TABLE OF CONTENTS

DOCUMENTS NUMI OF PAGE		
00001 00003	Title Sheet Table of Contents	1
BIDDI CONT	NG REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF TI RACT	<u>HE</u>
00010 00100 00300 00306 00310 00311 00375 00430 00500 00600 00650 00700 00852 00855 00860 00905 00945 00960	Advertisements for Bids Instructions and Information for Bidders Form for General Bid Bidder Qualifications Bid Bond Bidder's Certification Regarding Payment of Prevailing Wages Statement of Tax Compliance Notice of Award Form for Agreement Payment Bond Performance Bond Notice to Proceed General Conditions Special Conditions - Massachusetts (18 pages, 2 pages forms, and 39 pages of Special Conditions - Massachusetts Equal Employment Opportunity Change Order Form Certificate of Substantial Completion Waiver of Liens Certificate of Final Payment and Completion of Work	9
Section	ION 1 - GENERAL REOUIREMENTS 1 01300 – Submittals	
	ION 46 – WATER AND WASTEWATER EOUIPMENT 1 466113.01 – Granular Activated Carbon	8

NOTE: Bidders shall check the attached documents with the above list before submitting a Bid.

END OF TABLE OF CONTENTS

ADVERTISEMENT FOR BIDS

The Board of Selectmen for the Town of Hudson will receive sealed Bids for Cranberry Well, Removal and Replacement of GAC Filter Media until 10:00 a.m. Local Time on Thursday, March 7, 2024, at the Office of the Director of Public Works, 1 Municipal Drive, Hudson, Massachusetts 01749, at which time and place all Bids will be publicly opened and read aloud. Bids submitted after this time will not be accepted.

In general, the Work of this project includes, but is not limited to furnishing all necessary labor, materials, equipment and incidental to complete Removal and Disposal and Replacement of GAC Filter Media.

A copy of the Contract Documents for the Work may be obtained online or from the Office of the Director, Department of Public Works, 1 Municipal Drive, Hudson, Massachusetts 01749.

Questions regarding Spec/Plan request shall be forwarded to the Hudson Department of Public Works at Phone: (978) 562-9333, and Fax: (978) 568-9612.

Each Bid shall be accompanied by a Bid Security in the amount of five (5) percent of the value of the Bid in the form described in DOCUMENT 00100, INSTRUCTIONS AND INFORMATION FOR BIDDERS.

A Performance Bond and a Payment Bond, each in the amount of one hundred (100) percent of the Contract Price, will be required in the form described in DOCUMENT 00100, INSTRUCTIONS AND INFORMATION FOR BIDDERS.

Minimum Wage Rates as determined by the Deputy Director of the Department of Labor and Workforce Development under the provision of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H, 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.

Bidders attention is called to the requirements as to conditions of employment to be observed, minimum state wage rates to be paid and payroll submission requirements under the Contract.

No Bidder may withdraw its Bid within thirty (30) days (Saturdays, Sundays and legal holidays excluded) after the actual date of the Bid opening.

Complete instructions for filing Bids are included in DOCUMENT 00100, INSTRUCTIONS AND INFORMATION FOR BIDDERS.

The total time period for completion of all Work under this Contract is 30 consecutive calendar days using no more than 15 on-site working days. Work performed beyond the 30 on-site working day period or the 15 consecutive calendar days will be subject to liquidated damages in the amount specified herein. It is the requirement of this project for the treatment facility to remain in service between July and September.

Bidder's attention is also called to the requirements of the 5% WBE/MBE participation in the construction Contract.

This Contract is being bid on under the provisions of Massachusetts General Laws Chapter 30, Section 39M.

The Owner may waive any informalities or minor defects, or reject any or all Bids if it is in the best interest of the Owner to do so.

BOARD OF SELECTMEN HUDSON, MASSACHUSETTS

END OF DOCUMENT

INSTRUCTIONS AND INFORMATION FOR BIDDERS

- 1.1 Project Identification
 1.2 Receipt of Bids
 1.9 Time Schedule for Completion of Work
- 1.3 Modifications and Withdrawal of Bids 1.10 Wage Rates
- 1.4 Examination of Contract Documents and Site(s)

 1.11 Laws and Regulations
 1.12 Inspection of the Work
- 1.5 Addenda and Interpretations 1.13 Sales Tax
- 1.6 Bids, Bonds and Award of Contract
 1.7 Execution of the Agreement
 1.14 Guarantees
 1.15 Record Keeping
- 1.8 Notice to Proceed 1.16 Engineer

1.1 PROJECT IDENTIFICATION

A. Owner: Town of Hudson, Massachusetts

B. Awarding Authority: Board of Selectmen

C. Designated Agent: Director of Public Works, or his appointee

D. Mailing Address: Office of the Director of Public Works

Hudson Department of Public Works 1

Municipal Drive

Hudson, Massachusetts 01749

E. Project Name: Removal and Disposal and

Replacement of GAC Filter Media

at Cranberry Well

F. Funding: Local

1.2 RECEIPT OF BIDS

- A. General Bids for the Project will be received by the Awarding Authority on behalf of the Owner at the time and place stated in DOCUMENT 00010, ADVERTISEMENT FOR BIDS, and then at said place publicly opened and read aloud.
- B. Each Bid must be submitted in a sealed envelope, addressed to the Office of the Director of Public Works, Hudson Department of Public Works, 1 Municipal Drive, Hudson, Massachusetts 01749. Each sealed envelope containing a Bid must be plainly marked on the outside with Bid for "Cranberry Well: Removal and Replacement of GAC Filter Media" and the envelope should bear on the outside the name of the Bidder and its address. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed to the Office of Director of Public Works at the above address.
- C. All Bids must be made on the Bid form included in the Contract Documents. All blank spaces for bid prices must be filled in, in ink or typewritten, and the Bid form must be fully completed and executed when submitted. Only one (1) set of the Bid documents is required.

- D. List of required Documents for General Bid submission:

 - 3. Bidder's Certification Regarding Payment of Prevailing Wages Document 00311
- E. DOCUMENT 00375, STATEMENT OF TAX COMPLIANCE, must be submitted to the Owner before the award of the Contract.

1.3 MODIFICATIONS AND WITHDRAWAL OF BIDS

- A. The Owner may waive any informalities or minor defects or reject any and all Bids. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. Should there be reasons why the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between Owner and the Bidder.
- B. No Bidder may withdraw its Bid within thirty (30) calendar days (Saturdays, Sundays and legal holidays excluded) after the actual date of the Bid opening.
- C. Prior to Bid Opening, Bids may be withdrawn upon written or telegraphic request of the Bidder provided confirmation of any telegraphic withdrawal, signed by the Bidder, is placed in the mail and postmarked prior to the time set for the Bid Opening. Bid documents and security of any Bidder withdrawing its Bid in accordance with the foregoing conditions will be returned.

1.4 EXAMINATION OF CONTRACT DOCUMENTS

- A. Each Bidder is responsible for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to its Bid.
- B. Bidders must satisfy themselves of the accuracy of the estimated quantities in each Bid Item contained in DOCUMENT 00300, FORM FOR GENERAL BID by examination of the Project site and a review of the Contract Documents. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of Work or of the nature of the Work to be done.
- C. The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Bidder or relieve it from fulfilling any of the conditions of the Contract.

1.5 ADDENDA AND INTERPRETATIONS

- A. All questions by prospective Bidders as to the interpretation of the Contact Documents shall be submitted in writing to the Engineer and shall be in its possession at least ten (10) calendar days before the date herein set for the receipt of Bids. The Engineer will then email, to Bidders who have taken out the Contract Documents, at the addresses given by the Bidders, not less than five (5) calendar days before said date, interpretations of all questions so raised which, in its opinion, required interpretation.
- B. Each Bidder shall be responsible for determining that they have received all Addenda issued and shall acknowledge said receipt on DOCUMENT 00300, FORM FOR GENERAL BID.

1.6 BIDS, BONDS, AND AWARD OF CONTRACT

- A. Each Bid must be accompanied by a Bid Bond, certified check or a treasurer's or cashier's check issued by a responsible bank or trust company, payable to the Owner in the amount of five (5) percent of the value of the Bid. As soon as Bid prices have been compared, the Owner will return the Bid deposits of all except the three (3) lowest responsible Bidders. When the Agreement is executed, the Bid deposits of the two (2) remaining unsuccessful Bidders will be returned. The Bid deposit of the successful Bidder will be retained until the Payment Bond and Performance Bond have been executed and approved, after which it will be returned. Bid Bonds must be submitted from surety qualified to do business under the laws of Massachusetts.
- B. Each Bidder shall sign its name in the space provided for. If a partnership or corporation makes the Bid, the name and address of the partnership or corporation shall be shown, together with the names of the partners or the officers. A Bid made by a partnership shall be acknowledged by one of the partners; a Bid made by a corporation shall be acknowledged by one of the authorized officers thereof, and the corporate seal attached.
- C. A conditional or qualified bid will not be accepted.
- D. Award will be made to the lowest responsible and eligible Bidder.
- E. The Owner may make such investigations as it deems necessary to determine the ability of the Bidder to perform the Work and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.
- F. The lowest responsible and eligible Bidder shall supply the names and addresses of major material Suppliers and Subcontractors when required to do so by the Owner.

- G. A Performance Bond and a Payment Bond, each in the amount of one hundred (100) percent of the Contract price, with a corporate surety qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Owner, will be required of the General Contractor for the faithful performance of the Contract, and may be required by the General Contractor of Sub-contractors. If bonds are required of Sub-contractors, the General Contractor shall pay the premiums therefor.
- H. Attorneys-in-fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each bond a certified and effective dated copy of their power of attorney.

1.7 EXECUTION OF THE AGREEMENT

A. The party to whom the Contract is awarded will be required to execute DOCUMENT 00500, FORM FOR AGREEMENT and obtain the Performance Bond, Payment Bond and Certificates of Insurance within ten (10) calendar days from the date when DOCUMENT 00430, NOTICE OF AWARD is delivered to the Bidder. If any Bidder fails to execute DOCUMENT 00500, FORM FOR AGREEMENT and furnish a Performance Bond or Payment Bond as stated in its Bid, its Bid deposit shall become the property of the Owner as liquidated damages, provided that in case of death, disability or other unforeseen circumstances affecting the Bidder, its bid deposit may be returned, provided further that the amount of the Bid deposit to be retained shall not exceed the difference between the low Bid and the Bid of the next lowest eligible Bidder.

1.8 NOTICE TO PROCEED

A. DOCUMENT 00650, NOTICE TO PROCEED shall be issued within ten (10) days of the execution of DOCUMENT 00500, FORM FOR AGREEMENT by the Owner. Should there be reasons why DOCUMENT 00650, NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the Owner and Contractor. If DOCUMENT 00650, NOTICE TO PROCEED has not been issued within the ten-day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.

1.9 TIME SCHEDULE FOR COMPLETION OF WORK

A. The total time period for completion of all Work under this Contract is 30 consecutive calendar days using no more than 15 on-site working days. Work performed beyond the 30 consecutive calendar-day period and/or 15 on-site working day period will be subject to liquidated damages in the amount specified herein. It is the requirement of this project that one Filter be out of service during Replacement/Repair.

1.10 WAGE RATES

A. Minimum wage rates, as determined by the Department of Labor and Workforce Development, under the provision of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H, as amended, apply to this Project. It is the responsibility of the

Contractor, before Bid opening, to request, if necessary, any additional information on Massachusetts Wage Rates for those tradespeople who are not covered by the applicable Massachusetts Wage Decision, but who may be employed for the proposed Work under this Contract.

- B. In accordance with Chapter 149, Section 27B, it is the responsibility of the Contractor and any subcontractors to submit payroll records to the Owner on a weekly basis.
- C. In case that the Contract completion time is extended beyond one year from the Contract execution date, the Contractor shall pay wages according to the most updated wage rates.

1.11 LAWS AND REGULATIONS

- A. Applicable provisions of Massachusetts General Laws and Regulations and/or the United States Code and Code of Federal Regulations govern this Contract and any provision violation of the foregoing shall be deemed null, void and of no effect. Where conflict between Code of Federal Regulations and State Laws and Regulations exist, the more stringent requirement shall apply.
- B. All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout.
- C. This Project is subject to all of the OSHA Safety and Health Regulations (see 29 CFR Part 1926/1910 and all subsequent amendments) as promulgated by the United States Department of Labor on June 24, 1974 and to the Massachusetts, "Construction Industry Rules and Regulations", 454 CMR 10.00, et seq. Contractors shall be familiar with the requirements of these regulations.
- D. The Contract is being Bid on under the provisions of Massachusetts General Laws Chapter 30 Section 39M.
- E. This Project is a local project being Bid, awarded and administered by the Owner (Town of Hudson, Massachusetts) through its awarding authority (Board of Selectmen) and its Designated Agent (Director of Public Works or his designee).

