

BID DOCUMENTS AND SPECIFICATIONS FOR:

Masonry Restoration Old Burying Ground/Mt. Pleasant Cemetery

Arlington, Massachusetts

Bid # 20-27

May 2020

Prepared for:

Town of Arlington, Massachusetts

Prepared by: Simpson, Gumpertz & Heger

SEALED BIDS will be received:

Date: June 4, 2020

Time: 10:00 AM

Place: Office of the Purchasing Agent

730 Massachusetts Avenue

Arlington, MA 02476

Town of Arlington Massachusetts

INVITATION TO BID

BID No. 20- 27 Masonry Restoration- Old Burying Ground/Mt. Pleasant

Sealed bids for Masonry Restoration - Old Burying Ground/ Mt. Pleasant Cemetery for the Town of Arlington, MA, will be received at the Purchasing Department, 730 Mass Ave. Arlington, MA 02476 until 10:00AM EST on Thursday June 4, 2020 at which time and place said bids will be publicly opened and read aloud.

All bids must be in a sealed envelope plainly marked: <u>BID No. 20-27 Masonry Restoration - Old Burying Ground/Mt. Pleasant Cemetery</u>

The Town of Arlington seeks bids from Contractors experienced in masonry restoration at historical sites for furnishing all labor, materials, and equipment necessary to make improvements to specified areas at the Old Burying Ground (Pleasant St.) and Mt. Pleasant Cemetery (Medford St.) first by selective demolition and dismantling as described in the Contract Drawings. At the Old Burying Ground, the perimeter masonry wall enclosing the site will be rebuilt, restored and/or repointed in accordance with the plans and specifications. At Mt. Pleasant Cemetery, the coping stones from selected buried tombs will be removed and reset, sections of the support walls rebuilt, and drainage pipe installed in accordance with the plans and specifications. The Base Bid incorporates the work delineated as Phase 1 Wall at the Old Burying Ground, and all scope of work outlined for Mt. Pleasant Cemetery.

Add Alternate One includes the scope of work to the section of perimeter wall at the Old Burying Ground delineated as Phase 2 Wall in the Contract Drawings.

Add Alternate Two includes the scope of work to the section of perimeter wall at the Old Burying Ground outlined in Phase 3 Wall in the Contract Drawings.

Contract documents are available on the Town website at arlingtonma.gov/purchasing.

There is no pre-bid site visit for this project. The site is open to the public and able to be viewed at bidder's convenience. Questions may be addressed to James Feeney at jfeeney@town.arlington.ma.us.

The project is to begin as soon as a contract is executed. The project completion date will be weather dependent, with work proceeding continually until completion, or when winter conditions render exterior masonry work no longer practicable

A bid deposit in the amount of five percent (5%) on the Bid amount, including any and all alternates, shall be submitted with each Bid. Bid deposit shall be in the form of Certified Check, or a Treasurer's or Cashier's Check issued by a responsible or trust company payable to the Town of Arlington or a bid bond (a) in a form satisfactory to the Awarding Authority, (b) with a surety company qualified to do business in the Commonwealth of Massachusetts and (c) conditioned upon faithful performance by the principal of the agreements contained in the Bid. Return of bid deposits will be in accordance with the provisions of the applicable General Laws. All bid bonds shall be retained by the Town of Arlington unless accompanied by a stamped, self-addressed envelope.

Bidding procedures and award of the contract shall be in accordance with the applicable provisions of the Commonwealth of Massachusetts General Laws, Chapter 30, Section 39M as amended and Chapter

149, Sections 44A through 44L, inclusive, as amended.

The Town of Arlington will reject any Bid when required to do so by the above referenced General Laws. In addition, the Town of Arlington reserves the right to waive any informality in bidding and to reject any and all bids if it deems it to be the public interest to do so.

The successful bidder will be required to furnish a Performance Bond and a Labor and Materials Payment bond, each in the amount of 100% of the Contract Amount. The cost of such bonds, <u>including any and all alternates</u>, shall be stated on the bid form. Such bonds shall be of a surety company qualified to do business under the laws of the commonwealth of Massachusetts.

Bylaw of the Town of Arlington, Title 1, Article 16, Minority/Woman Workforce Participation in Construction Projects which exceed \$200,000 is part and parcel of the bid,

Minimum Wage rates as determined by the Commissioner of the Division of Occupational Safety of the Executive Office of Labor and Workforce Development under the provisions of Chapter 149, Sections 26 to 27D inclusive, as amended, apply to this project. It is the responsibility of the Bidder, before bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed work under this contract.

No bidder may withdraw his bid for a period of sixty (60) days, excluding Saturdays, Sundays and legal holidays, after the actual date of the opening thereof.

The Town of Arlington is exempt from sales tax, for which reason Bidders should not include sales taxes in figuring or in references to any bid.

Commonwealth of Massachusetts General Laws Section 149, Sections 44A through 44L, inclusive and Chapter 30, Sections 39F through 39P inclusive, are incorporated herein by reference. Any inconsistency between the Invitation to Bid, Instructions to Bidders, Bid Forms, Conditions of the Contract and any other contract documents and these Statutes, or any other applicable statutes, bylaws or regulation shall be deemed to govern.

The attention of bidders is particularly called to the requirements as to conditions of employment to be observed, the minimum wage rates to be paid under the contract and affirmative action to ensure equal employment opportunity.

Adam Chapdelaine, Town Manager TOWN OF ARLINGTON, MASSACHUSETTS May 13, 2020

INSTRUCTIONS TO BIDDERS

I. COMPLEMENTARY DOCUMENT

A. INVITIATION TO BID, including herewith, is complementary to this document and shall be reviewed by bidder for specific instruction which are not repeated herein.

2. STATUTES REGUALTING COMPETITIVE BIDDING

- A. Bidding procedures and award of general contract and subcontracts shall be in accordance with the provisions of Chapter 30, Section 39M and Chapter 149, Section 44A through 44L inclusive, of the General Laws of the Commonwealth of Massachusetts, including all current amendments.
- B. In the event of any discrepancy or inconsistency between the provisions of these Bid and Contract Documents and the above-mentioned statutes, the provisions of the above-mentioned statutes shall govern. In such event, the application of all remaining provisions not in conflict to any circumstance other than that in which the conflict occurs shall not be affected thereby.

3. BIDDER'S QUALIFICATIONS

- A. DCPO Certification not required.
- B. The Contractors' Update Statements are not public records and will not be open to public inspection.

4. INTERPRETATION OF DOCUMENTS: NOTIFICATION OF ERRORS

- A. Interpretations of the provisions of the Bid and Contract Documents will be made by the designer upon written request of any general bidder or sub bidder, provided that such request is received by the Designer at least seven (7) days prior to the date of the applicable bid opening, and that the Designer considers such interpretation to be of sufficient importance. Oral or telephone interpretations will not generally be made, and if made shall be strictly informal and not legally valid or binding.
- B. Such written interpretations shall be in the form of Addenda to the Bid and Contract Documents.
- C. Bidders are urged to communicate all errors and discrepancies found in the Bid and Contract Documents to the Designer. Telephone calls pointing out any such errors or discrepancies will be taken by the Designer, but only for the purpose of receiving the information in order that it may be properly processed, and not for interpretation or clarification.

5. EXAMINATION OF BIDDING AND CONTRACT DOCUMENTS

A. Each Bidder shall carefully examine the Bid and Contract Documents to obtain a thorough understanding of the work of his bid in addition to the work of related trades. In addition, each General Bidder shall personally visit the

site to thoroughly acquaint himself/herself with the conditions as they exist hereon.

B. Failure of any Bidder to thoroughly examine the Bid and Contract Documents or to visit and examine the site shall in no way relieve him/her of any obligation with respect to his/her bid or of any responsibility assigned to him under the Contract.

6. PRE-BID CONFERENCE

A. A Pre-bid conference will not be held.

7. MODIFICATION AND WITHDRAWAL OF BIDS

A. Modification of withdrawal of Bids will be permitted after the submission of such bids provided clearly written, readily understandable instructions for same are received by the Owner in writing prior to the time established for opening of such bids. No Bid may be withdrawn after that time, except as otherwise provided herein or by law.

8. ADDENDA

A. Addenda may be required during the bidding period to modify, clarify or interpret the Bid and Contract Documents. It is intended, but not guaranteed, that such Addenda shall be mailed by the Owner to all persons or parties to whom Bid and Contract Documents have been issued (Bidders of Record). Failure to receive such Addend shall in no way relieve any bidder from the execution of its provisions. All bidders are cautioned to verify the number of Addenda which have been issued and to secure any needed copies from the Designer before submitting a Bid.

9. FORM FOR BIDS

- A. The Owner will make available, to every person applying therefor, a Bid Form. Each bona fide Bidder will be furnished forms for his proposal upon request. Such forms will be made available at the Owner's office during the regular office hours throughout the bidding period. Bids must be submitted on the forms provided by Owner or of forms included in the bid documents of the Project Manual.
- B. All blank spaces provided on the bid forms shall be filled in with ink or typewriter. Where space if provided, sums shall be expressed in both words and figures. In case of a discrepancy between the two, the written words shall govern.
- C. No interlineations, additional, alterations or erasures shall be made on the forms.

10. ALTERNATES

A. Each Bidder shall bid on alternates listed. In the event that any alternate does not involve a change in the amount of the Bid, the Bidder shall so

indicate by using the words "No Change" in the space provided for that alternate.

- B. General Bidders shall enter on the form for General Bid a single amount for each alternate, each amount to consist of the total of all the subbidders' amounts for the given alternate plus the amount of for work of the alternate to be performed by the General Contractor.
- C. If alternate(s) are accepted, they shall be accepted in the order listed. The low bidder will be determined on the basis of the sum of the Base Bid and the alternates accepted.

11. SUBMISSION OF BIDS

A. The Bid Form shall be properly executed and enclosed with the required bid deposit in a sealed envelope plainly marked on the outside with the following information.

Bid For:	
	_
SUBMITTED BY:	
(Name of Bidder)	(Address of Bidder)

B. If Bids are mailed; the above required envelope shall be enclosed in a second envelope identified with the above markings and mailed to the place of bid opening, as described in the Invitation to Bid. Mailed Bids must be received before the time scheduled for opening of Bids.

12. PERFORMANCE AND PAYMENT BONDS

A. The Performance and Labor and Materials Payment Bonds required of the General Contractor shall each be in the amount of 100% of the contract sum from a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and approved by the Owner.

13. FOREIGN CORPORATIONS

A. The attention of bidders is called to General Laws, Chapter 30, Section 39L, as amended by Acts of 1967, Chapter 3, under which the Owner may not enter into a contract with a foreign corporation as a subcontractor unless the foreign corporation has filed with the Owner a certificate by the State Secretary stating that the foreign corporation has complied with General Laws Chapter 181, Sections 3 and 5 and stating the date of such compliance.

14. AWARD OF CONTRACT

A. The Contract will be awarded to the lowest responsible and eligible bidder except in the event of a substitution as provided by under Chapter 149, Sections 44E and 44F of the above-reference General Laws.

15. COMMENCEMENT AND COMPLETION OF WORK

A. The successful bidder, upon completion of the Contract Agreement, shall commence the work of the Contract within seven (7) calendar days from receipt of written Notice to Proceed issued by the Owner within fourteen (14) calendar days after said execution of the Contract Agreement, and shall therefore diligently and continuously carry on the work in such manner as to substantially complete the work on or before winter conditions preclude completion of exterior masonry work, except as noted herein.

16. LIQUIDATED DAMAGES

- A. The attention of bidders is particularly called to the requirements as to the conditions of employment to be observed, the minimum wage rates to be paid under the Contract and affirmative action to ensure equal employment opportunity.
- B. Contractor shall make full good faith efforts to secure at least ten percent (10%) of the Labor and Materials incorporated in the Work from Minority Business Enterprises and five percent (5%) of the Labor and Materials incorporated in the Work from Women Business Enterprises certified by the Commonwealth of Massachusetts and consistent with the Federal Equal Employment Opportunity requirements attached hereto as Attachment A. Satisfactory documentation of such effort shall be furnished promptly upon request by Owner.
 - C. The Owner is an equal employment opportunity employer and has an active Affirmative Action Plan (AAP). For more information, direct correspondence to Affirmative Action Officer for the Town of Arlington.

BID FORM

For	:: Masonry Restoration – Old Burying Gro	ound/Mt. Pleasant Cemetery (Bid	d#20-27)
Pro	posal (BID) of	(hereinal	fter called "Bidder")
acc	orporation, organized and existing under the l	aws of the Commonwealth of M	lassachusetts.
	ng business as (corporation, proprietorship, einafter called "Owner". Gentlemen:	partnership) to the TOWN OF A	ARLINGTON
A.	The Bidder, in compliance with your invitational Ground/Mt. Pleasant Cemetery, Arlington specifications with related documents and availability of materials and labor, hereby and to construct the project in accordance therein, and at the prices stated below. The performing the work required under the Construction of the cons	Massachusetts, having examine the site of the proposed project is proposes to furnish all labor, ma with the Contract Documents, we see prices are to cover all expens	d the plan and including the aterials and supplies, within the time set forth the incurred in
	Bidder hereby agrees to commence work up be specified in the written "Notice to Proce complete the work by December 1, 2020, or work, whicheve pay as liquidated damages, the sum of \$100 thereafter that the works remains incomplete Bidders, Modifications to General Condition follows:	whenever winter conditions preclude or date is later. The Bidder further a 0.00 for each consecutive calend te, as provided in the Instruction	stantially e further agrees to lar day 1 to
B.	Bidder acknowledges receipt of the following	ng addendum:	
			Dated
			Dated
C.	Bidder agrees to perform all work described on the drawings, for the following lump su	•	1
	1. Base Bid Contract Price:		
Old	Burying Ground Phase 1 Wall:		
		(dollars) and	cents
\${_			}}
Mt.	Pleasant Cemetery Tomb Repairs:		
		_(dollars) and	cents
			_

	2. Bid Deposit on total bid price, <u>including alternates</u> , in the sum of:
in	
BID not	form ofis submitted herewith in accordance with the INSTRUCTION FOR DERS and is to become property of the Owner in the event the Contract and bonds are executed within the time above set forth, as liquidated damages for the delay and itional expense to the Owner caused thereby.
	3. The Bid does not include premiums on Performance/Labor and Materials Bond. Cost of required Bond Premiums (for base bid and any and all alternates):
	BondPremiums Add\$
	4. Alternates This bid includes Alternates as follows:
AD	D Alternate No. 1 (OBG Phase 2 Wall):
	dollars andcents
\${_	}
AD	D Alternate No. 2 (OBG Phase 3 Wall):
	dollars andcents
\${_	}}
D.	If the Bid is accepted by the Owner, the undersigned agrees to complete the entire work provided to be done under the contract within the time stipulated by the Owner.
E.	The undersigned agrees that for extra work, if any, performed in accordance with the AGREEMENT, he will accept compensation as stipulated therein in full payment for such extra work.
F.	Bidder understands that the Owner reserves the right to reject any and all bids.
G.	The undersigned hereby agrees that he will not withdraw the Bid within sixty (60) consecutive calendar days after the actual date of the opening of Bids and that, if the Owner accepts this Bid, the undersigned will duly execute and acknowledge the required Contract Bonds within 10 days after notification that the AGREEMENT is ready for signature.

H. Should the undersigned fail to fulfill any of his agreements as here in before set forth, the Owner shall have the right to retain as liquidated damages the amount of the Bid security, which shall become the Owner/s property. If a bid was furnished as bid security, it is agreed that the amount thereof shall be paid as liquidated damages to the Owner by the

Surety.

I.	The Undersigned certifies under penalty of perjury that this Bid is in all respect bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the "person" shall men natural person, joint venture, partnership, corporation or other business or legal entity.							
J.	The undersigned certifies that he is able to furnish labor that can work in harmony with all with all laws and regulations applicable to awards made subject forty-four A.							
	1. Have been in business under the present name foryears.							
	2. Ever failed to complete any work awarded?(Yes),(No).							
	If yes, explain:							
	3. Bank Reference:							
K.	The Bidder is required to state below <u>all</u> work he/she and his/her subcontractors (if subcontractors are to perform substantial portions of the work) has competed within the past 5 years of a similar character and value to that of the work included in the proposed Contract and to give references that will enable the Owners to judge the Bidder's experience, skill and business standing. The Bidder is required to list a minimum of 3 completed projects that are comparable in scope, complexity and value. For each project, include the name, location, type, date complete, construction value and owner contact.							
(ad	d supplementary page if necessary)							
L.	The Bidder is required to state below <u>all</u> construction projects he/she currently has under contract. For each project, include the name, location, type, scheduled completion date, construction value and owner contact.							

М.	The undersigned bidder hereby certifies that the tools and equipment required to meet the specified requirements of the Contract document, will be utilized in the performance of the work.
N.	The undersigned further certifies under the penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of section 29F, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation declared there under.
O.	The undersigned bidder hereby certifies he/she will comply with the minority workforce percentage ratio and specific affirmative action steps contained in the EEO/AA provision of the Contract, including compliance with Minority/Women Business Enterprise as required under these contract provisions. The contractor receiving the award of the Contract shall be required to obtain from each of its subcontractors a copy of its bidder's certification and submit it to the contracting agency prior to the award of such subcontract, regardless tier, that it will comply with the minority workforce ratio and specific affirmative action steps contained in these EEO/AA contract provisions.
Date	e:
	Name of General Bidder By:
	Name and Title of Person Signing

Bond Business Address

12

SECTION 04110

MASONRY STABILIZATION

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

- A. The work site is a public space, and adjacent to, public parking lots and public sidewalks. Public safety at the site is the responsibility of the Contractor throughout the entire duration of construction with the goal of maintaining public access to the extent practical. As a minimum, the Contractor must comply with and provide the following pedestrian safety measures.
 - 1. The Contractor must propose and submit a pedestrian detour plan for approval by the Engineer and Owner if at any time an established pedestrian pathway will be inaccessible or otherwise unavailable.
 - 2. The Contractor must provide legible signs indicating detour routes at key locations as indicated on the pedestrian detour plan. Signs must be easily read from a distance of 20 ft, must include dark-colored letters on a light-colored background, and must be weather resistant. Final approval and acceptance of the signs is at the discretion of the Owner.
 - 3. The Contractor shall not store equipment or materials in critical root zones of mature trees and shall not ride equipment over such root zones. Nor shall the Contractor store material or equipment on or against existing monuments or markers. No excavation shall occur in tree root zones. Unless otherwise stipulated, critical root zones will be considered to align with the outermost tips of the branches forming the tree canopy. The contractor may cut or remove stumps and/or roots of trees that have been previously cut down as long as root removal does not undermine or damage the wall.
 - 4. The Contractor must adhere to the project limits (approved laydown, storage, vehicular access, and parking areas). All areas approved to be used as laydown or parking areas must be protected to prevent deep ruts and must be fully restored at the conclusion of the project (e.g., new loam and seed to replace dead grass).
 - Contractor to provide all water and electricity. For portions of the site where
 water and electricity are available via the Owner, the Contractor shall provide
 means to access these utilities with permission of the Owner.
 - 6. Limited parking is available on site. Limited parking of passenger vehicles may be permitted in the Old Burying Ground and Mt. Pleasant Cemetery, provided that the contractor proposes the following for review by the Owner: location and method of driving into and out of the cemetery, including appropriate pedestrian signage and barriers where necessary. If the plan is approved and parking is allowed in the cemetery, all parking must be away from primary usage paths and parking must be clearly delineated and signed to avoid

conflicts with cemetery visitors and cemetery activities. All landscaping must be restored at the conclusion of the project (e.g., new loam and seed to replace dead grass).

1.02 SUMMARY SCOPE OF WORK

- A. Perform the following below-listed work at both sites (Old Burying Ground and Mt. Pleasant Cemetery).
 - 1. Mobilize to the site and provide all equipment, traffic control, and/or sidewalk closures and temporary protection needed to access and undertake work in this section.
- B. Perform the following below-listed work for the Old Burying Ground perimeter wall repairs (Phase 1 through Phase 3).
 - Perform a survey of the Old Burying Ground perimeter walls for each phase to document all existing coping stones, marble tomb markers, and sections of the wall with large cut granite stones indicated in the Drawings to be removed, reset, and rebuilt.
 - a. Number all original coping stones and marble tomb markers selected for removal and resetting and provide annotated photographs of wall elevations at all areas requiring localized repair. The coping stones and tomb markers may be stored on-site or off-site. If they will be stored on site, provide protection for the landscaping (e.g., plywood).
 - b. Document the original position and orientation of each large cut granite stones. Document this position by numbering the stones and photographing the stone in its original location.
 - 2. Rebuild sections of the brick wall. Provide new replacement brick for full-height rebuilding.
 - Rebuild sections of the stone wall. Reuse existing stone for sections of stone wall.
 - 4. Brick and stone mortar removal and joint preparation. Exercise care not to damage any existing brick and stone
 - Brick and stone repointing.
 - 6. Localized rebuilding of masonry (brick or stone) walls, including removal and resetting coping stones and marble tomb markers. Reset all original coping stones using stone shims. Reuse existing stone shims and provide new where missing. Provide new coping stones where indicated.
 - 7. Clean 100% of all exposed masonry surfaces within the scope of work (including the removal of biological growth) including brick, cut granite, field stone, and marble tomb markers. Clean the brick and granite in accordance with the products and methods approved during the cleaning mockups. Clean

- the marble separately with a nonacidic cleaner, in accordance with the products and methods approved during the cleaning mockups.
- 8. Perform final wash-down of the wall.
- 9. Restore landscaping damaged by work (including laydown, storage, and parking areas) as directed by Owner.
- C. Perform an overall survey the buried tombs at the Mt. Pleasant Cemetery to document all existing coping stones indicated in the Drawings to be removed and reset.
 - Number all original coping stones selected for removal and resetting and provide annotated photographs of wall elevations at all areas requiring localized repair.
 - 2. Remove all coping stones indicated for removal on the Drawings. Reset all original coping stones using stone shims and reset with two 1/2 in. stainless steel dowels per coping stone. Reuse existing stone shims and provide new where missing.
 - 3. Fill large gaps between wall stones with stone shims and mortar.
 - 4. Localized replacement of outer wythe of brick.
 - 5. Rebuild sections of the brick wall. Provide new replacement brick for locations where rebuilding is indicated.
 - 6. Rebuild sections of the stone wall. Reuse existing stone for sections of stone wall.
 - 7. Install drainage pipe wrapped in filter fabric behind coping stones to be reset.
 - 8. Clean 100% of all exposed masonry surfaces within the scope of work (including the removal of biological growth). Clean the brick and granite in accordance with the products and methods approved during the cleaning mockups.
 - 9. Restore all landscaping damaged by the work (including laydown, storage, and parking areas) as directed by Owner.

1.03 CONSTRUCTION SCHEDULE

- A. The Contractor shall not perform work during the "no work" dates listed below, which correspond to major pedestrian-intensive events near the site. Provide temporary protection for the work in progress. The "no work" dates for 2020 are as follows:
 - 1. 25 May 2020.
 - 2. The above-mentioned dates may be changed at the discretion of the Owner.

B. Required Date of Substantial Completion: Completion date for each phase of the Old Burying Ground project and the Mt. Pleasant Cemetery project to be determined by the Owner during bidding phase.

1.04 SUBMITTALS

- A. Submit the following items to the Engineer and Owner for approval prior to the start of work. Do not order materials or begin work until receiving written approval of the submittals.
 - 1. Sample graphics for pedestrian directional signage; below are examples of potential signs:
 - a. "Sidewalk Closed".
 - b. "Pedestrian Detour" (with arrow)
 - 2. Copy of Town of Arlington Street or Sidewalk Occupancy Permit.
 - 3. Proposed plan of laydown, storage, vehicular access, and parking area(s) as well as tree protection plan for approval by the Owner.
 - 4. Proposed plan for storage of coping stones and marble tomb markers, including storage, protection of landscaping (if to be stored on site), and proposed transport (if to be stored off-site).
 - 5. Sequencing plan describing the sequence of the work to be performed.
 - 6. Photographs documenting location and identification number of each coping stone, marble tomb marker and large cut granite stone scheduled for rebuilding prior to removal. Identification number marked on face of every stone must be clearly visible in photographs.
 - a. For marking the exposed face of the stone prior to removal: Use a lumber crayon or other implement that will not wash off in the rain but that can be completely removed at the conclusion of the work. Prior to the work, demonstrate on an area of wall that is not highly visible that markings from the lumber crayon or other implement can be removed from the stone.
 - b. For marking the concealed face of the stone after removal: Use a permanent ink marker or permanent paint pen. Indicate orientation of the stone as well as identification number.
- B. Shop Drawings: Submit drawings showing locations of removal and resetting of face coping stones and marble tomb markers.
- C. Submit manufacturer's literature for all materials proposed for use on this project, as described in these specifications, with all pertinent technical data and material properties showing conformance with these specifications.

- D. Submit MSDS or SDS sheets to the Owner for review for cleaning products, and any other products, upon request.
- E. Mortar Sample Submittals: Provide samples of the cured mortar to be used for this project. Samples will be used to evaluate the color and texture of the proposed mortar. The mortar samples may be made in rings cut from 3 in. dia. PVC pipe.
- F. Replacement Brick: Submit sample boards of the brick units provided by the manufacturers for five different styles proposed for use. Submit ten actual full-size brick units representing the range and variation of color for up to three styles (up to thirty bricks total), as selected by the Engineer.
- C. Stone (new coping stones): Provide a minimum of two granite and two bluestone samples proposed for replacing missing coping stones, showing the range of variation among the stones. Submit samples sized between 10 in. x 10 in. and 12 in. x 12 in. All samples must be split-faced on at least one side of the large face.
- D. Product certificates for EZ-Flow drain including fittings from the manufacturer.
- G. Provide physical samples of all materials specified, clearly labeled, at the request of the Engineer or Owner. Include Ziploc bag samples, clearly labeled, of all powder or granular materials, such as sand, cement, lime, etc.
- E. Mockups: Construct mockups described in Paras. 3.06 and 3.08 at locations selected by the Engineer. The approved mockups shall remain as part of the completed work. Notify the Engineer at least 48 hrs before starting the work on each mockup. Reconstruct each mockup as many times as necessary to meet the approval of the Engineer. Do not proceed with any part of the work before the mockup is approved by the Engineer. Mockups will be used to establish both technical and aesthetic standards for the remainder of the project.
 - a. Joint Removal and Preparation: The mockup is to consist of an area of approximately 2 sq ft total (1 ft by 2 ft), demonstrating preparation of joints for repointing.
 - b. Masonry Cleaning: Clean representative areas of soiled masonry where directed by the Engineer. Perform cleaning mockup with the Engineer present. Perform up to three mockups for each type of cleaning material and method. Each cleaning mockup is to consist of an area of approximately 6 sq ft, at an inconspicuous area of the wall, as chosen by the Owner.
 - c. Repointing: The mockup is to include pointed joints with finish tooling. Mockup mortar mixes as directed by the Engineer, mockup for each mix approximately 2 sq ft (1 ft by 2 ft).
 - d. Rebuilt masonry wall: The initial area of the rebuilt brick masonry wall will be reviewed as an in situ mockup. The mockup is to consist of a minimum of 3 ft length, full height of the rebuilt masonry wall, including brick masonry resetting coping stone and marble tomb marker.

e. Resetting coping stones at Mt. Pleasant Cemetery: Construct a mockup of the drainage behind coping stone using the material proposed for the final construction. Mockup must include resetting at least one coping stone with two stainless steel dowels.

1.05 QUALITY REQUIREMENTS

- A. Initial Installation: The initial areas of installation of rebuilt brick and stone wall, repointing, resetting of coping stones and marble tomb markers, and of final cleaning will each be reviewed by the Engineer and Owner, and will be considered additional in situ mockups, by which the remaining work will be judged with regard to workmanship, quality, stone alignment, joint width, joint profile, color, texture, aesthetics, and all other characteristics. Notify the Engineer and Owner at least three days before initial installation construction of the mockup so that he/she may be present during the initial installation. Obtain the Engineer's acceptance of workmanship before proceeding with further installation. Approved installation will remain as part of the completed work.
- B. Installer Qualifications: Engage an experienced installer who has a minimum of five years of experience with successfully completed work described in this Section. If requested by the Owner, provide a list of five projects showing at least five years' successful experience with similar masonry restoration work on buildings or structures. List the project name and address, the Owner's representative, the General Contractor, the Engineer, and appropriate subcontractors with phone numbers and contact personnel.

