeast Station Side Entry Soffit

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01.31.00

PROJECT MANAGEMENT AND COORDINATION

I. PART I - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 SUMMARY

- A. Without limitations, coordination will include Critical Path Method Scheduling (CPM), coordination of submittals, coordination of all elements of the Work, and coordination of contract closeout.
- B. Description:
 - 1. Coordinate scheduling, submittals, and work of the various trades and elements of the Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
 - 2. Coordinate sequence of the Work to accommodate Partial (Beneficial) Occupancy.
- C. Meetings:
 - 1. In addition to progress meetings, hold coordination meetings and pre-installation conferences with personnel and Sub-Contractors to assure coordination of the Work.
- D. Coordination of Submittals:
 - 1. Schedule and coordinate submittals.
 - 2. Coordinate work of various trades having interdependent responsibilities for installing, connecting to, and placing in service such equipment.
 - 3. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and effect on work of other trades.
 - 4. Contractor's mark-up will be excluded from change orders caused by lack of coordination during design.

1.03 FIELD COORDINATION

- A. Project scopes of limited complexity or limited utility installation will not require coordination drawings. The Prime Contractor remains responsible for field coordinating the work of all trades, to see that it comes together without conflict or loss of functionality.
 - 1. Where field coordination is performed, the Prime Contractor shall advise the Designers of any conflict or field condition which results in the system being installed other than as designed.
 - 2. In such instances, contractors are expected to propose alternative routes based on field conditions revealed through the performance of the demolition. Rerouting shall not be performed, however, until first approved by the Designers. No additional compensation will be due for field coordination efforts.
 - 3. Where rerouting of utilities differently than designed creates a conflict with another trade, which was not foreseen or properly coordinated between the contractors, the conflicting utility shall be revised at no

expense to the Owner, to eliminate the conflict.

II. PRODUCTS (Not Used)

III. EXECUTION (Not Used)

END OF SECTION

SECTION 01.32.00

CONSTRUCTION PROGRESS DOCUMENTATION

I. PART I - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 REQUIREMENTS INCLUDED

- A. Procedures and requirements for submission and review of progress schedules and reports.

1.03 RELATED SECTIONS

- A. Section 01.10.00 – SUMMARY
 - 1. Project meetings.
- B. Section 01.31.00 - PROJECT MANAGEMENT AND COORDINATION
 - 1. Progress and coordination meetings.
- C. Section 01.33.00 - SUBMITTAL REQUIREMENTS
 - 1. Project reports.
 - 2. Schedule of values.
 - 3. Shop drawings, product data, and samples.

1.04 CONSTRUCTION SCHEDULE

- A. Prime Contractor shall prepare and submit for Designer and Owner's information, a construction for the total work of the project. Said schedule will be coordinated with the Designer's Work Plan to include sequencing of the project work and shall be submitted within 2 weeks of pre-construction meeting.
- B. In addition, the Prime Contractor shall prepare and submit at each project meeting, a two- week look-ahead schedule. The schedule shall identify:
 - 1. Major elements of the work which were complete since the last project meeting, organized by room or by trade.
 - 2. Major elements of the work to be performed in the next two weeks, to be able to track short-term conformance to the overall project schedule.

1.05 CRITICAL PATH METHOD SCHEDULING

- A. Due to the limited complexity of the project, a Critical Path schedule is not required for construction activities, however, the Prime Contractor remains responsible for identifying the critical path of all project activities and milestones, and will not be entitled to any additional compensation or any additional days related to Change Order work unless it can be demonstrated that latent conditions impact the critical path.
- B. The critical path schedule shall be updated and resubmitted with each Application for Payment, and shall be considered a prerequisite for payment.
- C. Additional Requirements

1. Provide a list of every submittal of shop drawings, product data, samples and other submittals required by the contract, General Conditions, Supplementary Conditions and/or technical specifications of the construction contract. The list shall identify the following where applicable:
 - (a) Every long lead item required by the contract.
 - (b) When submittal approval is required, in order to have materials available on site at the appropriate time.
 - (c) Allow 10 business days for review of submittals.

II. PRODUCTS (Not Used)

III. EXECUTION (Not Used)

END OF SECTION

SECTION 01.33.00

SUBMITTALS

I. PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 RELATED DOCUMENTS

- A. This Section supplements the General Conditions.
- B. Consult the individual sections of the specifications for the specific submittals required under those sections and for further details and descriptions of the requirements

1.03 GENERAL PROCEDURES FOR SUBMITTALS

- A. Timeliness - The Contractor shall transmit each submittal to the Architect sufficiently in advance of performing related Work or other applicable activities so that the installation is not delayed by processing times, including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery, and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals to the Architect in advance of the Work.
- B. Sequence - The Contractor shall transmit each submittal in a sequence which will not result in the Architect's approval having to be later modified or rescinded by reason of subsequent submittals which should have been processed earlier or concurrently for coordination.
- C. Contractor's Review and Approval - Only submittals received from and bearing the stamp of approval of the Contractor will be considered for review by the Architect. Submittals shall be accompanied by a transmittal notice stating name of Project, date of submittal, "To", "From" (Contractor, Subcontractor, Installer, Manufacturer, Supplier), Specification Section, or Drawing No. to which the submittal refers, purpose (first submittal, resubmittal), description, remarks, distribution record, and signature of transmitter.
- D. Architect's Action - The Architect will review the Contractor's submittals and return them with one of the following actions recorded thereon by appropriate markings:
 - 1. Final Unrestricted Release: Where marked "No Exceptions Taken" the Work covered by the submittal may proceed provided it complies with the requirements of the Contract Documents.
 - 2. Final-But-Restricted Release: When marked "Note Markings" or "Comments Attached" the Work may proceed provided it complies with the Architect's notations or corrections on the submittal and complies with the requirements of the Contract Documents. Acceptance of the Work will depend on these compliances.
 - 3. Returned for Resubmittal: When marked "Resubmit" or "Rejected" the Work covered by the submittal (such as purchasing, fabrication, delivery, or other activity) should not proceed. The submittal should be revised or a new submittal resubmitted without delay, in accordance with the Architect's notations stating the reasons for returning the submittal.
- E. Processing - All costs for printing, preparing, packaging, submitting, resubmitting, and mailing, or delivering submittals required by this contract shall be included in the Contract Sum.

1.04 OR EQUALS

- A. Definition - Whenever a specification section names one or more brands for a given item, and the Contractor wishes to submit, for consideration, another brand, the submission shall be considered an "or-equal" or a "material substitution". For the purposes of this Contract, the terms "or-equal" and "material substitution" shall be considered synonymous.
- B. In no case may an item be furnished on the Work other than the item named or described, unless the Architect, with the Owner's written concurrence, shall consider the item equal to the Item so named or described.
- C. The equality of items offered as "equal" to items named or described shall be proved to the satisfaction of the Architect at the expense of the Contractor submitting the substitution.

1.05 SUBMISSION OF PRODUCT DATA

- A. The Contractor shall submit an electronic copy of Product Data, in Adobe Acrobat (pdf) format to the Architect. All such data shall be specific and identification of material or equipment submitted shall be clearly marked or highlighted. Data of general nature will not be accepted.
- B. Product Data shall be accompanied by a transmittal notice. The Contractor's stamp of approval shall appear on the printed information itself, in a location which will not impair legibility.
- C. Product Data returned by the Architect as "Rejected" shall be resubmitted until the Architect's approval is obtained.
- D. When the Product Data are acceptable, the Architect will stamp them "No Exceptions Taken", and return 1 copy to the Contractor. The Contractor shall provide and distribute additional copies as may be required to complete the Work.
- E. The Contractor shall maintain one full set of approved, original, Product Data at the site.

1.06 SUBMISSION OF SHOP DRAWINGS

- A. Shop Drawings shall be complete, giving all information necessary or requested in the individual section of the specifications. They shall also show adjoining Work and details of connection thereto.
- B. Shop Drawings shall be for whole systems. Partial submissions will not be accepted.
- C. The Architect reserves the right to review and approve shop drawings only after approval of related product data and samples.
- D. Shop drawings shall be properly identified and contain the name of the project, name of the firm submitting the shop drawings, shop drawing number, date of shop drawings and revisions, Contractor's stamp of approval, and sufficient spaces near the title block for the Architect's stamp.
- E. The Contractor shall submit to the Architect three (3) black line prints of each shop drawing or one electronic copy in Adobe Acrobat (pdf) format, at the Architect's discretion. Prints may be mailed, delivered in roll form or emailed. Each submittal shall be accompanied by a transmittal notice bearing the Contractor's approval stamp.
- F. When the Architect returns a marked submittal with the stamp "Resubmit" or "Confirm", the Contractor shall correct the original drawing or prepare a new drawing and resubmit three prints or an electronic version thereof to the Architect for approval. This procedure shall be repeated until the Architect's approval is obtained.
- G. When the Architect returns submittal with the stamp "No Exceptions Taken", the Contractor shall provide and distribute the prints for all Contractor and Subcontractors use.
- H. The Contractor shall maintain one full set of approved shop drawings at the site.

1.07 SUBMISSION OF SAMPLES

- A. Unless otherwise specified in the individual section, the Contractor shall submit two specimens of each sample.
- B. A transmittal notice with the Contractors stamp of approval shall be included with all sample submittals.
- C. Samples shall be of adequate size to permit proper evaluation of materials. Where variations in color or in other characteristics are to be expected, samples shall show the maximum range of variation. Materials exceeding the variation of approved samples will not be approved on the Work.
- D. Samples that can be conveniently mailed shall be sent directly to the Architect, accompanied by a transmittal notice. All transmittals shall be stamped with the Contractor's approval stamp of the material submitted.
- E. All other samples shall be delivered at the field office of the Project Representative with sample identification tag attached and properly filled in.
- F. If a sample is rejected by the Architect, a new sample shall be resubmitted in the specified manner. This procedure shall be repeated until the Architect approves the sample.
- G. Samples will not be returned unless return is requested at the time of submission. The right is reserved to require submission of samples whether or not particular mention is made in the specifications, at no additional cost to the Owner.

END OF SECTION

SECTION 01.50.00

TEMPORARY FACILITIES AND CONTROLS

I. PART I - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 REQUIREMENTS INCLUDED

- A. Temporary Facilities and Controls including the following:
 - 1. Temporary Water.
 - 2. Weather Protection.
 - 3. Heating During Construction.
 - 4. Temporary Power.
 - 5. Hoisting Equipment and Machinery.
 - 6. Staging.
 - 7. Maintenance of Access.
 - 8. Dust Control.
 - 9. Noise Control.
 - 10. Indoor Air Quality (IAQ) Management.
 - 11. Enclosures.
 - 12. Cleaning During Construction.
 - 13. Field Offices.
 - 14. Telephone Service.
 - 15. Sanitary Facilities.
 - 16. Construction Barriers.
 - 17. Parking.
 - 18. Debris Control and Removal.
 - 19. Safety Protection.
 - 20. Vehicle and Equipment Protection.
 - 21. Shoring.
 - 22. Construction Fence.
 - 23. Project Identification Sign.
 - 24. Delivery of Materials.
 - 25. Shut Down Notice.
 - 26. Construction Cores.
 - 27. Covered Walkways
 - 28. Excavations and Field Survey Requirements

1.03 TEMPORARY WATER

- A. Water for construction purposes will be available to contractors from exterior hose bibbs or sill cocks, paid for by the Owner. Contractors shall furnish their own hoses, and store hoses securely, disconnected from faucets, at the end of each day.
- B. Temporary hoses and temporary pipe lines used for transporting water shall not be run unattended or unprotected across parking areas, parking area entrance, walkways, plazas, or steps. Temporary hoses and temporary pipelines shall not be permitted to be installed along, through or across corridor and occupied rooms or spaces.
- C. The Prime Contractor shall provide an adequate supply of drinking water from approved sources of acceptable quality, satisfactorily cooled, for his employees and those of his Subcontractors.

- D. Use of the water may be discontinued by the Owner if, in their opinion, it is wastefully used.