1.12 INSPECTION OF THE WORK

A. The Contractor shall provide at all times proper facilities for access and inspection by representatives of the Owner, Federal, State or other agency having jurisdiction over the Work of this Project.

1.13 SALES TAX

A. This Project is exempt from State Sales and Use or Excise Taxes to the extent allowed by law.

1.14 GUARANTEES

- A. In addition to other guarantees due the Owner, the Contractor guarantees that the Work and services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Contract Documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one (1) year from and after the date of completion and acceptance of the Work as stated in the final estimate. If part of the Work is accepted in accordance with the Contract Documents, the guarantee for that part of the Work shall be for a period of one (1) year from the date fixed for such acceptance. The Performance Bond shall remain in full force and effect through the Guarantee Period.
- B. If at any time within the said period of guarantee any part of the Work requires repairing, correction or replacement, the Owner may notify the Contractor in writing to make the required repairs, correction, or replacements. If the Contractor neglects to commence making such repairs, corrections, or replacements to the satisfaction of the Owner within three (3) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Owner may employ other persons to make the same, and all direct and indirect costs of making said repairs, correction or replacements, including compensation for additional professional services, shall be paid by the Contractor.

1.15 RECORD KEEPING

- A. The Contractor is reminded that the provisions of Chapter 30, Section 39R relative to record keeping apply to this Contract. A copy of c.30, s.39R is included in DOCUMENT 00855, SPECIAL CONDITIONS, COMMONWEALTH OF MASSACHUSETTS, of the Contract Documents. A brief summary of the requirements is as follows:
 - 1. The Contractor and all subcontractors shall maintain books, records, and accounts at least six (6) years after the final payment. They will be subject to inspection by the awarding authority, officers of the Inspector General, or the Deputy Commissioner of Capital Asset Management and Maintenance.
 - 2. Any changes in record keeping or recording transactions that affect the awarding authority shall be explained along with a letter from the Contractor's independent certified public accountant approving or otherwise commenting on the changes.
 - 3. The Contractor shall file with the Awarding Authority a statement of management as to whether the system of internal accounting controls has been established.

4. The Contractor shall file with the Awarding Authority a statement prepared and signed by an independent certified public accountant that an examination has been made of internal accounting controls.

1.16 ENGINEER

A. The Engineer for this Project is Town of Hudson Department of Public Works. Technical questions regarding the Contract Documents shall be directed to the Department of Public Works at telephone number 978-562-9333.

END OF DOCUMENT

FORM FOR GENERAL BID

Proposal of:

(he	ereinafter called "Bidder"), organized and existing under the laws of the State of doing business as
	(a corporation, or a partnership, or an individual)
To	: THE BOARD OF SELECTMEN FOR THE TOWN OF HUDSON, MASSACHUSETTS (hereinafter shall be called "Owner").
A.	In compliance with your DOCUMENT 00010, ADVERTISEMENT FOR BIDS, the Bidder hereby proposes to perform all Work for Removal, Disposal and Replacement of Filter Media, in strict accordance with the Contract Documents, within the time set forth therein and at the prices stated below in accordance with the provisions of Massachusetts General Laws Chapter 30, Section 39M.
B.	Bidder hereby agrees to commence Work under this Contract within ten (10) consecutive calendar days after a date to be specified in DOCUMENT 00650, NOTICE TO PROCEED and fully complete the project within 30 consecutive calendar days (using no more than 15 on-site working days) thereafter, unless the time for completion is extended otherwise by the Contract Documents. It is the requirement of this Project that one filter to be out of service during replacement/repair. Work performed beyond the 30 consecutive calendar days or the 15 on-site working day period will be subject to liquidated damages. Bidder further agrees to pay as liquidated damages, the sum of \$500.00 for each consecutive calendar day and \$500.00 for each working day thereafter, as provided in Article 15 of DOCUMENT 00700, GENERAL CONDITIONS.
C.	No Bidder may withdraw its Bid within thirty (30) calendar days (Saturday, Sunday and legal holidays excluded) after the actual date of the Bid opening.
D.	Bidder acknowledges receipt of Addenda Nothrough
E.	The Bidder agrees that, if he is selected as Contractor, it will within ten (10) days after presentation thereof by the Awarding Authority, execute a Contract in accordance with the terms of this Bid and furnish a Performance Bond and a Payment Bond, each of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Awarding Authority. Each bond shall be in the sum of one hundred (100) percent of the Contract price, the premiums for which are to be paid by the Contractor and are included in the Contract price and shall further provide the Owner with proof of insurance in a

F. The Bid prices shall include all profit, overhead, costs and expenses, labor, materials and

form satisfactory to the Owner, as required in the Contract.

insurance.

G. Bidder understands that the Owner reserves the right to reject any or all Bids and waive any informalities in the bidding.

BID ITEM

- A. Bidder agrees to perform all the Work, including all incidental labor, materials and equipment necessary for the satisfactory completion of the Work and in full compliance with the content and intent of the Specifications of the Work, for the following prices listed below.
- B. All prices, except item totals, shall be stated in both words and figures. In the event of a discrepancy between the price in words and the price in figures, the words shall govern. In the event of a discrepancy between the total of the items and the total stated, the total of the items shall govern.
- C. Interlineations, alteration or erasure may void the Bid. All prices shall be typewritten or written by hand in ink.

BID ITEM #1

Removal, Disposal of existing GAC Filter Media and Replacement with new, from 2 existing filter vessels, for an approximate quantity of 20 tons in total:

\$		
		DOLLARS
		CENTS
NAME OF COMPANY		
ADDRESS		
BY:		
DATE		
TELEPHONE	FAX	

- A. The Bidder further certifies under the penalties of perjury that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used herein the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.
- B. The undersigned represents that this proposal is made, in good faith without fraud, collusion or connection of any kind with any Bidder for the same Work; that it is competing in its own interests and in its own behalf without connection or obligation to any undisclosed person; that no other person has any interest in the profits of the Contract; that it has informed itself fully in regard to all conditions pertaining to the Work and in regard to the place where it is to be done; and that it has made its own examination and estimates from which this proposal is made.
- C. The Bidder further agrees that the Bid deposit left with the Awarding Authority shall become and be the property of the Town of Hudson as liquidated damages if, after an award is made to it, it shall fail to enter into the Contract therefore within ten (10) business days after notice of said award has been mailed or delivered to it.
- D. Bidder further certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction Work in the Commonwealth of Massachusetts under the provisions of Section Twenty-Nine F of Chapter Twenty-Nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.
- E. Bidder also certifies that it has visited the Project site, received and reviewed the Project Manual (Bidding Documents, Conditions and Technical Specifications).
- F. The Bidder hereby certifies that it is able to furnish labor that can Work in harmony with all other elements of labor employed or to be employed on the Work and that it will comply fully with all laws and regulations applicable to awards made in the State of Massachusetts, including the weekly submission of payroll records to the Owner.
- G. This Bid must bear the written signature of the Bidder or an authorized agent of the Bidder. If the Bidder is a corporation or a partnership, the Bid must be signed by a duly authorized officer of such corporation or by a partner and the title of such officer must be stated.

The BIDDER is a(n) _			
· / <u>-</u>	(A.) Individual	(B.) Partnership	or (C.) Corporation

Complete applicable section below: A. Individual OWNER State full name and address of OWNER. If business is carried on in any name other than that of the OWNER, state such name and address: B. Partnership C. Corporation Corporation is incorporated in the State of . . President is ______. Treasurer is . If there are any principals other than those identified above, state the full names and addresses of each (specify officers and majority stockholders if a corporation, general partners if a partnership). Place of business in Massachusetts is_____ If the BIDDER is a Foreign Corporation, also state the following: (1) The Power of Attorney required by General Laws, Chapter 181, Section 3, was filed on:

(2) The Certificate and copy of its Charter, Articles or Certificate of Incorporation required by

General

Laws, Chapter 181, Section 5, were filed on .

	r any title other than the real name of the owner, state the time ficate required by General Laws, Chapter 110, Section 5, was
•	entification Number of the BIDDER (the number used on Tax return, U.S. Treasury Department Form 941) is
If the BIDDER is an individual do must so state, giving the address of	ing business under a name other than its own name the proposal f the individual.
If the BIDDER is a partnership the all partners, and must be signed by	e Proposal must so state, setting forth the names and addresses of a partner designated as such.
If the BIDDER is a Corporation th of such Corporation.	e Proposal must be signed by a duly authorized Officer or Agent
such Foreign Corporation has filed	Contract with a BIDDER which is a Foreign Corporation until with the Awarding Authority a Certificate of the State Secretary at such Corporation has complied with General Laws, Chapter of such compliance.
Have you ever defaulted on a contr	ract? If so, where and why?
<u> </u>	recently completed by you, stating the approximate cost for each, d indicated which are similar to the Work called for under this
	Respectfully submitted:
	By(Signature of Bidder)
(Seal if Bid is by a Corporation)	Title

At a duly authorized meeting of the Board	l of	of the
	held on	
Name of Corporation		Date
at which all the Directors were present or	waived notice, it was Voted, that	
Name	Offic	 cer
of this company, be and be hereby is author	orized to execute contracts and bo	nds in the name and
behalf of said company, and affix its corp	orate seal thereto; and such execu	tion of any contract or
obligation in this company's name on its b		
under seal of the company, shall be valid		Officer
A true	сору,	
Attest:		
Place o	of Business:	
Date of	f this contract:	
I hereby certify that I am the clerk of the		that
	is the duly elected	of
said company, and that the above vote has	s not been amended or rescinded a	and remains in full for
and effect as of the date of this Contract.		
Corporate Seal		

END OF DOCUMENT

SECTION 00306

BIDDER'S QUALIFICATIONS

The following statements of experience and general qualifications of Bidder are submitted as part of the Bid and Bidder represents and guarantees the truthfulness and accuracy thereof.

A. Bidder has been in business continuously from the year	١.	Bidder has been in	n business	continuously	from th	ne year		
---	----	--------------------	------------	--------------	---------	---------	--	--

B.	Bidder has had the following experience in manufacturing equipment comparable to
	that required by the Contract Documents.

Number of Years' Continuous Experience	
	As prime manufacturer
	As equipment supplier
	As component manufacturer

C. Following is a list **of at least 3 projects** Bidder's organization has completed in the Northeast region **within the last 5 years** for which Bidder has manufactured or supplied equipment and services that is similar in type, character and magnitude to that required by the Specifications and provided Special Services.

Client/Owner Name/Address	Project Name/Location	CURRENT Contact Name, Phone, Email	Time Period

Client/Owner Name/Address	Project Name/Location	CURRENT Contact Name, Phone, Email	Time Period

- D. Bidder shall submit name and resume of full-time project manager in responsible charge with at least 10 years' experience as project manager in similar projects:
- E. Bidder shall submit Ten (10) references for GAC installations completed
- F. Bids shall only be accepted from manufacturers of bituminous coal-based reagglomerated activated carbon. Manufacturing facility must be located in the United States.
- G. Bidders shall have a minimum of 20 years' experience manufacturing virgin granular activated carbon and shall submit proof via a Manufacturer's Certificate and/or an Affidavit of Compliance.
- H. The bidder shall certify that it is the owner and operator of a minimum of two (2) NSF certified reactivation facilities exclusively dedicated to the receiving and production of potable reactivated GAC and shall submit proof via the reactivation facility's NSF Certificate and/or an Affidavit of Compliance. This requirement demonstrates the manufacturer's commitment to sustainable GAC use.
- I. Field Service personnel supervising the exchange must be directly employed by the bidder.
- J. Bidder's virgin and reactivation manufacturing processes shall produce NSF/ANSI/CAN 61 certified products.
- K. Field Services Personnel for Special Services
 - 1. Submit evidence that Bidder maintains and has readily available trained field service personnel who are thoroughly familiar, in detail, with all of the Goods to be furnished and capable of directing any major or minor repair work which may be required on the Goods.