1.06 WARRANTY

A. Guarantee all work under this Section in a document. State that if, within two years after the Date of Substantial Completion of the Work, any of the work of this Section 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. Also, state that the Contractor shall bear all costs incurred by the Owner, including reasonable attorney's fees, to enforce compliance with the obligations of this Guarantee. The obligation of these Guarantees shall run directly to the Owner and may be enforced by the Owner against the Contractor, shall survive the termination of the Contract, and shall not be limited by conditions other than this Contract.

PART 2 - MATERIALS

2.01 MASONRY MATERIALS

A. Brick:

 Replacement brick: Molded fired-clay brick, meeting the requirements of ASTM C67, Grade SW, size and color to match existing. Extruded brick are unacceptable. Cementitious or concrete brick are unacceptable. Brick must match the existing brick in appearance, including size, color, sheen, texture, etc. The following are manufacturers of molded fired-clay brick; although approval of any brick submittal, including brick provided by the manufacturers listed above, is conditional upon the specific brick submitted being an excellent match to the appearance of the existing brick, as well as meeting the technical requirements above.

- a. Stiles and Hart, Bridgewater, Massachusetts. 508-697-6928
- b. Old Carolina Brick, Salisbury, North Carolina. 704-636-8850
- c. Redland Brick, Williamsport, Maryland. 301-223-7700
- d. Glen-Gery Brick, Wyomissing, Pennsylvania. 610-374-4011
- e. Belden Brick, Canton, Ohio. 330-451-2031
- B. Coping Stones (granite and bluestone):
 - 1. Reuse existing copings stones wherever possible.
 - 2. Where original stones do not exist on the site, use new stone of the same geological types, color, size, and shape and in conformance with the original stone scheme, submitted in advance for review and approval. Stone submittals will be placed against the wall at the areas of mockup cleaning to judge the match of the stones with the cleaned originals.
- C. Stones other than coping stones (e.g., within the core of the wall or below-grade):
 - 1. Reuse existing stones wherever possible.
- D. Setting dowels for resetting wall coping stones and repair damaged coping stones:
 - 1. Dowels: Size as indicated, Type 304 stainless steel threaded rods, in lengths as required by the existing conditions, and as indicated on the Drawings.
 - 2. Epoxy for Setting Dowels: Two-part construction-grade epoxy supplied with static mixing tubes, such as HIT HY 200, by Hilti, or approved equal.
- E. Setting Shims: In joints of masonry and beneath coping stones, provide multiple stone shims at each stone to provide point-to-point contact between adjacent stones:
 - 1. Reuse existing stone shims wherever possible
 - 2. Provide new Dalcite (Bluestone) shims meeting the requirements of ASTM C568 for Type III (high-density) stone. Color and finish as approved by the Engineer and Owner, 1 in. to 1-1/2 in. thick, natural cleft (split) on all faces.
- F. Mortar for repointing: Site mixed mortar, conforming to ASTM C270, Type N. Approximate proportions by volume 1: 1: 5 to 6 (portland cement: hydrated lime: sand), per the approved samples and mockup. Do not use ground limestone or prepared masonry mortar mixes. Use the same brands of cement and lime, and the

same source of sand throughout the project, for each mix. Do not use any admixture without written approval by the Engineer. Constituent materials for mortar:

- Sand: Aggregate size and color to match the original. Sand to meet ASTM C144, except the Engineer or Owner may allow particle size variation to more-closely match the sand in the original mortar.
- 2. Cement: Type I or II, white, meeting ASTM C150, low alkali (equivalent alkalis less than 0.6%).
- Lime: Hydrated lime meeting ASTM C207, Type S.
- 4. Water: Potable.
- 5. Mortar Pigment: Inert, nonfading, finely ground, alkali-fast mineral oxides made especially for mortars, meeting ASTM C979. Limit inorganic coloring additive so as not to exceed 10% of the weight of the binder (cement + lime). Do not use any pigment unless specifically directed by the Engineer in the mockup phase. If required, the various pigment colors to be determined by the Engineer during the mockup phase. Do not use carbon black as a coloring additive material.
- G. Mortar for Stone: ASTM C270, Type N. Approximate proportions by volume 1: 1: 5 to 6 (portland cement: hydrated lime: sand), per the approved samples and mockup. Do not use ground limestone or prepared masonry mortar mixes. Use the same brands of cement and lime, and the same source of sand throughout the project, for each mix. Do not use any admixture without written approval by the Engineer. Constituent materials for mortar:
 - 1. Sand: Aggregate size and color to match the original, use provided original bedding mortar sand sample for color comparison. The Engineer will provide a sample to the Contractor to match. Sand to meet ASTM C144, except the Engineer or Owner may allow particle size variation to more closely match the sand in the original mortar.
 - 2. Cement: Type I or II, white, meeting ASTM C150, low alkali (equivalent alkalis less than 0.6%). Color, or combination of colors, as determined by the approved mortar sample and mockup.
 - 3. Lime: Hydrated lime meeting ASTM C207, Type S.
 - 4. Water: Potable.
 - 5. Mortar Pigment: Inert, nonfading, finely ground, alkali-fast mineral oxides made especially for mortars, meeting ASTM C979. Limit inorganic coloring additive so as not to exceed 10% of the weight of the binder (cement + lime). Do not use carbon black as a coloring additive material. Pigment colors to be determined by the Engineer and Owner during the mockup phase.

- H. Slate shims: Slate meeting ASTM C406 Grade S1, nominal 3/16 in. to 1/4 in. thickness.
- I. Non-shrink grout: Structural non-shrink (shrinkage-compensating), cementitious grout, nonmetallic (containing no metallic fibers or ingredients), with a minimum twenty-eight-day compressive strength of 6,000 psi at fluid consistency and a hardened height change per ASTM C1090 of 0.0% to +0.5% (expansion) such as "Five Star Grout" by U.S. Grout Corp.
- J. Round Steel Bars (coping stone staples): ASTM A36.
- K. Masonry Cleaning Products for mockups: Cleaning products must meet the requirements listed below. Review of the proposed product(s) for conformance to the requirements will be evaluated during the submittal process. If different forms of the product exist (e.g., liquid and gel), they may be used in combination. All products must be phosphate free and biodegradable. The Engineer and Owner will choose a method for cleaning from the mockups. The intention is to use the gentlest means possible.
 - Overall Cleaning Methods for Mockups:
 - a. Water power washing, with low pressure (under 100 psi).
 - b. Water with a mild detergent (e.g., Simple Green).
 - 2. Brick Cleaning Methods for Biological Growth Mockups.
 - a. Non-chlorine bleach diluted with water.
 - b. Lysol Brand Disinfectant Concentrate, liquid, biodegradable and not containing bleach, diluted with water.
 - c. D2 biological solution.
 - 3. General Performance Requirements for all Cleaners:
 - a. Will not damage masonry surface.
 - b. Approved for disposal in a sanitary sewer system (for all wet cleaning methods does not apply to dry microabrasive methods).
 - c. Effective in removing staining from the stone.
 - d. Low odor.
 - e. VOC compliant.
 - f. Water soluble.
 - g. Will not damage surrounding landscaping.
 - h. Classified on the Materials Safety Data Sheet as noncorrosive on the skin when applied undiluted.

- Not classified as a poisonous material under D.O.T. 173.132 Class 6, Division 6.1.
- j. Phosphate free.
- k. Biodegradable.
- Chemical Cleaner (for brick and granite only):
 - a. Mildly acidic, buffered detergent cleaner, One Restore by Eaco Chem, Light Duty Restoration Cleaner by Prosoco, or approved equal.
- 5. Cleaner (for marble tomb stone markers):
 - a. The Owners representative will determine cleaning method for the marble tomb stone markers.
- 6. Use natural or nylon bristle brushes for all cleaning operations. Metal bristle brushes are not permitted.
- L. EZ-Flow Drain and Fittings (EZ-1001F):
 - a. Pipe shall be manufactured from High Density Polyethylene and shall be both corrugated and perforated.
 - b. EZ Flow shall have Expanded Polystyrene Aggregate surrounding the pipe and enclosed by fabric mesh.
 - c. Expanded Polystyrene aggregate must be made from 100% Recycled Polyethylene.
 - d. Expanded Polystyrene aggregate shall have a measured void space of 57%.
 - e. EZ Flow sections must be provided in 10 ft sections.
 - f. Internal couplings shall be used to connect EZ Flow sections.
- M. Geotextile Filter Fabric: Non-woven needle-punched geotextile, manufactured for subsurface drainage applications made from polyolefins or polyesters; with elongation greater than 50%; complying with AASHTO M 288-15 and the following, measured per test methods referenced:
 - 1. Survivability: Class III; AASHTO M288
 - 2. Survivability: As follows:
 - a. Grab Test Strength: 120 lbs (534 N); ASTM D4632
 - b. Tear Strength: 50 lbs (233 N); ASTM D4533.

- c. Puncture Strength: 310 lbs (1380 N); ASTM D6241.
- 3. Apparent Opening Size: No. 70 Sieve, maximum; ASTM D4751.
- 4. Permittivity: 1.7 per second, minimum; ASTM D4491.
- 5. UV Stability: 70% after 500 hrs exposure; ASTM D4355
- N. Compacted Gravel Fill: Dense graded crushed gravel, gradation as required by Massachusetts Department of Transportation M2.01.7, for dense-graded crushed stone for sub-base. Compaction Curve: in accordance with the 95% Modified Proctor Compaction Test.
- O. Concrete for footings: Premanufactured bag mix concrete, minimum 5,000 psi, twenty-eight-day strength, as tested in accordance with ASTM C39, such as MasterEmaco S 440 (previously BASF LA-40).
 - 1. Water content not to exceed that recommended by manufacturer.
- P. Structural Backfill Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940; with at least 90% passing a 1-1/2 in. sieve and not more than 10% passing a No. 200 sieve.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify all site conditions and dimensions by field measurement in consideration of the special conditions associated with repairs to existing construction. Notify the Engineer immediately of any inconsistency between the conditions found and those shown in the Contract Drawings.

3.02 GENERAL WORKMANSHIP

- A. Do not use mortar when masonry surface temperature is below 40°F or above 90°F. Protect the mortar from direct sunlight and exposure to wind at temperatures over 80°F to prevent rapid evaporation of water in the mortar before, during, and after pointing.
- B. Measure cementitious and aggregate material for use in mortar in a dry condition by volume only. Measure materials with an approved device, not by shovel. Mix materials in a clean mechanical batch mixer. Thoroughly mix cementitious and aggregate materials together before adding any water. Add enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 1 to 1-1/2 hrs Add remaining water in small portions until mortar of desired consistency is reached. Use within 1 hr of final mixing.

3.03 STONE REMOVAL AND STORAGE

A. Prior to the work, demonstrate to the Owner or Engineer that the lumber crayon or other marking device for marking the exposed face of stones will not wash off in the

rain, but can be completely removed at the conclusion of the work. After successful demonstration of the lumber crayon or marking device, and prior to removal of any stone masonry, provide to the Engineer and Owner photographs of wall sections (both sides where necessary) clearly documenting the location and identification number of each stone scheduled for rebuilding. The identification number marked on face of every stone must be clearly legible in photographs.

- B. Remove individual stones using means and methods to avoid marring or damaging stones:
 - 1. Remove stones using hand chisels and other hand tools, <u>OR</u>
 - 2. Power-driven hand tools (e.g., motorized grinder) may be used only if approved in advance by the Owner. The Contractor must demonstrate that the following can be achieved without damaging the surrounding stone.
 - a. Cut the center width of the mortar around stone with a motorized grinder; avoid damage to any stone edges. Do not overcut into adjacent stone at any joint. After grinder-cut through center width of joints, remove remaining mortar at stone edges with hand tools.
- C. Upon removing each stone from the masonry, mark the identification number and stone orientation on the back (unexposed) face of each piece, using a permanent waterproof marker or paint pen.
- D. Carefully remove excess mortar from coping stones. Repair coping stones damaged during the removal using stone dutchman repairs at no additional cost to the Owner.
- E. Store removed stones in locations approved by the Owner. Take adequate precautions to prevent breakage, chipping, or scratching.
- F. At the interface of the existing masonry scheduled to remain with the removed masonry (i.e., masonry scheduled for rebuilding), remove all mortar from faces and ends of existing remaining masonry to the greatest extent possible without damaging

3.04 JOINT PREPARATION FOR REPOINTING

- A. Remove mortar from joints to a minimum depth equal to 2.5 times the joint width. Remove mortar to a greater depth wherever necessary to reach sound existing mortar.
 - 1. Remove mortar using hand chisels and other hand tools, or
 - 2. Power-driven hand tools (e.g., motorized grinder) may be used at the bed (horizontal) joints only if approved in advance by the Owner. Power-driven hand tools will not be permitted for use at the head (vertical) joints. To gain owner approval, the Contractor must demonstrate that the following can be achieved without damaging the surrounding brick or stone:
 - a. Cut the center width of the mortar bed joint with a motorized grinder; avoid damage to any stone edges. Do not overcut into adjacent brick

or stone at any joint. After grinder-cut through center width of mortar bed joints, remove remaining mortar at stone edges with hand tools.

- B. Remove mortar from masonry surfaces within raked-out joints to expose the sides of the brick and stone for contact with repointing mortar.
- C. Coordinate with cleaning of the wall.
- D. After cleaning of the wall is completed, clean open joints repeatedly with compressed air and water to remove dust, debris, and loose mortar or cleaning media particles. Time application of final rinsing so that, at time of repointing, excess water has evaporated or run off, and joint surfaces are damp but free of standing water.

3.05 MASONRY POINTING

- A. Deep Repointing:
 - 1. Where large voids exist behind the existing face stones remove the existing face stones.
 - 2. Remove all loose or damaged mortar from the interior of the wall until sound mortar is reached.
 - 3. Reset existing face stones.
- B. Remove mortar from masonry surfaces within raked-out joints to expose the sides of the stones for contact with pointing mortar.
- C. Coordinate with cleaning of the wall.
- D. After cleaning of the wall is completed, clean open joints repeatedly with compressed air and water to remove dust, debris, and loose mortar or cleaning media particles. Time application of final rinsing so that, at time of pointing, excess water has evaporated or run off, and joint surfaces are damp but free of standing water.
- E. Apply first layer of pointing mortar only to fill localized voids or pockets where existing mortar was removed to depths greater than surrounding areas, creating a recessed joint of uniform depth. Apply mortar in subsequent maximum 3/8 in. thick layers (i.e., lifts). Compact each layer thoroughly and wait till thumbprint-hard before applying next layer. Recess edges of final layer slightly from innermost face of stones to avoid uneven or irregular mortar joint edges where edges of stone are chipped, rounded, or irregular. Take care not to spread mortar over edges onto exposed surfaces. Tool the mortar joint into the raised beaded profile as shown in the Drawings.
- F. Cure mortar by maintaining in a damp condition for not less than 72 hrs. Keep masonry covered with opaque tarpaulins to protect from direct sun and wind during curing and use a fog spray (fine mist) periodically to maintain moist conditions under the tarp. Do not wash the newly pointed mortar with a stream of water.

- G. After mortar has fully hardened, thoroughly clean exposed masonry and stone surfaces of excess mortar and mortar residue matter using stiff plastic bristle or natural bristle brushes and clean water, spray-applied at low pressure (less than 200 psi).
 - 1. Do not use metal scrapers or metal brushes.
 - 2. Do not use acid or alkali cleaning agents.

3.06 STONE SETTING

- A. Mockup: Prior to resetting new stones, construct a mockup with new stone in the wall. The Owner and Engineer will review the mockup for approval. The aesthetic goal of the mockup is that it be as indistinguishable as possible from the surrounding original stone masonry, by matching the size, geometry, dimensions, projection, texture, finish etc., of the typical surrounding original stone masonry, including both stones and mortar joints.
- B. All stone setting shall be done by experienced stone masons under adequate supervision.
 - 1. In areas of loose or missing stones, where indicated on the Drawings, dismantle and rebuild using original face stones in their original locations, to the extent possible.
 - 2. Reuse existing stone in repair of the wall wherever possible, or, where originals stones are missing and cannot be found on the site, provide new stones matching the originals in geology, texture, color, shape, and finish.
- C. For sections of large cut granite stones indicated to be removed and reset as indicated in the Drawings use the annotated pre-demolition photos as a guide, rebuild the masonry with each existing face stone in its original position and orientation.
- D. Set stones such that their weight is <u>not</u> supported by the mortar bed, but by contact with adjacent stones or by the adjacent stones through stone shims. Provide concealed stone shims recessed from the face of the wall to allow full depth pointing mortar as described below in Para. D. Recess stone shims for vertical face stones at least 1 in. from the face of stone to permit adequate mortar coverage. Ensure that the stone is fully bedded in mortar.
- E. Lay bed mortar and immediately set stone to prevent drying out of mortar. Do not furrow bed joints. Completely butter the ends of each stone with mortar and shove the stone into place so that mortar squeezes out of the mortar joints.
- F. Once the stones are laid and firmly set in their final position, do not disturb, tap, shove, or push stones while the mortar is curing.

3.07 REBUILDING THE WALL

A. Excavate and provide compacted crushed stone or compacted structural fill as a compacted sub-base for the rebuilt section of the wall as indicated in the drawings.

- B. Generally, follow procedures for laying stones, pointing, setting coping stones, setting stone shims, and setting face stones as outlined in this Section.
- C. Additionally, use only granite or bluestone specified herein in the core of the wall. Lay and course the stone masonry such that stone-to-stone contact is provided between all adjacent stones. Use concealed stone shims to provide additional point-to-point contact, beneath the surface for the wall, and to limit the width of concealed mortar joints.

3.08 RESET COPING STONES AND MARBLE TOMB MARKERS

- A. Remove all existing coping stones and marble tomb markers after marking and photographing the stones as described above. Measure tomb markers and deliver to the Owner for cleaning. Rebuild wall with blocking to create recess for resetting tomb markers. Retrieve cleaned tomb markers from Owner and reset in wall.
- B. Where coping stones are damaged, cut the stone to remove the damaged portion and reuse. Provide a new stone to fit in the area where the damaged portion is removed.
- C. Where marble tomb marker is damaged, measure tomb marker and deliver fragments to Owner for repair. Rebuild wall with blocking to create recess for resetting tomb marker. Retrieve repaired tomb marker from Owner and reset in wall.
- D. Coping stones that are cracked all the way through the thickness and width of the stone, but are otherwise in good condition, should be removed and reinstalled in their original location but treated as two separate pieces.
- E. Provide bluestone shim course (12 to 18 in. by 1 to 1-1/2 in. by 6 in. minimum) beneath all coping stones. Reuse existing shims where possible.
- F. Reset existing coping stones and marble tomb markers in their original location and orientation and supported by a leveling course of cut stone shims. Coping stones and markers must be fully supported by stone shims and must be generally level and stable (without rocking). Dry set coping stones and marble tomb markers to ensure the stones are fully supported and do not rock before installing bedding mortar.
- G. For the resetting the coping stones at Mt. Pleasant Cemetery position stainless steel dowels, two per stone, at approximate quarter points of the stones.

3.09 INSTALLING DRAIN (MT. PLEASANT CEMETERY ONLY)

A. Inspection:

- Examine excavated trench for smoothness and ensure trench is free of debris.
 Inspect trench for correct slope and elevation in accordance with plans. Do not start EZ Flow installation until unsatisfactory conditions are corrected.
- 2. Inspect EZ Flow product to ensure product has not been damaged during delivery. Inspect interior of pipe for debris, soil or other foreign objects, if found remove before installation.

 Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance. If existing conditions are found unsatisfactory, contact Quality Control Manager for resolution.

B. Preparation:

- 1. Excavate trench as specified in plans to desired width accommodating the EZ Flow pipe system.
- 2. Slope trench as specified in plans to flow toward outlet(s).
- 3. Prepare and shape smooth trench bottom to have continuous contact with pipe at specified elevation as shown in plans.

C. Installation:

- 1. Provide EZ Flow product and install beginning at the outlet point and work upstream. Install drain to slope as indicated.
- 2. Use internal couplings provided by NDS to connect EZ Flow sections together.
- To cut EZ Flow pipe to lengths other than 10 ft intervals, mark the mesh where cut needs to be made and carefully make a cross-sectional cut in the mesh to access Polystyrene Aggregate. Remove and set aside sufficient aggregate to expose the pipe and to re-connect the mesh to the pipe. Using an appropriate connector such as a nylon wire tie, reattach the mesh to the pipe, making sure remaining aggregate is properly contained. Cut the exposed polyethylene pipe to the measured length. Dispose of remaining aggregate properly.
- 4. At the end of the workday, all upstream open ends of EZ Flow shall be covered or plugged to prevent intrusion of dirt, debris and foreign objects.
- 5. Connection to onsite storm drain systems and structures shall be considered incidental to the completion of this specification section.
- 6. Provide and install specified fill material over EZ Flow pipe. Lift thickness and compaction density shall be in accordance with plans and specifications.
- 7. Install surface medium as specified in plans.

3.10 CLEANING OF THE WALL

A. Prior to construction, undertake trial mockup cleaning of inconspicuous areas of the wall, as selected by Owner to determine the most effective methods (i.e., dwell time, dilution) for cleaning of the soot, dirt, pollutants, grime, paint, and other materials from the exposed surfaces of the wall, without harming the stones. Include a minimum of six iterations (9 sq ft area of each) combining different dwell times and dilutions. Start with a dwell time of 30 min. and do not exceed 3 hrs Follow all manufacturer's instructions for application and removal. The Owner and Engineer will select and approve a method of cleaning from review of the mockups.

- B. After preparation of joints for repointing, and after localized repairs to the wall, but prior to repointing, use the cleaning materials and procedures approved during the mockup process to clean the wall of dirt, soot, pollutants, paint, and other foreign contaminants to the level equal to that in the approved mockup.
- C. After all repairs are complete, perform a final wash-down of the wall using water to remove dust, debris, laitance from repointing, and any remaining lumber crayon numbering on exposed faces of stone.

END OF SECTION

BY-LAWS OF THE TOWN OF ARLINGTON TITLE I ARTICLE 16

CONSTRUCTION PROJECTS

Section 1. Women Work Force Participation

Any Town board or official in charge of a construction or reconstruction project is required to include in the contract documents the following:

- A. Contractor shall maintain as a goal on this project a not less than five percent ratio of women work force to total project hours in both the general contract and each individual filed sub-bid contract, if applicable. The preceding sentence shall be included in all construction contracts whether entered into by the Town pursuant to the provisions of M.G.L. c. 149 or M.G. L. c 30, §39M et. seq. provided however, that if entered into under Chapter 30 same shall not be deemed to apply where the projected bid price as determined by the Director of Public Works is not likely to exceed \$200,000.
- **B.** A Labor Scheduling Table which will be used as a tool for achieving a range of women work force participation for the entire project in both the general contract and each individual filed sub-bid contract.

Section 2. Equal Opportunity Goal Compliance

Any Town board or official in charge of a construction or reconstruction project is required to include in the contract documents the following:

- A. Before starting work, the contractors (includes the general contractor, for itself and its subcontractors, as well as all filed sub-bid contractors, if applicable) will submit plans for achievement of the equal opportunity goals of the contract. All contractors will be required to make a good faith effort to achieve these goals. The plan will indicate if the contractors expect to achieve the requirements during the first quarter. If there are reasons why the contractors do not expect to achieve the requirements during the first quarter year of the contract construction phase, then the contractors shall provide a plan calculated to address, to the extent reasonably possibly, these obstacles to a good faith effort to achieve such goals.
- B. Not more than ten days following the end of each work quarter, the contractors will report on the achievement of the goals, detailing the good faith efforts that have been made and will continue to be made and any other appropriate efforts not yet undertaken.
- C. All reports will be signed by an officer or principal of the company who has the authority to contractually obligate the company.

Section 3. Recruitment and Training

Any board, officer, committee, or other agency of the Town, which acts on behalf of the Town in making or supervising any contract, in an amount exceeding the sum of \$100,000 for the purchase of goods or services or for the construction, renovation, or repair of buildings or other improvement of real estate, may make arrangements with contractors and other interested agencies for special programs of recruitment and training in connection with the work to be performed on such contract, with the objective of promoting equal employment opportunity for members of minority groups protected by the fair employment laws of the Commonwealth and the United States. Any board, officer, committee or other Town agency may expend Town funds in carrying them out provided that appropriations specifically designed for such purposes have been voted by the Town Meeting.

TOWN OF ARLINGTON EQUAL OPPORTUNITY ADVISORY COMMITTEE



730 Massachusetts Avenue, Arlington, MA 02476 Phone (781) 316-3120 Fax: (781) 316-3129

TRICIA O'DONOGHUE, CHAIR BARBARA BOLTZ AUGUSTA HAYDOCK JACK JONES

CARYN COVE MALLOY
EQUAL OPPORTUNITY OFFICER

CONTRACTOR CERTIFICATION

During the performance of the Contract, the Contractor and all subcontractors (hereafter collectively referred to as "the Contractor") for a town construction contract or town assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

The Contractor shall comply with the provisions of Town of Arlington Bylaws, Anti-Discrimination policies and Chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this contract.

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barrier in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, gender identity, sexual orientation, age, genetic information, ancestry, children, marital status, veteran status or membership in the armed service, the receiving of public assistance, and handicap. Such affirmative action measures shall entail a list of positive and aggressive measures which shall include but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority women and other community-based organizations of employment opportunities; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying this Committee in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker.

The Contractor shall submit to the Equal Opportunity Advisory Committee, through the Purchasing Director Domenic Lanzillotti, the following Contractor's Certification with all attachments. The Contractor's Certification will be reviewed by the Committee and will inform the Contractor of any deficiencies to be corrected.

CONTRACTOR CERTIFICATION

	certifies that they:
(Contr	ractor Name)
1.	Will not discriminate in their employment practices.
2.	Intend to use, if General Contractor, the following listed construction trades in the work under the contract:
3.	If Trade Subcontractor, will provide the following work under the contract:
4.	Will make good faith efforts to comply with the minority employee and women employee workforce participation ratio goals of the Town of Arlington and the Commonwealth of Massachusetts and specific affirmative steps contained herein; and to provide evidence of its good faith efforts. Attached hereto, please find:
A.	Employment Opportunities advertised in:
В.	Notification to Minority/Women/Community based Organizations such as:

List of v	List of workers referred to Contractor and note on what action was taken:					
	notification that Union/Local Noworker during the week of:					
Signatur	re of Officer	Date				

To view and print Weekly Payroll & Statement of Compliance Forms, click on www.mass.gov/dols/pw.

PLEASE NOTE: The attached Prevailing Wage Schedule is valid for 90 days. An Awarding Authority should re-request an up to date Prevailing Wage Schedule if it has NOT opened bids or selected a contractor within 90 days of the issuance date of the attached prevailing wage schedule.

*For MULTI-YEAR projects bid on or after 8/8/08, Awarding Authorities must request an Annual Update to this Prevailing Wage Schedule each year for the duration of the project, no later than two weeks before the anniversary date of the execution of the general contract. Annual updates are not required for projects that last LESS THAN ONE YEAR.

*For CM AT RISK projects (bid pursuant to GL c.149A), Awarding Authorities must request a Prevailing Wage Schedule NOT sooner than 90-days before the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work.

*For MULTI-YEAR CM AT RISK projects, Awarding Authorities must request an Annual Update to this Prevailing Wage Schedule each year for the duration of the project, no later than two weeks before the anniversary date, which is the earlier of: (a)the execution date of the GMP Amendment, or (b) the execution date of the first amendment to procure construction scopes of work.

Apprentice wages (expressed as dollar figures) and the required benefits are listed on the Prevailing Wage Schedule. For further details, please see opinion letter PW-2010-03-03.16.10 (dated March 18, 2010) at www.mass.gov/dols/pw.

Request Prevailing Wage Rates online at: www.mass.gov/dols/pw.

THIS IS A SYSTEM-GENERATED EMAIL. PLEASE DO NOT REPLY TO THIS EMAIL. TO CONTACT DLS REGARDING PREVAILING WAGE MATTERS, CALL 617-626-6953.

APPROVAL/DENIAL COMMENTS



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

ROSALIN ACOSTA Secretary MICHAEL FLANAGAN Director

Awarding Authority:

Town of Arlington

Contract Number:

20-27 City/Town: ARLINGTON

Description of Work:

Masonry Restoration Old Burying Ground/Mt. Pleasant Cemetery to include Cleaning, Repointing, repair and

drainage installation as required.