1.04 WEATHER PROTECTION

- A. It is the intent of these Specifications to require that the Prime Contractor shall provide temporary enclosures and heat to permit construction work to be carried on during the months of November through March in compliance with M.G.L. Chapter 149, Section 44D(G). Under no circumstances shall the Prime Contractor suspend any work during the months of November through March because of their reluctance to provide and pay for temporary weather protection. These Specifications are not to be construed as requiring enclosures or heat for operations that are not economically feasible to protect in the judgment of the Designer. Included in the preceding category, without limitation, are such items as site work, excavation, steel erection, erection of certain "exterior" wall panels, roofing, and similar operations.
- B. "WEATHER PROTECTION" shall mean the temporary protection of that work adversely affected by moisture, wind, and cold, by covering, enclosing and/or heating. This protection shall provide adequate working areas during the months of November through March as determined by the Designer and consistent with the approved construction schedule to permit the continuous progress of all work necessary to maintain an orderly and efficient sequence of construction operations. The Prime Contractor shall furnish and install all "weather protection" material and be responsible for all costs, including heating required to maintain a minimum temperature of 50 degrees F. at the working surface. This provision does not supersede any specific requirements for methods of construction, curing of materials or the applicable general conditions set forth in the Contract Articles with added regard to performance obligations of the Prime Contractor.
 - 1. Within 30 calendar days after his award of contract, the Prime Contractor shall submit in writing to the Designer for approval, three copies of his proposed methods for "Weather Protection."
 - 2. Installation of weather protection and heating devices shall comply with all safety regulations including provisions for adequate ventilation and fire protection devices. Heating devices which may cause damage to finish surfaces shall not be used.

1.05 HEATING DURING CONSTRUCTION

- A. Temporary heat is not required for this scope of work.

1.06 TEMPORARY POWER

- A. Contractors may utilize electrical power where available in or around the Work Area, and the Owner shall pay the cost of electricity used.
 - 1. The use of cordless tools is strongly encouraged.
 - 2. Contractors shall provide their own electrical cords, and cords shall not be run through, across or draped within corridors or circulation spaces used by the public. If running electrical cords across circulation spaces is unavoidable, cords shall be secured to the floor with readily visible colored duct tape, and shall be removed as soon as power is no longer needed.
- B. Modification of electrical panels is not permitted, except where higher voltages are required for specialty tools. Any panel modifications may only be performed by a licensed electrician, and with the Owner's approval.
- C. Generators for temporary power will be permitted, located where directed by the Owner. All generators shall be equipped with mufflers and/or silencers.

1.07 HOISTING EQUIPMENT AND MACHINERY

- A. All hoisting equipment and machinery required for the proper and expeditious prosecution and progress of the work shall be furnished, installed, operated and maintained in safe condition by the individual Subcontractors and is so stated in each appropriately related Section of the Specifications. All costs for hoisting operating services shall be borne by the Subcontractors unless specifically excepted in the Contract Documents.

1. A licensed equipment manufacturer's representative shall be present at all times, to witness the erection and dismantling of all hoisting equipment and machinery, whenever such equipment is being erected or dismantled. No such work will be performed without the presence of such representative.
 2. Hoisting equipment and machinery erection and dismantling shall be performed only by trained, certified, and experienced riggers qualified to perform such work.
 3. Copies of such licenses and/or certifications, clearly indicating qualifications, shall be provided to the designer prior to commencement of such erecting and dismantling work.
- B. Review Drawings for hoisting requirements and openness of traffic access routes to installed destinations of specified equipment and furnishings.

1.08 STAGING

- A. All staging, planking and scaffolding, exterior and interior, required for the proper execution of the work and over eight feet in height, shall be furnished, installed, and maintained by the Prime Contractor.
1. Erection and dismantling of staging shall be performed only by trained, certified, and experienced staging personnel qualified to perform such work.
 2. Copies of such certifications, clearly indicating qualifications, shall be provided to the Owner prior to commencement of such erecting and dismantling work.
 3. All staging up to eight feet in height shall be provided by the individual Subcontractors as applicable to their work.
 4. Use of staging extends to the Owner's contractors as may be listed in Section 01.11.00 - Summary of Work, where applicable.

1.09 MAINTENANCE OF ACCESS

- A. The Prime Contractor shall provide and maintain for the duration of his contract, a means of access to, around and within the site, as indicated on the Contract Drawings, for vehicular traffic and authorized personnel. This means of access shall be construed to sustain the weight of equipment customarily engaged for use in construction projects of this type and magnitude. The Prime Contractor shall, without additional compensation from the Owner, furnish labor and materials as may be required from time to time to maintain this means of access in an acceptable condition as determined by the Designer. Pedestrian access shall provide adequate protection against falling debris, slippage, adequate lighting, warning and directional signs, and protection against construction activities.

1.10 DUST CONTROL

- A. The Prime Contractor shall have all Subcontractors provide adequate means for the purpose of preventing dust caused by construction operations from creating a hazard, nuisance, and from entering adjacent occupied areas throughout the period of the construction contract.
- B. This provision does not supersede any specific requirements for methods of construction or applicable general conditions set forth in the Contract Articles with added regard to performance obligations of the Prime Contractor.

1.11 NOISE CONTROL

- A. Work must be scheduled and performed in such a manner as to not interfere with the operations of the Owner. Construction work that is deemed by the Owner to be excessively noisy may be required to be done during non-normal working hours and at no additional expense.

- B. Comply with requirements of authorities having jurisdiction. Develop and maintain a noise-abatement program and enforce strict discipline over all personnel to keep noise to a minimum.
- C. Execute construction work by methods and by use of equipment which will reduce excess noise.
 - 1. Equip air compressors with silencers, and power equipment with mufflers.
 - 2. Manage vehicular traffic and scheduling to reduce noise.
 - 3. No heavy equipment may be started or idled before 7A.M.

1.12 INDOOR AIR QUALITY (IAQ) MANAGEMENT

- A. Minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to environmental tobacco smoke. At a minimum, take the following measures:
 - 1. Prohibit smoking in the building.
 - 2. Locate exterior designated smoking areas away from entries, outdoor air intakes, and operable windows.
- B. During Construction:
 - 1. Protect the building interior from dust and odors associated with construction operations by closing windows and shutting down intake fans and air conditioners in the vicinity of the work. Restore ventilation to the building as soon as dust/odor generating work concludes.

1.13 ENCLOSURES

- A. Not required.

1.14 CLEANING DURING CONSTRUCTION

- A. Unless otherwise specified under the various Sections of the Specifications, the Prime Contractor shall perform clean-up operations during construction as herein specified.
- B. Control accumulation of waste materials and rubbish; periodically dispose of off-site in a legal manner. The Prime Contractor shall bear all costs, including fees resulting from such disposal.
- C. Clean all dirt and debris tracked into other buildings by construction personnel, to the satisfaction of the Owner.
- D. Maintain project in accordance with all local and Federal Regulatory Requirements.
- E. Store volatile wastes in covered metal containers, and remove from premises.
- F. Prevent accumulation of wastes which create hazardous conditions.
- G. Provide adequate ventilation during use of volatile or noxious substances.
- H. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.
 - 4. Identify potential sources of cleaning water runoff and propose abatement procedures.
- I. Use only those materials which will not create hazards to health or property and which will not damage surfaces.
- J. Use only those cleaning materials and methods recommended by manufacturer of surface materials to be cleaned.
- K. Execute cleaning to ensure that the buildings, the sites, and adjacent properties are maintained free from accumulations of waste materials and rubbish and windblown debris, resulting from construction operations.

- L. Provide on-site containers for collection of waste materials, debris, and rubbish.
- M. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal dump site (DEP approved). Recycle where possible.
- N. Handle material in a controlled manner with as few handlings as possible. Do not drop or throw materials from heights.
- O. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not damage surrounding surfaces.

1.15 FIELD OFFICES

- A. Space is not available on site or in the building for a field office.

1.16 TELEPHONE SERVICE

- A. Wired telephone service to the office trailer or project site is not required, although contractors may elect to have such service at their own expense.
- B. All Designers, Superintendents and Project Managers shall maintain cellular telephones and be reachable Monday - Friday between 8AM and 5PM, and after hours for emergency calls. Phone numbers shall be listed on a Project Directory, to be submitted at the pre-construction meeting.

1.17 SANITARY FACILITIES

- A. Use of toilet facilities within the building is prohibited.
- B. The Prime Contractor shall provide suitable toilet facilities on each site, in a location as required by the Owner. Maintain chemical toilets where work is in progress and in quantity required by OSHA Code.
- C. Chemical toilets and their maintenance shall meet requirements of state and local health regulations and ordinances and shall be subject to the approval the Owner and Designer.

1.18 CONSTRUCTION BARRIERS

- A. Proper construction barriers shall be provided around the contract work areas as defined by the Contract Drawings or as directed by the Owner.
- B. Construction barriers shall consist of traffic cones, ribbons, tapes, secure fencing, trench covers, wood barriers, warning signs, directional signs, and other traffic materials to keep traffic and people from area of construction and maintain ongoing operations.
- C. Barriers shall be erected at such approved locations as are necessary, sufficiently cross-braced and supported adequately from floors and ceilings as required.

1.19 PARKING

- A. Parking spaces on site are very limited and the Owner may not provide designated parking lot spaces near the construction site for the Contractor's use. Contractors shall anticipate the need to park off-site, and carpool to the project area.
- B. Contractor's shall park where directed by the Owner, and move vehicles when requested by the Owner.
 - 1. Under no circumstances are apparatus bays to be blocked by vehicles, at any time. This includes idling and standing vehicles.

2. Access to loading docks, driveways, staff, faculty, visitor or tenant parking shall not be blocked by construction vehicles.
 3. Parking in handicapped accessible spaces will not be permitted.
- C. Idling of vehicles on site will not be permitted.
- D. If the Owner authorizes parking on lawns, the Prime Contractor shall be responsible for repairing any damage to lawns or curbs from parked vehicles.

1.20 DEBRIS CONTROL AND REMOVAL

- A. Debris shall not be permitted to accumulate or migrate and the work shall at all times be kept satisfactorily clean. Facility trash receptors shall not be used for the disposal of debris. Dumpster shall be provided by the Prime Contractor for removal of debris for all Subcontractors.
- B. Remove debris from the work site on a daily basis and dispose of same at any (private or public) DEP approved dump that the Prime Contractor may choose providing that the Prime Contractor shall make all arrangements and obtain all approvals and permits necessary from the owner or officials in charge of such dumps. During disposal process, copies of daily receipts from dumpsite shall be submitted on a regular basis.

1.21 SAFETY PROTECTION

- A. At no time shall the work be left unattended without proper safety protection and shall not be left unprotected to the weather and accessible to the public. It is the responsibility of the Prime Contractor to maintain proper safety protection for the public while work is in progress or unattended.

1.22 VEHICLE AND EQUIPMENT PROTECTION

- A. All construction activities shall be performed in such a manner so as not to dust, stain or damage any building elements, equipment, vehicles, etc. within general vicinity of the construction work area. Any damage to these items shall be cleaned and repaired at the expense of the Prime Contractor.
1. All construction vehicles and equipment on site shall be effectively disabled and secured when not in use.

1.23 SHORING

- A. The Subcontractors shall provide all temporary shoring and bracing as required for the proposed work. Comply with all applicable codes and standards.

1.24 CONSTRUCTION FENCE

- A. A construction fence shall be provided at all areas where work is being performed and at all pedestrian walkways throughout construction. Fencing shall be kept in good repair at all times, and shall be arranged to maintain ongoing operation's access and egress.
- B. Maintain pedestrian passages between the construction site and adjacent buildings.
- C. Construction fence may be plastic "snow fence" minimum 36" high, attached to sawhorses.
- D. Fencing shall be removed by the Prime Contractor at no cost to the Owner at such time before final completion as the Designer directs. Restore site to acceptable condition after removing fence.

1.25 PROJECT IDENTIFICATION

- A. No project sign is required by the Owner.
- B. If the Contractor wishes to provide a project sign, at his own expense, the Owner reserves the right to approve

the content and appearance of the sign.

- C. Any signs will be located on site where directed by the Owner, and shall be relocated or removed if the Owner so directs.

1.26 DELIVERY OF MATERIALS

- A. All Materials shall be delivered to the Contractor's or Sub-Contractor's warehouse or may be delivered to the site if the Contractor's representative is present to receive them.
- B. No materials will be received by the Owner's personnel.

1.27 SHUT DOWN NOTICE

- A. The shutdown of building utilities is not required for this project scope, and will not be allowed. Buildings shall operate unaffected, 24/7 throughout the performance of the Work.
- B. If protection of overhead electrical service is required for the execution of the Work, the Prime Contractor shall arrange for such protection to be placed by the Utility Company, sufficiently in advance of the performance of the Work such that the schedule is not adversely affected.

- 1. Upon completion of the Work, the contractor shall notify the Utility Company to remove protections.