- 2. Field Service personnel supervising the GAC exchange must be directly employed by the manufacturer of the GAC
- 3. The GAC manufacturer's supervisor must have a minimum of 5 years' experience in performing carbon exchanges.
- 4. Supervision of the GAC exchange by a third party or sub-contractor shall not be allowed.
- L. The names and addresses of the members of the Board of Directors of corporation, or the names and addresses of all persons and parties interested in this Bid as partners of a partnership or as individuals, are as follows.

Name	Address	Telephone No.

M. Reference is hereby made to the following bank or banks as to the financial responsibility of the Bidder.

Name of Bank	Address	Contact Name and Telephone No.

N. Following is a list of all projects Bidder has undertaken in the last 5 years which have resulted in partial or final settlement of the contract by arbitration or litigation.

Name of Client and Project	Contact Name/ Telephone No.	Original Contract Amount	Total Claims	Arbitrated or Litigated Amount of Settlement of Claims

END OF SECTION

BID BOND

Know all men by these	presents, that we, the undersigned,	,
		as Principal, and
		as Surety, are hereby held
and firmly bound unto	the Town of Hudson, Massachu	setts acting by and through its Board of
Selectmen as Owner in	the penal sum of	for
the payment of which, successors and assigns.	well and truly to be made, we her	reby jointly and severally bind ourselves,
Signed, this	day of	, 2024.

The Condition of the above obligation is such that whereas the Principal has submitted to the Town of Hudson, Massachusetts a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the Cleaning and Painting of Murphy Hill Water Storage Tank, Contract No. 15-01.

Now, therefore,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation, shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid and said Surety does hereby waive notice of any such extension.

In witness whereof, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

	Principal
By:	
	Surety
By:	

Important - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

BIDDER'S CERTIFICATION REGARDING PAYMENT OF PREVAILING WAGES

The undersigned Bidder hereby certifies, under the pains and penalties of perjury, that the foregoing Bid is based upon the payment to laborers to be employed on the Project of wages in an amount no less than the applicable prevailing wage rates established for the Project by the Massachusetts Department of Labor and Workforce Development, Division of Occupational Safety. The undersigned Bidder agrees to indemnify the awarding authority for, from and against an loss, expanse, damages, actions or claims, including any expense incurred in connection with any delay or stoppage of the project Work, arising out of or as a result of (1) the failure of the said Bid to be based upon the payment of the said applicable prevailing wage rates or (2) the failure of the Bidder, if selected as the Contractor, to pay laborers employed on the Project the said applicable prevailing wage rates.

DATED:	NAME OF BIDDER:
	D
	By:(Authorized Signature)
	Name:
	Title:

END OF DOCUMENT

DOCUMENT 00375 STATEMENT OF TAX COMPLIANCE

I,	, as	of
	1	(Title)
	, wh	ose principal place of
(Business)		
business is located at	,	, do hereby certify that the
above-named	has co	omplied with all laws of the
Commonwealth of Massachusetts relating	g to taxes, in accordan	nce with the provisions of
Massachusetts General Laws, Chapter 62C,	S.49A, as amended.	
Signed under the penalties of perjury this	day of	, 2024.
Dated:		
	(Authorized S	Signature)

NOTICE OF AWARD

To:	
Project Description: CRANBERRY WELL RE GAC FILTER MEDIA	- - MOVAL, DISPOSAL & REPLACEMENT OF
•	
BIDDERS to execute the DOCUMENT 00500 required Contractor's Performance Bond, Payme (10) calendar days from the date of this Notice and to furnish said Bonds within ten (10) days fr	INSTRUCTIONS AND INFORMATION FOR 0, FORM FOR AGREEMENT and furnish the ent Bond and Certificates of Insurance within ten of Award. If you fail to execute said Agreement from the date of this Notice of Award, said Owner ag out of the Owner's acceptance of your Bid as The Owner will be entitled to such other rights as
You are required to return an acknowledged copy day of, 2024.	of this Notice of Award to the Owner. Dated this
Owner: TOWN OF HUDSON By:	
Eric Ryder	-
Director of Public Works	
Title	.
Acceptance of Notice: Receipt of the above Notice to Proceed is hereby	
acknowledged by	
thisday of,	2024
Ву	
Title	

END OF DOCUMENT

15-01 00430-1

FORM FOR AGREEMENT

This Agreen	nent, made this_	day	/ of			2024	- by	and betw	een	the To	wn
of Hudson,	Massachusetts,	hereinafter	called	"Owner",	acting	by	and	through	its	Board	of
Selectmen, a	and	, hereinafter called "Contractor", doing business as				_					
		(a o	corpora	tion, or a p	artnersł	nip, c	or an	individu	al).		

Witness: That for and in consideration of the payments and agreements hereinafter mentioned:

- 1. The Contractor to commence and complete the Work for Removal, Disposal and Replacement of GAC filter media as specified.
- 2. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the completion of the Project described herein.
- 3. The Contractor will commence the work required by the Contract Documents within ten (10) consecutive calendar days after a date to be specified in DOCUMENT 00650, NOTICE TO PROCEED and will complete the Project within 30 consecutive calendar days (using no more than 15 on-site working days) thereafter. It is the intent of this Contract for the Contractor to submit shop drawings, schedule, and related paperwork immediately after execution of this Agreement and to complete the Project within the schedule specified.
- 4. Work performed beyond either the 30 on-site working days period or the 15 consecutive calendar days will be subject to liquidated damages. It is the requirement of this Project for the water storage tank to remain in service between July and September. The Contractor agrees to pay as liquidated damages the sum of \$500.00 for each consecutive calendar day and \$500.00 for each working day thereafter as provided in Article 15 of the DOCUMENT 00700, GENERAL CONDITIONS.
- 5. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the sum shown in DOCUMENT 00300, FORM FOR GENERAL BID.
- 6. The Contractor agrees that the "direct labor mark-up" rate for any change order work performed under this Agreement will be 15 percent.
- 7. The Contractor shall not discriminate against or exclude any person from participation herein on grounds of race, religion, color, sex, age, or national origin; and that it shall take affirmative actions to ensure that applicants are employed, and that employees are treated during their employment, without regard to race, religion, color, sex, age, handicapped status, or national origin.
- 8. The Contractor shall not participate in or cooperate with an international boycott, as defined in Section 999 (b) (3) and (4) of the Internal Revenue Code of 1954, as amended, or engage in conduct declared to be unlawful by Section 2 of Chapter 151E of the Massachusetts General Laws.

(B)	Instructions and Information for Bidders
(C)	Form for General Bid
(D)	Water Tank Painting Qualifications
(E)	Bid Bond
(F)	Bidder's Certification Regarding Payment of Prevailing Wages
(G)	Statement of Tax Compliance
(H)	Notice of Award
(I)	Form for Agreement
(J)	Payment Bond
(K)	Performance Bond
(L)	Notice to Proceed
(M)	General Conditions
(N)	Special Conditions – General Special Conditions – Massachusetts Special Conditions – Massachusetts Equal Employment Opportunity
(O)	Change Order Form
(P)	Certificate of Substantial Completion
(Q)	Waiver of Liens
(R)	Certificate of Final Payment and Completion of Work
(S)	Specifications by Hudson Department of Public Works, Dated January 2024.
(T)	Addenda No
10. The O Contra	wner will pay to the Contractor in the manner and at such times as set forth in the act Conditions such amounts as required by the Contract Documents.
11. This a execut	Agreement shall be binding upon all parties hereto and their respective heirs, ors, administrators, successors, and assigns.

9. The term "Contract Documents" means and includes the following:

(A) Advertisement for Bids

In witness whereof, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in five (5) copies, each of which shall be deemed an original on the date first above written.

Owner:	TOWN OF HUDSON, N	MASSACHUSETTS	
By its Bo	oard of Selectmen		
		_	
		_	
Attest:		(SEAL)	
Contractor:			
	Name		
	Title Address		
		(SEAL)	
Name			
The undersig 44, Section 3	ned, in compliance with the lC, certifies that an appropriate that an appropriate that an appropriate that the latest that an appropriate that the latest that	he Commonwealth of Mas priation in the amount requ	ssachusetts General Laws Chapter aired for this Contract is available.
Town Accou	ntant	Date	

END OF DOCUMENT

DOCUMENT 00600 PAYMENT BOND

(Name of Contractor)	
(Address of Contractor)	
a	, hereinafter called Principal,
(Corporation, Partnership or Individual)	
and	
(Name of Surety)	
(A 11 CC (A)	
(Address of Surety)	
hereinafter called Surety, are held and firmly bound unto the	
hereinafter called Owner, in the penal sum of:	
Dollars (\$)
(+	
in lawful money of the United States, for the payment of which subind ourselves, successors, and assigns, jointly and severally, firmly	
in lawful money of the United States, for the payment of which sur	y by these presents. Il entered into a certain Contract

Now, therefore, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the Work provided for in such Contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such Work, and all insurance premiums on said Work, and for all labor, performed in such Work whether by subcontractor or otherwise, then this obligation shall be void, otherwise to remain in full force and effect.

Provided, further, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the Contract Documents accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Contract Documents.

Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In witness whereof, this instrument is executive.	ated in five (5) counterparts, each one of which shall be
deemed an original, this theday of_	2024.
(SEAL) Attest:	Principal
By	By
Witness as to Principal	Contractor
Name	Name
Address	Address
(SEAL) Attest:	
By	Surety By
Witness as to Surety	Attorney-in-Fact
Name	Name
Address	Address

PERFORMANCE BOND

Know all men by these presents that	
(Name of Contractor)	
(Address of Contractor)	
a	, hereinafter called Principal,
(Corporation, Partnership or Individual)	
and(Name of Surety)	
(Address of Surety) hereinafter called Surety, are held and firmly bound unto the	
hereinafter called Owner, in the penal sum of:	
Dollars (\$)
in lawful money of the United States, for the payment of which bind ourselves, successors, and assigns, jointly and severally, fir	
The condition of this obligation is such that whereas, the Princ with the Owner, dated the day of	-
hereto attached and made a part hereof for the :	

Now, therefore, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such Contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

Provided, further, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the Contract Documents accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Contract Documents.

Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

ed in five (5) counterparts, each one of which shall be2024.
Duin ein al
Principal By
Contractor
Name
Address
Surety
By
Attorney-in-Fact
Name
Address

NOTICE TO PROCEED

To:		Date:			
		Project: REMOVAL	CRANBERRY WELL		
			, DISPOSAL		<u>&</u>
		REPLACEM	IENT	OF GAC	FILTER
		MEDIA.			
You are hereby notified to commence, 2024, on or before				•	
complete the Work within 30 consecutive of	calenda	r days using n	o more	than 15 on-s	site working
days thereafter. The date of completion of al	ll Work	is therefore			, 2024.
Owner: TOWN OF HUDSON					
By:					
Eric Ryder					
Director of Public Works					
Title					
Acceptance of Notice to Proceed:					
Receipt of the above Notice to Proc acknowledged by		•			
thisday of					
Ву					
Title					

END OF DOCUMENT

DOCUMENT 00700

GENERAL CONDITIONS

- **Definitions**
- Additional Instructions and Detail Drawings
- Schedules, Reports and Records
- **Drawings and Specifications**
- Shop Drawings 5.
- Materials, Services and Facilities
- Inspection and Testing
- Substitutions
- **Patents**
- 10. Surveys, Permits, Regulations
- 11. Protection of Work, Property, Persons
- 12. Supervision by Contractor
- 13. Changes in the Work14. Changes in Contract Price
- 15. Time for Completion and Liquidated Damages 33. Site Regulations
- 16. Correction of Work
- 17. Subsurface Conditions
- 18. Suspension of Work, Termination and Delay

- 19. Payments to Contractor
- 20. Acceptance of Final Payment as Release
- 21. Insurance
- 22. Contract Security
- 23. Assignments
- 24. Indemnification
- 25. Separate Contracts
- 26. Subcontracting
- 27. Engineer's Authority
- 28. Land and Rights-of-Way
- 29. Guaranty
- 30. Claims and Disputes
- 31. Taxes
- 32. Interpretation of Drawings and Specifications
- 34. Limitations of Data Presented
- 35. Health and Safety Equipment

1. **DEFINITIONS**

Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

- 1.1 ADDENDUM A written or graphic instrument issued prior to the execution of the CONTRACT, which modifies or interprets the CONTRACT DOCUMENTS, and/or DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.2 AWARDING AUTHORITY The authorized agent or representative of the OWNER, as defined herein, for which the PROJECT shall be undertaken.
- 1.3 BID The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 BIDDER Any person, firm or corporation submitting a BID for the WORK.
- 1.5 BOND Bid, Performance and Payment Bond(s) and other instruments of security, furnished by the CONTRACTOR and its Surety in accordance with the CONTRACT DOCUMENTS.
- 1.6 CHANGE ORDER A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.