Job Location:

Pleasant St./Medford St.

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Issue Date: 05/07/2020 **Wage Request Number:** 20200507-030

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction					o nompro y mono	
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2019	\$35.35	\$12.41	\$13.72	\$0.00	\$61.48
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$36.25	\$12.41	\$13.72	\$0.00	\$62.38
	08/01/2020	\$36.25	\$12.91	\$13.72	\$0.00	\$62.88
	12/01/2020	\$36.25	\$12.91	\$14.82	\$0.00	\$63.98
	06/01/2021	\$37.05	\$12.91	\$14.82	\$0.00	\$64.78
	08/01/2021	\$37.05	\$13.41	\$14.82	\$0.00	\$65.28
	12/01/2021	\$37.05	\$13.41	\$16.01	\$0.00	\$66.47
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2019	\$35.42	\$12.41	\$13.72	\$0.00	\$61.55
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$36.32	\$12.41	\$13.72	\$0.00	\$62.45
	08/01/2020	\$36.32	\$12.91	\$13.72	\$0.00	\$62.95
	12/01/2020	\$36.32	\$12.91	\$14.82	\$0.00	\$64.05
	06/01/2021	\$37.12	\$12.91	\$14.82	\$0.00	\$64.85
	08/01/2021	\$37.12	\$13.41	\$14.82	\$0.00	\$65.35
	12/01/2021	\$37.12	\$13.41	\$16.01	\$0.00	\$66.54
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2019	\$35.54	\$12.41	\$13.72	\$0.00	\$61.67
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$36.44	\$12.41	\$13.72	\$0.00	\$62.57
	08/01/2020	\$36.44	\$12.91	\$13.72	\$0.00	\$63.07
	12/01/2020	\$36.44	\$12.91	\$14.82	\$0.00	\$64.17
	06/01/2021	\$37.24	\$12.91	\$14.82	\$0.00	\$64.97
	08/01/2021	\$37.24	\$13.41	\$14.82	\$0.00	\$64.17 \$64.97 \$65.47 \$66.66 \$133.83
	12/01/2021	\$37.24	\$13.41	\$16.01	\$0.00	\$66.66
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$102.78	\$9.90	\$21.15	\$0.00	\$133.83
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR LABORERS - ZONE 1	12/01/2019	\$39.90	\$8.10	\$16.60	\$0.00	\$64.60
LADORERS - ZONE I	06/01/2020	\$40.89	\$8.10	\$16.60	\$0.00	\$65.59
	12/01/2020	\$41.87	\$8.10	\$16.60	\$0.00	\$66.57
	06/01/2021	\$42.89	\$8.10	\$16.60	\$0.00	\$67.59
	12/01/2021	\$43.90	\$8.10	\$16.60	\$0.00	\$68.60
For apprentice rates see "Apprentice- LABORER"				***		
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/01/2019	\$37.00	\$12.50	\$8.85	\$0.00	\$58.35
	06/01/2020	\$38.00	\$12.50	\$8.85	\$0.00	\$59.35
ACRIMAL T. D.A.W.E.D.	12/01/2020	\$39.00	\$12.50	\$8.85	\$0.00	\$60.35
ASPHALT RAKER LABORERS - ZONE 1	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/01/2010	\$10 72	\$12.50	\$15.70	\$0.00	\$76.93
OPERATING ENGINEERS LOCAL 4	12/01/2019 06/01/2020	\$48.73 \$40.83	\$12.50 \$12.50	\$15.70	\$0.00	
		\$49.83	\$12.50 \$12.50	\$15.70	\$0.00	\$78.03 \$70.18
	12/01/2020	\$50.98	\$12.50			\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70 \$15.70	\$0.00	\$80.28
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 2 of 37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BACKHOE/FRONT-END LOADER	12/01/2019	\$48.73	\$12.50	\$15.70	\$0.00	\$76.93
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.83	\$12.50	\$15.70	\$0.00	\$78.03
	12/01/2020	\$50.98	\$12.50	\$15.70	\$0.00	\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70	\$0.00	\$80.28
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43
BARCO-TYPE JUMPING TAMPER	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
LABORERS - ZONE 1	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
BLOCK PAVER, RAMMER / CURB SETTER	12/01/2019	\$39.90	\$8.10	\$16.60	\$0.00	\$64.60
LABORERS - ZONE 1	06/01/2020	\$40.89	\$8.10	\$16.60	\$0.00	\$65.59
	12/01/2020	\$41.87	\$8.10	\$16.60	\$0.00	\$66.57
	06/01/2021	\$42.89	\$8.10	\$16.60	\$0.00	\$67.59
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.90	\$8.10	\$16.60	\$0.00	\$68.60
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2020	\$46.10	\$7.07	\$17.98	\$0.00	\$71.15

Step	percent 01/01/2020		ntice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	;
1	65		\$29.97	\$7.07	\$11.69	\$0.00	\$48.73	
2	65		\$29.97	\$7.07	\$11.69	\$0.00	\$48.73	
3	70		\$32.27	\$7.07	\$12.59	\$0.00	\$51.93	
4	75		\$34.58	\$7.07	\$13.49	\$0.00	\$55.14	
5	80		\$36.88	\$7.07	\$14.38	\$0.00	\$58.33	
6	85		\$39.19	\$7.07	\$15.29	\$0.00	\$61.55	
7	90		\$41.49	\$7.07	\$16.18	\$0.00	\$64.74	
8	95		\$43.80	\$7.07	\$17.09	\$0.00	\$67.96	i
Notes								
Appr	entice to Journeyworke	r Ratio:1:4						
	FICIAL MASONRY (IN	ICL. MASONRY	02/01/2020	\$54.40	\$10.75	\$21.94	\$0.00	\$87.09
TERPROOFING) CKLAYERS LOCAL 3 (BOSTON)			08/01/2020	\$55.75	\$10.75	\$22.09	\$0.00	\$88.59
			02/01/2021	\$56.39	\$10.75	\$22.09	\$0.00	\$89.23
			08/01/2021	\$57.79	\$10.75	\$22.25	\$0.00	\$90.79
			02/01/2022	\$58.38	\$10.75	\$22.25	\$0.00	\$91.38

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 3 of 37

	Step	ve Date - 02/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	;
	1	50	\$27.20	\$10.75	\$21.94	\$0.00	\$59.89)
	2	60	\$32.64	\$10.75	\$21.94	\$0.00	\$65.33	
	3	70	\$38.08	\$10.75	\$21.94	\$0.00	\$70.77	
	4	80	\$43.52	\$10.75	\$21.94	\$0.00	\$76.21	
	5	90	\$48.96	\$10.75	\$21.94	\$0.00	\$81.65	
	Effecti	ve Date - 08/01/2020				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
	1	50	\$27.88	\$10.75	\$22.09	\$0.00	\$60.72	
	2	60	\$33.45	\$10.75	\$22.09	\$0.00	\$66.29)
	3	70	\$39.03	\$10.75	\$22.09	\$0.00	\$71.87	
	4	80	\$44.60	\$10.75	\$22.09	\$0.00	\$77.44	
	5	90	\$50.18	\$10.75	\$22.09	\$0.00	\$83.02	
	Notes:							
	Appre	ntice to Journeyworker Ratio:1:5						
		R/SCRAPER	12/01/2019	9 \$48.23	3 \$12.50	\$15.70	\$0.00	\$76.43
PERATING ENG	INEERS LO	OCAL 4	06/01/2020	0 \$49.31	\$12.50	\$15.70	\$0.00	\$77.51
			12/01/2020	0 \$50.45	\$12.50	\$15.70	\$0.00	\$78.65
			06/01/202	1 \$51.54	\$12.50	\$15.70	\$0.00	\$79.74
			12/01/202	1 \$52.68	\$12.50	\$15.70	\$0.00	\$80.88
		Apprentice- OPERATING ENGINEERS"						
AISSON & U BORERS - FOU		INNING BOTTOM MAN	12/01/2019	9 \$40.25	\$8.10	\$16.80	\$0.00	\$65.15
BOKERS - FOC	NDATION	AND MARINE	06/01/2020	0 \$41.24	\$8.10	\$16.80	\$0.00	\$66.14
			12/01/2020	0 \$42.22	\$8.10	\$16.80	\$0.00	\$67.12
			06/01/202	1 \$43.24	\$8.10	\$16.80	\$0.00	\$68.14
For apprentic	e rates see "	Apprentice- LABORER"	12/01/202	1 \$44.25	\$8.10	\$16.80	\$0.00	\$69.15
AISSON & U	JNDERP	INNING LABORER	12/01/2019	9 \$39.10	\$8.10	\$16.80	\$0.00	\$64.00
BORERS - FOU	NDATION	AND MARINE	06/01/2020	0 \$40.09	\$8.10	\$16.80	\$0.00	\$64.99
			12/01/2020	0 \$41.07	88.10	\$16.80	\$0.00	\$65.97
			06/01/202	1 \$42.09	\$8.10	\$16.80	\$0.00	\$66.99
			12/01/202	1 \$43.10	\$8.10	\$16.80	\$0.00	\$68.00
		Apprentice- LABORER"						
AISSON & U IBORERS - FOU		INNING TOP MAN AND MARINE	12/01/2019			\$16.80	\$0.00	\$64.00
			06/01/2020			\$16.80	\$0.00	\$64.99
			12/01/2020	0 \$41.07	\$8.10	\$16.80	\$0.00	\$65.97
			06/01/202	1 \$42.09	\$8.10	\$16.80	\$0.00	\$66.99
			12/01/202	1 \$43.10	\$8.10	\$16.80	\$0.00	\$68.00

Classification					Effective Da	te Base V	Wage	Health	Pension	Supplemental Unemployment	Total Rate
CARBIDE CO		LL OPERA	ATOR		12/01/2019	\$39	9.40	\$8.10	\$16.60	\$0.00	\$64.10
LABORERS - ZON	E I				06/01/2020	\$40).39	\$8.10	\$16.60	\$0.00	\$65.09
					12/01/2020	\$41	.37	\$8.10	\$16.60	\$0.00	\$66.07
					06/01/2021	\$42	2.39	\$8.10	\$16.60	\$0.00	\$67.09
					12/01/2021	\$43	3.40	\$8.10	\$16.60	\$0.00	\$68.10
For apprentic	e rates see '	'Apprentice-	LABORER"								
CARPENTER CARPENTERS - ZO	DNF 2 (Fas	torn Massacl	nusetts)		03/01/2020	\$42	2.50	\$9.40	\$18.95	\$0.00	\$70.85
CHILI ENTERS -ZC	TVL 2 (Lus	iern massaer	useus)		09/01/2020	\$43	3.15	\$9.40	\$18.95	\$0.00	\$71.50
					03/01/2021	\$43	3.75	\$9.40	\$18.95	\$0.00	\$72.10
					09/01/2021	\$44	1.40	\$9.40	\$18.95	\$0.00	\$72.75
					03/01/2022	\$45	5.00	\$9.40	\$18.95	\$0.00	\$73.35
					09/01/2022	\$45	5.65	\$9.40	\$18.95	\$0.00	\$74.00
					03/01/2023	\$46	5.25	\$9.40	\$18.95	\$0.00	\$74.60
	Appre Effecti	ntice - C	ARPENTER - Zone 2 Eastern 03/01/2020	e MA					Supplement	al	
	Step	percent		Apprentic	ee Base Wage	Health]	Pension	Unemploymen		2
	1	50			\$21.25	\$9.40		\$1.73	\$0.0	0 \$32.38	3
	2	60			\$25.50	\$9.40		\$1.73	\$0.0	0 \$36.63	3
	3	70			\$29.75	\$9.40		\$13.76	\$0.0	0 \$52.91	[
	4	75			\$31.88	\$9.40		\$13.76	\$0.0	0 \$55.04	1
	5	80			\$34.00	\$9.40		\$15.49	\$0.0		
	6	80			\$34.00	\$9.40		\$15.49	\$0.0		
	7	90			\$38.25	\$9.40		\$17.22	\$0.0		
	8	90			\$38.25	\$9.40		\$17.22	\$0.0		
					\$50. 2 0	Ψ,		Ψ17.22	Ψ0.0	φοο.	
	Effecti Step	ive Date - percent	09/01/2020	Apprentic	ce Base Wage	Health]	Pension	Supplement		e
	1	50			\$21.58	\$9.40		\$1.73	\$0.0	0 \$32.71	<u> </u>
	2	60			\$25.89	\$9.40		\$1.73	\$0.0	0 \$37.02	2
	3	70			\$30.21	\$9.40		\$13.76	\$0.0	0 \$53.37	7
	4	75			\$32.36	\$9.40		\$13.76	\$0.0		
	5	80			\$34.52	\$9.40		\$15.49	\$0.0		
	6	80			\$34.52	\$9.40		\$15.49	\$0.0		
	7	90			\$38.84	\$9.40		\$17.22	\$0.0		
	8	90			\$38.84	\$9.40		\$17.22	\$0.0		
	Notes:	% Indent	tured After 10/1/17; 45/45/55. 2 \$30.26/ 3&4 \$36.18/ 5&6 \$ purneyworker Ratio:1:5								
		ED AME	оптнеумогкег капо:1:5								

CARPENTER WOOD FRAME

10/01/2019 \$27.95 \$7.07 \$7.86 \$0.00 \$42.88

All Aspects of New Wood Frame Work

CARPENTERS -ZONE 2 (Wood Frame)

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 5 of 37

\$0.00

\$0.00

\$0.00

\$0.00

\$0.00

\$77.93

\$79.03

\$80.18

\$81.28

\$82.43

\$15.70

\$15.70

\$15.70

\$15.70

\$15.70

\$12.50

\$12.50

\$12.50

\$12.50

\$12.50

For apprentice rates see "Apprentice- LABORER"

OPERATING ENGINEERS LOCAL 4

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES

	entice - <i>CARPENTER (1</i> ive Date - 10/01/2019	7 00a 1 rame) - 20ne 2					
Step	ive Date - 10/01/2019 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	60	\$16.77	\$7.07	\$0.00	\$0.00	\$23.84	
2	60	\$16.77	\$7.07	\$0.00	\$0.00	\$23.84	
3	65	\$18.17	\$7.07	\$7.86	\$0.00	\$33.10	
4	70	\$19.57	\$7.07	\$7.86	\$0.00	\$34.50	
5	75	\$20.96	\$7.07	\$7.86	\$0.00	\$35.89	
6	80	\$22.36	\$7.07	\$7.86	\$0.00	\$37.29	
7	85	\$23.76	\$7.07	\$7.86	\$0.00	\$38.69	
8	90	\$25.16	\$7.07	\$7.86	\$0.00	\$40.09	
Notes							
		1/17; 45/45/55/55/70/70/80/80 \$27.19/ 5&6 \$34.50/ 7&8 \$37.29					
Appro	entice to Journeyworker						
	OSTON)						
	entice - CEMENT MASo	ONRY/PLASTERING - Eastern Mass (1	Boston)				
	,	ONRY/PLASTERING - Eastern Mass (1 Apprentice Base Wage		Pension	Supplemental Unemployment	Total Rate	
Effect	entice - CEMENT MASo vive Date - 01/01/2020			Pension \$15.41		Total Rate \$52.70	
Effect Step	entice - CEMENT MASo vive Date - 01/01/2020 percent	Apprentice Base Wage	Health		Unemployment		
Effect Step	entice - CEMENT MASC ive Date - 01/01/2020 percent	Apprentice Base Wage \$24.54	Health \$12.75	\$15.41	Unemployment \$0.00	\$52.70	
Effect Step 1 2	entice - CEMENT MASO ive Date - 01/01/2020 percent 50 60	Apprentice Base Wage \$24.54 \$29.44	Health \$12.75 \$12.75	\$15.41 \$17.41	\$0.00 \$0.62	\$52.70 \$60.22	
Effect Step 1 2 3	entice - CEMENT MASS ive Date - 01/01/2020 percent 50 60 65	\$24.54 \$29.44 \$31.90	Health \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41	\$0.00 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68	
Effect Step 1 2 3 4	entice - CEMENT MASO ive Date - 01/01/2020 percent 50 60 65 70	\$24.54 \$29.44 \$31.90 \$34.35	Health \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41	\$0.00 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13	
Effect Step 1 2 3 4 5	entice - CEMENT MASS sive Date - 01/01/2020 percent 50 60 65 70 75	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58	
Effect Step 1 2 3 4 5	entice - CEMENT MASerive Date - 01/01/2020 percent 50 60 65 70 75 80 90	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58	
Effect Step 1 2 3 4 5 6 7 Notes	entice - CEMENT MASO percent 50 60 65 70 75 80 90 : Steps 3,4 are 500 hrs. A	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58	
Effect Step 1 2 3 4 5 6 7 Notes	entice - CEMENT MASS rive Date - 01/01/2020 percent 50 60 65 70 75 80 90 Steps 3,4 are 500 hrs. A	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58	
Effect Step 1 2 3 4 5 6 7 Notes Approx	entice - CEMENT MASS rive Date - 01/01/2020 percent 50 60 65 70 75 80 90 Steps 3,4 are 500 hrs. A	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58	\$64.
Effect Step 1 2 3 4 5 6 7 Notes	entice - CEMENT MASS rive Date - 01/01/2020 percent 50 60 65 70 75 80 90 Steps 3,4 are 500 hrs. A	\$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41 \$22.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58 \$74.04 \$79.94	
Effect Step 1 2 3 4 5 6 7 Notes Approx	entice - CEMENT MASS rive Date - 01/01/2020 percent 50 60 65 70 75 80 90 Steps 3,4 are 500 hrs. A	Apprentice Base Wage \$24.54 \$29.44 \$31.90 \$34.35 \$36.80 \$39.26 \$44.16 All other steps are 1,000 hrs. Ratio:1:3	Health \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$12.75 \$0 \$12.75 \$12.75 \$12.75 \$12.75	\$15.41 \$17.41 \$18.41 \$19.41 \$20.41 \$21.41 \$22.41	\$0.00 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62 \$0.62	\$52.70 \$60.22 \$63.68 \$67.13 \$70.58 \$74.04 \$79.94	\$64. \$65. \$66.

12/01/2019

06/01/2020

12/01/2020

06/01/2021

12/01/2021

\$49.73

\$50.83

\$51.98

\$53.08

\$54.23

Ciassification			Effective Dat	e base wage	е пеани	1 CHSIOH	Unemployment	
For apprentice rate	tes see "A	pprentice- OPERATING ENGINEERS"						
OMPRESSOR C			12/01/2019	\$32.47	\$12.50	\$15.70	\$0.00	\$60.67
PERATING ENGINE	EERS LO	CAL 4	06/01/2020	\$33.22	\$12.50	\$15.70	\$0.00	\$61.42
			12/01/2020	\$34.00	\$12.50	\$15.70	\$0.00	\$62.20
			06/01/2021	\$34.75	\$12.50	\$15.70	\$0.00	\$62.95
			12/01/2021	\$35.54	\$12.50	\$15.70	\$0.00	\$63.74
For apprentice rate	tes see "A	pprentice- OPERATING ENGINEERS"						
DELEADER (BRI			01/01/2020	\$50.96	\$8.20	\$22.10	\$0.00	\$81.26
PAINTERS LOCAL 35	- ZONE	2	07/01/2020	\$52.06	\$8.20	\$22.10	\$0.00	\$82.36
			01/01/2021	\$53.16	\$8.20	\$22.10	\$0.00	\$83.46
		tice - PAINTER Local 35 - BRIDO e Date - 01/01/2020	GES/TANKS			Sumulamente	1	
		percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
_	1	50	\$25.48	\$8.20	\$0.00	\$0.00	\$33.68	
2	2	55	\$28.03	\$8.20	\$5.94	\$0.00		
	3	60	\$30.58	\$8.20	\$6.48	\$0.00		
	4	65	\$33.12	\$8.20	\$7.02	\$0.00		
	5	70	\$35.67	\$8.20	\$18.86	\$0.00		
	6	75	\$38.22	\$8.20	\$19.40	\$0.00		
	7	80	\$38.22 \$40.77			\$0.00		
	8	90		\$8.20	\$19.94			
	~	<i>7</i> 0	\$45.86	\$8.20	\$21.02	\$0.00	\$75.08	
E	Effectiv	e Date - 07/01/2020				Supplementa	1	
S	Step	percent	Apprentice Base Wage	Health	Pension	Unemploymen		
1	1	50	\$26.03	\$8.20	\$0.00	\$0.00	\$34.23	
2	2	55	\$28.63	\$8.20	\$5.94	\$0.00	\$42.77	
3	3	60	\$31.24	\$8.20	\$6.48	\$0.00	\$45.92	
4	4	65	\$33.84	\$8.20	\$7.02	\$0.00	\$49.06	
5	5	70	\$36.44	\$8.20	\$18.86	\$0.00		
ϵ	6	75	\$39.05	\$8.20	\$19.40	\$0.00		
7	7	80	\$41.65	\$8.20	\$19.94	\$0.00		
8	8	90	\$46.85	\$8.20	\$21.02	\$0.00		
					<u> </u>	Ψ0.00	. φ10.01	
N	Notes:							
		Steps are 750 hrs.						
		tice to Journeyworker Ratio:1:1						
DEMO: ADZEMA ABORERS - ZONE I			12/01/2019	\$39.30	\$8.10	\$16.60	\$0.00	\$64.00
		pprentice- LABORER"						
ABORERS - ZONE 1		ADER/HAMMER OPERATOR	12/01/2019	\$40.30	\$8.10	\$16.60	\$0.00	\$65.00
E (* (pprentice- LABORER"						
	OC		12/01/2019	\$40.05	\$8.10	\$16.60	\$0.00	\$64.75
DEMO: BURNER	X.S							

Wage Request Number:

20200507-030

Effective Date Base Wage Health

Classification

Issue Date: 05/07/2020

Supplemental

Pension

Total Rate

Page 7 of 37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: CONCRETE CUTTER/SAWYER LABORERS - ZONE 1	12/01/2019	\$40.30	\$8.10	\$16.60	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 1	12/01/2019	\$40.05	\$8.10	\$16.60	\$0.00	\$64.75
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER LABORERS - ZONE 1	12/01/2019	\$39.30	\$8.10	\$16.60	\$0.00	\$64.00
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR	12/01/2019	\$48.23	\$12.50	\$15.70	\$0.00	\$76.43
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.31	\$12.50	\$15.70	\$0.00	\$77.51
	12/01/2020	\$50.45	\$12.50	\$15.70	\$0.00	\$78.65
	06/01/2021	\$51.54	\$12.50	\$15.70	\$0.00	\$79.74
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$52.68	\$12.50	\$15.70	\$0.00	\$80.88
DIVER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$68.52	\$9.90	\$21.15	\$0.00	\$99.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99
For apprentice rates see "Apprentice-PILE DRIVER"						
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$73.41	\$9.90	\$21.15	\$0.00	\$104.46
For apprentice rates see "Apprentice-PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2019	\$102.78	\$9.90	\$21.15	\$0.00	\$133.83
For apprentice rates see "Apprentice-PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction)	03/01/2020	\$53.50	\$13.00	\$19.20	\$0.00	\$85.70
ELECTRICIANS LOCAL 103	09/01/2020	\$54.93	\$13.00	\$19.25	\$0.00	\$87.18
	03/01/2021	\$56.13	\$13.00	\$19.28	\$0.00	\$88.41
	09/01/2021	\$57.56	\$13.00	\$19.33	\$0.00	\$89.89
	03/01/2022	\$58.76	\$13.00	\$19.36	\$0.00	\$91.12
	09/01/2022	\$60.19	\$13.00	\$19.41	\$0.00	\$92.60
	03/01/2023	\$61.39	\$13.00	\$19.44	\$0.00	\$93.83
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN	03/01/2020	\$53.50	\$13.00	\$19.20	\$0.00	\$85.70
ELECTRICIANS LOCAL 103	09/01/2020	\$54.93	\$13.00	\$19.25	\$0.00	\$87.18
	03/01/2021	\$56.13	\$13.00	\$19.28	\$0.00	\$88.41
	09/01/2021	\$57.56	\$13.00	\$19.33	\$0.00	\$89.89
	03/01/2022	\$58.76	\$13.00	\$19.36	\$0.00	\$91.12
	09/01/2022	\$60.19	\$13.00	\$19.41	\$0.00	\$92.60
	03/01/2023	\$61.39	\$13.00	\$19.44	\$0.00	\$93.83

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 8 of 37

Total Rate

	ive Date -	03/01/2020		TT 1.1	ъ :	Supplemental	m . 1 p .	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
1	40		\$21.40	\$13.00	\$0.64	\$0.00	\$35.04	
2	40		\$21.40	\$13.00	\$0.64	\$0.00	\$35.04	
3	45		\$24.08	\$13.00	\$14.62	\$0.00	\$51.70)
4	45		\$24.08	\$13.00	\$14.62	\$0.00	\$51.70)
5	50		\$26.75	\$13.00	\$15.04	\$0.00	\$54.79)
6	55		\$29.43	\$13.00	\$15.46	\$0.00	\$57.89)
7	60		\$32.10	\$13.00	\$15.87	\$0.00	\$60.97	•
8	65		\$34.78	\$13.00	\$16.29	\$0.00	\$64.07	,
9	70		\$37.45	\$13.00	\$16.70	\$0.00	\$67.15	
10	75		\$40.13	\$13.00	\$17.12	\$0.00	\$70.25	
Effect	ive Date -	09/01/2020				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
1	40		\$21.97	\$13.00	\$0.66	\$0.00	\$35.63	
2	40		\$21.97	\$13.00	\$0.66	\$0.00	\$35.63	
3	45		\$24.72	\$13.00	\$14.64	\$0.00	\$52.36	
4	45		\$24.72	\$13.00	\$14.64	\$0.00	\$52.36	
5	50		\$27.47	\$13.00	\$15.06	\$0.00	\$55.53	
6	55		\$30.21	\$13.00	\$15.49	\$0.00	\$58.70)
7	60		\$32.96	\$13.00	\$15.90	\$0.00	\$61.86	
8	65		\$35.70	\$13.00	\$16.32	\$0.00	\$65.02	
9	70		\$38.45	\$13.00	\$16.73	\$0.00	\$68.18	;
10	75		\$41.20	\$13.00	\$17.16	\$0.00	\$71.36	;
Notes		1/1/03; 30/35/40/45/50/55/6	55/70/75/80					
Appro	entice to Jo	urneyworker Ratio:2:3***	. — — — — .					
CONSTR			01/01/2020	\$61	.42 \$15.73	\$18.41	\$0.00	\$95.
NSTRUCTO!	RS LOCAL 4		01/01/2021	\$63	.47 \$15.88	\$19.31	\$0.00	\$98.
			01/01/2022	\$65	.62 \$16.03	\$20.21	\$0.00	\$101

Unemployment

Total Rate

	Step	ive Date - 01/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	:
	1	50	\$30.71	\$15.73	\$0.00	\$0.00	\$46.44	
	2	55	\$33.78	\$15.73	\$18.41	\$0.00	\$67.92	
	3	65	\$39.92	\$15.73	\$18.41	\$0.00	\$74.06	
	4	70	\$42.99	\$15.73	\$18.41	\$0.00	\$77.13	
	5	80	\$49.14	\$15.73	\$18.41	\$0.00	\$83.28	
	Effect	ive Date - 01/01/2021				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$31.74	\$15.88	\$0.00	\$0.00	\$47.62	
	2	55	\$34.91	\$15.88	\$19.31	\$0.00	\$70.10	
	3	65	\$41.26	\$15.88	\$19.31	\$0.00	\$76.45	
	4	70	\$44.43	\$15.88	\$19.31	\$0.00	\$79.62	
	5	80	\$50.78	\$15.88	\$19.31	\$0.00	\$85.97	
	Notes:							
		Steps 1-2 are 6 mos.; Steps 3-5 are	1 year					
		entice to Journeyworker Ratio:1:1						
EVATOR (VATOR CON:		UCTOR HELPER RS LOCAL 4	01/01/2020	\$42.99	\$15.73	\$18.41	\$0.00	\$77.13
			01/01/2021	\$44.43	\$15.88	\$19.31	\$0.00	\$79.62
For appropria	a rates saa	"Apprentice - ELEVATOR CONSTRUCTOR	01/01/2022	2 \$45.93	\$16.03	\$20.21	\$0.00	\$82.1
		AIL ERECTOR	12/01/2019		, ¢0.10	\$16.60	\$0.00	ФСЛ 10
ORERS - ZON		HE ERECTOR	06/01/2019			\$16.60		\$64.10
			12/01/2020	,		\$16.60	\$0.00 \$0.00	\$65.09
				4		\$16.60	\$0.00	\$66.07 \$67.09
			06/01/2021 12/01/2021			\$16.60	\$0.00	\$68.10
		"Apprentice- LABORER"						
ELD ENG.I Erating enc		RSON-BLDG,SITE,HVY/HWY	05/01/2020	\$44.73	\$12.50	\$15.70	\$0.00	\$72.93
Mairing Bill	uling L	· · · · · · · · · · · · · · · · · · ·	11/01/2020	\$45.73	\$12.50	\$15.70	\$0.00	\$73.93
			05/01/2021	\$46.88	\$12.50	\$15.70	\$0.00	\$75.08
			11/01/2021	\$47.88	\$12.50	\$15.70	\$0.00	\$76.08
For apprentic	e rates see	"Apprentice- OPERATING ENGINEERS"	05/01/2022	2 \$49.03	\$12.50	\$15.70	\$0.00	\$77.23
		CHIEF-BLDG,SITE,HVY/HWY	05/01/2020) \$46.23	\$12.50	\$15.70	\$0.00	\$74.43
RATING ENC	GINEERS L	OCAL 4	11/01/2020			\$15.70	\$0.00	\$75.44
			05/01/2021			\$15.70	\$0.00	\$76.60
			11/01/202			\$15.70	\$0.00	\$77.6
			05/01/2022			\$15.70	\$0.00	\$78.7