1.28 EXCAVATIONS AND FIELD SURVEY REQUIREMENTS

- A. Not applicable.

II. PART II - PRODUCTS (Not Used)

III. PART III - EXECUTION (Not Used)

END OF SECTION
01.50.00

SECTION 01.73.29

CUTTING AND PATCHING

I. PART-1 GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 - GENERAL REQUIREMENTS, which are hereby made a part of this section of the specifications.

1.02 SCOPE OF WORK

- A. The General Contractor shall coordinate the work to ensure that all embedded or concealed items are placed prior to the closing of construction. Where opening up construction is required to install any aspect of the work, the General Contractor shall be solely responsible for the cutting and patching of such materials.

1.03 SUMMARY

- A. This Section specifies administrative and procedural requirements for cutting and patching.
- B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching.

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.
- B. Obtain approval of the cutting and patching proposal from the Designer before cutting and patching structural elements.
- C. 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.
- D. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Designer's opinion, reduce the building's esthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

1.05 RELATED SECTIONS

- A. Section 4.13 - General Conditions of the Contract, Article 3.

II. PART 2 - PRODUCTS

2.01 MATERIALS

- A. The scope of this project is generally limited to roof work, and interior cutting/patching is generally not anticipated. However, if the Work impacts materials other than roofing, they shall be repaired using materials as specified herein.
- B. Use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

- C. Concrete, where used to patch abandoned penetrations in floors or roofs, shall be:
 - 1. Normal weight concrete proportioned in accordance with ACI 211.1 and ACI 30 for 4,000 psi compressive strength @ 28 days.
 - 2. At openings over 6" wide, provide ASTM A 615/A 615M, Grade 60, deformed reinforcing bars doweled into to the existing slab 48" on center, both sides, staggered.
 - 3. At horizontal openings less than 6" wide, chip out the top of the opening to enlarge it, creating a tapered or conical hole to patch, such that the patch material cannot drop through the hole.
- D. Grout, where used to close annular space around floor or wall penetrations, shall be:
 - 1. non-shrink type, prepackage and preproportioned, requiring only the addition of potable water before use, meeting or exceeding the following standards:
 - (a) General Properties: ASTM C 1107-02
 - (b) Compressive strength: ASTM C 109
 - (c) Bond Strength: ASTM C 882
- E. Lumber: where cutting of lumber is required for the installation of utilities or recessed items such as toilet room accessories, or for the incidental replacement of damaged or unsuitable framing materials, new materials used to patch, sister, header or box out openings shall be kiln dried, stud grade S-P-F dimensional lumber with a dressed size of 1½" x the depth of the members receiving the work.
 - 1. Use pressure treated lumber when in contact with ground, masonry, concrete or for roof blocking, with CCA preservative and a minimum retention rate of 0.25 pcf. Treat all cut ends by touching up in field with preservative. Use only galvanized fasteners and separate from materials which will react with preservative by using a separation sheet of peel-and-stick bituminous flashing tape.
- F. Roofing: any cutting or patching of the existing roof shall be performed by a qualified roofer authorized by the membrane manufacturer. Patching materials shall be the same or compatible with those materials existing on the roof, unless the roof manufacturer recommends otherwise.
- G. Gypsum Board: patch gypsum board with ASTM C-1396 board materials of a thickness to match existing.
 - 1. Patches in rated assemblies shall be made with Type X materials.
 - 2. Patches in wet areas shall be made with MR (moisture resistant) materials.
 - 3. Joints and fasteners shall receive 3 coats of setting or drying type joint compound (contractor's option), sanded and feathered in successive wider applications to deliver a Level 4 finish to the patched area.
- H. Plaster: Where cutting and patching involves plaster, comply with the following:
 - 1. Comply with ASTM C 842
 - 2. Comply with manufacturer's instructions and install thickness and coats as indicated.
 - 3. Unless otherwise indicated, provide 3-coat work.
 - 4. Base Coat: Ready-mixed, sand aggregate gypsum plaster base.
 - 5. Finish Coat: Ready-mixed gypsum finish plaster.
 - 6. Finish gypsum plaster to match existing adjacent surfaces. Sand lightly to remove trowel marks and arises.

III. PART 3 - EXECUTION

3.01 PROTECTION

- A. Protect existing trees, plants, roads, walls etc. to remain. Special protection of any lawns and planting around buildings is the responsibility of the Contractor. Contractor will replace any planting killed or damaged by

construction operations.

3.02 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
 - 1. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
 - 2. Take all precautions necessary to avoid cutting existing pipe, conduit or duct work serving the building, but scheduled to be removed or relocated until provisions have been made to bypass them.
- C. Furnish dropcloths, erect dust partitions and take other measures as required to control dust generated by cutting activities and prevent its spread to adjacent areas

3.03 PERFORMANCE

- A. The General Contractor shall be responsible for all cutting and patching, including all cutting and patching required by sub contractors.
 - 1. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.
 - 2. Before proceeding, meet at the site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- B. General: Employ skilled workmen to perform cutting and patching. Where required to maintain an existing product or system warranty, such as a roof warranty, employ a manufacturer's approved and warranted Contractor to perform the cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- C. Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer; comply with the original installer's recommendations.
 - 1. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Cut through concrete and masonry using a cutting machine such as a Carborundum saw or diamond core drill.
- D. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

2. Where removal of walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary to achieve uniform color and appearance.
3. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch, after the patched area has received primer and second coat. Touch-up painting may stop at a corner, pilaster or other visual break in the repaired surface.
4. Patch, repair or re-hang existing ceilings as necessary to provide an even plane surface of uniform appearance.

E. Site Repair:

1. Restore all lawns, plantings, trees to their original condition.
2. Repair all walkways and driveways that were damaged due to construction.

3.04 CLEANING

- A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature.
- B. Clean any portions of the building which were affected by dirt or dust generated by cutting, sanding or other construction activities.

END OF SECTION

SECTION 01.77.00

CLOSEOUT PROCEDURES

I. PART 1 - GENERAL

1.01 SCOPE

- A. This section lists the procedures required for the proper completion of this project including processing the Release of Retainage and making the Final Payment to the Contractor.
- B. Consult the Individual sections of the specifications for requirements affecting Project Close Out.

1.02 RELATED DOCUMENTS

- A. This section supplements the General Conditions.
- B. Consult the individual sections of the specifications for specific items required under those sections.

1.03 SUBSTANTIAL COMPLETION

- A. Prior to requesting Substantial Completion the Contractor shall make a thorough inspection of the Work. During this inspection the Contractor shall prepare a comprehensive list of all items remaining to be completed or corrected. This list shall include all remaining Contractor and Subcontractor items to be provided under the Contract Documents.
- B. Upon completion of the items noted on the Contractor's list the Contractor shall notify the Architect that the Work is Substantially Complete. The Architect shall then conduct a similar thorough inspection. If the Architect agrees that the Work is Substantially Complete, the Architect will promptly make a thorough inspection and prepare a punch list, setting forth in accurate detail any items on the Contractor's list and additional items that are not acceptable or incomplete. The Contractor shall coordinate all Subcontractors to achieve prompt completion of the punch list.
- C. The Contractor shall not be relieved of the responsibility to provide Contract items left off of the Architect's punch list.
- D. If the Architect determines that the Work is not Substantially Complete, the Architect shall inform the Contractor of those items that must be completed before the Architect will prepare a punch list. Upon completion of those items, the Contractor shall again request the Architect to prepare a punch list.
- E. When the punch list has been prepared, the Architect will arrange a meeting with the Contractor and Subcontractors to identify and explain all punch list items and answer questions on work which must be done before final acceptance.
- F. The Architect may revise the punch list, from time to time, to ensure that all items of Work are properly completed.
- G. The Architect shall prepare the Certificate of Substantial Completion in accordance with the General Conditions.
- H. The Contractors shall correct the items noted on the punchlist(s). The Prime Contractor shall check the work of his forces, and of all sub-contractors to verify that the work has been corrected, and notify the architect that the project is ready for reinspection. The Architect and Engineers may, at their discretion, check the work to confirm the punchlist has been completed, and advise the Owner.
 - 1. If the Contractor calls for reinspection, and the Project is not actually ready or punchlist items have not been corrected and subsequent reinspections are required, the Architect reserves the right to bill the Owner for the reinspections, and such monies will be deducted from the balance due to the

Contractor.

1.04 RECORD DRAWINGS

- A. As-built Drawings shall consist of all the Contract Drawings. As-built Drawings shall be kept up-to-date. Information from on-going Work shall be recorded on As-built Drawings within 48 hours of Work being performed.
- B. The As-built Drawings shall be maintained in a clean, dry, and legible condition and shall not be used for construction purposes and shall be available at all time for inspection by the Project Manager or Designer. All deficiencies noted shall be promptly corrected.
- C. Record all changes, including change orders, in the location, size, number and type both horizontally and vertically of all elements of the project which deviate from those indicated on all the Contract Drawings.
 - 1. The tolerance for the actual location of utilities and appurtenances within the building to be marked on the As-built Drawings shall be plus or minus two (2) inches.
- D. At the end of each month and before payment for materials installed, the Prime Contractor, each Subcontractor, the Architect and Project Manager shall review the As-built Drawings for purpose of payment.
 - 1. If the changes in location of all installed elements are not shown on the As-Built Drawings and verified in the field, then the material shall not be considered as installed and payment will be withheld.
- E. Prior to the installation of all finish materials, a review of the As-built Drawings shall be made to confirm that all changes have been recorded. All costs to investigate such conditions shall be borne by the applicable party as determined by the Designer.
- F. The original hand-noted as-Built Drawings shall be scanned in color to Adobe Acrobat (*.pdf) format and submitted on CD or DVD to the Designer, to be added to the complete plans as constructed.

1.05 RECORD SURVEYS

- A. Not required.

1.06 OPERATING AND MAINTENANCE INSTRUCTIONS

- A. Consult the individual sections of the specifications for the specific requirements for those sections and for further details and descriptions of the requirements.
- B. Prior to final payment and completion the Contractor shall provide Operating Manuals and Maintenance Instructions binders, including the following information:
 - 1. A concise, typed list of all colors selected, with the manufacturer and model numbers.
 - 2. The contractor's warranty and the roofing manufacturer's warranty, both on letterhead and identifying the date of Substantial Completion as the start date for the warranty.
 - 3. All approved submittals.
 - 4. Signed-off building permit, and other permits if issued.
 - 5. Waste manifest for any hazardous materials disposed of.

1.07 PARTIAL RELEASE OF RETAINAGE

- A. If within 65 days after Substantial Completion, any of the items on the Architect's punch list are not complete or if the Contractor has not provided the appropriate marked up As Built Drawings, Operating Manuals, Warranties, Guarantees, or Spare Parts the Architect shall assign a monetary value for each incomplete item as well as any other items as provided by M.G.L. c.30 §39K, and the Architect shall

prepare a Certificate for Partial Release of Retainage

- B. If the Architect is required to prepare a Certificate for Partial Release of Retainage the Contractor shall complete all remaining Work in accordance with the provisions of the General Conditions.
- C. The Contractor's signature on this Certificate shall be notarized.
- D. The Contractor may make a request for additional releases of retainage when portions of the Work listed on the Architect's punch list have been satisfactorily completed. Each request shall be accompanied by a new application for payment and a new signed and notarized Certificate for Partial Release of Retainage.
- E. The Architect's inspections, required to complete the additional payment applications described above, are subject to provisions of the General Conditions.
- F. If the Owner has required Performance and Payment Bonds, then prior to the partial release of retainage, the Prime Contractor shall submit to the Owner Consent of Surety to Partial Release of Retainage using AIA Document G707A or an equivalent document.

1.08 FINAL RELEASE OF RETAINAGE

- A. Prior to the final release of retainage, the Prime Contractor shall submit to the Owner:
 - 1. Consent of Surety, using AIA Document G707 or similar document, if performance and payment bonds were required for the project.
 - 2. Contractor's Affidavit of Release of Liens, using AIA Document G706A or equivalent. This document shall be accompanied by certified statements from all sub-contractors working on the project, that they have received all monies due, and have paid all suppliers and sub-sub contractors accordingly.
 - (a) Should any payments be outstanding and contingent upon receipt of the retainage in order to be paid, the Prime Contractor shall submit AIA Document 706, itemizing those items which have not been paid.

END OF SECTION

SECTION 06.10.00

ROUGH CARPENTRY

I. PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 - GENERAL REQUIREMENTS, which are hereby made a part of this Section of the Specifications.
- B. This Contractor must be familiar with all other Divisions and Sections of the Specifications which affect the work of this Section.