- 1.7 COMPLETION That date, as certified by the ENGINEER, when the construction of the PROJECT (and all parts thereof) is fully completed in accordance with the CONTRACT DOCUMENTS, including but not limited to the satisfactory fulfillment of, in the opinion of the ENGINEER, all punch list items, correction of any defective WORK, start-up and training, testing of equipment, submission and approval of operations and maintenance manuals and record drawings. Should the CONTRACTOR not achieve COMPLETION within the specified time, or extension of time granted by the OWNER, then the provisions of LIQUIDATED DAMAGES shall apply.
- 1.8 CONTRACT The CONTRACT DOCUMENTS form the CONTRACT for construction. The CONTRACT represents the entire and integrated agreement between the OWNER and the CONTRACTOR and supersedes prior negotiations, representations or agreements, either written or oral.
- 1.9 CONTRACT DOCUMENTS The term, CONTRACT DOCUMENTS, is defined in the FORM FOR AGREEMENT.
- 1.10 CONTRACT PRICE The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.11 CONTRACT TIME The number of calendar days, and/or in combination with working days, stated in the CONTRACT DOCUMENTS to achieve COMPLETION of the WORK.
- 1.12 CONTRACTOR The person, firm or corporation with whom the OWNER has executed the CONTRACT.
- 1.13 DRAWINGS The part of the CONTRACT DOCUMENTS that shows the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.14 ENGINEER The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.15 FIELD ORDER A written order affecting a change in the WORK, not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.16 LIQUIDATED DAMAGES The sum of monies due the OWNER from the CONTRACTOR for the OWNER's costs incurred because of the CONTRACTOR's default for failure to achieve SUBSTANTIAL COMPLETION or COMPLETION of the WORK within the specified time(s) or extension of time(s) granted by the OWNER, as specified in the CONTRACT DOCUMENTS.
- 1.17 NOTICE OF AWARD The written notice of the acceptance of the BID by the OWNER to the successful BIDDER.
- 1.18 NOTICE TO PROCEED Written communication issued by the OWNER to the CONTRACTOR authorizing the CONTRACTOR to proceed with the WORK and establishing the dates of commencement and completion of the WORK.
- 1.19 OWNER A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.20 PROJECT The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

- 1.21 RESIDENT PROJECT REPRESENTATIVE The authorized representative of the ENGINEER at the PROJECT site(s) who is assigned to the PROJECT site(s) or any part thereof.
- 1.22 SHOP DRAWINGS All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated and/or installed.
- 1.23 SPECIFICATIONS The part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.24 STATE The STATE in which the WORK under this CONTRACT is to be performed.
- 1.25 SUBCONTRACTOR A person, firm or corporation having a direct contract with the CONTRACTOR, or with any other SUBCONTRACTOR, for the performance of a part of the WORK.
- 1.26 SUBSTANTIAL COMPLETION That date, as certified by the ENGINEER, when the construction of the PROJECT, or a specified part thereof, is sufficiently completed in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.27 SUPPLEMENTAL GENERAL CONDITIONS Modifications to GENERAL CONDITIONS required by an entity having a jurisdiction over or for participation, whether financially or otherwise, in the PROJECT and approved by the entity in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by the OWNER, the ENGINEER or applicable federal, state and local laws, regulations and/or agency guidelines.
- 1.28 SUPPLIER Any person or organization who supplies materials or equipment to be incorporated with the WORK, including that fabricated to a special design, but who does not perform labor at the site(s).
- 1.29 WORK All labor, materials and equipment incorporated or to be incorporated in the PROJECT required by the CONTRACT DOCUMENTS.
- 1.30 WRITTEN NOTICE Any notice to any party of the CONTRACT relative to any part of the WORK of the CONTRACT DOCUMENTS in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at its last given address or delivered in person to said party or its authorized representative. Whenever the words "as directed", "as permitted", "as required", or words of like effect are used, it shall be understood that the direction, permission or requirements of the ENGINEER is intended; and similarly, the words "approved", "acceptable", "satisfactory", or words of like import, shall mean approved or acceptable or satisfactory to the ENGINEER. Whenever the words "or equal", or words of like import are used, it shall be understood that this means equal in accordance with the following provisions: an item shall be considered equal, if in the opinion of the ENGINEER (l) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the WORK being contracted for or the material being purchased; and (3) it conforms

substantially, even with deviations, to the detailed requirements for the item. Whenever any power is possessed by, or act or thing is to be done by the OWNER under this CONTRACT, the exercise of such power or the doing of such act or thing by the AWARDING AUTHORITY shall be a sufficient compliance with the terms of this CONTRACT unless by law some other officer of the OWNER is required to act in the premises. Both the address given in the BID upon which this CONTRACT is founded and the CONTRACTOR's office at or near the site(s) of the WORK are hereby designated as places to either of which notices, letters, and any other communications to the CONTRACTOR shall be certified mailed or delivered. The delivering to the abovenamed place(s), or depositing in a post-paid wrapper directed to the first named place, in any post office box regularly maintained by the United States Postal Service, of any notice, letter or other communications to the CONTRACTOR, shall be deemed sufficient service thereof upon the CONTRACTOR, and the date of said service shall be the date of such delivery or mailing. The first named address may be changed at any time by an instrument in writing, executed and acknowledged by the CONTRACTOR and delivered to the ENGINEER. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the CONTRACTOR personally.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- 2.1 The CONTRACTOR may be furnished additional instructions and detail DRAWINGS, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2 The additional DRAWINGS and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail DRAWINGS and instructions.

3. SCHEDULES, REPORTS, AND RECORDS

- 3.1 Within ten (10) days after the WORK has commenced, the CONTRACTOR shall submit to the ENGINEER for approval a progress schedule in satisfactory form, showing in detail its proposed progress for the construction of the various parts of the WORK and the proposed times for receiving the various materials required. The CONTRACTOR shall, at the end of each month, or more often, if required, furnish the ENGINEER two (2) copies of a chart showing actual progress of the various parts of the WORK in comparison with the originally proposed progress schedule, as approved.
- 3.2 The CONTRACTOR shall submit a schedule of payments that it anticipates it will earn during the course of the WORK.
- 3.3 The WORK is to commence within ten (10) days after a date to be specified in the NOTICE TO PROCEED unless otherwise specified. WORK shall continue with dispatch to COMPLETION and no suspension of WORK will be allowed without written approval of the ENGINEER.
- 3.4 No Saturday, Sunday, holiday, or work day longer than eight (8) hours WORK, requiring the presence of the ENGINEER or RESIDENT PROJECT REPRESENTATIVE, will be permitted without prior arrangements with the ENGINEER, except in the case of an emergency, and then only to the extent that is absolutely necessary, and, if practical, with the written permission of the ENGINEER. If Saturday, Sunday, holiday or work day longer than eight (8) hours WORK is contemplated, the CONTRACTOR shall notify the ENGINEER not later than Friday of the previous week to allow arrangements to be made for observation and any other services required by the OWNER. If the CONTRACTOR

must work beyond the regular work week in order to complete the PROJECT within the CONTRACT TIME, all expenses of the ENGINEER and its personnel required for observation and any other extra expenses incurred by the OWNER for such WORK will be deducted monthly from any sums due or which will become due to the CONTRACTOR.

3.5 Prior to commencing any WORK at the site(s) requiring the presence of the ENGINEER or its representative, the CONTRACTOR shall notify the ENGINEER in writing at least twenty-four (24) hours in advance of the exact date and time on which it intends to start the WORK. In the event that the CONTRACTOR fails to meet this Schedule, the ENGINEER's on-site time will be assessed to the CONTRACTOR and will be deducted from any sums due or which will become due the CONTRACTOR.

4. DRAWINGS AND SPECIFICATIONS

- 4.1 The intent of the DRAWINGS and SPECIFICATIONS is to require that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental WORK necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER. Any WORK shown on the DRAWINGS, though not mentioned in the SPECIFICATIONS, and any WORK mentioned in the SPECIFICATIONS, though not shown on the DRAWINGS, is to be executed by the CONTRACTOR as a part of the WORK.
- 4.2 In case of a conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scaled dimensions, and detail DRAWINGS govern over general DRAWINGS.
- 4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions, or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS, shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR's risk.
- 4.4 Where compliance with two (2) or more industry standards or sets of requirements is indicated, and overlapping of those different standards or requirements establishes two (2) different or conflicting minimums or levels of quality, or quantity, the most stringent requirement (which is generally recognized to be, also, the most costly) is intended and will be enforced, unless specifically detailed language written into the CONTRACT DOCUMENTS (not by way of reference to an industry standard) clearly indicates that the less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which levels of quality or quantity is the more stringent, to the ENGINEER for a written decision before proceeding.

SHOP DRAWINGS

5.1 The CONTRACTOR shall provide SHOP DRAWINGS, as may be necessary for prosecution of the WORK, as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER's approval of any SHOP DRAWING shall not release the CONTRACTOR from its responsibility for deviations from the CONTRACT DOCUMENTS. A CHANGE ORDER shall evidence the approval of any SHOP DRAWING, which substantially deviates from the requirements of the CONTRACT DOCUMENTS.

- 5.2 When submitted for the ENGINEER's review, SHOP DRAWINGS shall bear the CONTRACTOR's certification that it has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the ENGINEER has approved the SHOP DRAWING or submission. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site(s) and shall be available to the ENGINEER.
- 5.4 The CONTRACTOR shall submit to the ENGINEER, before any shop work is commenced, four (4) to seven (7) prints [four (4) prints are to be used by the ENGINEER and up to three (3) prints are be used by the CONTRACTOR] of SHOP DRAWINGS for all items so stated in the SPECIFICATIONS as requiring SHOP DRAWINGS. Additional prints for regulatory agencies shall be submitted when indicated in the SPECIFICATIONS. Standard forms for processing SHOP DRAWINGS will be used by the CONTRACTOR and furnished to the CONTRACTOR by the ENGINEER.
 - 5.4.1 No SHOP DRAWINGS shall be submitted directly by SUBCONTRACTORs or SUPPLIERS. All SHOP DRAWINGS shall be submitted through the CONTRACTOR who shall check and verify all field dimensions, check for compliance with the CONTRACT DOCUMENTS, stamp and endorse all SHOP DRAWINGS to indicate its approval and compliance with the above, and assign a transmittal number to each submission. Numbers shall be assigned in sequence. In the event that a SHOP DRAWING is returned marked "Amend and Resubmit" or "Rejected", subsequent resubmittals for the same item shall retain the same transmittal number, but shall have an alphabetical suffix (3a, 3b, etc.). At the time of each submission, the CONTRACTOR shall in writing call the ENGINEER's attention to any deviations to the CONTRACT DOCUMENTS.
 - 5.4.2 No portion of the WORK requiring a SHOP DRAWING shall be commenced until the SHOP DRAWING has been reviewed by the ENGINEER. If the first submittal of the SHOP DRAWING is marked "No Exceptions Taken", "Make Corrections Noted" or "No Action/No Review", up to three (3) prints will be returned to the CONTRACTOR and fabrication of the item may begin. If the SHOP DRAWINGS are marked "Amend and Resubmit" or "Rejected See Remarks", up to two (2) prints will be returned to the CONTRACTOR with notations thereon of corrections required. The CONTRACTOR shall cause the necessary corrections to be made and shall resubmit [four (4) to seven (7) prints (four (4) prints for the ENGINEER and up to three (3) prints for the CONTRACTOR] with transmittal numbers and letters, as defined above. If subsequent resubmittals are still not acceptable, resubmittals shall be made under the procedure outlined above until final acceptance is received.
 - 5.4.3 The ENGINEER will review SHOP DRAWINGS with reasonable promptness, but its review shall be only for conformance with the design concept of the PROJECT and for compliance with the information given in the CONTRACT DOCUMENTS. The acceptance of the separate item, as such, will not indicate acceptance of the assembly in which the item functions. The CONTRACTOR shall make any corrections required by the ENGINEER and shall return the required number of corrected copies. The CONTRACTOR shall direct specific attention in writing or on resubmitted SHOP DRAWINGS to revisions other than the corrections called for by the ENGINEER on previous submissions.