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	05/01/2020	\$22.64	\$12.50	\$15.70	\$0.00	\$50.84
OPERATING ENGINEERS LOCAL 4	11/01/2020	\$23.23	\$12.50	\$15.70	\$0.00	\$51.43
	05/01/2021	\$23.91	\$12.50	\$15.70	\$0.00	\$52.11
	11/01/2021	\$24.51	\$12.50	\$15.70	\$0.00	\$52.71
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	05/01/2022	\$25.18	\$12.50	\$15.70	\$0.00	\$53.38
FIRE ALARM INSTALLER	03/01/2020	\$53.50	\$13.00	\$19.20	\$0.00	\$85.70
ELECTRICIANS LOCAL 103	09/01/2020	\$54.93	\$13.00	\$19.25	\$0.00	\$87.18
	03/01/2020	\$54.73	\$13.00	\$19.28	\$0.00	\$88.41
	09/01/2021	\$57.56	\$13.00	\$19.33	\$0.00	\$89.89
	03/01/2021	\$57.36	\$13.00	\$19.36	\$0.00	\$91.12
	09/01/2022	\$60.19	\$13.00	\$19.41	\$0.00	\$92.60
	03/01/2022	\$61.39	\$13.00	\$19.44	\$0.00	\$93.83
For apprentice rates see "Apprentice- ELECTRICIAN"	03/01/2023	\$01.57	\$13.00	Ψ17.11	ψ0.00	Φ/3.63
FIRE ALARM REPAIR / MAINTENANCE	03/01/2020	\$40.13	\$13.00	\$17.12	\$0.00	\$70.25
/ COMMISSIONING ELECTRICIANS LOCAL 103	09/01/2020	\$41.20	\$13.00	\$17.16	\$0.00	\$71.36
LOCAL 105	03/01/2021	\$42.66	\$13.00	\$17.27	\$0.00	\$72.93
	09/01/2021	\$44.32	\$13.00	\$17.38	\$0.00	\$74.70
	03/01/2022	\$45.83	\$13.00	\$17.49	\$0.00	\$76.32
	09/01/2022	\$47.55	\$13.00	\$17.62	\$0.00	\$78.17
	03/01/2023	\$49.11	\$13.00	\$17.73	\$0.00	\$79.84
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) OPERATING ENGINEERS LOCAL 4	12/01/2019	\$39.89	\$12.50	\$15.70	\$0.00	\$68.09
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$40.80	\$12.50	\$15.70	\$0.00	\$69.00
	12/01/2020	\$41.75	\$12.50	\$15.70	\$0.00	\$69.95
	06/01/2021	\$42.66	\$12.50	\$15.70	\$0.00	\$70.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$43.61	\$12.50	\$15.70	\$0.00	\$71.81
FLAGGER & SIGNALER	12/01/2019	\$23.50	\$8.10	\$16.60	\$0.00	\$48.20
LABORERS - ZONE 1	06/01/2020	\$23.50	\$8.10	\$16.60	\$0.00	\$48.20
	12/01/2020	\$24.50	\$8.10	\$16.60	\$0.00	\$49.20
	06/01/2021	\$24.50	\$8.10	\$16.60	\$0.00	\$49.20
	12/01/2021	\$24.50	\$8.10	\$16.60	\$0.00	\$49.20
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER	03/01/2020	\$47.05	\$9.40	\$19.25	\$0.00	\$75.70
FLOORCOVERERS LOCAL 2168 ZONE I	09/01/2020	\$47.85	\$9.40	\$19.25	\$0.00	\$76.50
	03/01/2021	\$48.65	\$9.40	\$19.25	\$0.00	\$77.30
	09/01/2021	\$49.45	\$9.40	\$19.25	\$0.00	\$78.10
	03/01/2022	\$50.25	\$9.40	\$19.25	\$0.00	\$78.90

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 11 of 37

Total Rate Unemployment

	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$23.53	\$9.40	\$1.79	\$0.00	\$34.72	
	2	55	\$25.88	\$9.40	\$1.79	\$0.00	\$37.07	
	3	60	\$28.23	\$9.40	\$13.88	\$0.00	\$51.51	
	4	65	\$30.58	\$9.40	\$13.88	\$0.00	\$53.86	
	5	70	\$32.94	\$9.40	\$15.67	\$0.00	\$58.01	
	6	75	\$35.29	\$9.40	\$15.67	\$0.00	\$60.36	
	7	80	\$37.64	\$9.40	\$17.46	\$0.00	\$64.50	
	8	85	\$39.99	\$9.40	\$17.46	\$0.00	\$66.85	
	Effecti	ve Date - 09/01/2020				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$23.93	\$9.40	\$1.79	\$0.00	\$35.12	
	2	55	\$26.32	\$9.40	\$1.79	\$0.00	\$37.51	
	3	60	\$28.71	\$9.40	\$13.88	\$0.00	\$51.99	
	4	65	\$31.10	\$9.40	\$13.88	\$0.00	\$54.38	
	5	70	\$33.50	\$9.40	\$15.67	\$0.00	\$58.57	
	6	75	\$35.89	\$9.40	\$15.67	\$0.00	\$60.96	
	7	80	\$38.28	\$9.40	\$17.46	\$0.00	\$65.14	
	8	85	\$40.67	\$9.40	\$17.46	\$0.00	\$67.53	
		Step 1&2 \$32.36/ 3&4	/55/55/70/70/80/80 (1500hr Steps) \$38.80/ 5&6 \$58.01/ 7&8 \$64.50					
	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1					
	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201			\$15.70	\$0.00	
	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202	0 \$49.83	\$12.50	\$15.70	\$0.00	\$78.03
RK LIFT/C FRATING ENG	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202	0 \$49.83 0 \$50.98	\$12.50 \$12.50	\$15.70 \$15.70	\$0.00 \$0.00	\$76.93 \$78.03 \$79.18
	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202	0 \$49.83 0 \$50.98 1 \$52.08	\$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28
RATING ENG	Appre HERRY GINEERS LO	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202	0 \$49.83 0 \$50.98 1 \$52.08	\$12.50 \$12.50 \$12.50	\$15.70 \$15.70	\$0.00 \$0.00	\$78.03 \$79.18
RATING ENG For apprentice NERATOR	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4 Apprentice- OPERATING ENG NG PLANT/HEATERS	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 GINEERS"	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23	\$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28
RATING ENG For apprentice NERATOR	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4 Apprentice- OPERATING ENG NG PLANT/HEATERS	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 GINEERS"	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28 \$81.43
RATING ENG For apprentice NERATOR	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4 Apprentice- OPERATING ENG NG PLANT/HEATERS	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 GINEERS" 12/01/201	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23 9 \$32.47 0 \$33.22	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28 \$81.43 \$60.66 \$61.42
RATING ENG For apprentice NERATOR	Appre	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4 Apprentice- OPERATING ENG NG PLANT/HEATERS	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 06/01/202 06/01/202	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23 9 \$32.47 0 \$33.22 0 \$34.00	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$78.02 \$79.13 \$80.23 \$81.42 \$60.66 \$61.42 \$62.20
For apprentice NERATOR RATING ENG	Appre	% After 09/1/17; 45/45, Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/201 06/01/202 12/01/202 12/01/202 12/01/202 12/01/202 12/01/202	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23 9 \$32.47 0 \$33.22 0 \$34.00 1 \$34.75	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28 \$81.43 \$60.66 \$61.42 \$62.20 \$62.93
For apprentice NERATOR RATING ENG	Appre HERRY GINEERS LO e rates see " L/LIGHTI GINEERS LO e rates see "	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER OCAL 4 Apprentice- OPERATING ENG NG PLANT/HEATERS	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 06/01/202 12/01/202 06/01/202	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23 9 \$32.47 0 \$33.22 0 \$34.00 1 \$34.75 1 \$35.54	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$78.02 \$79.18 \$80.28 \$81.43 \$60.66 \$61.42 \$62.20 \$62.92 \$63.74
For apprentice NERATOR RATING ENG	Appre HERRY GINEERS LO e rates see " L/LIGHTI GINEERS LO e rates see " LASS PLA	% After 09/1/17; 45/45. Step 1&2 \$32.36/ 3&4 ntice to Journeyworker PICKER PICKER PICKER PICKER PICKER PICKER PICKER PAPPRENTING ENGRAL 4 PAPPRENTING ENGRAL 4 PAPPRENTING ENGRAL 4 PAPPRENTING ENGRAL 4	\$38.80/ 5&6 \$58.01/ 7&8 \$64.50 Ratio:1:1 12/01/201 06/01/202 12/01/202 06/01/202 12/01/201 06/01/202 12/01/201 06/01/202 12/01/202 06/01/202 12/01/202 06/01/202 06/01/202	0 \$49.83 0 \$50.98 1 \$52.08 1 \$53.23 9 \$32.47 0 \$33.22 0 \$34.00 1 \$34.75 1 \$35.54 0 \$40.46	\$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50	\$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70 \$15.70	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$78.03 \$79.18 \$80.28 \$81.43 \$60.66 \$61.42 \$62.20 \$62.93

Total Rate

Apprentice - GLAZIER - Local 35 Zone 2 01/01/2020 **Effective Date -**Supplemental Apprentice Base Wage Health Unemployment Total Rate Step percent Pension 1 50 \$20.23 \$8.20 \$0.00 \$0.00 \$28.43 2 55 \$22.25 \$8.20 \$5.94 \$0.00 \$36.39 3 60 \$24.28 \$8.20 \$6.48 \$0.00 \$38.96 4 65 \$26.30 \$8.20 \$7.02 \$0.00 \$41.52 5 70 \$28.32 \$8.20 \$0.00 \$18.86 \$55.38 6 75 \$30.35 \$8.20 \$19.40 \$0.00 \$57.95 7 80 \$32.37 \$19.94 \$0.00 \$8.20 \$60.51 8 90 \$36.41 \$8.20 \$21.02 \$0.00 \$65.63 07/01/2020 **Effective Date -**Supplemental Apprentice Base Wage Health Pension Unemployment Total Rate Step percent 1 50 \$20.78 \$8.20 \$0.00 \$0.00 \$28.98 2 55 \$22.86 \$8.20 \$5.94 \$0.00 \$37.00 3 60 \$24.94 \$8.20 \$6.48 \$0.00 \$39.62 4 65 \$27.01 \$7.02 \$0.00 \$8.20 \$42.23 5 70 \$29.09 \$8.20 \$18.86 \$0.00 \$56.15 6 75 \$31.17 \$8.20 \$19.40 \$0.00 \$58.77 7 80 \$33.25 \$19.94 \$0.00 \$61.39 \$8.20 8 90 \$37.40 \$8.20 \$21.02 \$0.00 \$66.62 Notes: Steps are 750 hrs.

HOISTING ENGINEER/CRANES/GRADALLS	12/01/2019	\$48.73	\$12.50	\$15.70	\$0.00	\$76.93
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.83	\$12.50	\$15.70	\$0.00	\$78.03
	12/01/2020	\$50.98	\$12.50	\$15.70	\$0.00	\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70	\$0.00	\$80.28
	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 13 of 37

1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes:	p percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
3 65 4 70 5 75 6 80 7 85 8 90 Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) EETMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentice To AC (ELECTRICAL CONT	55	\$26.80	\$12.50	\$0.00	\$0.00	\$39.30)
4 70 5 75 6 80 7 85 8 90 Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	60	\$29.24	\$12.50	\$15.70	\$0.00	\$57.44	ļ
5 75 6 80 7 85 8 90 Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17 For apprentice rates see "Apprential AC (ELECTRICAL CONT	65	\$31.67	\$12.50	\$15.70	\$0.00	\$59.87	1
6 80 7 85 8 90 Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	70	\$34.11	\$12.50	\$15.70	\$0.00	\$62.31	
7 85 8 90 Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	75	\$36.55	\$12.50	\$15.70	\$0.00	\$64.75	i
Effective Date Step perce 1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes:	80	\$38.98	\$12.50	\$15.70	\$0.00	\$67.18	}
Step perce	85	\$41.42	\$12.50	\$15.70	\$0.00	\$69.62	!
Step perce	90	\$43.86	\$12.50	\$15.70	\$0.00	\$72.06	•
1 55 2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	ective Date - 06/01/2020				Supplemental		
2 60 3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) TIMETAL WORKERS LOCAL 17	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	:
3 65 4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	55	\$27.41	\$12.50	\$0.00	\$0.00	\$39.91	
4 70 5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17	60	\$29.90	\$12.50	\$15.70	\$0.00	\$58.10)
5 75 6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) TIMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical CELECTRICAL CONT	65	\$32.39	\$12.50	\$15.70	\$0.00	\$60.59)
6 80 7 85 8 90 Notes: Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical Control of the control o	70	\$34.88	\$12.50	\$15.70	\$0.00	\$63.08	}
7 85 8 90 Notes: Apprentice to AC (DUCTWORK) TIMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical CELECTRICAL CONT	75	\$37.37	\$12.50	\$15.70	\$0.00	\$65.57	,
Apprentice to AC (DUCTWORK) ETMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical Control of the con	80	\$39.86	\$12.50	\$15.70	\$0.00	\$68.06	ó
Apprentice to AC (DUCTWORK) THETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical CELECTRICAL CONT	85	\$42.36	\$12.50	\$15.70	\$0.00	\$70.56)
Apprentice to AC (DUCTWORK) TMETAL WORKERS LOCAL 17 For apprentice rates see "Apprential C (ELECTRICAL CONT	90	\$44.85	\$12.50	\$15.70	\$0.00	\$73.05	j
AC (DUCTWORK) TMETAL WORKERS LOCAL 17 For apprentice rates see "Apprentical CELECTRICAL CONT	es:						
For apprentice rates see "Apprential (ELECTRICAL CONT	orentice to Journeyworker Ratio:1:6						
For apprentice rates see "Apprenti		02/01/2020	0 \$49.36	\$13.35	\$24.12	\$2.61	\$89.44
AC (ELECTRICAL CONT	S LOCAL 17 - A	08/01/2020	0 \$50.96	\$13.35	\$24.12	\$2.66	\$91.09
AC (ELECTRICAL CONT		02/01/202	1 \$52.61	\$13.35	\$24.12	\$2.71	\$92.79
AC (ELECTRICAL CONT		08/01/202	1 \$54.36	\$13.35	\$24.12	\$2.76	\$94.59
.C (ELECTRICAL CONT	see "Apprentice- SHEET METAL WORKER"	02/01/2022	2 \$56.11	\$13.35	\$24.12	\$2.81	\$96.39
,		03/01/2020	0 \$53.50	\$13.00	\$19.20	\$0.00	\$85.70
	· · · · · · · · · · · · · · · · · · ·	09/01/2020			\$19.25	\$0.00	\$87.18
		03/01/202			\$19.28	\$0.00	\$88.41
		09/01/202			\$19.33	\$0.00	\$89.89
		03/01/2022			\$19.36	\$0.00	\$91.12
		09/01/2022			\$19.41	\$0.00	\$92.60
		03/01/2023			\$19.44	\$0.00	\$93.83

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR)	02/01/2020	\$49.36	\$13.35	\$24.12	\$2.61	\$89.44
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2020	\$50.96	\$13.35	\$24.12	\$2.66	\$91.09
	02/01/2021	\$52.61	\$13.35	\$24.12	\$2.71	\$92.79
	08/01/2021	\$54.36	\$13.35	\$24.12	\$2.76	\$94.59
	02/01/2022	\$56.11	\$13.35	\$24.12	\$2.81	\$96.39
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER)	03/01/2020	\$56.19	\$10.95	\$19.74	\$0.00	\$86.88
PIPEFITTERS LOCAL 537	09/01/2020	\$57.69	\$10.95	\$19.74	\$0.00	\$88.38
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"	03/01/2021	\$59.19	\$10.95	\$19.74	\$0.00	\$89.88
HVAC MECHANIC	03/01/2020	\$56.19	\$10.95	\$19.74	\$0.00	\$86.88
PIPEFITTERS LOCAL 537	09/01/2020	\$57.69	\$10.95	\$19.74	\$0.00	\$88.38
	03/01/2021	\$59.19	\$10.95	\$19.74	\$0.00	\$89.88
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS	12/01/2019	\$39.90	\$8.10	\$16.60	\$0.00	\$64.60
LABORERS - ZONE I	06/01/2020	\$40.89	\$8.10	\$16.60	\$0.00	\$65.59
	12/01/2020	\$41.87	\$8.10	\$16.60	\$0.00	\$66.57
	06/01/2021	\$42.89	\$8.10	\$16.60	\$0.00	\$67.59
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.90	\$8.10	\$16.60	\$0.00	\$68.60
INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	09/01/2019	\$48.44	\$12.80	\$16.40	\$0.00	\$77.64

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

Effect	ive Date - 09/01/2019				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$24.22	\$12.80	\$11.90	\$0.00	\$48.92
2	60	\$29.06	\$12.80	\$12.80	\$0.00	\$54.66
3	70	\$33.91	\$12.80	\$13.70	\$0.00	\$60.41
4	80	\$38.75	\$12.80	\$14.60	\$0.00	\$66.15
Notes	-					
	Steps are 1 year					
Appre	entice to Journeyworker Ratio:1:4					- — — — —
ONWORKER/WEL		03/16/2019	\$46.	66 \$8.00	\$23.50	\$0.00 \$78.16

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 15 of 37

	Step	ve Date - 03/16/2019 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$28.00	\$8.00	\$23.50	\$0.00	\$59.50	
	2	70	\$32.66	\$8.00	\$23.50	\$0.00	\$64.16	
	3	75	\$35.00	\$8.00	\$23.50	\$0.00	\$66.50	
	4	80	\$37.33	\$8.00	\$23.50	\$0.00	\$68.83	
	5	85	\$39.66	\$8.00	\$23.50	\$0.00	\$71.16	
	6	90	\$41.99	\$8.00	\$23.50	\$0.00	\$73.49	
	Notes:	** Structural 1:6; Ornamental 1:4						
	Appre	ntice to Journeyworker Ratio:**						
		VING BREAKER OPERATOR	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
ABORERS - ZONE	£ I		06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
			12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.0
			06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.0
For apprentice	rates see "	'Apprentice- LABORER"	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.1
ABORER			12/01/2019	\$39.15	\$8.10	\$16.60	\$0.00	\$63.8
ABORERS - ZONE	E 1		06/01/2020	\$40.14	\$8.10	\$16.60	\$0.00	\$64.8
			12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.8
			06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.8
			12/01/2021	\$43.15	\$8.10	\$16.60	\$0.00	\$67.8
		ntice - <i>LABORER - Zone 1</i> (ve Date - 12/01/2019						
	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$23.49	\$8.10	\$16.60	\$0.00	\$48.19	
	2	70	\$27.41	\$8.10	\$16.60	\$0.00	\$52.11	
	3	80	\$31.32	\$8.10	\$16.60	\$0.00	\$56.02	
	4	90	\$35.24	\$8.10	\$16.60	\$0.00	\$59.94	
	Effecti	ve Date - 06/01/2020				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	60	\$24.08	\$8.10	\$16.60	\$0.00	\$48.78	
	2	70	\$28.10	\$8.10	\$16.60	\$0.00	\$52.80	
	3	80	\$32.11	\$8.10	\$16.60	\$0.00	\$56.81	
	4	90	\$36.13	\$8.10	\$16.60	\$0.00	\$60.83	
	Notes:							

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER	12/01/2019	\$39.15	\$8.10	\$16.60	\$0.00	\$63.85
LABORERS - ZONE 1	06/01/2020	\$40.14	\$8.10	\$16.60	\$0.00	\$64.84
	12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.82
	06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.84
	12/01/2021	\$43.15	\$8.10	\$16.60	\$0.00	\$67.85
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER LABORERS - ZONE 1	12/01/2019	\$39.15	\$8.10	\$16.60	\$0.00	\$63.85
	06/01/2020	\$40.14	\$8.10	\$16.60	\$0.00	\$64.84
	12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.82
	06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.84
The state of Landburgh	12/01/2021	\$43.15	\$8.10	\$16.60	\$0.00	\$67.85
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 1 Engagement to grate one "Appropriate LABORER"	12/01/2019	\$39.30	\$8.10	\$16.60	\$0.00	\$64.00
For apprentice rates see "Apprentice- LABORER" LABORER: MASON TENDER	12/01/2019	\$20.40	¢0.10	\$16.60	\$0.00	¢(4.10
LABORERS - ZONE I	06/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
		\$40.39	\$8.10			\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
LABORER: MULTI-TRADE TENDER	12/01/2010	¢20.15	¢0.10	\$16.60	\$0.00	¢(2.05
LABORERS - ZONE I	12/01/2019	\$39.15	\$8.10			\$63.85
	06/01/2020	\$40.14	\$8.10	\$16.60	\$0.00	\$64.84
	12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.82
	06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.84
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$43.15	\$8.10	\$16.60	\$0.00	\$67.85
LABORER: TREE REMOVER	12/01/2019	\$39.15	\$8.10	\$16.60	\$0.00	\$63.85
LABORERS - ZONE I				\$16.60	\$0.00	
	06/01/2020	\$40.14	\$8.10			\$64.84
	12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.82
	06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.84
This classification applies to the removal of standing trees, and the trimming and remo clearance incidental to construction . For apprentice rates see "Apprentice-LABORER		\$43.15 bs when related t	\$8.10 to public work	\$16.60 s construction	\$0.00 or site	\$67.85
LASER BEAM OPERATOR	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
LABORERS - ZONE I	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER"	, 01, 2021	± .5.10	-0.10			+-0.10
MARBLE & TILE FINISHERS	02/01/2020	\$41.49	\$10.75	\$20.12	\$0.00	\$72.36
BRICKLAYERS LOCAL 3 - MARBLE & TILE		¢42.57	\$10.75	\$20.27	\$0.00	\$73.59
	08/01/2020	\$42.57	\$10.73		Ψ0.00	
	08/01/2020 02/01/2021	\$42.57 \$43.08	\$10.75	\$20.27	\$0.00	\$74.10

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 17 of 37

App	rent	ice	-	MARBLE & TILE FINISHER - Local 3 Marble & Tile	?
T 00		-		02/01/2020	

Ef	ffective Date -	02/01/2020				Supplemental		
St	ep percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$20.75	\$10.75	\$20.12	\$0.00	\$51.62	
2	60		\$24.89	\$10.75	\$20.12	\$0.00	\$55.76	
3	70		\$29.04	\$10.75	\$20.12	\$0.00	\$59.91	
4	80		\$33.19	\$10.75	\$20.12	\$0.00	\$64.06	
5	90		\$37.34	\$10.75	\$20.12	\$0.00	\$68.21	
Eí	ffective Date -	08/01/2020				Supplemental		
St	ep percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$21.29	\$10.75	\$20.27	\$0.00	\$52.31	
2	60		\$25.54	\$10.75	\$20.27	\$0.00	\$56.56	
3	70		\$29.80	\$10.75	\$20.27	\$0.00	\$60.82	
4	80		\$34.06	\$10.75	\$20.27	\$0.00	\$65.08	
5	90		\$38.31	\$10.75	\$20.27	\$0.00	\$69.33	
N	otes:							
$\mathbf{A}_{\mathbf{I}}$	pprentice to J	ourneyworker Ratio:1:3						
MARBLE MASON BRICKLAYERS LOCAL		ERS & TERRAZZO MECH	02/01/2020	\$54.42	\$10.75	\$21.93	\$0.00	\$87.10
BRICKLAYERS LOCAL	3 - MAKBLE & I	ILE	08/01/2020	\$55.77	\$10.75	\$22.08	\$0.00	\$88.60
			02/01/202	\$56.41	\$10.75	\$22.08	\$0.00	\$89.24
			08/01/202	\$57.81	\$10.75	\$22.24	\$0.00	\$90.80
			02/01/2022	2 \$58.38	\$10.75	\$22.24	\$0.00	\$91.37

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 18 of 37

	Step	ive Date -	02/01/2020	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	$\frac{3 \text{ cp}}{1}$	50		\$27.21	\$10.75	\$21.93	\$0.00	\$59.89	
	2	60		\$32.65	\$10.75	\$21.93	\$0.00	\$65.33	
	3	70		\$38.09	\$10.75	\$21.93	\$0.00	\$70.77	
	4	80		\$43.54	\$10.75	\$21.93	\$0.00	\$76.77 \$76.22	
	5	90		\$48.98	\$10.75	\$21.93	\$0.00	\$81.66	
	Effecti	ive Date -	08/01/2020				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$27.89	\$10.75	\$22.08	\$0.00	\$60.72	
	2	60		\$33.46	\$10.75	\$22.08	\$0.00	\$66.29	
	3	70		\$39.04	\$10.75	\$22.08	\$0.00	\$71.87	
	4	80		\$44.62	\$10.75	\$22.08	\$0.00	\$77.45	
	5	90		\$50.19	\$10.75	\$22.08	\$0.00	\$83.02	
	Notes:								
	Appre	ntice to Jo	urneyworker Ratio:1:5						
ECH. SWEE			(ON CONST. SITES)	12/01/2019	9 \$48.23	\$12.50	\$15.70	\$0.00	\$76.43
EKATING ENGI	NEEKS LO	JCAL 4		06/01/2020	0 \$49.31	\$12.50	\$15.70	\$0.00	\$77.51
				12/01/2020	0 \$50.45	\$12.50	\$15.70	\$0.00	\$78.65
				06/01/202	1 \$51.54	\$12.50	\$15.70	\$0.00	\$79.74
For apprentice	rates see '	'Apprentice- (DPERATING ENGINEERS"	12/01/202	1 \$52.68	\$12.50	\$15.70	\$0.00	\$80.88
ECHANICS				12/01/2019	9 \$48.23	\$12.50	\$15.70	\$0.00	\$76.43
PERATING ENGI	NEERS LO	OCAL 4		06/01/2020	0 \$49.31	\$12.50	\$15.70	\$0.00	\$77.51
				12/01/2020	0 \$50.45	\$12.50	\$15.70	\$0.00	\$78.65
				06/01/202	1 \$51.54	\$12.50	\$15.70	\$0.00	\$79.74
				12/01/202	1 \$52.68	\$12.50	\$15.70	\$0.00	\$80.88
For apprentice	rates see '	'Apprentice- (PERATING ENGINEERS"						