1.02 DESCRIPTION OF WORK

- A. **Work included:** Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. Plywood.
 - 2. Nails and fasteners for securing items of this section.
- B. **Alternates:** None.
- C. **Items to Be Installed Only:** Install the following items as furnished by the designated Sections:
 - 1. None. All items to be installed by this trade, shall be furnished by this trade.
- D. **Items to Be Furnished Only:** Furnish the following items for installation by the designated Sections:
 - 1. None.
- E. **Related Work Specified Elsewhere:** The following items are not included in the Section, and will be performed under the designated Section:
 - 1. None.

1.03 REFERENCES

- A. APA: American Plywood Association.
- B. AWWA (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.
- C. NFPA: National Forest Products Association.

1.04 SUBMITTALS

- A. Product Data:
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification

by treating plant that treated materials comply with requirements. Indicate type of preservative used, net amount of preservative retained, and chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.

2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
 3. Include copies of warranties from chemical treatment manufacturers for each type of treatment.
- B. Samples: not required.
- C. Shop Drawings: none required.
- D. Schedule: not required.
- E. Qualification Data: not required.

1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
1. Lumber Grading Agency: Certified by ALSC.
 2. Plywood Grading Agency: Certified by APA.
- B. The maximum moisture content for lumber products shall be 19 percent on air-dried stock, and 15 percent maximum on kiln-dried (KD) stock. All lumber stock shall be furnished air-dried unless specifically noted otherwise.
- C. Except when particular types of dressing are specified for certain products, surface lumber four sides (S4S).

1.06 DELIVERY, STORAGE AND HANDLING

- A. Keep materials dry during delivery and storage. Store all materials indoors, within the project area. No outdoor storage will be permitted.
- B. Stack lumber and plywood, and provide air circulation within stacks. Do not store or erect material in wet or damp portions of the building or in areas where plastering or similar work is to be executed until such work has been completed and has become reasonably dry.

1.07 PROJECT CONDITIONS

- A. The Contractor must examine the substrate and supporting structure and the conditions under which the carpentry work is to be installed, and notify the Architect in writing of conditions detrimental to the Work. The Contractor must notify the Architect if the existing conditions are not acceptable for shingle installation. Do not proceed with the installation until unsatisfactory conditions have been corrected in a manner acceptable to the Architect.
- B. Coordination: Fit carpentry work to other work; scribe and cope as required for accurate fit. Coordinate location of furring, nailers, blocking, grounds and similar supports to allow proper attachment of other Work.

1.08 WARRANTY

- A. Contractor's standard 1-year warranty on installed items.
- B. Manufacturer's standard warranty on treated lumber.

II. PART 2 - PRODUCTS

2.01 WOOD PRODUCTS, GENERAL

- A. Plywood Panels:
 - 1. Plywood: Either DOC PS 1 or DOC PS 2, unless otherwise indicated.
 - 2. Thickness: As needed to comply with requirements specified but not less than thickness indicated.
 - 3. Factory mark panels according to indicated standard.

2.02 PANEL PRODUCTS

- A. Sheathing: Exterior Type, Standard Grade with exterior glue; Douglas Fir, 5 ply thickness to match the existing sheathing. Note: 4 ply, southern yellow pine plywood is not acceptable.
- B. Soffits: Medium Density Overlay (MDO), 5/8" thickness.
- C. Plywood Grading: Comply with Product Standard PS 1, "Construction and Industrial Plywood".
- D. Certification and Marking: The producer shall include a Certificate of Inspection with each shipment. Grade mark each panel in compliance with applicable standards of Product Standard PS 1.
- E. Moisture Content: Provide plywood which has been seasoned by kiln drying to a moisture content not to exceed 19%.
- F. Thickness:
 - 1. Where used to patch or infill existing openings in roof sheathing, match existing.

2.03 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
 - 1. Where carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Wire, Brads, and Staples: FS FF-N-105
- C. Power-Driven Fasteners: CABO NER-272.
- D. Screws:
 - 1. Wood Screws: ASME B18.6.1.

III. PART 3 - EXECUTION

3.01 GENERAL

- A. Replace deteriorated roof sheathing materials with new sheathing, as specified above. In addition to the areas specifically noted on the Drawings to receive new sheathing, contractors shall include in the bid 64 sf of additional new sheathing to be installed where damaged sheathing is revealed after removing roofing materials.

- 1. Contractors shall expect the repair materials to be installed in pieces as needed, and not as full sheets

3.02 INSTALLATION

A. INSTALLATION, GENERAL

- 1. Discard units of material with defects that impair quality of carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.
- 2. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- 3. Securely attach carpentry work as indicated and according to applicable codes and recognized standards.
- 4. Use fasteners of appropriate type and length. Predrill members when necessary to avoid splitting wood.
 - (a) Soffits shall be screwed.

END OF SECTION
06.10.00

SECTION 07.31.00

SHINGLE ROOFING

I. PART 1 - GENERAL

1.01 GENERAL

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 DESCRIPTION OF WORK

- A. **Work included:** Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
1. Installing a new roof system, including but not limited to asphalt roof shingles, underlayment, rubberized membrane underlayment, drip edge, and other sheet metal flashings, starter strips, nails and other fasteners, and plastic cement and other items required for a complete watertight installation.
 2. Lining existing gutters with elastomeric roofing.
- B. **Alternates:** None.
- C. **Items to Be Installed Only:** Install the following items as furnished by the designated Sections:
1. None. All items to be installed by this trade, shall be furnished by this trade.
- D. **Items to Be Furnished Only:** Furnish the following items for installation by the designated Sections:
1. None.
- E. **Related Work Specified Elsewhere:** The following items are not included in the Section, and will be performed under the designated Section:
1. 06.10.00 - ROUGH CARPENTRY, for patching products at roof sheathing.

1.03 SUBMITTALS

- A. General: Submit in accordance with section 01.33.00.
- B. Product data for each type of product specified, including details of construction relative to materials, dimensions of individual components, profiles, textures, and colors.
- C. Samples for initial selection in the form of manufacturer's sample finishes showing the full range of colors and profiles available for each type of asphalt shingle indicated.

1.04 QUALITY ASSURANCE

- A. All roofing accessories shall be by the manufacturer of the roofing material whenever possible.
- B. Provide certificate of compliance from shingle manufacturer for ASTM and UL Standards, indicating

conformance to Contract requirements.

- C. Maintain one (1) copy of manufacturer's application instructions on site.
- D. All shingles shall have same Lot Number.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's unopened bundles or containers with labels intact.
- B. Handle and store materials at Project site to prevent water damage, staining, or other physical damage. Store roll goods on end. Comply with manufacturer's recommendations for job-site storage, handling, and protection.

1.06 JOB CONDITIONS

- A. Substrate: Proceed with shingle work only after substrate construction and penetrating work have been completed.
- B. Weather Conditions: Proceed with shingle work only when weather conditions are in compliance with manufacturer's recommendations and when substrate is completely dry.
- C. ABSOLUTELY NO WORK WILL BE DONE IN THE RAIN.
- D. NO SHINGLE WORK SHALL BE PERFORMED WHEN THE AIR TEMPERATURE IS BELOW 32° F

1.07 WARRANTY

- A. In addition to those Guarantees and Warrantees required by the General Conditions the Contractor shall provide:
 - 1. The Contractor shall provide the Owner with a copy of the Bill of Sale for the Shingles clearly indicating the product, quantity, purchase date, and a note indicating the project for which the product is intended.
 - 2. The installing contractor shall warranty watertightness of the entire system for a period of 2 years from Substantial Completion.
 - 3. The Shingle Manufacturer shall warranty the shingles as follows:
 - a. Initial non pro-rated warranty period of 5 years
 - b. Overall warranty period of 50 years.
 - c. Wind ("blow-off") warranty of 15 years for wind speeds up to 110 mph.
 - d. Algae resistance warranty of 10 years.
 - 4. Satisfactory delivery of warrantees shall be precedent to final payment.

II. PART 2 - PRODUCTS

2.01 SHINGLES

A. MANUFACTURERS

1. Certainteed "Landmark TL"
2. GAF "Timberline Lifetime HD"
3. Owens Corning "TruDefinition Duration"
4. Approved equal fiberglass/asphalt laminated architectural shingle meeting the following:
 - a. ASTM D 3018, Type 1
 - b. ASTM D 3462 Tear Resistance
 - c. ASTM E 108, UL 790 Fire Resistance: Class A
 - d. ASTM D7158, Class H
 - e. ASTM D3161, Class F
 - f. Algae Resistant
5. Ridge Caps: Use manufacturer's Distinctive Ridge Caps designed for use with the Specified Product.
6. Color: one color shall be selected by the Owner from the full range of colors available.

2.02 SHINGLE ACCESSORIES

- A. Waterproof Underlayment (ice and water shield):
 1. GAF "Storm Guard".
 2. Grace 40 mil ice and water shield.
 3. Owens Corning "Weatherlock Cold Climate"
 4. EMCO "Proguard Waterproofing Membrane".
 5. CertainTeed Corporation "WinterGuard"
 6. or approved equal.
- B. Fiberglass reinforced Roof Deck Protection: UL Classified for use with Class A Asphalt Shingles to meet roof shingle manufacturer's requirement, complying with ASTM D 226, ASTM D4869, 36" wide.
 1. GAF Shingle mate
 2. Tarah Type 30 ASTM Saturated Felt
 3. United Roofing Manufacturing #30 HD ASTM 4869 Type II
 4. or approved equal.
- C. Nails: 11 or 12-gage, sharp pointed, conventional roofing nails with barbed shanks, minimum 3/8" diameter head and of sufficient length to penetrate through sheathing. Length to penetrate 3/4 inch into solid decking or at least 1/8 inch through plywood sheathing.
 1. Where hot-dipped galvanized nails are used, nails shall meet ASTM A-153 Hot Dip Galvanizing Spec.
 2. Electrogalvanized nails will be acceptable in locations where they are fully covered by shingles or other construction.
 3. Where nails are in contact with flashing, prevent galvanic action by providing nails made from the same metal as that of the flashing.
- D. Asphalt Plastic Cement: Rubber reinforced asphalt cement with mineral fibers complying with ASTM D-4586 Type 1, ASTM D 3409 and federal Spec SS-C-153 Type 1 (Asbestos-Free) designed for trowel application. Material shall be Karnak #19 Ultra Rubberized Flashing Cement, APOC 128 All Pro SBS Rubberized Flashing Cement, BLACK JACK Premium Rubberized or equal.

2.03 FLASHINGS

- A. Drip Edge: 16 oz. red copper. Formed to provide a minimum 1" inch flange with 3/4" drip at lower edge and a minimum 6" roof deck flange. Furnish in 8' or 10' lengths. Do not install drip edge in pieces shorter than 24". At gutter, the drip edge shall be hemmed and locked to existing gutter flange.
- B. Plumbing Vent Flashings: Salvage and reinstall existing.
- C. Step flashings: protect and reuse existing.
- D. Cricket flashing: 16 oz. red copper, fabricated from a single sheet.
- E. Gutter lining: EPDM, unreinforced 45 mil or uncured strip flashing of sufficient width and length to line gutters without seams.
 - 1. Bonding adhesive and substrate cleaners as recommended by membrane manufacturer.

III. PART 3 - EXECUTION

3.01 PREPARATION AND PROTECTION

- A. Provide, erect and maintain catch platforms, lights, barriers, weather protection, warning signs and other items as required for the protection of the workers engaged in demolition operations and the public.
- B. Provide fire protection in accordance with local fire department requirements.
- C. Do not close or obstruct streets or sidewalks without the proper permit. Conduct operations with minimum traffic interference.
- D. Protect public and private property adjacent to and on the job site, including landscaping, vents, utility lines, streets, sidewalks, light standards, hydrants, street signs, mail boxes and fire alarm boxes. Make repairs to the complete satisfaction of the owner of the damaged property.
- E. Make such explorations and probes as are necessary to ascertain any required protective measures before proceeding with demolition and removal work.
- F. Provide and maintain temporary protection of the existing structure designated to remain where demolition and removal work is being done, connections made, materials handled or equipment moved, including but not limited protecting areas where roofing has been re-moved and new work has not be made the existing weather tight.
- G. Protect items scheduled to remain, from being damaged during demolition operations.
- H. Clean substrates of projections and substances detrimental to application. Cover knotholes or other minor voids in substrate with sheet metal flashing secured with non-corrosive roofing nails.
- I. Coordinate installation with flashings and other adjoining work to ensure proper sequencing.