- 5.4.4 The ENGINEER's review of SHOP DRAWINGS shall not relieve the CONTRACTOR from its responsibility for any deviations from the requirements of the CONTRACT DOCUMENTS unless the CONTRACTOR has in writing called the ENGINEER's attention to such deviations at the time of submission and the ENGINEER has given written acceptance to the specific deviation, nor shall any acceptance by the ENGINEER relieve the CONTRACTOR from responsibility for errors or omissions in the SHOP DRAWINGS. The final acceptance of SHOP DRAWINGS by the ENGINEER shall not operate to relieve the CONTRACTOR in any way of its responsibility under this CONTRACT for the satisfactory COMPLETION of the WORK, or for the accuracy of the dimensions, details, and quantities or for its CONTRACT. No change shall be made in the accepted SHOP DRAWINGS without written consent of the ENGINEER. The CONTRACT PRICE shall include the cost of furnishing all SHOP DRAWINGS, and the CONTRACTOR shall be allowed no extra compensation therefor.
- 5.5 The CONTRACTOR shall submit to the ENGINEER for review, with such promptness as to cause no delay in the WORK, all samples required by the CONTRACT DOCUMENTS. All samples shall be checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, any pertinent catalog numbers, the use for which intended, and the section number and paragraph of the SPECIFICATION wherein the material is specified. All samples shall be shipped post and/or freight paid.
 - 5.5.1 At the time of each submission, the CONTRACTOR shall in writing, call the ENGINEER's attention to the deviations that the samples may have from the requirements of the CONTRACT DOCUMENTS.
 - 5.5.2 The ENGINEER will review with reasonable promptness submitted samples, but its review shall be only for conformance with the information given in the CONTRACT DOCUMENTS. The acceptance of a separate item as such will not indicate acceptance of the assembly in which the item functions. In the event samples are not accepted, the CONTRACTOR shall resubmit new samples until acceptance is obtained.
 - 5.5.3 No WORK requiring sample submission shall be commenced until the ENGINEER has accepted the submission in writing.
 - 5.5.4 The ENGINEER's acceptance of sample(s) shall not relieve the CONTRACTOR from its responsibility for any deviations from the requirements of the CONTRACT DOCUMENTS unless the CONTRACTOR has in writing called the ENGINEER's attention to such deviations at the time of submission and the ENGINEER has given written acceptance of the specific deviations.

6. MATERIALS, SERVICES AND FACILITIES

6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all labor, materials, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the CONTRACT TIME.

- 6.2 Materials and equipment shall be so stored as to insure the preservation of its quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4 Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5 Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.
- 6.6 All materials are to be new, unused and the best and of finest quality of their several kinds. The CONTRACTOR shall provide facilities and handle all materials as required for the inspection by the ENGINEER. Materials which have not been accepted by the ENGINEER shall be removed from the site(s) of the WORK together with all surplus earth and materials which are unsuitable or not in conformity with the CONTRACT DOCUMENTS. Disposal of materials shall be without expense to the OWNER. The CONTRACTOR shall promptly replace any materials rejected or condemned, and shall not be allowed extra time for COMPLETION of the WORK by reason of such rejection.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3 The CONTRACTOR shall provide at its expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.
- 7.5 Inspections, tests or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS. Should inspections or tests reveal defective WORK, the defective WORK shall be made good and unsuitable materials shall be rejected, notwithstanding that such WORK and materials have been previously overlooked and accepted or estimated for payment. If the WORK or any part thereof shall be found defective at any time before the final acceptance of the whole WORK, the CONTRACTOR shall forthwith make good such defect in a manner satisfactory to the ENGINEER. Nothing in this CONTRACT shall be construed as vesting in the CONTRACTOR any right or property in the materials used after they have been attached or affixed to the WORK or the soil, but all such materials shall, upon being so attached or affixed, become the property of the OWNER.

- 7.6 All portions of the WORK condemned by the ENGINEER, as failing to conform to the CONTRACT DOCUMENTS, shall be taken down and removed, and the CONTRACTOR shall promptly replace and re-execute the same in accordance therewith and without expense to the OWNER and bear the expense of making good all WORK or property of other contractors or of the OWNER destroyed or damaged by such removal or replacement.
- 7.7 The ENGINEER and its representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating federal or STATE agency shall be permitted to inspect all WORK, materials, payroll records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and, also, for any inspection or testing thereof.
- 7.8 If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for its observation and replaced at the CONTRACTOR's expense.
- 7.9 If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR at the ENGINEER's request, will uncover, expose, or otherwise make available for observation, inspection or testing, as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all expenses of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction. If, however, such WORK is found not to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributed to such uncovering, exposure, observation, inspection, testing and reconstruction; and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered.
- 8.2 The CONTRACTOR may recommend the substitution of a material, article or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalog number; and, if, in the opinion of the ENGINEER, such material, article or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that, if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitution will be made by the CONTRACTOR without a change in CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

9.1 The CONTRACTOR shall pay all applicable royalties and license fees. The CONTRACTOR shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design or the product of a particular manufacturer or manufacturers is specified. However, if the CONTRACTOR has reason to believe that the design, process, or the product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless it promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

- 10.1 The Contractor shall establish baselines for locating all component parts of the work. From the information provided in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction layout.
- 10.2 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR, unless otherwise specified. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall be solely responsible for performing any necessary acts and providing any materials required in order to comply with any and all terms and conditions set forth in any permits and licenses. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, it shall promptly notify the ENGINEER in writing and any necessary changes shall be adjusted, as provided in Article 13 CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS

11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, and will provide necessary protection to prevent damage, injury or loss to, all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site(s), and other property at the site(s) or adjacent thereto, including trees, shrubs, lawns, walks, pavement, roadways, structures and utilities not designated for removal, relocation or replacement during the course of construction. The CONTRACTOR shall be responsible for and pay for all loss or damage to materials and property, whether such are incorporated in, or to be incorporated in, the WORK. The CONTRACTOR shall also replace or restore to original condition man-made or natural improvements or other things injured or interfered with by the CONTRACTOR in carrying out the WORK. Adequate weather protection of all materials and structures of this PROJECT shall be the duty of the CONTRACTOR.

- 11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. It will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. It will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR(s), or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS, or to acts or omissions of the OWNER or the ENGINEER, or anyone employed by either of them or anyone for whose acts either of them may be liable and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3 In emergencies affecting the safety of persons or the WORK or property at the site(s) or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt written notice of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall be issued covering the changes and deviations involved.

11.4 HAZARDOUS MATERIAL

- 11.4.1. If at any time during construction the presence of unanticipated hazardous materials at or proximate to a construction site(s) is detected, the CONTRACTOR shall stop WORK in the affected area and perform the following immediately:
 - a. Notify the OWNER in writing.
 - b. Take all action necessary and appropriate for the protection and safety of the public and persons at or about the site(s), including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
 - c. Notify the respective STATE agency responsible for hazardous waste and receive instructions as to the appropriate measures to be taken while working in that area.
 - d. Notify the designated representative of the respective STATE agency having financial, license or permit and/or technical jurisdiction for this PROJECT, or other appropriate STATE program director/administrator in writing mailed within 48 hours following discovery of the suspected hazardous materials.
 - e. Notify the local hazardous waste coordinator.
- 11.4.2. Actions at the construction site(s) following completion of these steps shall be at the direction of the STATE agency responsible for hazardous waste. Nothing in this Article shall be construed to require the ENGINEER and/or the CONTRACTOR to perform WORK for which adequate compensation has not been contracted for other than to insure that basic measures necessary to protect the health and welfare of workers, residents and abutters are immediately adopted.

11.4.3. At construction site(s) where the presence of contaminated or hazardous materials are suspected to exist and provisions have been made in the CONTRACT DOCUMENTS for their management, the requirements of Paragraph 11.4.1 of this Article shall apply.

12. SUPERVISION BY CONTRACTOR

- 12.1 The CONTRACTOR will supervise and direct the WORK. The CONTRACTOR will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR's representative at the site(s). The supervisor/superintendent shall have full authority to act on behalf of the CONTRACTOR, and all communications given to the supervisor/superintendent shall be as binding as if given to the CONTRACTOR. The supervisor/superintendent shall be present on the site(s) at all times, as required, to perform adequate supervision and coordination of the WORK.
- 12.2 The CONTRACTOR shall employ only competent workers; and, whenever the ENGINEER shall notify the CONTRACTOR in writing that any person on the WORK is, in its opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory or not employed in accordance with the provisions of this CONTRACT, such person shall be discharged from the WORK and shall not again be employed on it except with the consent of the ENGINEER.

13. CHANGES IN THE WORK

- 13.1 The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the CONTRACT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, a CHANGE ORDER shall authorize an equitable adjustment. The OWNER must confirm in writing any explanation or interpretation of DRAWINGS or SPECIFICATIONS altering or varying the WORK, made by an employee of the OWNER, before such changed WORK is acted upon by the CONTRACTOR.
- 13.2 The ENGINEER, also, may at any time by issuing a FIELD ORDER make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER, unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in the CONTRACT PRICE, or time, or both, in which event the CONTRACTOR shall give the ENGINEER written notice thereof within seven (7) days after receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or time within thirty (30) days. The CONTRACTOR shall not execute such changes pending receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE

- 14.1 The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER, or of any claim for increase or decrease in the CONTRACT PRICE, shall be determined by one (1) or more of the following methods in order of precedence listed below:
 - (a) Unit prices previously approved.

- (b) An agreed lump sum.
- (c) The actual cost for labor, direct overhead, materials, supplies, equipment and other services necessary to complete the WORK, computed as follows:
 - (1) The reasonable cost of labor employed directly on the WORK at prevailing rates of wages.
 - (2) The cost of Worker's Compensation Insurance, Federal Social Security and STATE Unemployment Compensation on Item (1) at established rates.
 - (3) The reasonable cost of materials incorporated in the WORK.
 - (4) The reasonable cost at fair market rental rates for equipment employed directly on the WORK.
 - (5) Fifteen (15) percent of Items (1), (2), (3) and (4) for overhead, superintendence and profit. On subcontract WORK, this fifteen (15) percent will be allowed only to the SUBCONTRACTOR.
 - (6) An additional five (5) percent of Items (1), (2), (3) and (4) on WORK performed by a SUBCONTRACTOR of the CONTRACTOR. This five (5) percent includes overhead, superintendence, profit and bonds.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- 15.1 The date of commencement and the time for SUBSTANTIAL COMPLETION and COMPLETION of the WORK are essential conditions of the CONTRACT DOCUMENTS, and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure both SUBSTANTIAL COMPLETION and full COMPLETION within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the time allowed to achieve SUBSTANTIAL COMPLETION and the CONTRACT TIME for COMPLETION of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3 If the CONTRACTOR shall fail to achieve SUBSTANTIAL COMPLETION or COMPLETION within the specified time(s) or extension of time(s) granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for LIQUIDATED DAMAGES, as specified in the CONTRACT DOCUMENTS, for each calendar day and/or working day that the CONTRACTOR shall be in default after the time(s) stipulated.
- 15.4 The CONTRACTOR shall not be charged with LIQUIDATED DAMAGES or any excess cost, when the delay in COMPLETION of the WORK is due to the following, and the CONTRACTOR has promptly given written notice of such delay to the OWNER or ENGINEER:
 - 15.4.1 To any preference, priority or allocation order duly issued by the OWNER;

- 15.4.2 To unforeseeable causes 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 abnormal and unforeseeable weather; and
- 15.4.3 To any delays of SUBCONTRACTOR(s) occasioned by any of the causes specified in Paragraphs 15.4.1 and 15.4.2 of this Article.