Page 19 of 37 **Issue Date:** 05/07/2020 Wage Request Number: 20200507-030

	Apprentice - <i>MILLWRIGHT</i> Effective Date - 04/01/2019	Local 1121 Zone 1			Supplemental		
	Step percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	e
	1 55	\$23.22	\$9.90	\$5.31	\$0.00	\$38.43	3
	2 65	\$27.44	\$9.90	\$15.13	\$0.00	\$52.47	7
	3 75	\$31.67	\$9.90	\$16.10	\$0.00	\$57.67	7
	4 85	\$35.89	\$9.90	\$17.06	\$0.00	\$62.85	5
	Notes:						
	Steps are 2,000 hours					i	
	Apprentice to Journeyworker	Ratio:1:5					
MORTAR MIX		12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
ABORERS - ZON	E I	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
		12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
		06/01/202	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
		12/01/202	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
	e rates see "Apprentice- LABORER"						
	ER THAN TRUCK CRANES,GR	ADALLS) 12/01/2019	\$23.08	\$12.50	\$15.70	\$0.00	\$51.28
OPERATING ENGINEERS LOCAL 4		06/01/2020	\$23.63	\$12.50	\$15.70	\$0.00	\$51.83
		12/01/2020	\$24.20	\$12.50	\$15.70	\$0.00	\$52.40
		06/01/202	\$24.75	\$12.50	\$15.70	\$0.00	\$52.95
		12/01/202	\$25.33	\$12.50	\$15.70	\$0.00	\$53.53
	e rates see "Apprentice- OPERATING EN	GINEERS"					
	CK CRANES, GRADALLS) SINEERS LOCAL 4	12/01/2019	\$27.64	\$12.50		\$0.00	\$55.84
		06/01/2020	\$28.29	\$12.50		\$0.00	\$56.49
		12/01/2020	\$28.97	\$12.50	\$15.70	\$0.00	\$57.17
		06/01/202	\$29.61	\$12.50	\$15.70	\$0.00	\$57.81
For course	o rotos son "Amerontis" - ODED ATIDIO EN	12/01/202	\$30.29	\$12.50	\$15.70	\$0.00	\$58.49
	e rates see "Apprentice- OPERATING EN ER DRIVEN EQUIPMENT - CL.	OC II		.	Ø15.50	ФО ОО	
	ER DRIVEN EQUIPMENT - CL. EINEERS LOCAL 4	12,01,201,		\$12.50	\$15.70	\$0.00	\$76.43
		06/01/2020		\$12.50		\$0.00	\$77.51
		12/01/2020		\$12.50		\$0.00	\$78.65
		06/01/202		\$12.50	\$15.70	\$0.00	\$79.74
For apprentice	e rates see "Apprentice- OPERATING EN	12/01/202 GINEERS"	\$52.68	\$12.50	\$15.70	\$0.00	\$80.88
	IDGES/TANKS)	01/01/2020	\$50.96	\$8.20	\$22.10	\$0.00	\$81.26
PAINTERS LOCAL	/	07/01/2020		\$8.20	\$22.10	\$0.00	\$82.36
		07/01/2020	, \$32.00	ψ0.20	Ψ==.10	ψ0.00	Ψ0∠.50

Issue Date: 05/07/2020 **Wage Request Number:** 20200507-030 **Page 20 of 37**

\$7.05

\$7.07

\$0.00

\$39.93

Total Rate

Effect Step	percent 01/01/2020	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.48	\$8.20	\$0.00	\$0.00	\$33.68
2	55	\$28.03	\$8.20	\$5.94	\$0.00	\$42.17
3	60	\$30.58	\$8.20	\$6.48	\$0.00	\$45.26
4	65	\$33.12	\$8.20	\$7.02	\$0.00	\$48.34
5	70	\$35.67	\$8.20	\$18.86	\$0.00	\$62.73
6	75	\$38.22	\$8.20	\$19.40	\$0.00	\$65.82
7	80	\$40.77	\$8.20	\$19.94	\$0.00	\$68.91
8	90	\$45.86	\$8.20	\$21.02	\$0.00	\$75.08
Effect	ive Date - 07/01/202	0			Sunnlemental	
	percent 07/01/2020	O Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
			Health \$8.20	Pension \$0.00		Total Rate \$34.23
Step	percent	Apprentice Base Wage			Unemployment	
Step 1	percent 50	Apprentice Base Wage \$26.03	\$8.20	\$0.00	Unemployment \$0.00	\$34.23
Step 1 2	percent 50 55	Apprentice Base Wage \$26.03 \$28.63	\$8.20 \$8.20	\$0.00 \$5.94	\$0.00 \$0.00	\$34.23 \$42.77
Step 1 2 3	percent 50 55 60	\$26.03 \$28.63 \$31.24	\$8.20 \$8.20 \$8.20	\$0.00 \$5.94 \$6.48	\$0.00 \$0.00 \$0.00	\$34.23 \$42.77 \$45.92
Step 1 2 3 4	percent 50 55 60 65	\$26.03 \$28.63 \$31.24 \$33.84	\$8.20 \$8.20 \$8.20 \$8.20	\$0.00 \$5.94 \$6.48 \$7.02	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$34.23 \$42.77 \$45.92 \$49.06
Step 1 2 3 4 5	percent 50 55 60 65 70	\$26.03 \$28.63 \$31.24 \$33.84 \$36.44	\$8.20 \$8.20 \$8.20 \$8.20 \$8.20	\$0.00 \$5.94 \$6.48 \$7.02 \$18.86	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$34.23 \$42.77 \$45.92 \$49.06 \$63.50

06/01/2013

\$25.81

PAINTER (SIGN, PICTORIAL & DISPLAY)
PAINTERS LOCAL 35 - ZONE 2

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Notes:

Issue Date: 05/07/2020

Wage Request Number:

20200507-030

Apprentice -	PAINTER SIGN -	Local 35 Zone 2
--------------	----------------	-----------------

	Effect	ive Date - 06/01/2013				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	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.						
	Appre	entice to Journeyworker Ratio:1:1						
		R SANDBLAST, NEW) *	01/01/2020	3 \$41.86	\$8.20	\$22.10	\$0.00	\$72.16
		rfaces to be painted are new construction used. PAINTERS LOCAL 35 - ZONE 2	ion, 07/01/2020	9 \$42.96	\$8.20	\$22.10	\$0.00	\$73.26
Ew paint	iac shall of	USCALI AINTERS LOCAL 33 - ZONE 2	01/01/202	1 \$44.06	\$8.20	\$22.10	\$0.00	\$74.36

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 22 of 37

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

	Step	ve Date - percent	01/01/2020	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	;
_	1	50		\$20.93	\$8.20	\$0.00	\$0.00	\$29.13	
:	2	55		\$23.02	\$8.20	\$5.94	\$0.00	\$37.16	
:	3	60		\$25.12	\$8.20	\$6.48	\$0.00	\$39.80)
	4	65		\$27.21	\$8.20	\$7.02	\$0.00	\$42.43	
:	5	70		\$29.30	\$8.20	\$18.86	\$0.00	\$56.36	
	6	75		\$31.40	\$8.20	\$19.40	\$0.00	\$59.00)
	7	80		\$33.49	\$8.20	\$19.94	\$0.00	\$61.63	
:	8	90		\$37.67	\$8.20	\$21.02	\$0.00	\$66.89)
		ve Date -	07/01/2020				Supplemental		
5	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
	1	50		\$21.48	\$8.20	\$0.00	\$0.00	\$29.68	;
:	2	55		\$23.63	\$8.20	\$5.94	\$0.00	\$37.77	,
:	3	60		\$25.78	\$8.20	\$6.48	\$0.00	\$40.46	
•	4	65		\$27.92	\$8.20	\$7.02	\$0.00	\$43.14	
:	5	70		\$30.07	\$8.20	\$18.86	\$0.00	\$57.13	
	6	75		\$32.22	\$8.20	\$19.40	\$0.00	\$59.82	!
	7	80		\$34.37	\$8.20	\$19.94	\$0.00	\$62.51	
;	8	90		\$38.66	\$8.20	\$21.02	\$0.00	\$67.88	}
1	Notes:								
į		Steps are	750 hrs.						
Ā	Apprei	ntice to Jo	urneyworker Ratio:1:1						
ER (SPRA			AST, REPAINT)	01/01/2020	\$39.9	2 \$8.20	\$22.10	\$0.00	\$70.2
IS LOCAL 33	LOIVE	. 2		07/01/2020	\$41.0	2 \$8.20	\$22.10	\$0.00	\$71.3

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 23 of 37 Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Pension

Total Rate Unemployment

	ctive Date - 01/01/2020	ne 2 sprujysunuetust Tiepunu			Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$19.96	\$8.20	\$0.00	\$0.00	\$28.16	
2	55	\$21.96	\$8.20	\$5.94	\$0.00	\$36.10	
3	60	\$23.95	\$8.20	\$6.48	\$0.00	\$38.63	
4	65	\$25.95	\$8.20	\$7.02	\$0.00	\$41.17	
5	70	\$27.94	\$8.20	\$18.86	\$0.00	\$55.00	
6	75	\$29.94	\$8.20	\$19.40	\$0.00	\$57.54	
7	80	\$31.94	\$8.20	\$19.94	\$0.00	\$60.08	
8	90	\$35.93	\$8.20	\$21.02	\$0.00	\$65.15	
Effe	etive Date - 07/01/2020				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$20.51	\$8.20	\$0.00	\$0.00	\$28.71	
2	55	\$22.56	\$8.20	\$5.94	\$0.00	\$36.70	
3	60	\$24.61	\$8.20	\$6.48	\$0.00	\$39.29	
4	65	\$26.66	\$8.20	\$7.02	\$0.00	\$41.88	
5	70	\$28.71	\$8.20	\$18.86	\$0.00	\$55.77	
6	75	\$30.77	\$8.20	\$19.40	\$0.00	\$58.37	
7	80	\$32.82	\$8.20	\$19.94	\$0.00	\$60.96	
8	90	\$36.92	\$8.20	\$21.02	\$0.00	\$66.14	
Note	s:						
İ	Steps are 750 hrs.						
App	rentice to Journeyworker Ratio:	1:1					
	MARKINGS)	12/01/2019	\$39.15	\$8.10	\$16.60	\$0.00	\$63.85
ERS - ZONE 1		06/01/2020	\$40.14	\$8.10	\$16.60	\$0.00	\$64.84
		12/01/2020	\$41.12	\$8.10	\$16.60	\$0.00	\$65.82
		06/01/2021	\$42.14	\$8.10	\$16.60	\$0.00	\$66.84
		12/01/2021	\$43.15	\$8.10	\$16.60	\$0.00	\$67.85
	ee "Apprentice- LABORER"						
	BRUSH, NEW) * urfaces to be painted are new cons	01/01/2020 struction	\$40.46		\$22.10	\$0.00	\$70.76
	be used. PAINTERS LOCAL 35 - ZONE.	0.7/01/2020	\$41.56		\$22.10	\$0.00	\$71.86
		01/01/2021	\$42.66	\$8.20	\$22.10	\$0.00	\$72.96

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 24 of 37

Total Rate

1 50	Total Rate	Total Rate	Supplemental Unemployment To	Pension	Health	Apprentice Base Wage	percent	Step
Second S	\$28.43	\$28.43	\$0.00	\$0.00	\$8.20	\$20.23	50	1
Second S	\$36.39	\$36.39	\$0.00	\$5.94	\$8.20	\$22.25	55	2
Second S	\$38.96	\$38.96	\$0.00	\$6.48	\$8.20	\$24.28	60	3
Step percent Apprentice Base Wage Health Pension Unemployment	\$41.52	\$41.52	\$0.00	\$7.02	\$8.20	\$26.30	65	4
Solution \$55.38	\$55.38	\$0.00	\$18.86	\$8.20	\$28.32	70	5	
Solution Supplemental Unemployment 1	\$57.95	\$57.95	\$0.00	\$19.40	\$8.20	\$30.35	75	6
Effective Date - 07/01/2020 Supplemental Vnemployment Step percent Apprentice Base Wage Health Pension Supplemental Unemployment 1 50 \$20.78 \$8.20 \$0.00 \$0.00 2 55 \$22.86 \$8.20 \$5.94 \$0.00 3 60 \$24.94 \$8.20 \$6.48 \$0.00 4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$60.51	\$60.51	\$0.00	\$19.94	\$8.20	\$32.37	80	7
Step percent Apprentice Base Wage Health Pension Unemployment 1 50 \$20.78 \$8.20 \$0.00 \$0.00 2 55 \$22.86 \$8.20 \$5.94 \$0.00 3 60 \$24.94 \$8.20 \$6.48 \$0.00 4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$65.63	\$65.63	\$0.00	\$21.02	\$8.20	\$36.41	90	8
1 50 \$20.78 \$8.20 \$0.00 \$0.00 2 55 \$22.86 \$8.20 \$5.94 \$0.00 3 60 \$24.94 \$8.20 \$6.48 \$0.00 4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00			Supplemental				ve Date - 07/01/2020	Effecti
2 55 \$22.86 \$8.20 \$5.94 \$0.00 3 60 \$24.94 \$8.20 \$6.48 \$0.00 4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00 Notes:	Total Rate	Total Rate	Unemployment To	Pension	Health	Apprentice Base Wage	percent	Step
3 60 \$24.94 \$8.20 \$6.48 \$0.00 4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$28.98	\$28.98	\$0.00	\$0.00	\$8.20	\$20.78	50	1
4 65 \$27.01 \$8.20 \$7.02 \$0.00 5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$37.00	\$37.00	\$0.00	\$5.94	\$8.20	\$22.86	55	2
5 70 \$29.09 \$8.20 \$18.86 \$0.00 6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$39.62	\$39.62	\$0.00	\$6.48	\$8.20	\$24.94	60	3
6 75 \$31.17 \$8.20 \$19.40 \$0.00 7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$42.23	\$42.23	\$0.00	\$7.02	\$8.20	\$27.01	65	4
7 80 \$33.25 \$8.20 \$19.94 \$0.00 8 90 \$37.40 \$8.20 \$21.02 \$0.00	\$56.15	\$56.15	\$0.00	\$18.86	\$8.20	\$29.09	70	5
8 90 \$37.40 \$8.20 \$21.02 \$0.00 Notes:	\$58.77	\$58.77	\$0.00	\$19.40	\$8.20	\$31.17	75	6
Notes:	\$61.39	\$61.39	\$0.00	\$19.94	\$8.20	\$33.25	80	7
	\$66.62	\$66.62	\$0.00	\$21.02	\$8.20	\$37.40	90	8
Steps are 750 hrs.								Notes:
		İ					Steps are 750 hrs.	İ
Apprentice to Journeyworker Ratio:1:1							ntice to Journeyworker Ratio:1:1	Appre

01/01/2021

\$40.72

\$22.10

\$8.20

\$0.00

\$71.02

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 25 of 37

Total Rate

	Step	ve Date - 01/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$19.26	\$8.20	\$0.00	\$0.00	\$27.46	
	2	55	\$21.19	\$8.20	\$5.94	\$0.00	\$35.33	
	3	60	\$23.11	\$8.20	\$6.48	\$0.00	\$37.79	
	4	65	\$25.04	\$8.20	\$7.02	\$0.00	\$40.26	
	5	70	\$26.96	\$8.20	\$18.86	\$0.00	\$54.02	
	6	75	\$28.89	\$8.20	\$19.40	\$0.00	\$56.49	
	7	80	\$30.82	\$8.20	\$19.94	\$0.00	\$58.96	
	8	90	\$34.67	\$8.20	\$21.02	\$0.00	\$63.89	
		ve Date - 07/01/2020	Assessation Dans Wass	II 14b	Danaian	Supplemental	Tatal Data	
	Step	percent	Apprentice Base Wage		Pension	Unemployment	Total Rate	
	1	50	\$19.81	\$8.20	\$0.00	\$0.00	\$28.01	
	2	55	\$21.79	\$8.20	\$5.94	\$0.00	\$35.93	
	3	60	\$23.77	\$8.20	\$6.48	\$0.00	\$38.45	
	4	65	\$25.75	\$8.20	\$7.02	\$0.00	\$40.97	
	5	70	\$27.73	\$8.20	\$18.86	\$0.00	\$54.79	
	6	75	\$29.72	\$8.20	\$19.40	\$0.00	\$57.32	
	7	80	\$31.70	\$8.20	\$19.94	\$0.00	\$59.84	
	8	90	\$35.66	\$8.20	\$21.02	\$0.00	\$64.88	
	Notes:							
		Steps are 750 hrs.					į	
		ntice to Journeyworker Ratio:1:1						
		UCKS DRIVER IL NO. 10 ZONE A	12/01/2019	\$35.18	\$12.41	\$13.72	\$0.00	\$61.31
SIEKS JOIN	1 COUNC	IL NO. 10 ZONE A	06/01/2020	\$36.08	\$12.41	\$13.72	\$0.00	\$62.21
			08/01/2020	\$36.08	\$12.91	\$13.72	\$0.00	\$62.71
			12/01/2020	\$36.08	\$12.91	\$14.82	\$0.00	\$63.81
			06/01/2021	\$36.88	\$12.91	\$14.82	\$0.00	\$64.61
			08/01/2021	\$36.88	\$13.41	\$14.82	\$0.00	\$65.11
			12/01/2021	\$36.88	\$13.41	\$16.01	\$0.00	\$66.30
K) Driver loo	CAL 56 (ZC	NSTRUCTOR (UNDERPINNING A DNE 1) 'Apprentice- PILE DRIVER"	ND 08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99
DRIVER			08/01/2019	\$48.94	\$9.90	\$21.15	\$0.00	\$79.99

Apprentice - Pl	LE DRIVER - Local	56 Zone 1
-----------------	-------------------	-----------

Ef	ffective Date - 08/0	01/2019				Supplemental		
St	tep percent	I	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$24.47	\$9.90	\$21.15	\$0.00	\$55.52	
2	60		\$29.36	\$9.90	\$21.15	\$0.00	\$60.41	
3	70		\$34.26	\$9.90	\$21.15	\$0.00	\$65.31	
4	75		\$36.71	\$9.90	\$21.15	\$0.00	\$67.76	
5	80		\$39.15	\$9.90	\$21.15	\$0.00	\$70.20	
6	80		\$39.15	\$9.90	\$21.15	\$0.00	\$70.20	
7	90		\$44.05	\$9.90	\$21.15	\$0.00	\$75.10	
8	90		\$44.05	\$9.90	\$21.15	\$0.00	\$75.10	
No	otes:							
							į	
$\mathbf{A}_{\mathbf{I}}$	pprentice to Journey	worker Ratio:1:5						
EFITTER & ST			03/01/2020	\$56.19	\$10.95	\$19.74	\$0.00	\$86.88
EFITTERS LOCAL :	537		09/01/2020	\$57.60	\$10.05	\$19.74	\$0.00	\$88.38

09/01/2020

03/01/2021

\$57.69

\$59.19

\$10.95

\$10.95

\$19.74

\$19.74

\$0.00

\$0.00

\$88.38

\$89.88

Apprentice - *PIPEFITTER - Local 537*

Effectiv	ve Date -	03/01/2020				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40		\$22.48	\$10.95	\$8.00	\$0.00	\$41.43
2	45		\$25.29	\$10.95	\$19.74	\$0.00	\$55.98
3	60		\$33.71	\$10.95	\$19.74	\$0.00	\$64.40
4	70		\$39.33	\$10.95	\$19.74	\$0.00	\$70.02
5	80		\$44.95	\$10.95	\$19.74	\$0.00	\$75.64
Effectiv	ve Date -	09/01/2020				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40		\$23.08	\$10.95	\$8.00	\$0.00	\$42.03
2	45		\$25.96	\$10.95	\$19.74	\$0.00	\$56.65
3	60		\$34.61	\$10.95	\$19.74	\$0.00	\$65.30
4	70		\$40.38	\$10.95	\$19.74	\$0.00	\$71.07
5	80		\$46.15	\$10.95	\$19.74	\$0.00	\$76.84
— — Notes:	** 1.2.2.	15. 1.10.41					
		15; 1:10 thereafter / S C Mechanic **1:1;1:2	;2:4;3:6;4:8;5:10;6:12;7:14;8:1	7;9:20;10:2	23(Max)		

Apprentice to Journeyworker Ratio:**

			Enec			Health		Unemployment	
IPELAYER 4BORERS - ZO			12/0	01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
ooreks - ZC	NE I		06/0	01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
			12/0	01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
			06/0	01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
			12/0	01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
		"Apprentice- LABORER"							
LUMBERS Lumbers & 0				01/2020	\$58.69	\$12.07	\$17.26	\$0.00	\$88.02
				01/2020	\$60.19	\$12.07	\$17.26	\$0.00	\$89.52
			03/0	01/2021	\$61.69	\$12.07	\$17.26	\$0.00	\$91.02
		entice - <i>PLUMBER/GASFITTE</i> tive Date - 03/01/2020	R - Local 12				Supplemental		
	Step	percent	Apprentice Base	Wage E	Iealth	Pension	Unemployment	Total Rate	
	1	35	\$20.54	\$	12.07	\$6.24	\$0.00	\$38.85	
	2	40	\$23.48		12.07	\$7.08	\$0.00	\$42.63	
	3	55	\$32.28		12.07	\$9.63	\$0.00	\$53.98	
	4	65	\$38.15		12.07	\$11.33	\$0.00		
	5	75	\$44.02		12.07	\$13.03	\$0.00		
		tive Date - 09/01/2020	A	W	T = = 141:	Danish	Supplemental	Tr. (.1 D.)	
	Step	percent	Apprentice Base			Pension	Unemployment		
	1	35	\$21.07		12.07	\$6.24	\$0.00		
	2	40	\$24.08		12.07	\$7.08	\$0.00		
	3	55	\$33.10		12.07	\$9.63	\$0.00		
	4	65	\$39.12		12.07	\$11.33	\$0.00		
	5	75	\$45.14	\$	12.07	\$13.03	\$0.00	\$70.24	
	Notes	 ::							
		** 1:2; 2:6; 3:10; 4:14; 5:19/S Step4 with lic\$65.32, Step5 w							
	Appr	entice to Journeyworker Ratio:	**						
		ROLS (TEMP.)	03/0	01/2020	\$56.19	\$10.95	\$19.74	\$0.00	\$86.88
PEFITTERS L	OCAL 537		09/0	01/2020	\$57.69	\$10.95	\$19.74	\$0.00	\$88.38
				01/2021	\$59.17	\$10.95	\$19.74	\$0.00	\$89.86
		"Apprentice- PIPEFITTER" or "PLUMB							
IEUMATI Borers - zc		/TOOL OPERATOR		01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
20				01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
			12/0	01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
			06/0	01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
For approx	ina rotos ss -	"Apprentice I ADODED"	12/0	01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
WDERM		ASTER	10//	11/2010	\$40.15	¢0 10	\$16.60	\$0.00	¢(10F
BORERS - ZC				01/2019	\$40.15	\$8.10	\$16.60 \$16.60	\$0.00	\$64.85
				01/2020	\$41.14	\$8.10	\$16.60	\$0.00	\$65.84
				01/2020	\$42.12	\$8.10	\$16.60	\$0.00	\$66.82
				01/2021	\$43.14	\$8.10	\$16.60	\$0.00	\$67.84
			10/0	1/2021	\$44.15	\$8.10	\$16.60	\$0.00	\$68.85

Wage Request Number:

20200507-030

Effective Date Base Wage

Health

Pension

Classification

Issue Date: 05/07/2020

Supplemental

Unemployment

Total Rate

Page 28 of 37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"					опетрюущен	
POWER SHOVEL/DERRICK/TRENCHING MACHINE	12/01/2019	\$48.73	\$12.50	\$15.70	\$0.00	\$76.93
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.83	\$12.50	\$15.70	\$0.00	\$78.03
	12/01/2020	\$50.98	\$12.50	\$15.70	\$0.00	\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70	\$0.00	\$80.28
	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4	12/01/2019	\$48.73	\$12.50	\$15.70	\$0.00	\$76.93
	06/01/2020	\$49.83	\$12.50	\$15.70	\$0.00	\$78.03
	12/01/2020	\$50.98	\$12.50	\$15.70	\$0.00	\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70	\$0.00	\$80.28
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43
PUMP OPERATOR (DEWATERING, OTHER)	12/01/2010	¢22.47	¢12.50	\$15.70	\$0.00	\$60.67
OPERATING ENGINEERS LOCAL 4	12/01/2019	\$32.47	\$12.50	\$15.70	\$0.00 \$0.00	\$60.67
	06/01/2020	\$33.22	\$12.50	\$15.70		\$61.42
	12/01/2020	\$34.00	\$12.50	\$15.70	\$0.00	\$62.20
	06/01/2021	\$34.75	\$12.50	\$15.70	\$0.00	\$62.95
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2021	\$35.54	\$12.50	\$15.70	\$0.00	\$63.74
READY MIX CONCRETE DRIVERS after 4/30/12	05/01/2020	\$27.90	\$10.41	\$14.12	\$0.00	\$52.43
(Drivers Hired After 4/30/2012) TEAMSTERS 25 (Metro) - Aggregate	08/01/2020	\$27.90	\$10.91	\$14.12	\$0.00	\$52.93
	05/01/2021	\$29.15	\$10.91	\$15.25	\$0.00	\$55.31
	08/01/2021	\$29.15	\$11.41	\$15.25	\$0.00	\$55.81
	05/01/2022	\$30.40	\$11.41	\$15.25	\$0.00	\$57.06
	08/01/2022	\$30.40	\$11.91	\$15.25	\$0.00	\$57.56
READY-MIX CONCRETE DRIVER	05/01/2020	\$32.91	\$10.41	\$14.12	\$0.00	\$57.44
TEAMSTERS 25 (Metro) - Aggregate	08/01/2020	\$32.91	\$10.91	\$14.12	\$0.00	\$57.94
	05/01/2021	\$33.66	\$10.91	\$15.25	\$0.00	\$59.82
	08/01/2021	\$33.66	\$11.41	\$15.25	\$0.00	\$60.32
	05/01/2022	\$34.41	\$11.41	\$15.25	\$0.00	\$61.07
	08/01/2022	\$34.41	\$11.91	\$15.25	\$0.00	\$61.57
RECLAIMERS	12/01/2019	\$48.23	\$12.50	\$15.70	\$0.00	\$76.43
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.31	\$12.50	\$15.70	\$0.00	\$77.51
	12/01/2020	\$50.45	\$12.50	\$15.70	\$0.00	\$78.65
	06/01/2021	\$51.54	\$12.50	\$15.70	\$0.00	\$79.74
	12/01/2021	\$52.68	\$12.50	\$15.70	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						*
RIDE-ON MOTORIZED BUGGY OPERATOR	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
LABORERS - ZONE 1	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER"						

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 29 of 37

Classification	1		Effective Da	te Base Wag	e Health	Pension	Supplemental Unemployment	Total Rate
		/MULCHING MACHINE	12/01/2019	9 \$48.23	\$12.50	\$15.70	\$0.00	\$76.43
PERATING ENC	GINEERS I	OCAL 4	06/01/2020	\$49.31	\$12.50	\$15.70	\$0.00	\$77.51
			12/01/2020	\$50.45	\$12.50	\$15.70	\$0.00	\$78.65
			06/01/2021	1 \$51.54	\$12.50	\$15.70	\$0.00	\$79.74
			12/01/202	1 \$52.68	\$12.50	\$15.70	\$0.00	\$80.88
		"Apprentice- OPERATING ENGINEERS"						
OOFER (Inc		Waterproofing &Roofer Damproof	03/01/2020	\$45.67	\$11.50	\$15.90	\$0.00	\$73.07
OOI ENGLOCK	L 33		08/01/2020	\$47.10	\$11.50	\$15.90	\$0.00	\$74.50
			02/01/2021	1 \$48.53	\$11.50	\$15.90	\$0.00	\$75.93
			08/01/2021	1 \$49.96	\$11.50	\$15.90	\$0.00	\$77.36
			02/01/2022	2 \$51.39	\$11.50	\$15.90	\$0.00	\$78.79
	Appro	entice - ROOFER - Local 33						
		ive Date - 03/01/2020				Supplementa		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemploymen	t Total Rate	:
	1	50	\$22.84	\$11.50	\$3.69	\$0.00	\$38.03	
	2	60	\$27.40	\$11.50	\$15.90	\$0.00	\$54.80	
	3	65	\$29.69	\$11.50	\$15.90	\$0.00	\$57.09	
	4	75	\$34.25	\$11.50	\$15.90	\$0.00	\$61.65	
	5	85	\$38.82	\$11.50	\$15.90	\$0.00	\$66.22	
	Effect Step	ive Date - 08/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
	1	50	\$23.55	\$11.50	\$3.69	\$0.00		
	2	60	\$28.26	\$11.50	\$15.90	\$0.00		
	3	65	\$30.62	\$11.50	\$15.90	\$0.00		
	4	75	\$35.33	\$11.50	\$15.90	\$0.00		
	5	85	\$40.04	\$11.50	\$15.90	\$0.00		
		: ** 1:5, 2:6-10, the 1:10; Rerooffr Step 1 is 2000 hrs.; Steps 2-5 are (Hot Pitch Mechanics' receive \$	e 1000 hrs. 1.00 hr. above ROOFER)					
		entice to Journeyworker Ratio:**						
UUEED CI 4		LE / PRECAST CONCRETE	03/01/2020	9 \$45.92	\$11.50	\$15.90	\$0.00	\$73.32
			08/01/2020	\$47.35	\$11.50	\$15.90	\$0.00	\$74.75
			02/01/2021	1 \$48.78	\$11.50	\$15.90	\$0.00	\$76.18
			02/01/2021	φ10.70				
			08/01/202		\$11.50	\$15.90	\$0.00	\$77.61
OOFERS LOCA	ce rates see	"Apprentice- ROOFER"		\$50.21		\$15.90 \$15.90	\$0.00 \$0.00	\$77.61 \$79.04
For apprentic	AL WOR	KER	08/01/202	\$50.21 2 \$51.64	\$11.50			
For apprentic	AL WOR	KER	08/01/202 02/01/2022	\$50.21 2 \$51.64 0 \$49.36	\$11.50 \$11.50	\$15.90	\$0.00	\$79.04
For apprentic SHEETMETA	AL WOR	KER	08/01/2022 02/01/2022 02/01/2020	\$50.21 2 \$51.64 0 \$49.36 0 \$50.96	\$11.50 \$11.50 \$13.35	\$15.90 \$24.12	\$0.00 \$2.61	\$79.04 \$89.44
ROOFERS LOCA	AL WOR	KER	08/01/2022 02/01/2022 02/01/2020 08/01/2020	\$50.21 2 \$51.64 0 \$49.36 0 \$50.96 1 \$52.61	\$11.50 \$11.50 \$13.35 \$13.35	\$15.90 \$24.12 \$24.12	\$0.00 \$2.61 \$2.66	\$79.04 \$89.44 \$91.09