3.02 DEMOLITION

- A. Remove all existing roofing, flashings, underlayments and accessories, down to the existing deck.

1. Where items are noted to be salvaged, carefully remove and protect them from damage, until ready for reinstallation.
 2. Protect existing gutters from damage during demolition operations.
- B. Remove portions of sheathing from eaves as noted.
- C. Inspect decking revealed by demolition for damages. Replace damaged areas with new sheathing as specified in Division 6.
- D. Do not remove more roofing than can be reinstalled in the same day.

3.03 SHINGLE INSTALLATION

- A. General: Comply with manufacturer's instructions and recommendations but not less than those recommended by ARMA's "Residential Asphalt Roofing Manual" or "The NRCA Steep Roofing Manual."
1. Fasten shingles to roof sheathing with nails by hand or nail gun. **Under no circumstances shall staples be used.**
- B. Ice and Water Shield Underlayment:
1. Eaves: Apply 2 layers of underlayment horizontally to a minimum of 36" past the warm face of the exterior wall or to the extent indicated on the Drawings, whichever is greater. Lap ends a minimum of 4". Overlap edges a minimum of 2". Adhere underlayment using the self-sticking backing.
 - a. After installation of edge metal at eave line, install an 8" strip of underlayment over the apron prior to installing edge metal at rake.
- C. Felt Underlayment: Cover the remainder of roof areas to receive shingles with one layer of roofing felt, lapping all edges a minimum of 2" and ends a minimum 6". Stagger end joints a minimum 24". Secure with roofing nails and underlayment tins at a rate of 1 fastener per 4 sf minimum. Staples and tack hammers are not permitted.
- D. Flashing:
1. Edge flashing: Install metal flashing and trim around edges of all roof sheathing receiving work and according to details and recommendations of the "Asphalt Roofing" section of "The NRCA Steep Roofing Manual" and ARMA's "Residential Asphalt Roofing Manual."
 2. Pipe flashing: Reinstall salvaged copper pipe flashings.
- E. Shingles:
1. Comply with installation details and recommendations of shingle manufacturer and NRCA Steep Roofing Manual.
 2. At roof's lower edge, install shingles with manufacturer's starter strip. Inverting a course of shingles is **NOT AN ACCEPTABLE STARTER COURSE**. Use vertical and horizontal chalk lines to ensure straight coursing.
 3. Fasten shingles with the manufacturer's recommended exposure pattern, using six nails per shingles.

3.04 GUTTERS

- A. Clean existing copper gutter lining of all existing debris and dirt. Do not flush gutters to downspouts, as they are connected to a sub-surface drainage system.
- B. Resecure any loose portions of liner with suitable fasteners.
- C. Prepare gutters to receive EPDM lining by scrubbing them with the membrane manufacturer's recommended solvent or cleaner.
- D. Apply bonding adhesive to all areas to be lined, and install EPDM liner material in continuous lengths, without seams.
 - 1. Roll out material to remove any blisters or wrinkles.
 - 2. Make up corners at ends of gutters, following manufacturer's standard details.

3.05 ADJUSTING AND CLEANING

- A. Replace any damaged materials installed under this Section with new materials that meet specified requirements.
- B. Reinstall gutter outlet strainers in existing gutters. Secure in place with silicone sealant.
- C. Clean site regularly as work is performed.

END OF SECTION

07.31.00

SECTION 07.41.13

METAL ROOFING

I. PART 1 - GENERAL

1.01 Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.02 DESCRIPTION OF WORK

- A. **Work included:** Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. Standing seam metal roofing.
 - 2. Underlayment.
 - 3. Flashings and accessories.
- B. **Alternates:** Not Applicable.
- C. **Items to Be Installed Only:** Not Applicable.
- D. **Items to Be Furnished Only:** Furnish the following items for installation by the designated Sections:
 - 1. Not applicable.
- E. **Related Work Specified Elsewhere:** The following items are not included in the Section, and will be performed under the designated Section:
 - 1. Section 06.10.00 – FINISH CARPENTRY for replacement roof sheathing.

1.03 PERFORMANCE REQUIREMENTS

- A. **General:** Provide metal roof panel assemblies that comply with performance requirements specified as determined by testing manufacturers' standard assemblies similar to those indicated for this Project, by a qualified testing and inspecting agency.
- B. **Wind-Uplift Resistance:** Capable of producing sheet metal roofing assemblies that comply with UL 580 for Class 90 wind-uplift resistance. Other performance test shall include ASTM E1592 Static Air Pressure Test for Roof Coverings.

1.04 SUBMITTALS

- A. **Product Data:** Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal roof panel and accessory, including each type of underlayment product indicated:
 - 1. Concealed fastener, standing seam metal roof panels and accessories.
 - 2. Underlayment.
- B. **Shop Drawings:** Show layouts of sheet metal roofing, including plans, elevations, and keyed references to termination points. All fastening patterns shall be clearly designated to meet the specified wind speed requirements.
 - 1. Include details for forming, joining, and securing sheet metal roofing, including pattern of seams,

termination points, expansion joints, roof penetrations, edge conditions, special conditions, connections to adjoining work, and accessory items.

2. Coordination Drawings: Not required.

C. Samples: For each exposed finish.

D. Field quality control inspection reports, to be submitted for warranty program level, if applicable.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Installer of sheet metal roofing for a minimum of 10 years.

B. Roll-Formed Sheet Metal Roofing Fabricator Qualifications: Minimum of 10 years factory forming experience.

C. Source Limitations: Obtain each type of metal roof panels through one source from a single manufacturer.

D. Sheet Metal Roofing Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual and manufacturer's installation guidelines.

E. Fire-Resistance Ratings: Where indicated, provide metal roof panels identical to those of assemblies tested for fire resistance that comply with ASTM E 108 in accordance with UL790.

F. Pre-installation Conference: Conduct conference at project location with building owner, architect, installing contractor, general contractor and sheet metal roofing manufacturer a minimum of 10 days prior to start of work. All details shall be reviewed including; underlayments, substrates, fastening patterns, scheduling, trim and flashing components, accessories such as fasteners and sealants.

1.06 DELIVERY, STORAGE & HANDLING

A. Do not deliver materials of this section to project site until suitable facilities for storage and protection are available.

B. Protect materials from damage during transit and at project site. Store under cover, but sloped to provide positive drainage. Do not expose materials with strippable protective film to direct sunlight or extreme heat.

C. Do not allow storage of other materials or allow staging of other work on installed metal panel system.

D. Upon receipt of delivery of metal panel system, and prior to signing the delivery ticket, the installer is to examine each shipment for damage and for completion of the consignment.

1.07 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal roof panels to be performed according to manufacturers' written instructions and warranty requirements.

B. Field Measurements: Verify locations of roof framing and roof opening dimensions by field measurements before metal roof panel fabrication and indicate measurements on Shop Drawings.

1.08 WARRANTY

A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal roofing that shows evidence of deterioration of factory-applied finishes within specified

warranty period.

- B. Fluoropolymer Finish Warranty Period: 30 years from date of Substantial Completion.
- C. Special Installer's Warranty: Specified form in which Roofing Installer agrees to repair or replace components of custom-fabricated sheet metal roofing that fail in materials or workmanship within 5 years from date of Substantial Completion.

II. PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: ATAS International, Inc. "Field-Lok" FLM-125 or approved equal metal standing seam roofing by Una-Clad, Pac-Clad or approved equal meeting the performance criteria specified herein.

2.02 CONCEALED-FASTENER, STANDING SEAM METAL ROOF PANELS

- A. General: Provide factory-formed metal roof panels designed to be field assembled by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation. Unless more stringent requirements are indicated, comply with ASTM E 1514.
- B. Vertical-Rib, Seamed-Joint, Standing-Seam Metal Roof Panels: Formed with vertical ribs at panel edges and flat pan between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels, and mechanically seaming panels together with approved seaming equipment.
- C. Characteristics:
 - 1. Material: Aluminum .032
 - 2. Texture: Smooth
 - 3. Pan Coverage: 12-1/2"
 - 4. Seam Height: 1-1/2"
 - 5. Finish: KYNAR 5000® PDVF or HYLAR 5000® Finish
 - 6. Color: to match existing

2.03 UNDERLAYMENT

- A. Self-Adhering, High-Temperature Sheet: 45 mil homogeneous rubberized asphalt waterproofing compound, glass fiber reinforced designed specifically for use under sheet metal roofing.
 - 1. Basis for design ATAS ATA-Shield as supplied by ATAS International, Inc. Subject to source limitations, provide equal underlayments by substitute panel manufacturers, if so submitted/approved.
 - 2. Thermal Stability: Resistant to 240 deg F; ASTM D 1970.
 - 3. Low Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970.

2.04 MISCELLANEOUS MATERIAL

- A. Fasteners: Self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads. Manufacturer shall provide or authorize all fasteners utilized with the sheet metal roofing system.

- B. Exposed Fasteners: Heads matching color of sheet metal roofing by means of plastic caps or factory-applied coating.
- C. Fasteners for Flashing and Trim: Blind fasteners or screws spaced to resist wind uplift loads.
- D. Sealing Tape: Pressure-sensitive, 100 percent solid polyisobutylene compound sealing tape with release-paper backing. Provide permanently elastic, non-sag, non-toxic, non-staining tape.
- E. Elastomeric Joint Sealant: ASTM C 920, of base polymer, type, grade, class, and use classifications required to produce joints in sheet metal roofing that will remain weathertight.
- F. Expansion-Joint Sealant: For hooked-type expansion joints, which must be free to move, provide non-setting, non-hardening, non-migrating, heavy-bodied polyisobutylene sealant.
- G. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15 mil dry film thickness per coat.

2.05 ACCESSORIES

- A. Sheet Metal Roofing Accessories: Provide components required for a complete sheet metal roofing assembly including trim, copings, fasciae, corner units, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of sheet metal roofing, unless otherwise indicated. All trim and flashing components shall be supplied in a minimum of 12'-0" lengths and shall conform to manufacturer's standard part dimensions and details.
 1. 26 ga. SS clip base w/26 ga. SS stem designed to withstand negative-load requirements.
 2. Closures: Closed-cell, expanded, cellular, rubber or cross linked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch thick, flexible closure strips; cut or premolded to match sheet metal roofing profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
 3. Sealants as recommended by manufacturer.
 4. Fasteners as recommended by manufacturer.
- B. Flashing and Trim: Formed from matching materials as sheet metal roof panel in gauges noted. Provide flashing and trim in heavier gauge materials as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent sheet metal roofing.
- C. Snow Guards: Not required.

2.06 FABRICATION

- A. General: Fabricate sheet metal roofing panels to comply with details shown and sheet metal roofing manufacturer's written instructions.
- B. Fabricate sheet metal roofing to allow for expansion in running work sufficient to prevent leakage, damage, and deterioration of the Work. Form exposed sheet metal work to fit substrates without excessive oil canning, buckling, and tool marks, true to line and levels indicated, and with exposed edges folded back to form hems.
 1. Fold and cleat eaves as required by manufacturer to insure weathertightness and wind uplift resistance.

2. Form and fabricate sheets, seams, strips, cleats, valleys, ridges, edge treatments, integral flashings, and other components of metal roofing to profiles, patterns, and drainage arrangements shown and as required for leak proof construction and wind uplift resistance.
- C. Metal Protection: Where dissimilar metals will contact each other, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturers of dissimilar metals or by fabricator.
- D. Sheet Metal Accessories: Custom fabricate flashings and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated. Obtain field measurements for accurate fit before manufacturer fabrication.

III. PART 3 - EXECUTION

3.01 DEMOLITION

- A. Remove existing electrical heating cables from area to receive work. Coil and store cables on site for Owner, where directed.
- B. Carefully remove existing metal roofing panels, copings and flashings noted to be salvaged, and store on site. Protect from damage until reinstalled.
- C. Demolish and dispose of existing metal roofing where indicated, including underlayments, stripping roof area down to the deck.

3.02 EXAMINATION

- A. Examine exposed plywood roof deck in area to receive work, for signs of damage. Replace sheathing where noted on Drawings, and any damaged or unsuitable decking revealed by demolition, using quantities stated in Section 06.10.00 - Rough Carpentry.
- B. Examine primary and secondary roof framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal roof panel manufacturer.
- C. Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.
- D. For the record, prepare written report for the General Contractor, endorsed by Installer, listing conditions detrimental to performance of work.
- E. Examine roughing-in for components and systems penetrating metal roof panels to verify actual locations of penetrations relative to seam locations of metal roof panels before metal roof panel installation.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.03 PREPARATION

- A. Lay out and examine substrate before installation of sheet metal roofing. Space fasteners as required to resist design uplift, but not more than 24 inches o.c.
- B. Install flashings and other sheet metal to comply with manufacturer's requirements for warranty.