16. CORRECTION OF WORK

- 16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not; and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER. The CONTRACTOR shall bear the expense of making good all WORK of other contractors by such removal and replacement of all destroyed or damaged WORK.
- 16.2 All removal and replacement WORK shall be done at the CONTRACTOR's expense. If the CONTRACTOR does not take action to remove and replace such rejected WORK within five (5) days after receipt of written notice, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS

- 17.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by written notice of:
 - 17.1.1 Subsurface or latent physical conditions at the site(s) differing materially from those indicated in the CONTRACT DOCUMENTS, or
 - 17.1.2 Unknown physical conditions at the site(s) of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.
- 17.2 The OWNER shall promptly investigate the conditions; and, if it finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the CONTRACTOR has given the required written notice, provided that the OWNER may, if the CONTRACTOR determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION AND DELAY

18.1 The OWNER may suspend the WORK, or any portion thereof, for a period of not more than ninety (90) calendar days or such further time, as agreed upon by the CONTRACTOR, by written notice to the CONTRACTOR and the ENGINEER, which notice shall fix the date on which the WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- 18.2 If the CONTRACTOR is adjudged bankrupt or insolvent, or if the CONTRACTOR makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of the CONTRACTOR's property, or if the CONTRACTOR files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or other applicable laws, or if the CONTRACTOR repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if the CONTRACTOR repeatedly fails to make prompt payments to SUBCONTRACTORs or for labor, materials, or equipment, or if the CONTRACTOR disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK, or if the CONTRACTOR disregards the authority of the ENGINEER, or if the CONTRACTOR otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of ten (10) days from delivery of a written notice, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, tools, equipment, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method it may deem expedient.
- 18.3 In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is completed. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.4 Where the CONTRACTOR's services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.5 After ten (10) days from delivery of a written notice to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK satisfactorily executed and any expense sustained plus reasonable profit.
- 18.6 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) calendar days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a written notice to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until the CONTRACTOR has been paid all amounts then due, in which event and upon resumption of WORK, a CHANGE ORDER shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.

18.7 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted, as a result of a failure of the OWNER or the ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time an adjustment in the CONTRACT PRICE and extension of the CONTRACT TIME, or both, shall be made by a CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or the ENGINEER.

19. PAYMENTS TO CONTRACTOR

- 19.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site(s), the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER's title to the material and equipment and protect its interest therein, including applicable insurance. Payments to the CONTRACTOR are governed by Massachusetts General Law, Chapter 30, Section 39G and are recited in full in DOCUMENT 00855, SPECIAL CONDITIONS, COMMONWEALTH OF MASSACHUSETTS.
- 19.2 Prior to SUBSTANTIAL COMPLETION, the OWNER with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.3 The OWNER shall have the right to enter the premises for the purpose of doing WORK not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.4 The CONTRACTOR will indemnify and save the OWNER or the OWNER's agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORs, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of WORK. The CONTRACTOR shall at the OWNER's request furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

20.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability of the CONTRACTOR other than claims in stated amounts, as may be specifically accepted by the CONTRACTOR, for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the performance bond and payment bond.

21. INSURANCE

- 21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the CONTRACTOR's execution of the WORK, whether such execution be by itself, by any SUBCONTRACTOR, by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable:
 - 21.1.1 Claims under Worker's Compensation, disability benefit, and other similar employee benefit acts;
 - 21.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees;
 - 21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any persons other than its employees;
 - 21.1.4 Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (b) by any other person; and,
 - 21.1.5 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 21.2 Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These certificates shall contain a provision that coverages afforded under the policies will not be canceled or a restrictive amendment added, unless at least thirty (30) days prior written notice has been given to the OWNER. The certificates shall name the types of policy provided, specifically state the title of this CONTRACT and state that the Insurance coverage is as required by the GENERAL CONDITIONS and SUPPLEMENTAL GENERAL CONDITIONS.
- 21.3 The CONTRACTOR shall procure and maintain at its own expense during the CONTRACT TIME liability insurance, as hereinafter specified:
 - 21.3.1 General Public Liability including Contractor's Liability as applicable to the CONTRACTOR's obligations. Completed Operations and Products Liability: all on the occurrence basis with Personal Injury coverage and Broad Form Property Damage. Products and Completed Operations shall be maintained for up to 3 years after the COMPLETION of the PROJECT.

Bodily Injury and Accidental Death - General Liability

Combined Single Limit/Annual Aggregate \$1,000,000/\$2,000,000

Property Damage - General Liability

Combined Single Limit/Annual Aggregate \$1,000,000/\$2,000,000

<u>Bodily Injury - Automobile Liability</u> (Applicable for any contractor who has an automobile operating exposure.)

Per Accident/Aggregate \$1,000,000/\$2,000,000

<u>Property Damage - Automobile Liability (Applicable for any contractor who has an automobile operating exposure.)</u>

Per Accident/Aggregate \$1,000,000/\$1,000,000

- 21.3.2 The CONTRACTOR's Public Liability Insurance shall provide, by any necessary removal of exclusions or by separate policies of the same limits, coverage for all hazards inherent in the WORK of this PROJECT. Without limiting the foregoing statement, the insurance shall cover the following hazards: Explosion, collapse and underground damage; damage to property in the CONTRACTOR's care, custody or control; rigging, hoisting and moving.
- 21.3.3 The CONTRACTOR shall acquire and maintain Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR and SUBCONTRACTOR as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR's Surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.
- 21.4 The CONTRACTOR shall procure and maintain at its own expense during the CONTRACT TIME, in accordance with the provisions of the laws of the STATE in which the WORK is performed, Worker's Compensation Insurance and Employer's Liability Insurance, including occupational disease provisions for all of its employees at the site(s) of the PROJECT; and, in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Worker's Compensation Insurance and Employer's Liability Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous WORK under this CONTRACT at the site(s) of the PROJECT is not protected under Worker's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of its employees not otherwise protected. The limit of Employer's Workers Compensation and Liability Insurance shall not be less than required by the State of Massachusetts.
 - 21.4.1 Workers Compensation: \$100,000
 - 21.4.2 Employer's Liability: \$2,000,000 per accident, \$2,000,000 disease per employer
- 21.5 The CONTRACTOR shall secure "Special Form" type Builders All Risk Insurance for WORK to be performed. The Builders All Risk Insurance is required on a 100 percent completed value basis on the insurable portion of the work, until the work is completed and accepted by the Owner. The Engineer shall also be listed as additional insured.
- 21.6 The CONTRACTOR shall secure and maintain Owner's Protective Liability Insurance coverage naming the OWNER and the ENGINEER as insured with the same limits and coverages as the CONTRACTOR's General Public Liability, Property Damage Insurance. This insurance shall be in addition to the other required coverages, but shall not duplicate such coverage therein provided.
 - a. Bodily Injury:

Each Occurrence \$1,000,000

b. Property Damage:

Each Occurrence \$1,000,000 Annual Aggregate \$2,000,000

- 21.7 The CONTRACTOR shall secure and maintain Umbrella or Excess Liability Insurance in the amount of Five Million Dollars (\$5,000,000.00) for each occurrence and Five Million Dollars (\$5,000,000.00) as aggregate over and above the primary limits required to be carried. The OWNER shall be named as an additional insured.
- 21.8 Insurance referred to shall be written for not less than any limits of liability required by law, or those set forth above, whichever is greater.
- 21.9 The OWNER reserves the right to require additional insurance coverages, higher limits or both, provided the OWNER will pay the additional premium therefor.

22. CONTRACT SECURITY

22.1 The CONTRACTOR shall within ten (10) days after receipt of the NOTICE OF AWARD furnish the OWNER with a performance bond and payment bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions, and agreements of the CONTRACT DOCUMENTS and upon prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such bonds shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the STATE in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds", as published in the U.S. Treasury Department Circular Number 570. The expense of these bonds shall be borne by the CONTRACTOR. If at any time a surety on any such bonds is declared bankrupt or loses its right to do business in the STATE in which the WORK is to be performed or is removed from the list of Surety Companies Acceptable on Federal Bonds, the CONTRACTOR shall, within ten (10) days substitute an acceptable bond(s) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such bond(s) shall be paid by the CONTRACTOR. No further payments to the CONTRACTOR shall be deemed due nor shall any be made until the new surety or sureties shall have furnished an acceptable bond(s) to the OWNER.

23. ASSIGNMENTS

23.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the CONTRACT or any portion thereof, or of its right, title or interest therein, or its obligations thereunder without written consent of the other party.

24. INDEMNIFICATION

- 24.1 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses, and expenses, including attorney's fees, arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR and SUBCONTRACTOR(s), anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable.
- 24.2 In any and all claims against the OWNER or the ENGINEER, or any of its agents or employees by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them

- may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under Worker's Compensation Acts, Disability Benefit Acts, or other employee benefit acts.
- 24.3 The obligation of the CONTRACTOR under this Article shall not extend to the liability of the ENGINEER, its agents or employees, arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERs, designs or SPECIFICATIONS.
- 24.4 The CONTRACTOR will indemnify and save the OWNER or the OWNER's agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORs, laborers, workmen, mechanics, materialmen, and furnisher of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived.

25. SEPARATE CONTRACTS

- 25.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall promptly connect and coordinate WORK with theirs. If the proper execution or results of any part of the CONTRACTOR's WORK depends upon the WORK of any other contractor, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 25.2 The OWNER may perform additional WORK related to the PROJECT or let other contracts containing provisions similar to these. The CONTRACTOR will afford the other contractors who are parties to such contracts (or the OWNER, if performing the additional WORK itself) reasonable opportunity for the introduction and storage of materials and equipment, and the execution of WORK, and shall properly connect and coordinate WORK with theirs.
- 25.3 If the performance of additional WORK by other contractors or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves the CONTRACTOR in additional expense, or entitles the CONTRACTOR to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim therefor, as provided in Articles 14 and 15.
- 25.4 The OWNER shall have the right to enter the premises for the purpose of doing WORK not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.

26. SUBCONTRACTING

26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORs on those parts of the WORK, which under normal contracting practices are performed, by specialty SUBCONTRACTORs.

- 26.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(s) in excess of fifty (50) percent of the CONTRACT PRICE without prior written approval of the OWNER.
- 26.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORs, and of persons either directly or indirectly employed by them, as they are for the acts and omissions of persons directly employed by them.
- 26.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORs to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORs and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY

- 27.1 The ENGINEER shall act as the OWNER's representative during the construction period. The ENGINEER shall decide questions that may arise as to quality and acceptability of materials furnished and WORK performed. The ENGINEER shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site(s) and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures or construction safety.
- 27.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY

- 28.1 Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the COMPLETION of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2 The OWNER shall provide to the CONTRACTOR information, which delineates and describes the lands owned and rights-of-way acquired.
- 28.3 The CONTRACTOR shall provide at the CONTRACTOR's expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities or for storage of materials.

29. GUARANTY

29.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship; and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

30. CLAIMS AND DISPUTES

- 30.1 All claims, disputes and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims that have been waived by the making and acceptance of final payment as provided by Article 20, shall be entered into a court of competent jurisdiction within the STATE where the WORK is located.
- 30.2 The CONTRACTOR will carry on the WORK and maintain the progress schedule during any disputes and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, unless otherwise mutually agreed in writing.

31. TAXES

31.1 The CONTRACTOR is an exempt purchaser under the Massachusetts Sales Act, Chapter 14 of the Acts of 1966, to the extent that materials and supplies are used or incorporated in the performance of the CONTRACT. The CONTRACTOR shall obtain from the OWNER an exemption certificate number to be used in lieu of paying the tax on exempted items.

32. INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

32.1 The SPECIFICATIONS and the DRAWINGS are intended to describe and provide for a completed PROJECT. They are intended to be complementary, and what is called for by either shall be complete in every detail, notwithstanding that every item necessarily involved is not particularly mentioned, and the CONTRACTOR shall provide all labor and materials necessary for the entire COMPLETION of the WORK intended to be described.

33. SITE REGULATIONS

- 33.1 On or before the COMPLETION of the WORK, the CONTRACTOR shall without charge therefor tear down and remove all buildings and other temporary structures built by the CONTRACTOR, and shall remove and legally dispose of surplus material and rubbish of all kinds from any ground which it has occupied and shall leave the WORK, grounds and surroundings in a clean and neat condition.
- 33.2 Tobacco, Drugs and Liquor Prohibited. The CONTRACTOR shall neither permit nor suffer smoking where it creates a hazard nor the introduction or use of drugs, spirituous

- or intoxicating liquors upon or about the WORK embraced in this CONTRACT or upon any of the ground occupied by the CONTRACTOR.
- 33.3 Posters. The CONTRACTOR shall not permit or suffer any placards, posters or advertisements to be displayed on or about the premises unless approved by the OWNER.