Supplemental

Total Rate

Issue Date: 05/07/2020 **Wage Request Number:** 20200507-030 **Page 30 of 37**

Total Rate

Apprentice - SHEET METAL WORKER - Local 17-A

Pension

Unemployment

	Effecti	ve Date - 02/01/2020				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	2
	1	42	\$20.73	\$13.35	\$5.89	\$0.00	\$39.97	7
	2	42	\$20.73	\$13.35	\$5.89	\$0.00	\$39.97	7
	3	47	\$23.20	\$13.35	\$11.13	\$1.43	\$49.11	
	4	47	\$23.20	\$13.35	\$11.13	\$1.43	\$49.11	
	5	52	\$25.67	\$13.35	\$12.08	\$1.53	\$52.63	3
	6	52	\$25.67	\$13.35	\$12.33	\$1.54	\$52.89)
	7	60	\$29.62	\$13.35	\$13.70	\$1.70	\$58.37	7
	8	65	\$32.08	\$13.35	\$15.15	\$1.80	\$62.38	3
	9	75	\$37.02	\$13.35	\$16.56	\$2.01	\$68.94	ļ
	10	85	\$41.96	\$13.35	\$17.96	\$2.20	\$75.47	7
	Effecti Step	ve Date - 08/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	$\frac{3 \text{ Gp}}{1}$	42	\$21.40	\$13.35	\$5.89	\$0.00	\$40.64	
	2	42	\$21.40	\$13.35 \$13.35	\$5.89	\$0.00	\$40.64	
	3	47	\$23.95	\$13.35	\$11.13	\$1.45	\$49.88	
	4	47	\$23.95	\$13.35	\$11.13	\$1.45	\$49.88	
	5	52	\$26.50	\$13.35	\$12.08	\$1.56	\$53.49	
	6	52	\$26.50	\$13.35	\$12.33	\$1.57	\$53.75	
	7	60	\$30.58	\$13.35 \$13.35	\$13.70	\$1.73	\$59.36	
	8	65	\$33.12	\$13.35	\$15.15	\$1.75	\$63.47	
	9	75	\$38.22	\$13.35	\$16.56	\$2.04	\$70.17	
	10	85	\$43.32	\$13.35 \$13.35	\$17.96	\$2.04	\$76.17 \$76.87	
	Notes:	Steps are 6 mos.						
	Appre	ntice to Journeyworker Ratio:1:4						
ECIALIZE		I MOVING EQUIP < 35 TONS	12/01/2019	9 \$35.64	\$12.41	\$13.72	\$0.00	\$61.77
		IL NO. 10 ZONE A	06/01/2020				\$0.00	\$62.67
			08/01/2020				\$0.00	\$63.17
			12/01/2020			\$13.72	\$0.00	\$64.27
			06/01/202			\$14.82	\$0.00	\$65.07
			08/01/202			\$14.82	\$0.00	\$65.57
			12/01/202			\$16.01	\$0.00	\$66.76

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	12/01/2019	\$35.93	\$12.41	\$13.72	\$0.00	\$62.06
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$36.83	\$12.41	\$13.72	\$0.00	\$62.96
	08/01/2020	\$36.83	\$12.91	\$13.72	\$0.00	\$63.46
	12/01/2020	\$36.83	\$12.91	\$14.82	\$0.00	\$64.56
	06/01/2021	\$37.63	\$12.91	\$14.82	\$0.00	\$65.36
	08/01/2021	\$37.63	\$13.41	\$14.82	\$0.00	\$65.86
	12/01/2021	\$37.63	\$13.41	\$16.01	\$0.00	\$67.05
SPRINKLER FITTER	03/01/2020	\$60.82	\$9.68	\$20.55	\$0.00	\$91.05
SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	10/01/2020	\$62.32	\$9.68	\$20.55	\$0.00	\$92.55
	03/01/2021	\$63.82	\$9.68	\$20.55	\$0.00	\$94.05

Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1

311000	ive Date -	03/01/2020				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	35		\$21.29	\$9.68	\$11.61	\$0.00	\$42.58
2	40		\$24.33	\$9.68	\$12.30	\$0.00	\$46.31
3	45		\$27.37	\$9.68	\$12.99	\$0.00	\$50.04
4	50		\$30.41	\$9.68	\$13.73	\$0.00	\$53.82
5	55		\$33.45	\$9.68	\$14.36	\$0.00	\$57.49
6	60		\$36.49	\$9.68	\$15.05	\$0.00	\$61.22
7	65		\$39.53	\$9.68	\$15.74	\$0.00	\$64.95
8	70		\$42.57	\$9.68	\$16.43	\$0.00	\$68.68
9	75		\$45.62	\$9.68	\$17.11	\$0.00	\$72.41
10	80		\$48.66	\$9.68	\$17.80	\$0.00	\$76.14
Effect	ive Date -	10/01/2020				Supplemental	
	ive Date -	10/01/2020	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Step		10/01/2020	Apprentice Base Wage \$21.81	Health \$9.68	Pension \$11.61		Total Rate
Step 1	percent	10/01/2020				Unemployment	\$43.10
Step 1 2	percent 35	10/01/2020	\$21.81	\$9.68	\$11.61	Unemployment \$0.00	\$43.10 \$46.91
Effect Step 1 2 3 4	35 40	10/01/2020	\$21.81 \$24.93	\$9.68 \$9.68	\$11.61 \$12.30	\$0.00 \$0.00	\$43.10 \$46.91 \$50.71
Step 1 2 3	35 40 45	10/01/2020	\$21.81 \$24.93 \$28.04	\$9.68 \$9.68 \$9.68	\$11.61 \$12.30 \$12.99	\$0.00 \$0.00 \$0.00	\$43.10 \$46.91 \$50.71 \$54.57
Step 1 2 3 4	percent 35 40 45 50	10/01/2020	\$21.81 \$24.93 \$28.04 \$31.16	\$9.68 \$9.68 \$9.68 \$9.68	\$11.61 \$12.30 \$12.99 \$13.73	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$43.10 \$46.91 \$50.71 \$54.57 \$58.32
Step 1 2 3 4 5 6	95 percent 35 40 45 50 55	10/01/2020	\$21.81 \$24.93 \$28.04 \$31.16 \$34.28	\$9.68 \$9.68 \$9.68 \$9.68 \$9.68	\$11.61 \$12.30 \$12.99 \$13.73 \$14.36	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$43.10 \$46.91 \$50.71 \$54.57 \$58.32 \$62.12
Step 1 2 3 4 5 5	95 percent 35 40 45 50 55 60	10/01/2020	\$21.81 \$24.93 \$28.04 \$31.16 \$34.28 \$37.39	\$9.68 \$9.68 \$9.68 \$9.68 \$9.68 \$9.68	\$11.61 \$12.30 \$12.99 \$13.73 \$14.36 \$15.05	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Step 1 2 3 4 5 6 6 7	percent 35 40 45 50 55 60 65	10/01/2020	\$21.81 \$24.93 \$28.04 \$31.16 \$34.28 \$37.39 \$40.51	\$9.68 \$9.68 \$9.68 \$9.68 \$9.68 \$9.68	\$11.61 \$12.30 \$12.99 \$13.73 \$14.36 \$15.05	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$43.10 \$46.91 \$50.71 \$54.57 \$58.32 \$62.12

Apprentice to Journeyworker Ratio:1:3

Issue Date: 05/07/2020 Wage Request Number: 20200507-030 Page 32 of 37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
STEAM BOILER OPERATOR	12/01/2019	\$48.23	\$12.50	\$15.70	\$0.00	\$76.43
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.31	\$12.50	\$15.70	\$0.00	\$77.51
	12/01/2020	\$50.45	\$12.50	\$15.70	\$0.00	\$78.65
	06/01/2021	\$51.54	\$12.50	\$15.70	\$0.00	\$79.74
	12/01/2021	\$52.68	\$12.50	\$15.70	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/01/2019	\$48.23	\$12.50	\$15.70	\$0.00	\$76.43
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.31	\$12.50	\$15.70	\$0.00	\$77.51
	12/01/2020	\$50.45	\$12.50	\$15.70	\$0.00	\$78.65
	06/01/2021	\$51.54	\$12.50	\$15.70	\$0.00	\$79.74
	12/01/2021	\$52.68	\$12.50	\$15.70	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN	03/01/2020	\$40.13	\$13.00	\$17.12	\$0.00	\$70.25
ELECTRICIANS LOCAL 103	09/01/2020	\$41.20	\$13.00	\$17.16	\$0.00	\$71.36
	03/01/2021	\$42.66	\$13.00	\$17.27	\$0.00	\$72.93
	09/01/2021	\$44.32	\$13.00	\$17.38	\$0.00	\$74.70
	03/01/2022	\$45.83	\$13.00	\$17.49	\$0.00	\$76.32
	09/01/2022	\$47.55	\$13.00	\$17.62	\$0.00	\$78.17
	03/01/2023	\$49.11	\$13.00	\$17.73	\$0.00	\$79.84

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 33 of 37

Total Rate

Pension

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103 03/01/2020 **Effective Date -**Supplemental Apprentice Base Wage Health Unemployment Total Rate Step percent Pension 1 45 \$18.06 \$13.00 \$0.54 \$0.00 \$31.60 2 45 \$18.06 \$13.00 \$0.54 \$0.00 \$31.60 3 50 \$20.07 \$13.00 \$14.00 \$0.00 \$47.07 4 50 \$20.07 \$13.00 \$14.00 \$0.00 \$47.07 5 55 \$22.07 \$13.00 \$0.00 \$49.38 \$14.31 6 60 \$24.08 \$13.00 \$14.62 \$0.00 \$51.70 7 65 \$26.08 \$13.00 \$14.94 \$0.00 \$54.02 8 70 \$28.09 \$13.00 \$15.25 \$0.00 \$56.34 9 75 \$30.10 \$13.00 \$15.56 \$0.00 \$58.66 10 80 \$32.10 \$13.00 \$15.87 \$0.00 \$60.97 09/01/2020 **Effective Date -**Supplemental Step percent Apprentice Base Wage Health Pension Unemployment Total Rate 1 45 \$18.54 \$13.00 \$0.57 \$0.00 \$32.11 2 45 \$18.54 \$13.00 \$0.00 \$0.57 \$32.11 3 50 \$20.60 \$13.00 \$14.02 \$0.00 \$47.62 4 50 \$20.60 \$14.02 \$0.00 \$47.62 \$13.00 5 55 \$22.66 \$0.00 \$49.99 \$13.00 \$14.33 6 60 \$24.72 \$0.00 \$13.00 \$14.64 \$52.36 7 65 \$26.78 \$13.00 \$14.96 \$0.00 \$54.74 8 70 \$28.84 \$13.00 \$15.28 \$0.00 \$57.12 9 75 \$30.90 \$59.49 \$13.00 \$15.59 \$0.00 10 80 \$32.96 \$13.00 \$15.90 \$0.00 \$61.86 Notes: Apprentice to Journeyworker Ratio:1:1

TERRAZZO FINISHERS	02/01/2020	\$53.34	\$10.75	\$21.94	\$0.00	\$86.03
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2020	\$54.69	\$10.75	\$22.09	\$0.00	\$87.53
	02/01/2021	\$55.33	\$10.75	\$22.09	\$0.00	\$88.17
	08/01/2021	\$56.73	\$10.75	\$22.25	\$0.00	\$89.73
	02/01/2022	\$57.32	\$10.75	\$22.25	\$0.00	\$90.32

Issue Date: 05/07/2020 **Wage Request Number:** 20200507-030 **Page 34 of 37**

	Step	ve Date - 02/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$26.67	\$10.75	\$21.94	\$0.00	\$59.36	
	2	60	\$32.00	\$10.75	\$21.94	\$0.00	\$64.69	
	3	70	\$37.34	\$10.75	\$21.94	\$0.00	\$70.03	
	4	80	\$42.67	\$10.75	\$21.94	\$0.00	\$75.36	
	5	90	\$48.01	\$10.75	\$21.94	\$0.00	\$80.70	
			Ψ.10.101	Ψ10.70	Ψ=1.7.	Ψ0.00	φσσ.//σ	
		ve Date - 08/01/2020				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	:
	1	50	\$27.35	\$10.75	\$22.09	\$0.00	\$60.19	
	2	60	\$32.81	\$10.75	\$22.09	\$0.00	\$65.65	
	3	70	\$38.28	\$10.75	\$22.09	\$0.00	\$71.12	
	4	80	\$43.75	\$10.75	\$22.09	\$0.00	\$76.59	
	5	90	\$49.22	\$10.75	\$22.09	\$0.00	\$82.06	
	Notes:							
į								
ı	Appre	ntice to Journeyworker Ratio:1:3						
ST BORING			12/01/2019	9 \$40.5	\$8.10	\$16.80	\$0.00	\$65.40
BORERS - FOUNI	DATION	AND MARINE	06/01/2020	\$41.4	9 \$8.10	\$16.80	\$0.00	\$66.39
			12/01/2020	\$42.4	\$8.10	\$16.80	\$0.00	\$67.37
			06/01/202	1 \$43.4	9 \$8.10	\$16.80	\$0.00	\$68.39
			12/01/202	1 \$44.5	\$8.10	\$16.80	\$0.00	\$69.40
• • • • • • • • • • • • • • • • • • • •		Apprentice- LABORER"						
EST BORING . BORERS - FOUND			12/01/2019	\$39.2	\$8.10	\$16.80	\$0.00	\$64.12
JOHENS TOOM			06/01/2020	\$40.2	\$8.10	\$16.80	\$0.00	\$65.11
			12/01/2020	\$41.1	9 \$8.10	\$16.80	\$0.00	\$66.09
			06/01/202	\$42.2	\$8.10	\$16.80	\$0.00	\$67.11
For appropriace	ntaa aaa !!	Appropriate LADORED!	12/01/202	\$43.2	\$8.10	\$16.80	\$0.00	\$68.12
EST BORING		Apprentice- LABORER" RER	10/01/001/) p20.1	0 0010	¢16 00	00.02	¢(400
BORERS - FOUNI			12/01/2019			\$16.80	\$0.00	\$64.00
			06/01/2020			\$16.80	\$0.00	\$64.99
			12/01/2020			\$16.80 \$16.80	\$0.00	\$65.97
			06/01/202			\$16.80	\$0.00	\$66.99
For apprentice ra	ates see "	Apprentice- LABORER"	12/01/202	1 \$43.1	0 \$8.10	\$16.80	\$0.00	\$68.00
		LE STEAM GENERATORS	12/01/2019	9 \$48.2	3 \$12.50	\$15.70	\$0.00	\$76.43
ERATING ENGIN	EERS LC	OCAL 4	06/01/2020	\$49.3	\$1 \$12.50	\$15.70	\$0.00	\$77.51
			12/01/2020	\$50.4	5 \$12.50	\$15.70	\$0.00	\$78.65
			06/01/202	1 \$51.5			\$0.00	\$79.74
			12/01/202				\$0.00	\$80.88
For appropriace	atec cee "	Apprentice- OPERATING ENGINEERS"						_

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRAILERS FOR EARTH MOVING EQUIPMENT	12/01/2019	\$36.22	\$12.41	\$13.72	\$0.00	\$62.35
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$37.12	\$12.41	\$13.72	\$0.00	\$63.25
	08/01/2020	\$37.12	\$12.91	\$13.72	\$0.00	\$63.75
	12/01/2020	\$37.12	\$12.91	\$14.82	\$0.00	\$64.85
	06/01/2021	\$37.92	\$12.91	\$14.82	\$0.00	\$65.65
	08/01/2021	\$37.92	\$13.41	\$14.82	\$0.00	\$66.15
	12/01/2021	\$37.92	\$13.41	\$16.01	\$0.00	\$67.34
TUNNEL WORK - COMPRESSED AIR	12/01/2019	\$51.38	\$8.10	\$17.20	\$0.00	\$76.68
LABORERS (COMPRESSED AIR)	06/01/2020	\$52.37	\$8.10	\$17.20	\$0.00	\$77.67
	12/01/2020	\$53.35	\$8.10	\$17.20	\$0.00	\$78.65
	06/01/2021	\$54.37	\$8.10	\$17.20	\$0.00	\$79.67
	12/01/2021	\$55.38	\$8.10	\$17.20	\$0.00	\$80.68
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) LABORERS (COMPRESSED AIR)	12/01/2019	\$53.38	\$8.10	\$17.20	\$0.00	\$78.68
LADOREKS (COM RESSED AIR)	06/01/2020	\$54.37	\$8.10	\$17.20	\$0.00	\$79.67
	12/01/2020	\$55.35	\$8.10	\$17.20	\$0.00	\$80.65
	06/01/2021	\$56.37	\$8.10	\$17.20	\$0.00	\$81.67
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$57.38	\$8.10	\$17.20	\$0.00	\$82.68
TUNNEL WORK - FREE AIR	12/01/2019	\$43.45	\$8.10	\$17.20	\$0.00	\$68.75
LABORERS (FREE AIR TUNNEL)	06/01/2020	\$44.44	\$8.10	\$17.20	\$0.00	\$69.74
	12/01/2020	\$45.42	\$8.10	\$17.20	\$0.00	\$70.72
	06/01/2021	\$46.44	\$8.10	\$17.20	\$0.00	\$71.74
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$47.45	\$8.10	\$17.20	\$0.00	\$72.75
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/01/2010	Φ 4.5. 4.5	#0.10	¢17.20	\$0.00	Φ70.75
LABORERS (FREE AIR TUNNEL)	12/01/2019	\$45.45	\$8.10	\$17.20	\$0.00	\$70.75
	06/01/2020	\$46.44	\$8.10	\$17.20	\$0.00	\$71.74
	12/01/2020	\$47.42	\$8.10	\$17.20	\$0.00	\$72.72
	06/01/2021	\$48.44	\$8.10	\$17.20	\$0.00	\$73.74
For apprentice rates see "Apprentice- LABORER"	12/01/2021	\$49.45	\$8.10	\$17.20	\$0.00	\$74.75
VAC-HAUL	12/01/2019	\$35.64	\$12.41	\$13.72	\$0.00	\$61.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2020	\$36.54	\$12.41	\$13.72	\$0.00	\$62.67
	08/01/2020	\$36.54	\$12.91	\$13.72	\$0.00	\$63.17
	12/01/2020	\$36.54	\$12.91	\$14.82	\$0.00	\$64.27
	06/01/2021	\$37.34	\$12.91	\$14.82	\$0.00	\$65.07
	08/01/2021	\$37.34	\$13.41	\$14.82	\$0.00	\$65.57
	12/01/2021	\$37.34	\$13.41	\$16.01	\$0.00	\$66.76
WAGON DRILL OPERATOR	12/01/2019	\$39.40	\$8.10	\$16.60	\$0.00	\$64.10
LABORERS - ZONE I	06/01/2020	\$40.39	\$8.10	\$16.60	\$0.00	\$65.09
	12/01/2020	\$41.37	\$8.10	\$16.60	\$0.00	\$66.07
	06/01/2021	\$42.39	\$8.10	\$16.60	\$0.00	\$67.09
	12/01/2021	\$43.40	\$8.10	\$16.60	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER"	12,01/2021	Ψ Τ υ. Τ υ	ψ0.10	\$10.00	\$3.00	ψ00.10

 Issue Date:
 05/07/2020
 Wage Request Number:
 20200507-030
 Page 36 of 37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WASTE WATER PUMP OPERATOR	12/01/2019	\$48.73	\$12.50	\$15.70	\$0.00	\$76.93
OPERATING ENGINEERS LOCAL 4	06/01/2020	\$49.83	\$12.50	\$15.70	\$0.00	\$78.03
	12/01/2020	\$50.98	\$12.50	\$15.70	\$0.00	\$79.18
	06/01/2021	\$52.08	\$12.50	\$15.70	\$0.00	\$80.28
	12/01/2021	\$53.23	\$12.50	\$15.70	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER	03/01/2020	\$58.69	\$12.07	\$17.26	\$0.00	\$88.02
PLUMBERS & GASFITTERS LOCAL 12	09/01/2020	\$60.19	\$12.07	\$17.26	\$0.00	\$89.52
	03/01/2021	\$61.69	\$12.07	\$17.26	\$0.00	\$91.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER	/GASFITTER"					

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

- Multiple ratios are listed in the comment field.
- *** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

 **** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

Issue Date: 05/07/2020 **Wage Request Number:** 20200507-030 Page 37 of 37

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

This document has been approved and endorsed by

The Associated General

Contractors of America

Construction Specifications Institute

EJCDC No. 1910-8 (1996 Edition)

Copyright ©1996

National Society of Professional Engineers 1420 King Street, Alexandria, VA 22314

American Consulting Engineers Council 1015 15th Street N.W., Washington, DC 20005

American Society of Civil Engineers 345 East 47th Street, New York, NY 10017

GENERAL CONDITIONS 00700-2

TABLE OF CONTENTS

<u>Page</u>

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY	6
1.01 Defined Terms	
1.02 Terminology	
ARTICLE 2 - PRELIMINARY MATTERS	9
2.01 Delivery of Bonds	
2.02 Copies of Documents	
2.03 Commencement of Contract Times; Notice to Proceed	
2.04 Starting the Work	
2.05 Before Starting Construction	
2.06 Preconstruction Conference	
2.07 Initial Acceptance of Schedules	10
ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE	10
3.01 Intent	10
3.02 Reference Standards	10
3.03 Reporting and Resolving Discrepancies	10
3.04 Amending and Supplementing Contract Documents	11
3.05 Reuse of Documents	11
ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITION	NS; REFERENCE
POINTS	11
4.01 Availability of Lands	11
4.02 Subsurface and Physical Conditions	12
4.03 Differing Subsurface or Physical Conditions	12
4.04 Underground Facilities	13
4.05 Reference Points	13
4.06 Hazardous Environmental Condition at Site	14
ARTICLE 5 - BONDS AND INSURANCE	15
5.01 Performance, Payment, and Other Bonds	15
5.02 Licensed Sureties and Insurers	15
5.03 Certificates of Insurance	15
5.04 CONTRACTOR's Liability Insurance	15
5.05 OWNER's Liability Insurance	16
5.06 Property Insurance	16
5.07 Waiver of Rights	17
5.08 Receipt and Application of Insurance Proceeds	18
5.09 Acceptance of Bonds and Insurance; Option to Replace	18
5.10 Partial Utilization, Acknowledgment of Property Insurer	18
ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES	
6.01 Supervision and Superintendence	18
6.02 Labor; Working Hours	19
6.03 Services, Materials, and Equipment	19
6.04 Progress Schedule	
6.05 Substitutes and "Or-Equals"	19
6.06 Concerning Subcontractors, Suppliers, and Others	2

	6.07 Patent Fees and Royalties	21
	6.08 Permits	22
	6.09 Laws and Regulations	22
	6.10 Taxes	22
	6.11 Use of Site and Other Areas	22
	6.12 Record Documents	
	6.13 Safety and Protection	23
	6.14 Safety Representative	
	6.15 Hazard Communication Programs	
	6.16 Emergencies	
	6.17 Shop Drawings and Samples	
	6.18 Continuing the Work	
	6.19 CONTRACTOR's General Warranty and Guarantee	
	6.20 Indemnification	
ARTICLE 7 -	OTHER WORK	26
	7.01 Related Work at Site	
	7.02 Coordination	
ARTICLE 8 -	OWNER'S RESPONSIBILITIES	27
	8.01 Communications to Contractor	
	8.02 Replacement of ENGINEER	
	8.03 Furnish Data	
	8.04 Pay Promptly When Due	
	8.05 Lands and Easements; Reports and Tests	
	8.06 Insurance	
	8.07 Change Orders	
	8.08 Inspections, Tests, and Approvals	
	8.09 Limitations on OWNER's Responsibilities	
	8.10 Undisclosed Hazardous Environmental Condition	
	8.11 Evidence of Financial Arrangements	
ARTICLE 9 -	ENGINEER'S STATUS DURING CONSTRUCTION	27
	9.01 OWNER'S Representative	
	9.02 Visits to Site	
	9.03 Project Representative	
	9.04 Clarifications and Interpretations	
	9.05 Authorized Variations in Work	
	9.06 Rejecting Defective Work	
	9.07 Shop Drawings, Change Orders and Payments	
	9.08 Determinations for Unit Price Work	
	9.09 Decisions on Requirements of Contract Documents and Acceptability of Work	
	9.10 Limitations on ENGINEER's Authority and Responsibilities	
ARTICLE 10	- CHANGES IN THE WORK; CLAIMS	29
	10.01 Authorized Changes in the Work	
	10.02 Unauthorized Changes in the Work	
	10.03 Execution of Change Orders	
	10.04 Notification to Surety	
	10.05 Claims and Disputes	
ARTICLE 11	- COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK	30
	11.01 Cost of the Work	20

11.02 Cash Allowances	32
11.03 Unit Price Work	33
	-
ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES	
12.01 Change of Contract Price	
12.02 Change of Contract Times	
12.03 Delays Beyond CONTRACTOR's Control	
12.04 Delays Within CONTRACTOR's Control	
1205 Delays Beyond OWNER's and CONTRACTOR'S Control	
12.06 Delay Damages	34
ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF I	DEFECTIVE
WORK	34
13.01 Notice of Defects	34
13.02 Access to Work	
13.03 Tests and Inspections	
13.04 Uncovering Work	
13.05 OWNER May Stop the Work	
13.06 Correction or Removal of Defective Work	
13.07 Correction Period	
13.08 Acceptance of Defective Work	
13.09 OWNER May Correct Defective Work	
ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION	37
14.01 Schedule of Values	37
14.02 Progress Payments	37
14.03 CONTRACTOR's Warranty of Title	38
14.04 Substantial Completion	39
14.05 Partial Utilization	39
14.06 Final Inspection	39
14.07 Final Payment	40
14.08 Final Completion Delayed	40
14.09 Waiver of Claims	41
ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION	41
15.01 OWNER May Suspend Work	
15.02 OWNER May Terminate for Cause	
15.03 OWNER May Terminate For Convenience	
15.04 CONTRACTOR May Stop work or Terminate	4.
ARTICLE 16 - DISPUTE RESOLUTION	42
16.01 Methods and Procedures	42
ARTICLE 17 - MISCELLANEOUS	Δ3
17.01 Giving Notice	
17.02 Computation of Times	
17.03 Cumulative Remedies	
17.03 Cumulative Remedies	
17.05 Controlling Law	

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
- 2. Agreement--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.
- 3. Application for Payment--The form acceptable to ENGINEER which is to be used by CON-TRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid--*The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 7. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.
- 8. *Bonds*--Performance and payment bonds and other instruments of security.
- 9. Change Order--A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the

Contract Times, issued on or after the Effective Date of the Agreement.