3.04 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free, on roof sheathing under sheet metal roofing where indicated on Drawings.
 - 1. Comply with temperature restrictions of underlayment manufacturer for installation; use primer rather than nails for installing underlayment at low temperatures.
 - 2. Apply at locations noted on Drawings in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3.5 inches. Extend underlayment a minimum of 1.5 inches of fascia board. Roll laps with roller.
 - 3. Cover underlayment within 14 days.
- B. Felt Underlayment: All metal roofing installed in areas not receiving self-adhering underlayment, shall be separated from the roof deck by felt underlayment.

3.05 INSTALLATION, GENERAL

- A. General: Anchor sheet metal roofing and other components of the Work securely in place, with provisions for thermal and structural movement. Install fasteners, protective coatings, separators, sealants, and other miscellaneous items as required for a complete roofing system and as recommended by fabricator for sheet metal roofing.
 - 1. Field cutting of sheet metal roofing by torch is not permitted.
 - 2. Rigidly fasten ridge end of sheet metal roofing and allow for positive panel attachment as per manufacturer's recommendations. All flashing details shall accommodate thermal movement.
 - 3. Provide metal closures at peaks, ridge, gable and hip caps.
 - 4. Flash and seal sheet metal roofing with weather closures at eaves, rakes, and at perimeter of all openings. Fasten with self-tapping screws.
 - 5. Form valley flashing per SMACNA/NCRA guidelines, extending a minimum 1 foot under roofing panels and formed with a hemmed edge to create a dam.
- B. Fasteners: Use fasteners of size and length as required for compatibility with substrate.
- C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by fabricator of sheet metal roofing or manufacturers of dissimilar metals.
 - 1. Separate sheet metal roofing with bituminous coating where roofing will contact wood, ferrous metal, or cementitious construction. Interlock and overlap shingles and stagger end joints from shingles above and below according to shingle manufacturer's written instructions.
 - 2. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

3.06 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

- B. Install components required for a complete sheet metal roofing assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
- C. Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual. Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
- D. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.07 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as sheet metal roofing is installed. On completion of sheet metal roofing installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain in a clean condition during construction.

END OF SECTION

07.41.13

SECTION 09.90.00

PAINTING

I. PART 1 - GENERAL

1.01 GENERAL

- A. The 00.72.00 **Conditions of the Contract** and all sections of **Division 01**, General Requirements shall be part of this section unless otherwise specifically excluded.
- B. This Contractor must be familiar with all other Divisions and Sections which affect this Work.

1.02 DESCRIPTION OF WORK

- A. **Work included:** Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. All new exterior ceilings.
 - 2. Field priming and painting of existing steel lintels.
 - 3. Surface preparation for priming and painting.
- B. **Alternates:** None.
- C. **Items to Be Installed Only:** Install the following items as furnished by the designated Sections:
 - 1. None. All items to be installed by this trade, shall be furnished by this trade.
- D. **Items to Be Furnished Only:** Furnish the following items for installation by the designated Sections:
 - 1. None.
- E. **Related Work Specified Elsewhere:** The following items are not included in the Section, and will be performed under the designated Section:
 - 1. None.

1.03 SUBMITTALS

- A. Submit product data on all finishing products under provisions of Section 01.33.00.
- B. Product Data: For each paint system indicated. Include block fillers and primers.
 - 1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.
- C. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.

1. Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 2. Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.
 3. Submit two eight inch by 12 inch Samples for each type of finish coating for Designer's review of color and texture only.
- D. Surface Preparation: A detailed description of surface preparation procedures and surrounding area protection plan.

1.04 QUALITY ASSURANCE

- A. Applicator Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.
- B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.
- C. Store paint materials at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in well ventilated area, unless required otherwise by manufacturer's instructions.
- D. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F (7 degrees C) for 24 hours before, during, and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F (7 degrees C) for interiors; 50 degrees (10 degrees C) for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish and Finishes: 65 degrees F (18 degrees C) for interior or exterior, unless required otherwise by manufacturer's instructions.

1.07 DEFINITIONS AND EXTENT

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
 2. Eggshell refers to low-sheen finish with a gloss range between 20 and 35 when measured at a 60-degree meter.
 3. Semigloss refers to medium-sheen finish with a gloss range between 35 and 70 when measured at a 60-degree meter.

4. Full gloss refers to high-sheen finish with a gloss range more than 70 when measured at a 60-degree meter.
- B. This Section includes surface preparation and field painting of exposed exterior items and surfaces.
 1. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
- C. Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Designer will select from standard colors and finishes available
- D. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.

1.08 EXTRA MATERIALS

- A. Not required. Deliver any unused paint to Owner.

II. PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. All materials specified in the painting schedule are Sherwin-Williams materials.
- B. Paint by other PPG or Benjamin Moore, meeting or exceeding the performance characteristics listed herein may be substituted at other locations.
- C. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.

2.02 MATERIALS

- A. Coatings: Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating with a good flow and brushing properties; capable of drying or curing free of streaks or sags.
- B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.
- C. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- D. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

III. PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application.
 - 1. Proceed with paint application only after unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
 - 2. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work:
 - 1. Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
 - 2. Notify Designer about anticipated problems when using the materials specified over substrates primed by others.

3.02 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 - 1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
 - 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 3. Provide finish coats that are compatible with primers used.
 - 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, grates, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
- B. Surface Preparation:
 - 1. Clean all existing steel to bright metal (completely free of oil, grease, dirt, dust, mill scale, rust, coatings, oxides, corrosion products and other foreign matter) using one or more of the following methods:
 - (a) SSPC-SP1 Solvent Cleaning: Solvent cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants. Solvent cleaning does not remove rust or mill scale. Change rags and cleaning solution frequently so that deposits of oil and grease are not spread over additional areas in the cleaning process. Be sure to allow adequate ventilation.
 - (b) SSPC-SP11- Power Tool Cleaning to Bare Metal: Metallic surfaces that are prepared according to this specification, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxide corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portions of pits if the original surface is pitted. Prior to power tool surface preparation, remove visible deposits of oil or grease by any of the methods specified in SSPC-SP1, Solvent Cleaning, or other agreed upon methods.
 - 2. Prime any bare steel within 8hours or before flash rusting occurs.
- C. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

- D. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 2. Omit primer over metal surfaces that have been shop primed and touchup painted.
 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.
- E. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
 2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.
- F. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.
- G. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- H. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.03 PROTECTION

- A. Protect elements surrounding the work of this Section from damage or disfiguration.
- B. Repair damage to other surfaces caused by work of this Section.
- C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces. Remove empty paint containers from site.

3.04 APPLICATION COATINGS GENERAL

- A. Apply products in accordance with manufacturer's instructions.
- B. Do not apply finishes to surfaces that are not dry.
- C. Apply each coat to uniform finish.

- D. Sand lightly between coats to achieve required finish.
- E. Allow applied coat to dry before next coat is applied.
- F. Where clear finishes are required, tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.
- G. Prime back surfaces of new exterior woodwork with primer paint.

3.05 CLEANING

- A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.
- B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.
- C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

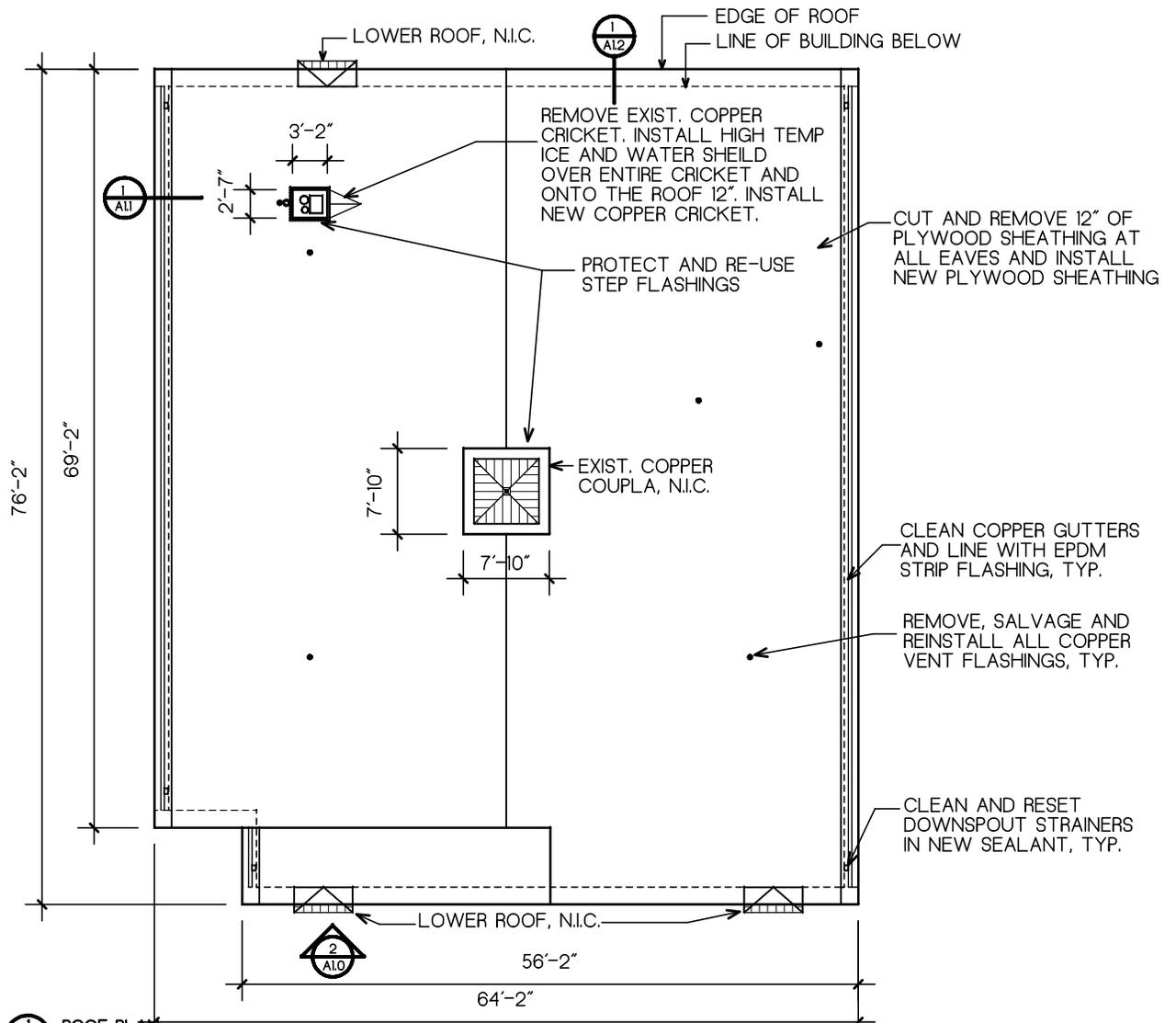
3.06 PAINT SCHEDULE: Paint schedule is for new and existing materials. Refer to Item 3.02 B for surface prep of existing materials.

- A. METAL: Lintels
 - 1. Semi-Gloss or Gloss Finish:
 - (a) 1st Coat: S-W Marcopoxy 646 Fast Cure Epoxy, B58 Series (7mils wet, 5.0 mils dry)
 - (b) 2nd Coat: S-W Acrolon 218 High Solids Acrylic Polyurethane, B65 Series
 - (c) 3rd Coat: S-W Acrolon 218,High Solids Acrylic Polyurethane B65 Series (4.5 mils wet, 3.0 mils dry per coat).
- B. WOOD: Exterior Ceilings.
 - 1. Latex Systems: Flat- Satin or Gloss Finish: (Finish sheen picked by Architect)
 - (a) 1st Coat: S-W Exterior Oil Base Primer, Y24W8020 Series(4 mils wet, 12.3 mils dry).
 - (b) 2nd Coat: S-W Exterior Emerald Line
 - (c) 3rd Coat: S-W Exterior Emerald Line (4 mils wet, 1.3 mils dry per coat)

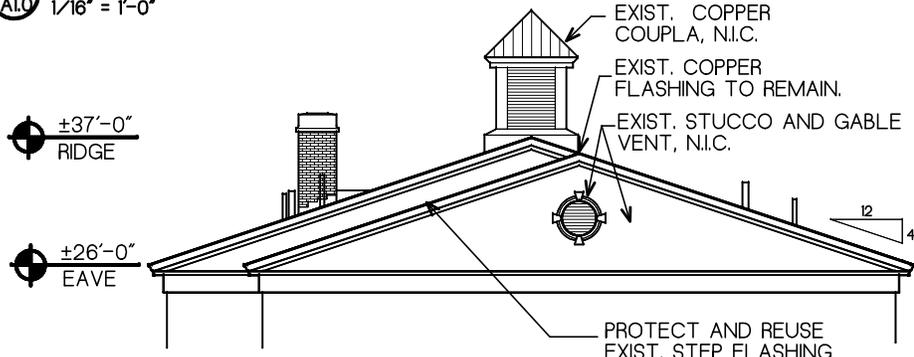
3.07 PAINT COLORS:

- A. Ceilings shall be ceiling white.
- B. Lintels shall be as selected by owner.