34. LIMITATIONS OF DATA PRESENTED

- 34.1 DRAWINGS, surveys, measurements, dimensions, calculations, estimates, borings and statements as to the condition under which the WORK is to be performed are believed to be correct.
- 34.2 The BIDDER shall carefully examine the CONTRACT DOCUMENTS, including all DRAWINGS, SPECIFICATIONS and ADDENDA, shall visit the site(s) and shall satisfy itself as to the type and quantity of the WORK to be performed. For the purposes of comparing several proposals, the BID shall be based on the data presented and the BIDDER's examination of the site(s).
- 34.3 The locations of all utilities are obtained from the best available sources and are to be considered as approximate insofar as size, location and elevation are concerned. Furthermore, it is expressly understood that there may be utilities in existence other than those shown on the DRAWINGS.

35. HEALTH AND SAFETY EQUIPMENT

- 35.1 As provided for in Article 11, the CONTRACTOR is responsible for establishing and maintaining a health and safety program throughout the course of the PROJECT so as to meet all local, STATE, federal and OSHA requirements.
- 35.2 In order for the OWNER and/or ENGINEER to observe the WORK, the CONTRACTOR shall provide health and safety equipment for such purposes. Such equipment shall specifically include, but not necessarily be limited thereto, the following:
 - 35.2.1 Ear plugs in sufficient quantities
 - 35.2.2 Headset protective hearing devices
 - 35.2.3 Safety glasses/goggles
 - 35.2.4 4-way gas detector meter with lights and alarm (hydrogen sulfide, carbon monoxide, combustible gases and oxygen deficiency)
 - 35.2.5 Tripod (mechanical crank type especially designed and equipped for lifting personnel in and out of confined spaces)
 - 35.2.6 Ropes and harnesses
 - 35.2.7 Disposable coveralls/protective clothing/gloves in sufficient quantity and sizes
 - 35.2.8 Ventilating equipment for confined spaces
 - 35.2.9 Self-contained breathing apparatus (SCBA)

- 35.3 All of the above equipment shall be continuously provided at the worksite(s) and maintained in good working order (including manufacture's recommended maintenance and calibration of the 4-way gas detector and SCBA equipment). It is understood that such equipment shall remain the property of the CONTRACTOR and is in addition to any and all health and safety equipment that the CONTRACTOR is required to have for the CONTRACTOR's health and safety program on-site.
- 35.4 The CONTRACTOR is advised that the OWNER has clearly established on-going Confined Space and Lock-out/Tag-out programs. Where the CONTRACTOR's WORK requires confined space entry into existing facilities and/or lock-out/tag-out of existing equipment and electrical controls, the CONTRACTOR shall strictly abide by the OWNER's programs if they are more stringent than the CONTRACTOR's own procedures.

END OF DOCUMENT

DOCUMENT 00852

SPECIAL CONDITIONS GENERAL

1.1 Statutory Requirements in General

- A. Keep fully informed of all existing and future State and Federal Laws and municipal ordinances and regulations in any manner affecting those engaged or employed in the Work, or the materials used or employed in the Work, or in any way affecting the conduct of the Work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same and of all provisions required by law to be made a part of this Contract, all of which provisions are hereby incorporated by reference and made a part thereof. If any discrepancy or inconsistency is discovered in the Contract Documents for this Work in relation to any such law, ordinance, regulation, order or decree, report the same to the Owner in writing. At all times observe and comply with, and cause all its agents and employees to observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees; and protect and indemnify the Owner and Engineer and all of its and their officers, agents, and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by itself or its employees or subcontractors.
- B. All materials furnished and Work done are to comply with all state and federal laws and regulations.

END OF DOCUMENT

DOCUMENT 00855

SPECIAL CONDITIONS COMMONWEALTH OF MASSACHUSETTS INDEX

Massachusetts General Laws ("2002 Official Edition")

- Article 1 Construction Contracts;...Subcontractor Defined;...Direct Payment... (MGL C.30, s.39F)
- Article 2 Completion of Public Works; Semi-Final and Final Estimates; Payments; Extra Work; Disputed Items MGL. C.30, s.39G)
- Article 3 Deviations (from Plans and Specifications) (MGL C.30, s.39I)
- Article 4 ...Construction Contracts; Effect of Decisions... (MGL C.30, s.39J)
- Article 5 Public Building Construction Contracts; Payments (MGL C.30, s.39K)
- Article 6 ...Work by Foreign Corporations... (MGL C.30, s.39L)
- Article 7 Contracts...; Manner of Awarding (MGL C.30, s.39M)
- Article 8 (Claims)...for...(Unforeseen) Conditions (MGL C.30, s.39N)
- Article 9 (Claims)...for...Delay... (MGL C.30, s.390)
- Article 10 ...Decisions...(and Approvals by Engineer or Architect) (MGL C.30, s.39P)
- Article 11 (Record Keeping) (MGL C.30, s.39R)
- Article 12 Public Works; Preference in Employment, Wages (MGL C.149, s.26)
- Article 13 Public Contracts;...Hours...of Work... (MGL C.149, ss.34)
- Article 14 Minimum Wage Rates

(MGL C.149, ss.26 to 27H)

- "Weekly Payroll Records Report and Statement of Compliance" (Statement of Compliance to be furnished to the Massachusetts Executive Office of Labor within fifteen (15) days after completion of work)
- "Weekly Payroll Report Form"
- "Minimum Wage Rates for Apprentices"
- "State Wage Rates"
- Article 15 (Notice Requirements for Excavations in Public Ways (MGL C.82, ss.40-40E)

SPECIAL CONDITIONS - COMMONWEALTH OF MASSACHUSETTS

Article 1. CONSTRUCTION CONTRACTS...;...SUBCONTRACTOR DEFINED;...DIRECT PAYMENT...

(General Laws, Chapter 30, Section 39F - "2002 Official Edition")

- "(1) Every contract awarded pursuant to sections forty-four A to L, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.
- (a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by the subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.
- (d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of the balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.

- (e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct form a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.
- (f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by a decree of a court of competent jurisdiction.
- (g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account for accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of the such payment.
- (h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.
- (i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h)."...

Article 2. COMPLETION OF PUBLIC WORKS; SEMI-FINAL AND FINAL ESTIMATES; PAYMENTS; EXTRA WORK; DISPUTED ITEMS

(General Laws, Chapter 30, Section 39G - "2002 Official Edition")

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

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

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

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

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

The awarding authority shall pay the amount due pursuant to any substantial completion or final estimate within thirty-five days after receipt of written acceptance for such estimate from the contractor and shall pay interest on the amount due pursuant to such estimate at the rate hereinabove provided from that thirty-fifth day to the date of payment. Within 15 days, 30 days in the case of the commonwealth, after receipt from the contractor, at the place designated by the awarding authority, if such place is so designated, of a periodic estimate requesting payment of the amount due for the preceding periodic estimate period, the awarding authority shall make a periodic payment to the contractor for the work performed during the preceding periodic estimate period and for the materials not incorporated in the work but delivered and suitably stored at the site, or at some location agreed upon in writing to which the contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that the materials are free from all encumbrances. The awarding authority shall include with each such payment interest on the amount due pursuant to such periodic estimate at the rate herein above provided from the due date. In the case of periodic payments, the contracting authority may deduct from its payment a retention based on its estimate of the fair value of its claims against the contractor, a retention for direct payments to subcontractors based on demand for same in accordance with the provisions of section thirty-nine F, and a retention to secure satisfactory performance of the contractual work not exceeding five percent of the approved amount of any periodic payment, and the same right to retention shall apply to bonded subcontractors entitled to direct payment under section thirty-nine F of chapter thirty; provided, that a five percent value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

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

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

Article 3. DEVIATIONS (FROM PLANS AND SPECIFICATIONS)

(General Laws, Chapter 30, Section 39I - "2002 Official Edition")

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

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

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

Article 4. ...CONSTRUCTION CONTRACTS; EFFECT OF DECISIONS...

(General Laws, Chapter 30, Section 39J - "2002 Official Edition")

"Notwithstanding any contrary provision of any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount of the contract is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, district, board, commission or other public body, a decision, by the contracting body or by any administrative board, official or agency, or by any architect or engineer, on a dispute, whether of fact or of law, arising under said contract shall not be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily is unsupported by substantial evidence, or is based upon error of law."

Article 5. PUBLIC BUILDING CONSTRUCTION CONTRACTS; PAYMENTS

(General Laws, Chapter 30, Section 39K - "2002 Official Edition")

"Every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building by the commonwealth, or by any county, city, town, district, board, commission, or other public body, when the amount is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, town, district, board, commission or other public body, shall contain the following paragraph: 'Within fifteen days (30 days in the case of the commonwealth, including local housing authorities) after receipt from the contractor, at the place designated by the awarding authority if such a place is so

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

The awarding authority may make changes in any periodic estimate submitted by the contractor and the payment due on said periodic estimate shall be computed in accordance with the changes so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the awarding authority may, within seven days after receipt, return to the contractor for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter. The provisions of section thirty-nine G shall not apply to any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building to which this section applies.

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

A certificate of the architect to the effect that the contractor has fully or substantially completed the work shall, subject to the provisions of section thirty-nine J, be conclusive for the purposes of this section."

Article 6. ...WORK BY FOREIGN CORPORATIONS...

(General Laws Chapter 30, Section 39L - "2002 Official Edition")

"The Commonwealth and every county, city, town, district, board, commission or other public body which, as the awarding authority, requests proposals, bids or subbids for any work in the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or other public works (1) shall not enter into a contract for such work with, and shall not approve as a subcontractor furnishing labor and materials for a part of any such work, a foreign corporation which has not filed with such awarding authority a certificate of the state secretary stating that such corporation has complied with sections three and five of chapter one hundred and eighty-one and the date of such compliance, and (2) shall report to the state secretary and to the department of corporations and taxation any foreign corporation performing work under such contract or subcontract, and any person, other than a corporation, performing work under such contract or subcontract, and residing or having a principal place of business outside the Commonwealth."

Article 7. CONTRACTS...; MANNER OF AWARDING

(General Laws, Chapter 30, Section 39M - "2002 Official Edition")

"(a) Every contract for the construction, reconstruction, alteration, remodeling or repair of any public work, or for the purchase of any material, as hereinafter defined, by the commonwealth, or political subdivision thereof, or by any county, city, town, district, or housing authority, and estimated by the awarding authority to cost more than ten thousand dollars, and every contract for the construction, reconstruction, installation, demolition, maintenance or repair of any building by a public agency, as defined by subsection one of section forty-four A of chapter one hundred and forty-nine, estimated to cost more than ten thousand dollars but not more than twenty-five thousand dollars, shall be awarded to the lowest responsible and eligible bidder on the basis of competitive bids publicly opened and read by such awarding authority forthwith upon expiration of the time for the filing thereof; provided, however, that such awarding authority may reject any and all bids, if it is in the public interest to do so. Every bid for such contract shall be accompanied by a bid deposit in the form of a bid bond, or cash, or a certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company, payable to the awarding authority. The amount of such bid deposit shall be five per cent of the value of the bid. Any person submitting a bid under this section shall, on such bid, certify as follows:

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

(Name of person signing bid)
 (Company)

This paragraph shall not apply to the award of any contract subject to the provisions of sections forty-four A to forty-four J, inclusive, of chapter one hundred and forty-nine and every such contract shall continue to be awarded as provided therein. In cases of extreme emergency caused by enemy attack, sabotage or other such hostile actions or resulting from explosion, fire, flood, earthquake, hurricane, tornado or other such catastrophe, an awarding authority may, without competitive bids and notwithstanding any general or special law, award contracts otherwise subject to this paragraph to perform work and to purchase or rent materials and equipment, all as may be necessary for temporary repair and restoration to service of any and all public work in order to preserve the health and safety of persons or property; provided that this exception shall not apply to any permanent reconstruction, alteration, remodeling or repair of any public work.