- 10. Claim--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.
- 13. Contract Price-The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).
- 14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

- 16. Cost of the Work--See paragraph 11.01.A for definition.
- 17. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *ENGINEER*--The individual or entity named as such in the Agreement.
- 20. ENGINEER's Consultant--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.
- 21. Field Order--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times
- 22. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 23. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 24. *Hazardous Waste--*The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 25. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

- 26. *Liens--*Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 27. *Milestone--*A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 28. Notice of Award--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
- 29. *Notice to Proceed--*A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.
- 30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.
- 31. Partial Utilization--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
 - 32. PCBs--Polychlorinated biphenyls.
- 33. Petroleum-Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.
- 35. Project Manual--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

- 36. Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 37. Resident Project Representative--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.
- 40. *Site--*Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.
- 41. Specifications--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 42. Subcontractor--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.
- 43. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 44. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

- 45. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.
- 46. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 47. *Unit Price Work* -- Work to be paid for on the basis of unit prices.
- 48. Work--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 49. Work Directive--A Change written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergen-A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.
- 50. Written Amendment--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 Terminology

A. Intent of Certain Terms or Adjectives

Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable." "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. Day

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. Furnish, Install, Perform, Provide

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other

specified location) ready for use or installation and in usable or operable condition.

- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.
- E Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

Delivery of Bonds

2.01

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02* Copies of Documents

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times com-

mence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

*See Supplementary Conditions

2.05* Before Starting Construction

- A. CONTRACTOR's Review of Contract Docu-Before undertaking each part of the Work, ments: CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.
- B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:
 - 1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents:
 - 2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
 - 3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into

component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

* C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 Preconstruction Conference

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in para graph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

- A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.
 - 1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

- 2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

*See Supplementary Conditions

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01* *Intent*

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part there of) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.
- C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws, and Regulations
 - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in 3.04; provided, however, paragraph CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CON-TRACTOR knew or reasonably should have known thereof.

B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or

*See Supplementary Conditions

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 Reuse of Documents

A. CONTRACTOR and any Subcontractor Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or

restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

- B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02* Subsurface and Physical Conditions

- A.* *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and
 - 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.
- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:
 - 1. the completeness of such reports and drawings for CONTRACTOR's purposes, includ-

ing, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or

- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information

*See Supplementary Conditions

4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
 - 1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Contract Documents; or
 - 3. differs materially from that shown or indicated in the Contract Documents: or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.
- B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the

necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.
- 2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or
 - c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.
- 3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be

made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 Underground Facilities

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
 - 2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
 - a. reviewing and checking all such information and data.
 - b. locating all Underground Facilities shown or indicated in the Contract Documents,
 - c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or

performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05* Reference Points

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

- A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.
- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:
 - 1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or

*See Supplementary Conditions

- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.
- D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition;

- (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.
- F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or

Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants. and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges architects, engineers, attorneys, and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

*See Supplementary Conditions

ARTICLE 5 - BONDS AND INSURANCE

5.01* Performance, Payment, and Other Bonds

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B.* All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Compa-

nies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

5.04* CONTRACTOR's Liability Insurance

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to

perform any of the Work, or by anyone for whose acts any of them may be liable:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason:
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, 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.
- B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

*See Supplementary Conditions

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, **ENGINEER's** Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 - 3. include completed operations insurance;
- 4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;
- 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWN-ER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);
- 6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claims -made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 OWNER's Liability Insurance

A.* In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06* Property Insurance

A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property

insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

- include the interests of OWNER, CON-1. TRACTOR. Subcontractors. ENGINEER. ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured:
- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects):

*See Supplementary Conditions

- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;
- 5. allow for partial utilization of the Work by OWNER;
 - 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with

- 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B.* OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C.* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.
- D.* OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E.* If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

5.07 Waiver of Rights

A.* OWNER and CONTRACTOR intend that all policies purchased in accordance with para graph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other

individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other their respective officers, directors, partners, and employees. agents. and other consultants subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, and other consultants and employees, agents, subcontractors of each and any of them) under such policies for losses and damages so caused.

None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:

*See Supplementary Conditions

- 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and
- 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to

paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08* Receipt and Application of Insurance Proceeds

A.* Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B.* OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09* Acceptance of Bonds and Insurance; Option to Replace

A.* If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the

certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in para graph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with

*See Supplementary Conditions

the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences,

and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 Labor; Working Hours

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly

run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

- A. CONTRACTOR shall adhere to the progress schedule established in accordance with para graph 2.07 as it may be adjusted from time to time as provided below.
 - 1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.
 - 2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.
 - 1. "Or-Equal" Items: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be

considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;
- b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

- a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.
- c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.
- d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify

that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the applicaand available engineering, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.
- C. Engineer's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to para graphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a

substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

- D. Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- E. ENGINEER's Cost Reimbursement: ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.
- F. CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance the Supplementary Conditions, OWNER's with acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement

for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

- C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.
- E CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRAC-

TOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 Patent Fees and Royalties

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for

the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 Laws and Regulations

- A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.
- B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, CONTRACTOR of shall relieve but this not CONTRACTOR's obligations under paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10* *Taxes*

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11* Use of Site and Other Areas

A.* Limitation on Use of Site and Other Areas

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations,

*See Supplementary Conditions

and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify hold harmless OWNER. ENGINEER. ENGINEER's Consultant. and the officers. directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers. architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

- C. Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading Structures: CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 Safety and Protection

- A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17* Shop Drawings and Samples

A.* CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B.* CONTRACTOR shall also submit six (6) Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

- c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and
- d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or

*See Supplementary Conditions

Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

- 2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satis fied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.
- 3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. ENGINEER's Review

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals

will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

- 2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. Resubmittal Procedures

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 Continuing the Work

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 CONTRACTOR's General Warranty and Guarantee

- A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or
 - 2. normal wear and tear under normal usage.
- B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by ENGINEER;
 - 2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;
 - 4. use or occupancy of the Work or any part thereof by OWNER;
 - 5. any acceptance by OWNER or any failure to do so;
 - 6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
 - 7. any inspection, test, or approval by others; or
 - 8. any correction of defective Work by OWNER.

6.20 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:
 - 1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and
 - 2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.
- B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and

other consultants and subcontractors of each and any of them arising out of:

- 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
- 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 Related Work at Site

- A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - 1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
 - 2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.
- B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of

such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified:
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 Replacement of ENGINEER

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 Furnish Data

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 Pay Promptly When Due

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

*See Supplementary Conditions

8.06* Insurance

A.* OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 Limitations on OWNER's Responsibilities

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 OWNER'S Representative

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 Visits to Site

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and

observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03* Project Representative

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee,

*See Supplementary Conditions

the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Clarifications and Interpretations

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Docu-

ments. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 Authorized Variations in Work

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

9.06 Rejecting Defective Work

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 Shop Drawings, Change Orders and Payments

- A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.
- B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.
- C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.
- 9.08 Determinations for Unit Price Work

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.
- B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

*See Supplementary Conditions

9.10 Limitations on ENGINEER's Authority and Responsibilities

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such

authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. ENGINEER will not supervise, direct, control, or have authority over or be responsible CONTRACTOR's means, methods, techniques, quences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.
- C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the require ments of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants. See Article 18.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the

applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 Execution of Change Orders

- A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:
 - 1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;
 - 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
 - 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 Claims and Disputes

- A. Notice: Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).
- B. ENGINEER's Decision: ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:
 - 1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or
 - 2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days

- after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.
- C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.
- D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

A. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work

shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.
- Payments made by CONTRACTOR to Subcontractors for Work performed Subcontractors. If required by OWNER, CON-TRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CON-TRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGI-NEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of

CONTRACTOR's employees incurred in discharge of duties connected with the Work.

- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWN-ER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.
- i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.
- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expedit ers, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
 - 2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.
 - 3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
 - 4. Costs due to the negligence of CON-TRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not

- limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.
- C. CONTRACTOR's Fee: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.
- D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 Cash Allowances

- A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:
 - 1. the allowances include the cost to CON-TRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of

Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.
- B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.
- C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:
 - 1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - 2. there is no corresponding adjustment with respect any other item of Work; and
 - 3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01* Change of Contract Price

- A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B.* The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under para graph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).
- C. *CONTRACTOR's Fee:* The CONTRACTOR's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

- b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;
- c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor:

*See Supplementary Conditions

- d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B:
- e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones)

will be determined in accordance with the provisions of this Article 12.

12.03 Delays Beyond CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 Delays Within CONTRACTOR's Control

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 Delays Beyond OWNER's and CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 Delay Damages

- A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:
 - 1. delays caused by or within the control of CONTRACTOR; or
 - 2. delays beyond the control of both OWNER and CONTRACTOR including but mt limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility

owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02* Access to Work

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03* Tests and Inspections

- A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B.* OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;

- 2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and
- 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.
- D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.
- E If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.
- F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 Uncovering Work

- A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.
- B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in

question, furnishing all necessary labor, material, and If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges engineers, architects, attorneys, and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

*See Supplementary Conditions

13.05 OWNER May Stop the Work

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 Correction Period

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

- C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment. ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges engineers. architects. attorneys. and professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 OWNER May Correct Defective Work

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice

- to CONTRACTOR, correct and remedy any such deficiency.
- In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take posses sion of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.
- C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.
- D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A.* Applications for Payments

- At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to pro-gress payments will be as stipulated in the Agreement.

*See Supplementary Conditions

B. Review of Applications

- 1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.
- 2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:
 - a. the Work has progressed to the point indicated:
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and
 - c. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.
- 3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically as signed to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties

that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

- Neither ENGINEER's review CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.
- 5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:
 - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. the Contract Price has been reduced by Written Amendment or Change Orders;
 - c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
 - d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. Reduction in Payment

- 1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:
 - a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWN-ER to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling OWNER to a set-off against the amount recommended; or
 - d. OWNER has actual knowledge of the occurrence of any of the events enumerated in para graphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.
- 2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.
- 3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, OWNER, CONTRACTOR, and ENGI-NEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. f, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion. ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete α correct items on the tentative list.

14.05 Partial Utilization

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

OWNER at any time may request CON-TRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CON-TRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify **ENGINEER** OWNER and in writing CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

- After CONTRACTOR has, in the 1 opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents. all maintenance and operating schedules. guarantees, instructions. Bonds. certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other

indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled. ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 Final Completion Delayed

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not

fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, 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 CONTRACTOR to ENGINEER with the Application for 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.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
 - 1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents: and
 - 2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

15.02 OWNER May Terminate for Cause

A. The occurrence of any one or more of the following events will justify termination for cause:

- 1. CONTRACTOR's persis tent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);
- 2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. CONTRACTOR's disregard of the authority of ENGINEER; or
- 4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 OWNER May Terminate For Convenience

- A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):
 - 1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
 - 3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) in curred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
 - 4. for reasonable expenses directly attributable to termination.
- B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 CONTRACTOR May Stop Work or Terminate

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon

seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION*

16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS*

17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to

exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.



SUPPLEMENTARY CONDITIONS

TABLE OF CONTENTS

Article Number	Title
1	DEFINITIONS AND TERMINOLOGY
2	PRELIMINARY MATTERS
3	CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE
4	AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS
5	BONDS AND INSURANCE
6	CONTRACTOR'S RESPONSIBILITIES
7	OWNER'S RESPONSIBILITIES
8	ENGINEER'S STATUS DURING CONSTRUCTION
9	COST OF THE WORK; CASH ALLOWANCES, UNIT PRICE WORK
10	CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES
. 11	TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK
12	PAYMENTS TO CONTRACTOR AND COMPLETION
13	SUSPENSION OF WORK AND TERMINATION
14	MISCELLANEOUS

SUPPLEMENTARY CONDITIONS

AMENDMENTS TO GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

ARTICLE I. DEFINITIONS AND TERMINOLOGY

Add the following language at the beginning of definition I.QI A.12 entitled "Contract Documents" in the General-Conditions:

"The Advertisement for Bids, Instructions to Bidders, State Regulations, ..."

Delete the words "The individual or entity named as such in the Agreement" in 1.01.A.19 and insert the following in their place:

"The individual or entity duly appointed by the Owner to undertake the duties and powers herein assigned to the Engineer, acting either directly or through duly appointed representatives."

Delete the words "and who is identified as such in the Supplementary Conditions" at the end of definition 1.01 A.20, entitled "ENGINEER'S Consultant."

Delete definition 1.01 A.41 entitled "Specifications" in the General Conditions in its entirety and insert the following in its place:

"Sections included under Division 1 through Division 16 of the Contract Documents:"

ARTICLE 2. PRELIMINARY MATTERS

SC-2.05

Delete paragraph 2.0SC of the General Conditions in its entirety and insert the following in its place:

"C. Evidence of Insurance: CONTRACTOR shall deliver to OWNER, with a copy to the ENGINEER, Certificates of Insurance within 10 days after receipt of the notice of the acceptance of bid (and other evidence requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with the requirements of Article 5."

ARTICLE 3. CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE SC-3.0

Add the following sentence at the end of Paragraph 3.01A of the General Conditions:

"...by all. Each and every provision of law and clause required by law to be inserted in these Contract Documents shall be deemed to be inserted herein, and they shall be read and enforced as though itwere included herein, and ifthrough mistake or otherwise, any such provision is not inserted, or if not correctly inserted, then upon the application of either party, the Contract Documents shall forthwith be physically amended to make such insertion."

ARTICLE 4. AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

SC-4.02

Delete the term "Supplementary Conditions" of paragraph 4.02 A of the General Conditions and replace it with "Contract Documents".

SC-4.04

Change "of' to "or" on line 6 of paragraph 4.04 B.2 of the General Conditions. Delete the following words from lines 8 and 9 of paragraph 4.04 82 of the General Conditions:

"...Or not shown or indicated with reasonable accuracy..."

SC-4.05

Add a new paragraph immediately after paragraph 4.05A of the General Conditions which is to read as follows:

B. ENGINEER may check the lines elevations and reference marks set by CONTRACTOR, and CONTRACTOR shall correct any errors disclosed by such check. Such a check shall not be considered" as approval of CONTRACTOR'S work and shall not relieve CONTRACTOR of the responsibility for construction of the entire Work in accordance with the Contract Documents. CONTRACTOR shall furnish personnel to assist ENGINEER in checking lines and grades."

SC-4.06

Delete the term Supplementary Conditions in paragraph 4.06A of the General Conditions and replace it with "Contract Documents".

ARTICLE 5. BOND AND INSURANCE

NOTICE TO CONTRACTOR:

- 1. Proof of Insurance coverage shall be furnished to the OWNER inaccordance with the schedule for submittal of Bonds and Agreements.
- 2. Additionally refer to Article 2. PRELIMINARY MATTERS, Paragraph SC-2.05.C

SC-5.01

Insert these sentences following SC-5.01.A: The Surety Company providing the bonds shall have a rating of A or better within the Best Key Rating Guide and be licensed by the Massachusetts Division of Insurance. The contractor shall pay the premiums for such Bonds.

SC-5.03

Delete the second sentence following SC-5.03.A: of the General Conditions, which beings "OWNER shall deliver to..."

SC-5.04

The limits of liability for the insurance required by paragraph 5.04A of the General Conditions shall provide coverage for not less than the following amounts or greater where required by law:

5.4 A.1 and 5.04 A.2 Worker's Compensation

(1) Worker's Compensation Statutory Requirements

(2) Coverage B - Employer's Liability \$100,000/\$500,000/\$100,000

5.04 A.3, 5.04 A.4, and 5.04 A.5 Commercial General Liability Limits shall include Coverage for... independent Contractors, Personal Injury, Owners and Contractors Protective Liability, Explosion, Underground and Collapse, Broad Form Property Damage, Blanket Contractual Liability per locations/project endorsement.

Commercial General Liability \$1,000.000/\$2,000,000

Products/completed Operations \$2,000,000 Aggregate

5.4 A.6 Automobile Liability for owned, hired and non-owned vehicles:

(1) Bodily injury: \$1,000,000/\$1,000,000 Each person

\$1,000,000/\$1,000,000 Each accident

(2) Property damage \$1,000,000 Each occurrence

The following indemnity agreement: shall be made part of this contract:

1.To the fullest extent permitted by law, Contractor(s) hereby acknowledges and agrees that it shall indemnify, hold harmless and defend the Engineer, the Owner, the Engineer and any of their officers, directors, employees, agents, affiliates, subsidiaries and partners from and against all-claims, damages, losses and expenses, including but not limited to, attorney's fees, arising out of or resulting from the performance of the contractor's work under this contract, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury to or destruction of tangible property (other than to the work itself) including loss of use resulting therefrom, and (2) is (CAUSED) in whole or in part by

negligent acts omissions of the contractor, its employees, agents or contractors or anyone directly or indirectly employed by any of them, or anyone whose acts any of them may be liable.

- 2. The Contractor hereby acknowledges its obligation under the foregoing paragraph to indemnify the Engineer and Owner against judgments suffered because of the contractor's work and to assume the cost of defending the Engineer and Owner against claims as described in the foregoing paragraph.
- A. Engineer and Owner shall be named as Additional Insured on contractors General Liability and Umbrella Liability Contractors.

The Contractual Liability required by paragraph s.04n.4 of the General Conditions shall provide coverage for not less than the following amounts:

(1) Bodily injury: \$1,000,000 Each occurrence \$1,000,000 Annual aggregate

(2).Property damage, including explosion, collapse and underground coverage: \$1,000,000 Each occurrence \$1,000,000 Annual aggregate

SC-5.04

Add two new paragraphs immediately after paragraph-5.04B of the General Conditions, which are to read as follows:

- "C. The CONTRACTOR shall also provide:
- 1. CONTRACTOR shall, as a minimum, purchase and maintain excess liability insurance in the umbrella form with a combined single limit of not less than \$5,000,000 per claim and in the aggregate. Evidence of such excess liability shall be delivered to OWNER in accordance with paragraph 2.0SC in the form of a certificate indicating the policy numbers and limits of liability of all underlying insurance.
- A. General Liability, Workers' Compensation, Automobile Liability and Umbrella Liability Policies will contain waivers of subrogation in favor of the Engineer and Owner.
- 2. If the aggregate limits of liability indicated in CONTRACTOR' insurance provided in accordance with paragraphs 5.03 and 5.04 are not sufficient to cover all claims for damages arising from his operations under this Contract and from any other work performed by him or if policies of insurance do not provide that the aggregate limits of liability for bodily injury and property damage apply to each contract or project separately, CONTRACTOR shall have such policies amended so that the aggregate limits of liability required by this Contract will be available to cover all claims for damages due to operations under this Contract."

SC-5.05

Delete paragraph 5 .05 of the General Conditions in its entirety.

SC-5.06

Delete Paragraph 5.06 A of the General Conditions in its entirety and insert the following in its place:

"A. CONTRACTOR shall purchase and maintain, until final payment, property insurance upon the Work at the site in an amount equal to the total bid price for the completed construction. This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEERS consultants in the Work, shall insure against the perils of fire and extended coverage, shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and shall include damages, losses and expenses rising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). This insurance shall be provided on the completed value form.' If not covered under the "all risk" insurance or otherwise provided in these Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment." A \$20,000 deductible shall be acceptable. Any other deductible amount shall be approved in advance by the OWNER and any deductible amount shall be borne by the CONTRACTOR.

Delete paragraph 5.068 of the General Conditions in its entirety.

Delete Paragraph 5.06C of the General Conditions in its entirety and insert the following in its place:

"C. All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least thirty days' prior written notice has been given to OWNER by certified mail and will contain waiver provisions in accordance with paragraph 5.078. The words "Endeavor to" shall be struck from the Certificate of Insurance in the Cancellation Statement"

Delete paragraph 5.06D of the General Conditions in its entirety.

Delete paragraph 5.06E of the General Conditions in its entirety.

SC-5.07

Amend the last sentence of paragraph 5.07A of the General Conditions by striking out the words "held by OWNER as trustee or." As so amended, paragraph 5.07A remains in effect.

SC-5.08

Delete paragraph 5.08A of the General Conditions in its entirety.

Delete paragraph 5.0813 of the General Conditions in its entirety.

SC-5.09

Delete paragraph 5.09A of the General Conditions in its entirety and insert the following in its place:

"A. If OWNER has any objection Ito the coverage afforded by or other provisions of the insurance required to be purchased and maintained by CONTRACTOR inaccordance with this Article 5 on the basis of its not complying with the Contract Documents, OWNER will notify CONTRACTOR in writing thereof within thirty days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.0SC. CONTRACTOR will provide such additional information in respect of insurance provided by him as OWNER may reasonably request."

ARTICLE 6. CONTRACTOR'S RESPONSIBILTIES

SC-6.01

Delete paragraph 6.01B of the General Conditions in its entirety and replace with the following:

"B. At the site of the Work the CONTRACTOR shall employ a full-time construction superintendent or foreman who shall have full authority to act for the CONTRACTOR. It is understood that such representative shall be acceptable to the ENGINEER and shall be one who will be continued in the capacity for the particular job involved unless the representative ceases to be on the CONTRACTOR'S payroll. If at any time during the Work the representative is deemed by the ENGINEER to be no longer acceptable, the representative shall be promptly replaced by the CONTRACTOR. All communications to the superintendent shall be as binding as if given to the CONTRACTOR."

SC-6.04

Add the following paragraph after paragraph 6.04 A.2 of the General Conditions: -

"B. The CONTRACTOR's resident superintendent shall attend weekly progress meetings at the site of the work with the ENGINEER and others as appropriate to review schedule status and such other pertinent subjects as may be listed on the agenda by the ENGINEER."

SC-6.17

In paragraph 6.17 E.1 of the General Conditions, delete the word "timely" from the first line.

SC-6.20

Delete paragraph 6.20A of the General Conditions in its entirety and replace with the following:

"A. To the fullest extent permitted by law, the CONTRACTOR shall indemnify and hold harmless the OWNER, the ENGINEER, ENGINEER'S consultants, and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness,

disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by acts or omissions of the CONTRACTOR, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall apply to any such claims, damages, losses and expenses which arise and/or are incurred by any person or entity either during the performance of the Work and/or alter completion of construction. Nothing in this paragraph shall be construed to negate, abridge, or reduce other rights or obligations of indemnity or contribution which would otherwise exist as to a party or person indemnified hereunder. CONTRACTOR hereby assumes the responsibility and liability for injury to or death of any and all persons, including the. CONTRACTOR's employees, and for any and all damage to property caused by, resulting from, or arising out of any act, omission or neglect on the part of the CONTRACTOR, or of any Subcontractor or of anyone directly or indirectly employed by any of them or of anyone for whose acts, any of them may be liable."

Delete paragraph 6.20C of the General Conditions in its entirety.

ARTICLE 8. OWNER'S RESPONSIBILITIES

SC-8.06

Delete paragraph 8.06A of the General Conditions in its entirety.

ARTICLE 9. ENGINEER'S STATUS DURING CONSTRUCTION

SC-9.01

Add a new paragraph 9.0113 after paragraph 9.01A of the General Conditions, which is to read as follows:

"B. Nothing contained in the Contract Documents shall be construed to create a contractual relationship of any kind (1) between the ENGINEER and CONTRACTOR, (2) between the OWNER and a Subcontractor or Subcontractors, or (3) between any person or entities other than the OWNER and CONTRACTOR. The ENGINEER shall, however, be entitled to performance and enforcement of obligations under the CONTRACT DOCUMENTS intended to facilitate performance of the ENGINEERS duties."

ARTICLE 11. COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

Delete Article 11 of the General Conditions in its entirety and replace with the following:

- "A. The unit price of an item of Unit Price work shall be subject to reevaluation and adjustment under the following conditions:
- (1) If the total extended bid price [Estimated Quantity times the Bid Unit Price] of a particular item of Unit Price Work amounts to 5 percent or more of the Original Contract Price and the variation in the quantity of the particular item of Unit Price Work performed by CONTRACTOR differs by more than 15 percent from the estimated quantity of such item indicated in the Agreement; and

- (2) If there is no corresponding adjustment with respect to any other item of work; and
- (3) If CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an adjustment in the Contract Price in accordance with Article 11- if the parties am unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed. If OWNER believes that the quantity variation entitles OWNER to an adjustment in the unit price, OWNER shall be entitled to an adjustment in the unit price in an amount determined by the ENGINEER. ENGINEER shall not be liable in connection with any determination relating to adjustments which is rendered in good faith."

ARTICLE 12. CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

SC-12.06

Add the following new paragraphs after paragraph 12.06 of the General Conditions:

"12.07 Liquidated Damages:

A. If the CONTRACTOR shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the OWNER, then the CONTRACTOR does hereby agree, as a part consideration for the awarding of this Contract, to pay to the OWNER the amount specified in the Contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contract shall be in default after the time stipulated in the Contract for completing the work. Such damages may be retained from time to time by the OWNER from progress payments or any amounts owing to the CONTRACTOR, or otherwise collected.

- B. The said amount is fixed and agreed upon by and between the CONTRACTOR and the OWNER because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER would in such event sustain, and said amount is agreed to be the amount of damages which the OWNER would sustain and said amount shall be retained from time to time by the OWNER from current periodical estimates.
- C. It is further agreed that time is of the essence of each and every portion of this Contract and of the specifications wherein as definite and certain length of times if fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract. Provided that the CONTRACTOR shall not be charged with liquidated damages of any excess cost when the OWNER determines that the CONTRACTOR is without fault and the CONTRACTOR'S reasons for the time extension are acceptable to the OWNER; Provided, further, that the CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:
 - 1) to any preference, priority or allocation order duly issued by the Government;
- 2) to unforeseeable cause beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and

- 3) to any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections C(I) and C(2) above;
- D. Provided, further, that the CONTRACTOR shall, within ten (10) days from the beginning of such delay, unless the OWNER shall grant a further period of time prior to the date of final settlement of the Contract, notify the OWNER, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the CONTRACTOR within a reasonable time of its decision in the matter."

ARTICLE 13. TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

SC-13.07

Delete paragraph 3.07A of the General Conditions and insert the following in its place:

"A. If within one year alter the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any work is found. to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) correct such defective work, or, if it has been rejected by OWNER, remove it from the site and replace it with work that is not defective, and (ii) satisfactorily construct or remove and replace any damage to other work or the work of others therefrom. If CONTRACTOR does not begin the repairs ten (10) days of receipt of written notification and promptly comply with the terms of OWNER's written instructions, or in an emergency when delay would cause serious risk, loss or damage, OWNER may have the defective work corrected or the rejected work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR."

SC-13.09

Revise paragraph 13.09A of the General Conditions

A. Delete the word "seven" and replace it with the word "ten" so that it reads "alter ten days written notice to CONTRACTOR."

ARTICLE 14. PAYMENTS TO CONTRACTOR AND COMPLETION

SC-14.02

Delete paragraph 14.02A.3 and insert the following in its place:

"3. Retainage with respect to progress payments will be five percent or, if stipulated, the maximum allowed by law."

Add Paragraph 4. to read as follows:

"4. The CONTRACTOR shall submit Weekly Payroll Records Report and Statement of

Compliance verifying compliance with the Minimum Prevailing Wage Law, MGL ch. 149, Sections 26-27H. "These Statements of Compliance shall be submitted as a condition of payment for work performed during the period the reports apply."

SC-14.03

Delete paragraph 14.03A in its entirety and insert the following in its place:

"A CONTRACTOR warrants and guarantees that title to all work, material and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than at the time of Application for Payment free and clear of all liens. CONTRACTOR shall provide written transfer of title and a certified paid invoice provided by the supplier."

ARTICLE 15. SUSPENSION OF WORK AND TERMINATION

SC-15.02

Add a new paragraph immediately after paragraph 15.02 AA of the General Conditions which is to read as follows:

"5. If the Work to be done under this Contract shall be abandoned, or if this Contract or any part thereof shall be sublet, without the previous written consent of OWNER, or if the contract or any claim thereunder shall be assigned by CONTRACTOR otherwise than as herein specified;"

ARTICLE 17. MISCELLANEOUS

SC-17.06, 17.07, 17.08, 17.09

Add the following new paragraphs after paragraph 17.05 of the General Conditions:

"17.06 Assignment:

A. The CONTRACTOR shall not assign the whole or any part of this Contract or any moneys due or to become due hereunder until thirty (30) days prior notice in writing has been given to the OWNER of the intention to assign, which notice shall state the identity and address of the prospective assignee. No assignment shall be made without the OWNER's prior written consent. Such consent shall not be unreasonably withheld. In case the CONTRACTOR assigns all or any part of the moneys due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the CONTRACTOR shall be subject to prior claims of all persons, firms and corporations of services rendered or materials supplied for the performance of the work called for in this Contract."