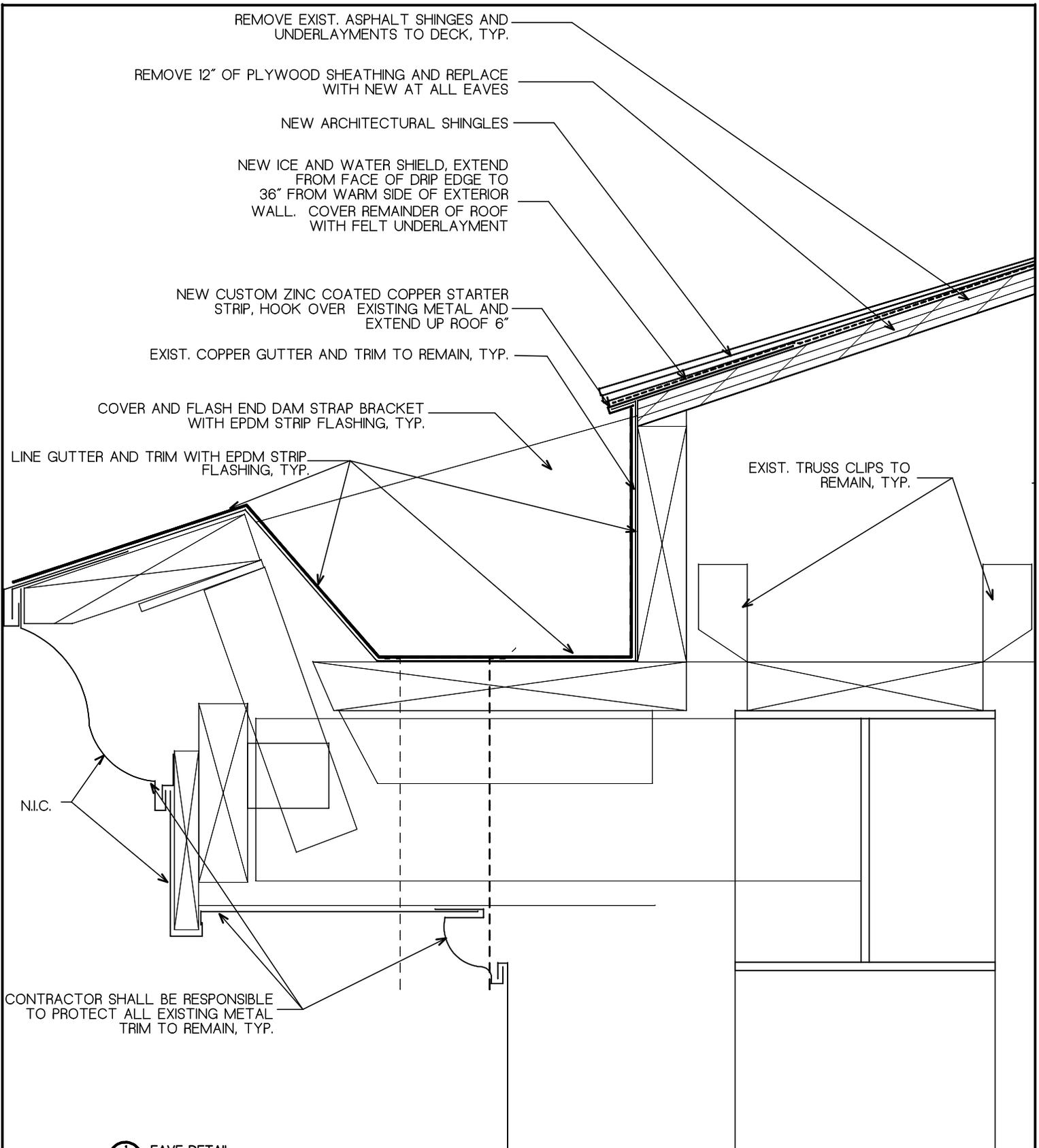
END OF SECTION



1 ROOF PLAN
A10 1/16" = 1'-0"



2 PARTIAL ROOF ELEVATION
A10 1/16" = 1'-0"



1 EAVE DETAIL
 3" = 1'-0"



NAULT ARCHITECTS, INC.

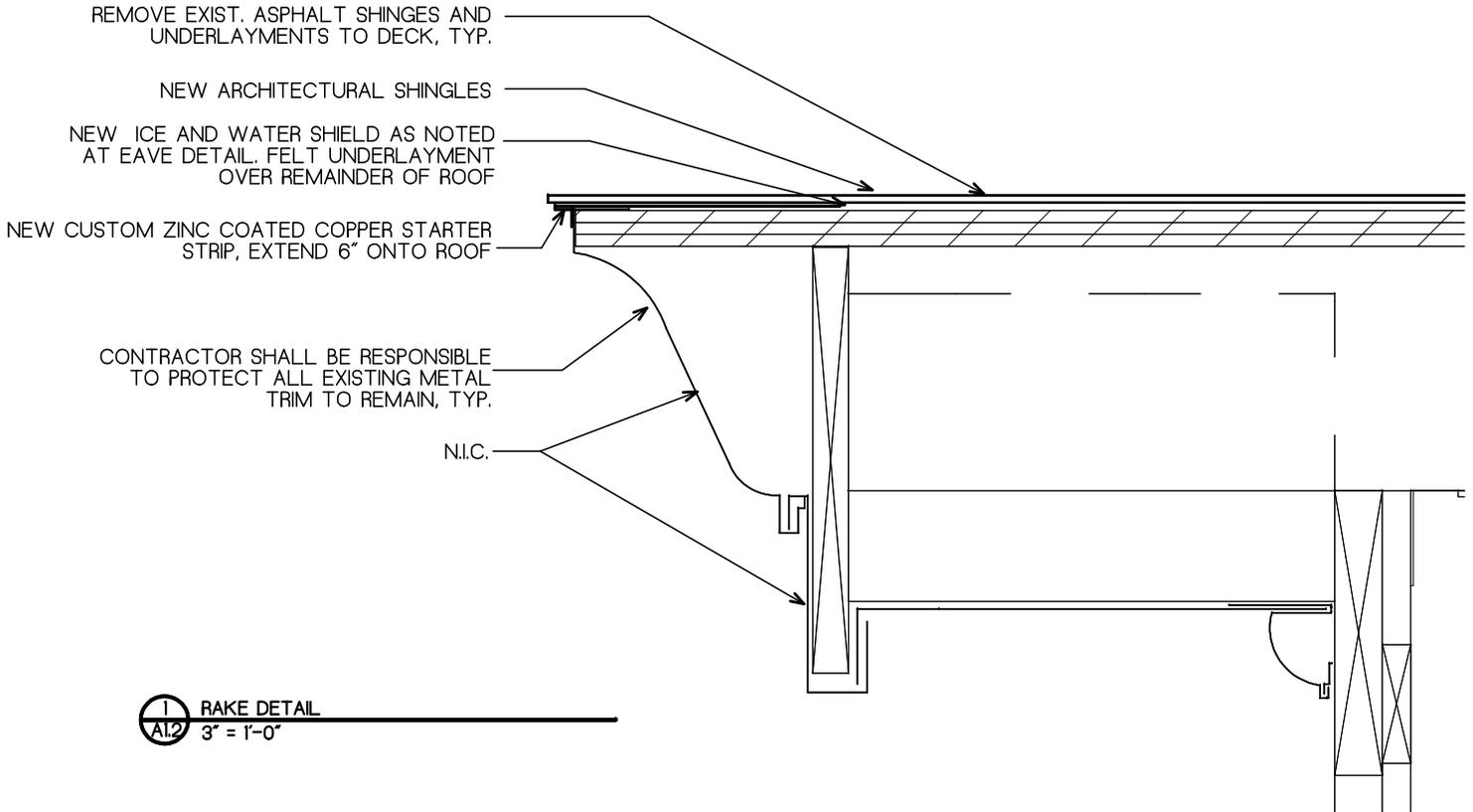
71 HOPE AVENUE
 WORCESTER, MA 01603

TEL: (508) 755-6134
 FAX: (508) 754-4661

PROJECT: FIRE STATION ROOF REPAIRS
 DRAWING: PARK AVE STATION
 ROOF DETAILS

SCALE: AS NOTED
 DATE: AUGUST, 2016

A1.1



NAULT ARCHITECTS, INC.

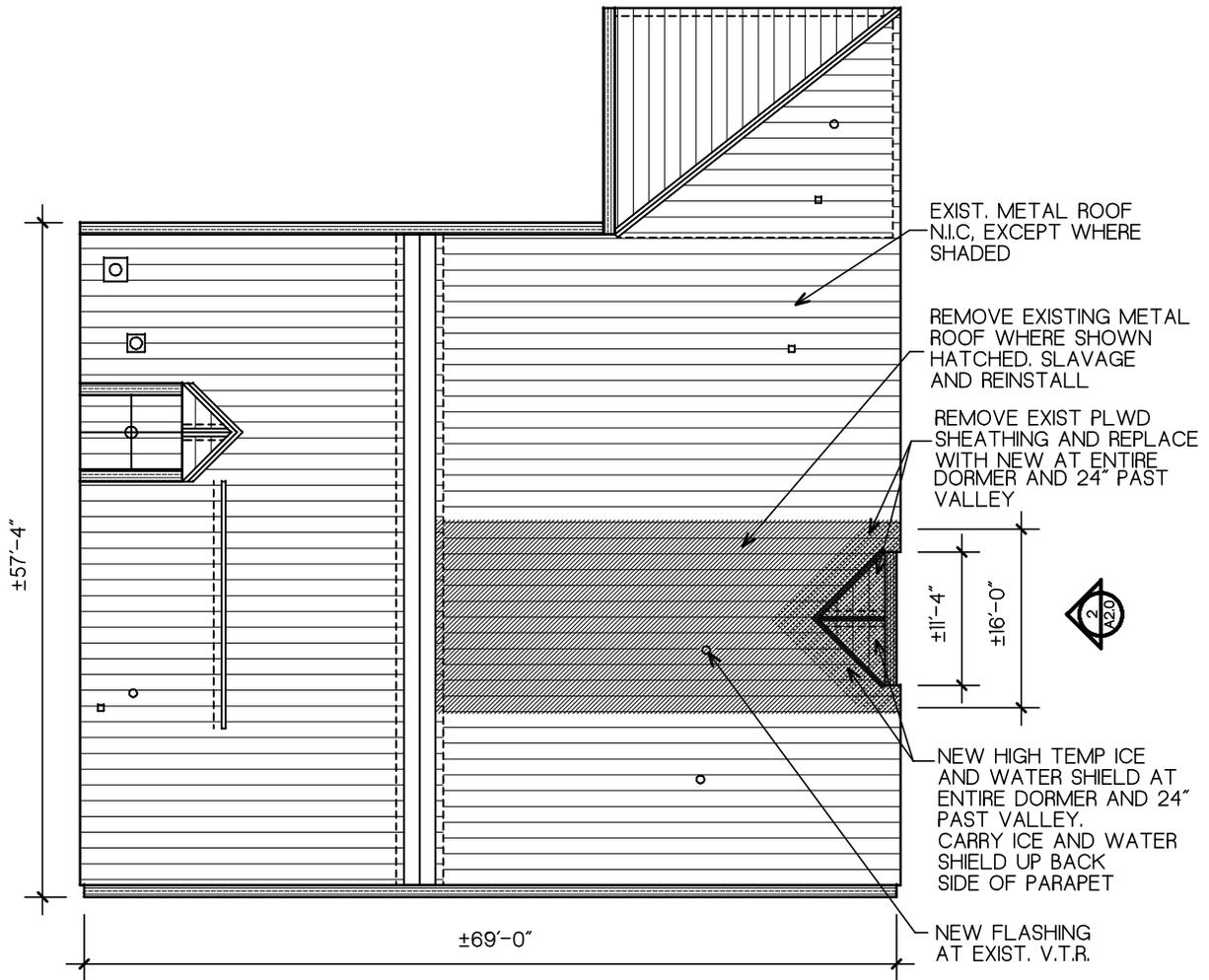
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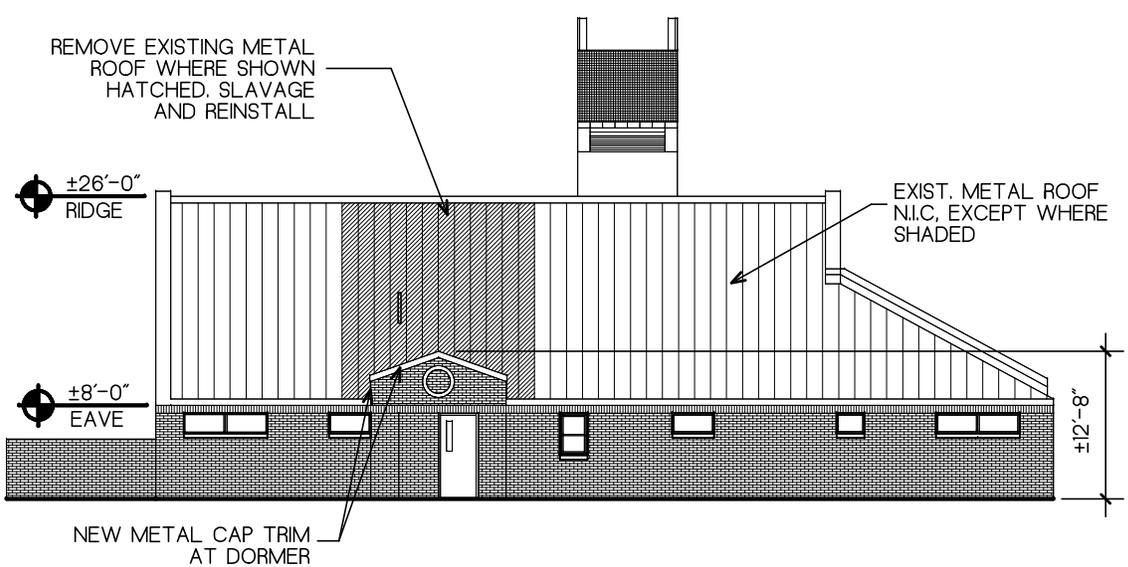
PROJECT: FIRE STATION ROOF REPAIRS
DRAWING: PARK AVE STATION
ROOF DETAILS