17.7 Liability

1t is understood and agreed that members of the OWNER or the ENGINEER' or any agent or employees of the OWNER signing this Agreement shall not be personally liable hereunder for any action incurred in connection with this Agreement.

17.8 State Statutes and Regulations

See Superseding Changes To General & Supplementary Conditions 12/29/04 for further modifications of the General Conditions due to state statutes and regulations.

17.9 Severability

If any provision of this Agreement shall be invalid or unenforceable to any extent or in any application, then the remainder of this Agreement and of such terms and conditions, except to such extent or in such application, shall not be affected thereby, and each and every term and condition of this Agreement shall be valid and enforced to the fullest extent and in the broadest application permitted by law."

END OF SECTION

1

STATE STATUTES AND REGULATIONS COMMONWEALTH OF MASSACHUSETTS

A. REVISIONS TO GENERAL CONDITIONS

- 1. Definitions
- 2. Subsurface Conditions Found Different
- 3. Subcontracting
- 4. Permits
- 5. Contractor Records
- 6. Massachusetts Sales and Use Tax I
- 7. Clarifications and Interpretations
- 8. Change of Contract Price
- 9. Payments
- 10. Suspension of Work and Termination
- 11. Labor Classification and Minimum Wage Rates

B. OTHER REGULATORY REQUIREMENTS

- 1. Working Hours
- 2. DEP Community Sound Level Criteria

ATTACHMENT A – Wage Rates

ATTACHMENT B

Excerpts from Chapter 149 and Chapter 30 of the Massachusetts General Law

ATTACHMENT C - (not used on this project)

Special Provisions for Minority/Women Business Enterprises and the Commonwealth of Massachusetts Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program.

ATTACHMENT D--

Change Orders

A. REVISIONS TO GENERAL CONDITIONS:

1. Definitions

The term "AWARDING AUTHORITY," as used herein, shall be considered to be synonymous with the term "OWNER," described in definition 1.01 A.30.

Delete definition 1.01 A.43 entitled "Substantial Completion" in the General Conditions in its entirety and insert the following in its place:

"Substantial Completion shall be interpreted in accordance with Massachusetts General Law Chapter 30, Section 39G or -39K as appropriate."

2. Subsurface Conditions Found Different

Add the following sentence to the end of paragraph 4.03A of the General Conditions:

"...to do so. Adjustments resulting from subsurface or latent physical conditions will be in accordance with Massachusetts General Law Chapter 30, Section 39N."

3. Subcontracting

Add the following language at the end of paragraph 6.06F of the General Conditions:

"Except as required otherwise by Massachusetts General Law Chapter 149, Section 44F, for Work governed by Chapter 149, sections 44A through 44H."

4. Permits

Delete paragraph 6.08A of the General Conditions in its entirety and insert the following in its place:

"A. The AWARDING AUTHORITY shall be responsible for identifying and obtaining all federal, state, and local permits required by the nature and location of construction, including but not limited to railroad permits, building construction permits, and permits for street and highway cuts and openings. CONTRACTOR shall be responsible for obtaining all permits required of his equipment, work force, or particular operations (such as blasting) in the performance of the Work and not otherwise specified to be obtained by the AWARDING AUTHORITY. These permit fees shall be paid by CONTRACTOR. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of bids, or, if there are no Bids, on the Effective Date of the Agreement."

5. Contractor Records

Add a new paragraph immediately after paragraph 6.09C of the General Conditions, which is to read as follows:

"D. The CONTRACTOR shall comply with all applicable provisions Chapter 30, Section 39R of the Massachusetts General Laws Regarding, CONTRACTOR'S records."

6. Massachusetts Sales and Use Tax

Add the following paragraph after paragraph 6.10A of the General Conditions:

"B. The material and supplies to be used by the CONTRACTOR in the Work of this Contract are exempt from the Sales and Use Tax of the Commonwealth of Massachusetts. The AWARDING AUTHORITY tax exemption certificate number will be furnished to the CONTRACTOR."

7. Clarifications and Interpretations

Add the following language at the end of paragraph 9.04A of the General Conditions:

"The ENGINEER'S interpretation will be made in accordance with the requirements of Massachusetts General Law Chapter 30, Section 39P."

8. Change of Contract Price

Delete paragraphs 11.01,11.02, and 12.01 of the General Conditions, having to do with Change of Contract Price. Changes in contract price will be governed by the section called "Change Orders" in Attachment D, Section XXX and Article 11 in the Supplementary Conditions.

9. Payments

Delete paragraph 12.028.1 of the General Conditions, in its entirety and insert the following in its place:

"1. Progress Payments will be made in accordance with the Massachusetts General Law Chapter 30, Section 39G or 39K, as applicable."

Add the following new paragraph following paragraph 14.02C.1 of the General Conditions:

"2. The CONTRACTOR shall make payments to Subcontractors in accordance with the requirements of Massachusetts General Law Chapter 30, Section 39F."

Delete paragraph 14.07B of the General Conditions in its entirety and insert the following in its place:

"1. If, on the basis of the ENGINEER's observation of the Work during construction and final inspection and, upon the ENGINEER's review of the final Application for Payment and accompanying documentation, the ENGINEER is satisfied that the Work has been completed and that the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the ENGINEER will indicate in writing his recommendation of payment and present the Application to the AWARDI NG AUTHORITY for payment. Thereupon the ENGINEER will give written notice to the AWARDING AUTHORITY and the CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.15. Otherwise, the ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment. In such case the CONTRACTOR shall make the

necessary corrections and resubmit the Application. If the Application and accompanying documentation are appropriate as to form and substance, the AWARDING AUTHORITY shall in accordance with the applicable Massachusetts General Law, pay the CONTRACTOR the amount recommended by the ENGINEER."

10. Suspension of Work and Termination

Delete paragraph 15.01A of the General Conditions in its entirety and insert the following in its place:

"A. The AWARDING AUTHORITY may order, at any time and without cause, the CONTRACTOR to suspend or delay the Work in accordance with Massachusetts General Law Chapter 30, Section 39-0."

11. <u>Labor Classifications and Minimum Wage Rates</u>

Add the following paragraphs under the heading "Wage Rates" after paragraph 17.10 of the Supplementary Conditions:

"17.11 Wage Rates

- A. Minimum wage rates as determined by the Commissioner of the Department of Labor and Industries under the provisions of Massachusetts General Laws Chapter 149, Sections 26-270 apply to this project. A copy of the wage schedule is included in the front end of the specifications under Federal Minimum Wage Rates. If, after the Notice of Award, it becomes necessary to employ any person in a trade or occupation not classified in the wage determinations, such person shall be paid at not less than such rates as shall be determined by the Commissioner. Such approved minimum rate shall be retro- active to the time of the initial employment of such person in such trade or occupation. The CONTRACTOR shall notify the AWARDING AUTHORITY of its intention to employ persons in trades or occupations not classified in the wage determinations as soon as possible in order to allow sufficient time for the AWARDING AUTHORITY to obtain approved rates for such trades or occupations.
- B. The schedule of wages referred to above are minimum rates only, and the AWARDING AUTHORITY will not consider any claims for additional compensation made by CONTRACTOR because of payment by the CONTRACTOR of any wage rate in excess of the applicable rate contained in the Contract.
- C. The said schedule of wages shall continue to be the minimum rates to be paid during the life of this Agreement and a legible copy of said schedule shall be kept posted in a conspicuous place at the site of the Work.
- D. CONTRACTOR and subcontractors shall submit a copy of weekly payroll records to the AWARDING AUTHORITY and the AWARDING AUTHORITY shall retain the records of a minimum of three years."

B. OTHER REGULATORY REQUIREMENTS:

1. Working Hours

No laborer, workman, mechanic, foreman, or inspector, working within the Commonwealth, in the employ of the CONTRACTOR, subcontractor, or other person doing or contracting to do the whole or a part of the work contemplated by this 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 emergency.

2. DEP Community sound Level Criteria

The Community Sound Level Criteria as established by the Commonwealth of Massachusetts Department of Environmental Protection (DEP) must be conformed to prior to the AWARDING AUTHORITY's acceptance of the structure. The following sound level criteria must be met at the construction site:

- A. The increase in the broad band noise level shall not be in excess often (10) dB(A) above ambient at the station boundary. The ambient level is defined as the A-weighted noise level that is exceeded ninety (90) percent of the time measured during the period in question.
- B. The primary noise source(s) shall not produce a puretone condition. Puretone is any given octave band center frequency that exceeds the two adjacent center frequencies by three (3) or more decibels.

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SUPERSEDING CHANGES TO GENERAL AND SUPPLEMENTARY CONDITIONS

1. GENERAL CONDITIONS

2.06A - insert at end: Said conference shall be scheduled and arranged by the Contractor. I

4.01B -delete

4.06G - delete

5.07B - delete

6.17E - restore the word "timely" in the first line. Delete the word "only" from the 5" line. Where "only" has been deleted, insert "to determine their general conformance with the contract documents, in accordance with good and accepted engineering practices, and".

8.02A - delete "to whom contractor makes no reasonable objection'.

9.02A - Insert, after "Work" in the 6'" line, "While construction is active at the project, said visits and inspections will take place at least once per week."

12.06 - delete subparts A and B, and replace with the following: "The Contractor hereby agrees that the Contractor shall have no claim for damages of any kind against the Owner or the Engineer on account of any delay in the commencement of the Work and/or any delay in, or suspension of any portion of the Work, whether such delay is caused by the Owner, the Engineer, or otherwise. The Contractor acknowledges that the Contractor's sole remedy for any such delay and/or suspension will be an extension of time as provided in these general conditions.

No claims shall be allowed on account of the failure of the Engineer to furnish Drawings, specifications or instructions or to return Shop Drawings or Samples until the expiration of the applicable time period referenced in Mass. Gen. L. c. 30, §39P, and not then unless such claim be reasonable.

No extension of time shall be granted because of seasonable or abnormal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the Contract, whether occurring within the time originally scheduled for completion, or within any period of extension granted. There shall be no increase in the Contract Sum on account of any additional costs or operations or conditions resulting therefrom.

14.02C - change 'Ten" to "Twenty-One"

14.07A(3) - delete the first three lines through the word "Owner,". In the third line, after Contractor, substitute "shall" for "may". In the fourth line, after the word "full" insert "on behalf of both Contractor and all of its Subcontractors.".

14.09A(1) - delete -

15.03B - add after "termination" ", with respect to this project or any other project of the Contractor."

Add "15.03C. If this Contract is terminated by Owner with or without cause, and regardless of whether said termination is rightful or wrongful, in no event shall the Contractor be paid a sum which, together with prior payments to Contractor, exceeds the sum payable to Contractor under the Agreement (Section 00520), as adjusted by any agreed change orders.

II. SUPPLEMENTARY CONDITIONS

Article V - Bonds and Insurance

Employer's liability coverage must be \$2 million per accident, \$2 million disease limits, and \$2 million per employee disease limits.

General liability insurance limits must be \$5 million aggregate, \$2 million dollars' products/completed operations aggregate; \$2 million personal injury and advertising; and \$2 million per occurrence.

The contractual liability insurance coverage must have limits corresponding to the foregoing. At 5.04A.6, the following changes should be made to paragraph I of the indemnity clause: four lines from the bottom, the parenthesis should be removed from the word "CAUSED" and the word "CAUSED" should be changed to lower-case (caused). Also, in the last line of said clause, insert the word "for" after the word "anyone."

At SC-5.04C 1 - insert the following sentence at the end: "The Contractor's excess liability insurance coverage must follow from with its underlying liability coverages."

SC-6.20A - insert the word "defend" after the word "shall" in the first line.

SC-14.02A.3 - insert the following sentence at the end: "Retainage for the entire project will be withheld until substantial completion of the entire project, at which time retainage shall be accounted for, subject to all of the other terms and conditions of payment at the time of substantial completion.

Add the following Article SC-18.

SC-I 8 Arbitration - J

18.1 Controversies and Claims Subject to Arbitration. Any Claim arising out of or related to the Contract, or the breach thereof, except claims relating to aesthetic effect, shall be settled by arbitration, subject to the provisions of Subparagraph 18.7. Arbitration will be conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association and judgment upon the award rendered by the Arbitrator or Arbitrators may be entered in any Court having jurisdiction thereof. In any such arbitration in which the amount stated in the demand is \$100,000 or less, a single arbitrator shall be appointed in accordance with the procedures set forth in the American Arbitration in which the amount stated in the demand is in excess of \$100,000, a panel of three arbitrators shall be appointed in accordance with the procedures set forth in the American Arbitration

Association Construction Industry Arbitration Rules. The patties may agree to use any arbitration service. In the absence of such agreement, the American Arbitration Association shall be utilized.

18.2 Rules For Arbitration. If the neutral arbitrator is appointed by the American Arbitration Association, the said Association shall administer the arbitration and its Construction Industry Arbitration Rules shall govern all aspects of the proceeding including the enforcement of any award. If the neutral arbitrator is not appointed by the American Arbitration Association, then the panel of arbitrators shall act as the administrator of the arbitration but the Construction Industry Arbitration Rules of the Association shall nonetheless govern all aspects of the proceeding, including the enforcement of any award. The arbitration panel shall have all the powers and duties conferred on the Association pursuant to said rules.

In addition, the following rules shall govern the selection of arbitrators and the proceedings:

- 18.2.1 Neither party may appoint as arbitrator an employee or an owner of that party, nor the parent, spouse or child of an employee or owner of that party.
- 18.2.2 Alter the neutral arbitrator has been appointed, neither party may engage in exparte communication with the arbitrator appointed by that party.
- 18.2.3 Contract Performance During Arbitration. During arbitration proceedings, the Owner and Contractor shall otherwise continue their performances hereunder.

-

- 18.3 When a written decision of the Engineer states that the decision is final, any demand for arbitration of the matter covered by such decision must be made within two months after substantial completion of the project, as determined by the Engineer in accordance with the provisions hereof. The failure to demand arbitration within said two month period will result in the Engineer's decision becoming final and binding upon the Owner and the Contractor.
- 18.4 A Demand for arbitration shall be made with the time limits specified in Subparagraph 18.3, and in no event shall be made after the date when the institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations.
- 18.5 Claims and Timely Assertion of Claims. A party who files a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. When a party fails to include a claim through oversight, inadvertence or excusable neglect, or when a Claim has matured or been acquired subsequently, the arbitrator or arbitrators may permit amendment.
- 18.6 Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and the judgment maybe entered upon it in accordance with applicable law in any court having jurisdiction thereof.
- 18.7 Notwithstanding any provision contained in this Paragraph 18 or elsewhere in the Contract Documents, the Owner reserves the following right in connection with claims and disputes between the Owner and Contractor:

- 1. the right to institute the legal action against the Contractor in any court of competent jurisdiction in-lieu of demanding arbitration pursuant to this paragraph 18, in which case the dispute or disputes which are the subject of such action shall be decided by such court, and not by arbitration.
- 2. the right to obtain from any court of competent jurisdiction a stay of any arbitration instituted by the Contractor, provided that the application for such stay is made before the appointment of the neutral arbitrator in such arbitration, in which case the dispute or disputes which are the subject of such arbitration shall be decided by such court, and not by arbitration;
- 3. the right to require the Contractor to join as a party in any arbitration between the Owner and Architect relating to the Project in which case the Contractor agrees to be bound by that decision of the arbitrator arbitrators in such arbitration.

In case the Owner elects to proceed in accordance with 18.7.1 or 18.7.2 above, the word "litigation", shall be deemed to replace the word "arbitration" wherever the latter word appears in the Contract Documents.

SC-19 MBE and WBE participation

The Contractor shall comply with the provision of G.L.c. 7 40N, and any associated regulations effective during the time of the project, relative to the participation of minority and womenowned businesses in connection with the project. At present, the current participation goals are 7.4% MBE and 4% WBE.

END OF SECTION

EQUAL OPPORTUNITY REQUIREMENTS

EQUAL EMPLOYMENT OPPORTUNITY

- A. <u>Equal Employment Plan</u>: The Contractor and each Subcontractor shall implement an effective affirmative action plan to assure equal employment opportunity throughout the performance of work on this project. Do not discriminate against any employee or applicant tor employment because of race, color, sex, religion, age, or national origin. Affirmative action plan shall include, but not be limited to, the following:
 - 1. Employment, upgrading, demotion, or transfer.
 - 2. Recruitment or recruitment advertising.
 - 3. Layoff or termination.
 - 4. Rates of pay or other forms of compensation.
 - 5. Selection for training, including apprenticeship.
- B. <u>Rules and Regulations:</u> The Contractor and each Subcontractor shall comply with all applicable local, state and federal laws and regulations regarding equal employment opportunity and with the provisions of the following:
- 1.. Governors "Executive Order No. 74", dated July 20. 1970. entitled the "Governor's Code of Fair Practices", as amended by the Governor's Executive Order No. 116, dated May 1, 1975.
- 2. The Fair Employment Practices Law of the Commonwealth, Chapter 1518 of the General Laws of Massachusetts, as amended.
- 3. The rules and regulations of the Massachusetts Commission Against Discrimination as in force at the dale of the Contract.
- 4. The rules, regulations and relevant orders of the United States Secretary of Labor, the Commonwealth of Massachusetts Department of Labor and Industries, and other authorities having jurisdiction as in force at the date of the Contract.
 - 5. Governor's 'Executive Order No. 237'.
- C. <u>Employment Advertisements:</u> State in all solicitations or advertisements for employees that all qualified applicants will receive consideration tor employment without regard to race, color, sex, religion, age, or national origin.
- D. <u>Referral Notices</u>: Direct special effort toward the recruitment of minority workers through the unions and through referral agencies representing the minority community.
- E. <u>Advising Labor Unions</u>: Send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Contractors equal employment opportunity commitment and post copies of these notices in conspicuous places available to employees and applicants for employment.

- F. <u>Posting</u>: Post copies of equal opportunity employment notices in conspicuous places available to employees and applicants for employment and post notices setting forth the provisions oi this non-discrimination equal employment opportunity clause.
- G. <u>Manning Table</u>: Assume and be responsible for the affirmative duty of achieving the range of minority employment and women work force participation set forth in a manning table tor the entire project. Submit a manning table at the request of the Owner and obtain Owners approval prior to the Award of Contract.
- H. <u>Percentage Participation:</u> Both Contractor and Sub-contractor shall comply with requirements of Minority and Women Business percentage of Contract percentage participation requirements specified in the Minority and Women Business Enterprise Set Aside Requirements Section.

END OF SECTION

MINORITY AND WOMEN BUSINESS ENTERPRISE SET ASIDE REQUIREMENTS

GENERAL

A. All provisions of the Contract Documents shall be subject to all applicable provisions of law, including, without limitation, Federal. State, and Local statutes and ordinances regarding setting aside a portion of the Contract tor qualified Minority and Women Business Enterprises. The Contractor shall recognize that other duties and obligations are required by laws, statutes, and ordinances which may not be provided herein, but must be considered and made a part of this Contract. In case of a conflict between the Contract Documents and applicable laws, statutes, and ordinances, the provisions of law, statutes, and ordinances shall *govern*.

2. MINORITY AND WOMEN OWNED BUSINESS ENTERPRISE SET ASIDE REQUIREMENTS

- A. Requirements For minority and women business enterprise set aside requirements, provided to the Architect by the Awarding Authority Follow. The Architect does not warrant or guarantee the completeness or accuracy of this information, and *every* bidder and contractor shall be responsible tor ascertaining the MWBE set aside requirements in the area where the work will be performed.
- 1. Bidders shall agree to contract with minority and women owned businesses as certified by the State Office of Minority and Women Business Assistance [SOMWBA]. "the amount of participation which shall be reserved for such enterprises shall not be less than fifteen percent [t5%] of the total contract amount including accepted alternates, of which at least ten percent [10%] shall be reserved tor minority business enterprises and five percent [5%] shall be reserved tor womenowned business enterprises.
- 2. The Contractor and each Subcontractor shall furnish to the Awarding Authority, within fifteen days alter completion of its portion of the work, a certified 'Statement of Compliance" certifying compliance with minority and women business enterprise set aside requirements. Submit the 'Statement of Compliance' in a form acceptable lo the Awarding Authority.
 - 3. See Massachusetts Executive Order 237 as amended.

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

BY-LAWS OF THE TOWN OF ARLINGTON TITLE 1 ARTICLE 16: CONSTRUCTION PROJECTS

ART. 15, A.T. M. 4/22/96

Section 1. Women Work Force Participation

Any Town board or official in charge of a construction or reconstruction project is required to include in the contract documents the following:

ART. 17, A.T.M. 4/28/99

A. The contractor shall maintain as a goal on this project a not less than five percent ratio of women work force to total project hours in both the general contract and individual filed subbid contract, if applicable. The preceding sentence shall be included in all construction contracts whether entered into the Town pursuant to the provisions of M.G.L. c.149 or M.G.L. c.30 §.39M, et seq., provided however, that if entered into under Chapter 30 same shall not be deemed to apply where the projected bid price as determined by the Director of Public Works is not likely to exceed \$200,000.

B. A Labor Scheduling Table which will be used as a tool for achieving a range of women work force participation for the entire project in both the general contract and .each individual filed sub-bid contract.

Section 2. Equal Opportunity Goal Compliance

Any Town board or official in charge of a construction or reconstruction project is required to include in the contract documents the following:

ART. 16 A.T.M. 4/24/96; ART. 17, A.T.M. 4/28/99

A. Before starting work, the contractors (includes general contractor, for itself and its subcontractors, as well as all filed sub-bid contractors, if applicable) will submit plans for achievement of the equal opportunity goals of the contract. All contractors will be required to make a good faith effort to achieve these goals. The plan will indicate if the contractors expect to achieve the requirements during the first quarter. If there are reasons why the contractors do not expect to achieve the requirements during the first quarter year of the contract construction phase, then the contractors shall provide a plan calculated to address, to the extent reasonably possible, these obstacles to a good faith effort to achieve such goals.

- B. Not more than ten days following the end of each work quarter, the contractors will report on the achievement of the goals, detailing the good faith efforts that have been made and will continue to be made and any other appropriate efforts not yet undertaken.
- C. All reports will be signed by an officer or principal of the company who has the authority to contractually obligate the company.

Section 3. Recruitment and Training

ART. 53 ATM 5/19/97

Any board, officer, committee, or other agency of the Town, which acts on behalf of the Town in making or supervising any contract, in an amount exceeding the sum of \$100,000 for the purchase of goods or services or for the construction, renovation, or repair of buildings or other improvement of real estate, may make arrangements with contractors and other interested agencies for special programs of recruitment and training in connection with the work to be performed on such contract, with the objective of promoting equal employment opportunity for members of minority groups protected by the fair employment

laws of the Commonwealth and the United States. Any board, officer, committee or other Town agency may expend Town funds in carrying them out provided that appropriations specifically designed for such purposes have been voted by the Town Meeting.

ART. 32, ATM 5/14/03

Section 4. LEED

It is the intent of the Town to reduce the life-cycle operating costs and increase the environmental efficiency of Town buildings, by adopting the goal that all construction of new Town buildings and major renovations and additions to existing Town buildings meet or exceed a Silver Certification based on the most current criteria of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System promulgated by the United States Green Building Council, or comparable scoring system. The Town shall include a minimum of LEED Silver Certification, or equivalent level in comparable building scoring system, as a required element in requests for proposal or bids it issues soliciting architectural design services for construction, major renovation, and addition to its buildings, unless the Permanent Town Building Committee makes the finding that such certification is not in keeping with the use or purpose of the building or is otherwise inappropriate. No building project shall be deemed complete until LEED Silver Certification or greater, or equivalent, has been confirmed, unless the PTBC makes the finding that such certification is not in keeping with the use or purpose of the building or is otherwise inappropriate. ART. 18, ATM 4/00, ART. 32 ATM 5/14/03

http://www.town.arlington.ma. us/Public_Documents/ArlingtonMA_TownBylaws/title1#arti cle16

END OF SECTION

INSURANCE REQUIREMENTS

1. GENERAL

- A. This section specifies the Owner's requirements for insurance and relates to the General Conditions of the Contract for Construction and Supplementary Conditions of the Contract for Construction.
- B. Provisions of the General Conditions of the Contract for Construction and Supplementary General Conditions of the Contract for Construction, which are not modified by the following insurance Requirements, remain in full effect.

2. INSURANCE REQUIREMENTS

A. Insurance Limits: The insurance required should be written for not less than the limits of liability required by law or the following limits, whichever is greater: State and federal Workmen's Compensation Statutory Benefits required by union contract as required.

GENERAL LIABILITY*

General Liability-Bodily Injury and Property Damage Each Occurrence General Liability —Bodily Injury and Property Damage Aggregate General Liability shall include coverage for the following: \$1,000,000.00 \$2,000,000.00

Comprehensive form

Premise/Operations Liability

Explosion, Collapse and Underground (XCU). Products/Completed Operations (aggregate limit \$2,000,000.00) Contractual Liability

Independent Contractors Broad

Independent Contractors Broad

Form Property Damage

Personal Injury Including Libel and Slander Coverage Broad

Form CGL Endorsement

AUTOMOBILE LIABILITY**

Comp. Automobile Liability** Bodily Injury and Property Damage Per Accident

\$1,000,000.00

EXCESS LIABILITY - Umbrella Form

- B. Exclusions: The Owner's property insurance shall not cover tools, equipment, shoring, staging, forms, temporary buildings or other equipment owned or rented by the Contractor, its Subcontractors, or any Worker.
- C. Named Insured: Each Insurance policy certificate of insurance provided by the Contractor shall name the Town of Arlington as an additional insured. Each insurance policy and certificate of insurance provided by the Contractor shall contain a provision that the Owner shall be notified of cancellation or restrictive amendment at least thirty (30) days prior to the effective date of such cancellation or amendment.

^{**}Provide coverage for All Owned, Non-Owned, and Hired vehicles.

- D. Insurance Certificates: Submit insurance certificates for the Owner's review and approval prior to commencement of the work. The Contractor and all subcontractors who are required to provide insurance under the Contract shall provide accurate and bona fide "Certificates of insurance "issued by a responsible agent of the insurance company.
- 1. Certificate Content: Such "Certificates of Insurance" shall clearly indicate the insurance coverage. Each "Certificate of Insurance" shall be accompanied by a sworn and duly notarized statement from the responsible agent of the insurance company issuing the certificate clearly stating that all insurance specified and required by the Contract Documents is provided and in force, and also a clear statement of all exceptions and deviations, if any, from the Contract Document issuance requirements.
- 2. Responsibility: The insurance agent issuing and authorizing the "Certificate of Insurance" shall be responsible and liable for the accuracy and validity of the "Certificate of Insurance". Each insured party shall certify by sworn and duly notarized statement that the "Certificate of Insurance" issued for them are bona fide.
- 3. Disclaimers Prohibited: "Certificates of Insurance" shall not contain any disclaimers such as: "This Certificate is issued as a matter of information only and confers no right upon the certificate holder. This Certificate does not amend, extend, or alter the coverage afforded by the policies listed below." Disclaimers are not acceptable.
- 4. Certificates of Insurance Can Be Relied Upon: Parties receiving "Certificates of insurance" shall be entitled to rely upon the "Certificates of insurance" and shall have the right to claim the benefits and protection provided by the insurance as it applies to them.
- 5. Alternate to "Certificates of Insurance": Instead of providing the "Certificates of Insurance" and the sworn statements required above, the insured may provide bona fide and accurate copies of all insurance policies and riders accompanied by a sworn and duly notarized statement from the insured that the policies, riders, and documents submitted are bona fide and valid, and that parties receiving the insurance documents may rely on the documents as satisfaction of the Contract insurance requirements.
- E. The Contractor shall provide "builder's risk" insurance as described in the General Conditions of the Contract for Construction and with limits equal to the full insurable completed value of the building under construction. The "Builder's Risk" insurance shall include "all risk" insurance for physical loss and damage including theft, vandalism, and malicious mischief. The "Builder's Risk" insurance shall be amended to delete any and all endorsements relating to cancellation of the policy due to partial occupancy by the Owner.
 - 1. Builder's Risk Deductible Amount:

\$1,000,000.00

END OF SECTION