SCALE: AS NOTED
DATE: AUGUST, 2016

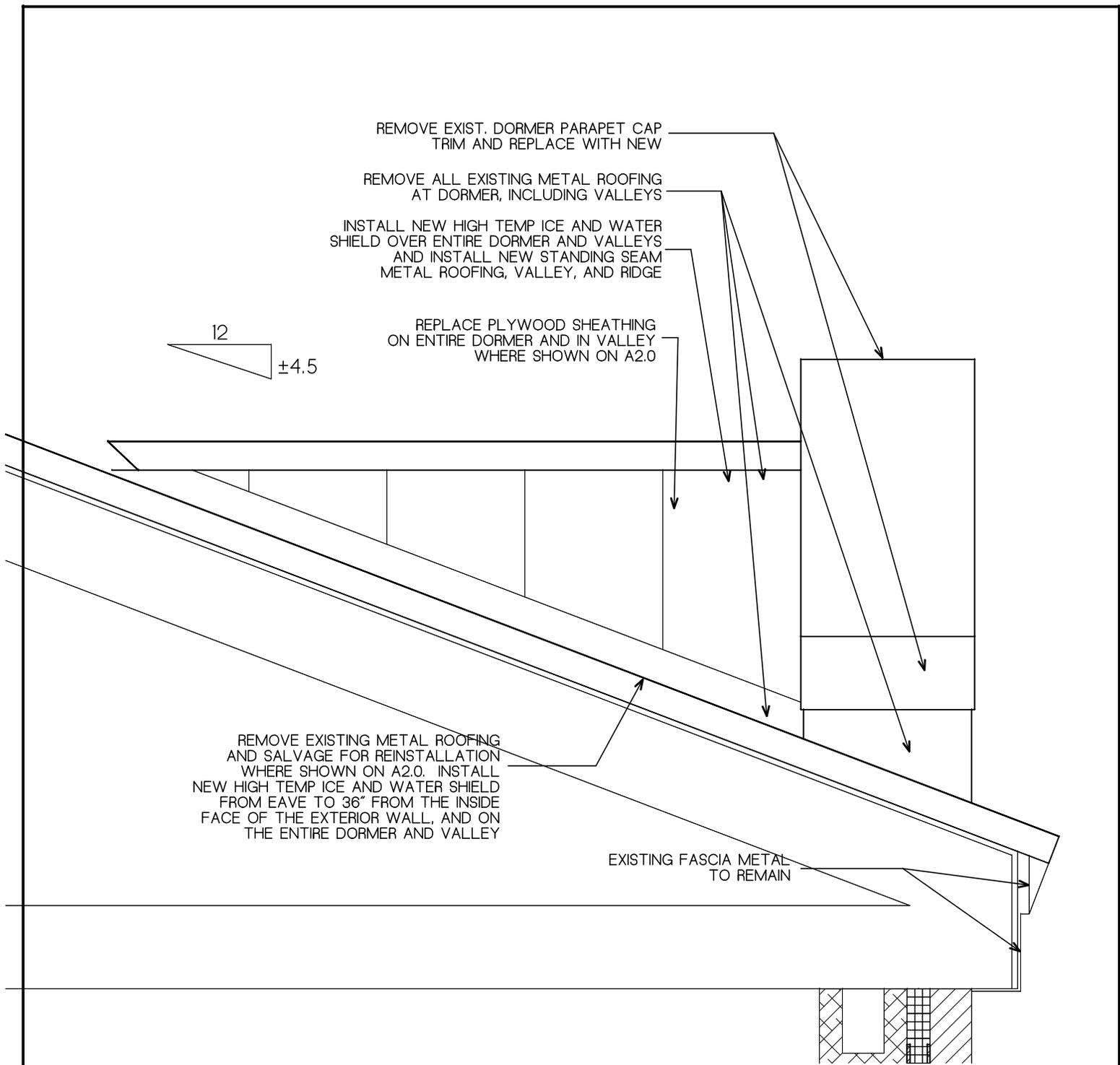
A1.2



1 ROOF PLAN
A2.0 1/16" = 1'-0"



2 SIDE ELEVATION
A2.0 1/16" = 1'-0"

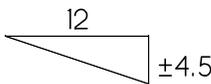


REMOVE EXIST. DORMER PARAPET CAP TRIM AND REPLACE WITH NEW

REMOVE ALL EXISTING METAL ROOFING AT DORMER, INCLUDING VALLEYS

INSTALL NEW HIGH TEMP ICE AND WATER SHIELD OVER ENTIRE DORMER AND VALLEYS AND INSTALL NEW STANDING SEAM METAL ROOFING, VALLEY, AND RIDGE

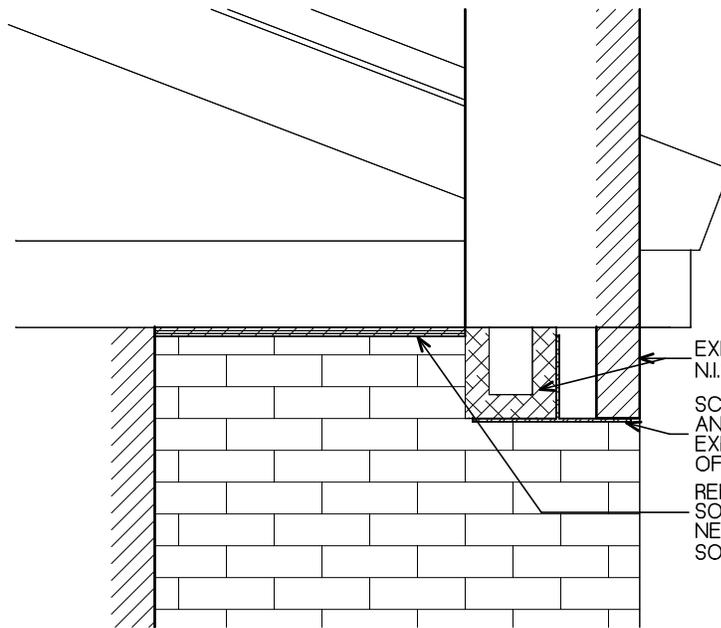
REPLACE PLYWOOD SHEATHING ON ENTIRE DORMER AND IN VALLEY WHERE SHOWN ON A2.0



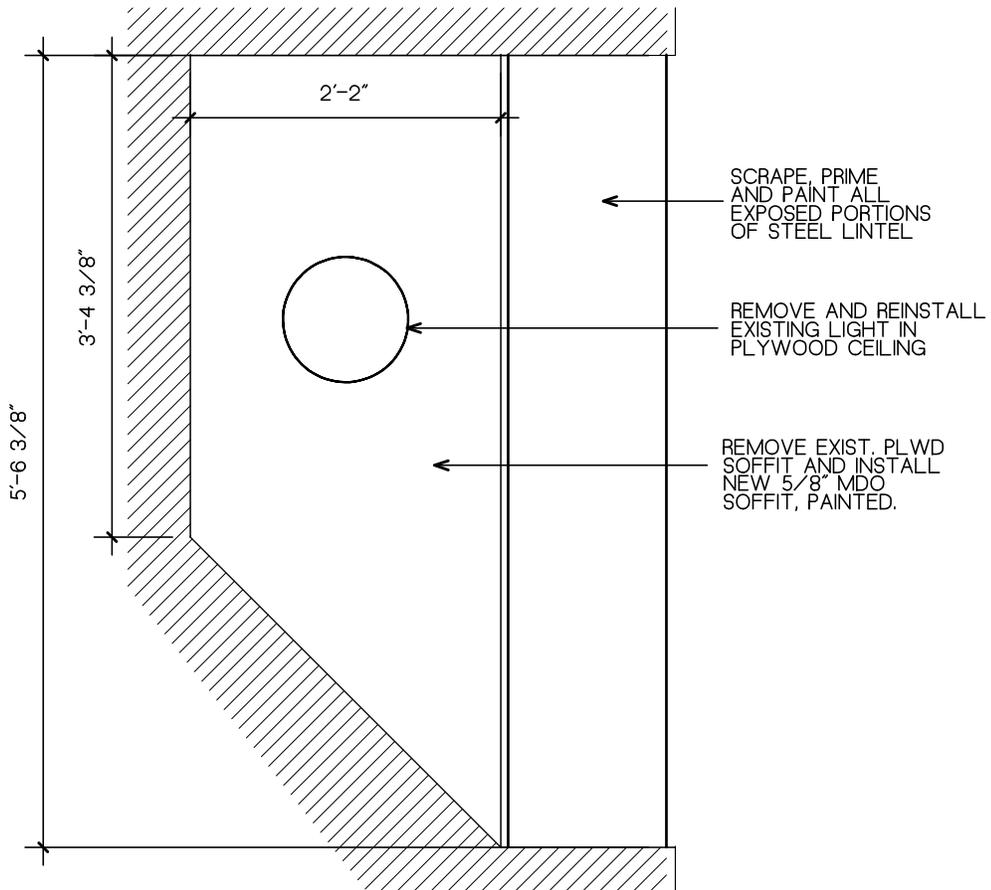
REMOVE EXISTING METAL ROOFING AND SALVAGE FOR REINSTALLATION WHERE SHOWN ON A2.0. INSTALL NEW HIGH TEMP ICE AND WATER SHIELD FROM EAVE TO 36" FROM THE INSIDE FACE OF THE EXTERIOR WALL, AND ON THE ENTIRE DORMER AND VALLEY

EXISTING FASCIA METAL TO REMAIN

1 DORMER SIDE ELEVATION
A2.1 1" = 1'-0"



1 SIDE ENTRY SECTION
 A2.2 3/4" = 1'-0"



2 SIDE ENTRY RCP
 A2.2 3/4" = 1'-0"