- (b) Specifications for such contracts, and specifications for contracts awarded pursuant to the provisions of said sections forty-four A to forty-four L of said chapter one hundred and forty-nine, shall be written to provide for full competition for each item of material to be furnished under the contract; except, however, that said specifications may be otherwise written for sound reasons in the public interest stated in writing in the public records of the awarding authority or promptly given in writing by the awarding authority to anyone making a written request therefor, in either instance such writing to be prepared after reasonable investigation. Every such contract shall provide that an item equal to that named or described in the said specifications may be furnished; and an item shall be considered equal to the item so named or described if, in the opinion of the awarding authority: (1) it is at least equal in quality, durability, appearance, strength and design, (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased, and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the said specifications. For each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or produces, and for the equal of any one said named or described materials.
- (c) The term "lowest responsible and eligible bidder" shall mean the bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (3) who, where the provision of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder; and (4) who obtains within ten days of the notification of contract award the security by bond required under section twenty-nine of chapter one hundred and forty-nine; provided that for the purposes of this section the term "security by bond" shall mean the bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority.
- (d) The provisions of this section shall not apply (1) to the extent that they prevent the approval of such specifications by any contributing federal agency, (2) to materials purchased under specifications of the state department of highways at prices established by the said department pursuant to advertisement and bidding in connection with work to be performed under the provisions of chapter eighty-one or chapter ninety, (3) to any transaction between the commonwealth and any of its political subdivisions or between the commonwealth and any public service corporation, and (4) to any contract of not more than twenty-five thousand dollars awarded by a governmental body, as defined by section two of chapter thirty B, in accordance with the provisions of section five of said chapter thirty B; and (5) to any contract solely for the purchase of material awarded by a governmental body, as defined by section 2 of chapter 30B, in accordance with section 5 of said chapter 30B.
- (e) The word "material" as used in this section shall mean and include any article, assembly, system, or any component part thereof."

Article 8. (CLAIMS)...FOR....(UNFORESEEN) CONDITIONS

(General Laws, Chapter 30, Section 39N - "2002 Official Edition")

"Every contract subject to section forty-four A of chapter one hundred and forty-nine or subject to section thirty-nine M of chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims:

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

Article 9. (CLAIMS)...FOR....DELAY...

(General Laws, Chapter 30, Section 390 - "2002 Official Edition")

"Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

- (a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.
- (b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing, as soon as practicable after the end of the suspension, delay, interruption of failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act of failure to act involved in the claim."

Article 10. ...DECISIONS...(AND APPROVALS BY ENGINEER OR ARCHITECT)

(General Laws, Chapter 30, Section 39P - "2002 Official Edition")

"Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made."

Article 11. (RECORD KEEPING)

(General Laws, Chapter 30, Section 39R - "2002 Official Edition")

(Only applies to contracts with an award or estimated amount greater than \$100,000)

- "(a) The words defined herein shall have the meaning stated below whenever they appear in this section:
- (1) "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.
- (2) "Contract" means any contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount of estimated amount greater than one hundred thousand dollars.
- (3) "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.
- (4) "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his/her residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.
- (5) "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

- (6) "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by a responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.
- (7) "Management", when used herein, means the chief executive officers, partners, principals, or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.
- (8) Accounting term, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.
- (b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty of section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:
- (1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which is reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and
- (2) until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and
- (3) if the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and
- (4) if the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and
- (5) if the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.
- (c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:
 - (1) transactions are executed in accordance with management's general and specific authorization;
 - (2) transactions are recorded as necessary:
 - (i) to permit preparation of financial statements in conformity with generally accepted accounting principles, and
 - (ii) to maintain accountability for assets;

- (3) access to assets is permitted only in accordance with management's general or specific authorization; and
- (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.
- (d) Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to
- (1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and
- (2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.
- (e) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.
- (f) The office of inspector general, the commissioner of capital asset management and maintenance and any other awarding authority shall enforce the provisions of this section. The deputy commissioner of capital asset management and maintenance may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to section forty-four C of chapter one hundred and forty-nine.
- (g) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph (b)."

Article 12. PUBLIC WORKS; PREFERENCE...(IN EMPLOYMENT); WAGES

(General Laws, Chapter 149, Section 26 - "2002 Official Edition")

"In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works by the commonwealth, or by a county, town, authority or district, or by persons contracting or subcontracting for such works, preference shall first be given to citizens of the commonwealth who have been residents of the commonwealth for at least six months at the commencement of their employment who are male veterans as defined in clause Forty-third of section seven of chapter four, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the commonwealth generally who have been residents of the commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town, authority or district.

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

Article 13. PUBLIC CONTRACTS; HOURS OF WORK

(General Laws, Chapter 149, Section 34 - "2002 Official Edition")

"Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or town, subject to section thirty, is a party, shall contain a stipulation that 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 the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in case of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided, that in contracts entered into by the department of highways for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or subcontractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void."

Article 14. MINIMUM WAGE RATES

In compliance with Massachusetts Laws, Chapter 149, Sections 26 to 27H inclusive, job classifications and determinations of the rate of wages applying thereto have been established by the Executive Office of Labor of the Commonwealth of Massachusetts and said job classifications and determinations of the rate of wages applicable to this project are included at the end of this Article.

<u>The required Weekly Payroll Records Report & Statement of Compliance (2 Pages), and Prevailing Wage Rates (39 Pages) are all attached at the end of this DOCUMENT 00855, SPECIAL CONDITIONS, MASSACHUSETTS.</u>

Article 15. (NOTICE REQUIREMENTS FOR EXCAVATIONS IN PUBLIC WAYS)

(General Laws, Chapter 82, Sections 40-40E - "2002 Official Edition")

"Section 40. The following words, as used in this section and sections 40A to 40E, inclusive, shall have the following meanings; -

"Company", natural gas pipeline company, petroleum or petroleum products pipeline company, public utility company, cable television company, and municipal utility company or department that supply gas electricity, telephone, communication or cable television services or private water companies within the city or town where such excavation is to be made.

"Description of excavation location", such description shall include the name of the city or town, street, way, or route number where appropriate, the name of the streets at the nearest intersection to the excavation, the number of the buildings closest to the excavation or any other description, including landmarks, utility pole numbers or other information which will accurately define the location of the excavation.

"Emergency", a condition in which the safety of the public is in imminent danger, such as a threat to life or health or where immediate correction is required to maintain or restore essential public utility service.

"Excavation", an operation for the purpose of movement or removal of earth, rock or the materials in the ground including, but not limited to, digging, blasting, augering, backfilling, test boring, drilling, pile driving, grading, plowing in, hammering, pulling in, jacking in, trenching, tunneling and demolition of structures, excluding excavation by tools manipulated only by human power for gardening purposes and use of blasting for quarrying purposes.

"Excavator", any entity including, but not limited to, a person, partnership, joint venture, trust, corporation, association, public utility, company or state or local government body which performs excavation operations.

"Premark", to delineate the general scope of the excavation or boring on the paved surface of the ground using white paint, or stakes or other suitable white markings on nonpaved surfaces. No premarking shall be acceptable if such marks can reasonably interfere with traffic or pedestrian control or are misleading to the general public. Premarking shall not be required of any continuous excavation that is over 500 feet in length.

"Safety Zone", a zone designated on the surface by the use of standard color-coded markings which contains the width of the facilities plus not more than 18 inches on each side.

"Standard color-coded markings", red - electric power lines, cables, conduit or light cables; yellow - gas, oil, street petroleum, or other gaseous materials; orange - communications cables or conduit, alarm or signal lines; blue - water, irrigation and slurry lines; green - sewer and drain lines; white - premark of proposed excavation.

"System", the underground plant damage prevention system as defined in section 76D of chapter 164.

Excavations; notice.

Section 40A. No excavator installing a new facility or an addition to an existing facility or the relay or repair of an existing facility shall, except in an emergency, make an excavation, in any public or private way, any company right-of-way or easement or any public or privately owned land or way, unless at least 72 hours, exclusive of Saturdays, Sundays and legal holidays but not

more than 30 days before the proposed excavation is to be made, such excavator has premarked not more than 500 feet of the proposed excavation and given an initial notice to the system. Such initial notice shall set forth a description of the excavation location in the manner as herein defined. In addition, such initial notice shall indicate whether any such excavation will involve blasting and, if so, the date and the location at which such blasting is to occur.

The notice requirements shall be waived in an emergency as defined herein; provided, however, that before such excavation begins or during a life-threatening emergency, notification shall be given to the system and the initial point of boring or excavation shall be premarked. The excavator shall ensure that the underground facilities of the utilities in the area of such excavation shall not be damaged or jeopardized.

In no event shall any excavation by blasting take place unless notice thereof, either in the initial notice or a subsequent notice accurately specifying the date and location of such blasting shall have been given and received at least 72 hours in advance, except in the case of an unanticipated obstruction requiring blasting when such notice shall be not less than four hours prior to such blasting. If any such notice cannot be given as aforesaid because of an emergency requiring blasting, it shall be given as soon as may be practicable but before any explosives are discharged.

Designation of location of underground facilities.

Section 40B. Within 72 hours, exclusive of Saturdays, Sundays and legal holidays, from the time the initial notice is received by the system or at such time as the company and the excavator agree, such company shall respond to the initial notice or subsequent notice by designating the location of the underground facilities within 15 feet in any direction of the premarking so that the existing facilities are to be found within a safety zone. Such safety zone shall be so designated by the use of standard color-coded markings. The providing of such designation by the company shall constitute prima facie evidence of an exercise of reasonable precaution by the company as required by this section; provided, however; that in the event that the excavator has given notice as aforesaid at a location at which because of the length of excavation the company cannot reasonably designate the entire location of its facilities within such 72 hour period, then such excavator shall identify for the company that portion of the excavation which is to be first made and the company shall designate the location of its facilities in such portion within 72 hours and shall designate the location of its facilities in such portion within a reasonable time thereafter. When an emergency notification has been given to the system, the company shall make every attempt to designated its facilities as promptly as possible.

Excavator's responsibility to maintain designation markings; damage caused by excavator.

Section 40C. After a company has designated the location of its facilities at the location in accordance with section 40B, the excavator shall be responsible for maintaining the designation markings at such locations, unless such excavator request remarking at the location due to the obliteration, destruction or other removal of such markings. The company shall then remark such location within 24 hours following receipt of such request.

When excavating in close proximity to the underground facilities of any company when such facilities are to be exposed, non-mechanical means shall be employed, as necessary, to avoid damage in locating such facility and any further excavation shall be performed employing reasonable precautions to avoid damage to any underground facilities including, but not limited to, any substantial weakening of structure or lateral support of such facilities, penetration or destruction of any pipe, main, wire or conduit or the protective coating thereof, or damage to any pipe, main wire or conduit.

If any damage to such pipe, main, wire or conduit or its protective coating occurs, the company shall be notified immediately by the excavator responsible for causing such damage.

The making of an excavation without providing the notice required by section 40A with respect to any proposed excavation which results in any damage to a pipe, main, wire or conduit, or its protective coating, shall be prima facie evidence in any legal or administrative proceeding that such damage was caused by the negligence of such person.

Local laws requiring excavation permits; public ways.

Section 40D. Nothing contained herein shall be construed to affect or impair local ordinances or by-laws requiring permits to be obtained before excavation in a public way; provided, however, that notwithstanding any contrary provision of local ordinances or by-laws, no permit to excavate in a public way shall be approved or issued by the officer or board having charge of any such way, except in an emergency as herein defined, until such time as proof of such notices to the system have been filed with such officer or board by the applicant for the permit as required by this section and notice of issuance of a permit to excavate have been served by such officer or board upon the appropriate water and sewer department.

Violations of secs. 40A - 40E; punishment.

Section 40E. Any person or company found by the department of telecommunications and energy, after a hearing, to have violated any provision of sections 40A to 40E, inclusive, shall be fined \$500 for the first offense and not less than \$1,000 nor more than \$5,000 for any subsequent offense within 12 consecutive months as set forth by the rules of said department; provided, however, that nothing herein shall be construed to require forfeiture of any penal sum by a state or local government body for violation of section 40A or 40C; and provided, further, that nothing herein shall be construed to require the forfeiture of any penal sum by a residential property owner for the failure to premark for an excavation on such person's residential property."

Article 16. (INVITATION TO BID: NOTICE: CONTENTS)

(General Laws, Chapter 149, Section 44J "2002 Official Edition")

"Section 44J. (1) No public agency or authority of the commonwealth or any political subdivision thereof shall ward any contract for which competitive bids are required pursuant to section forty-four A of this chapter or section thirty-nine M of chapter thirty, or for which competitive proposals are required pursuant to subsection (4) of section forty-four E of this chapter or section eleven C of chapter twenty-five A, unless a notice inviting bids or proposals therefor shall have been posted no less than one week prior to the time specified in such notice for the receipt of said bids or proposals in a conspicuous place in or near the offices of the awarding authority, and shall have remained posted until the time so specified, and unless such notice shall also have been published at least once not less than two weeks prior to the time so specified in the central register published by the secretary of state pursuant to section twenty A of chapter nine and in a newspaper of general circulation in the location of the proposed project. Said notice shall also be published at such other times and in such other newspapers or trade periodicals as the commissioner of capital asset management and maintenance may require, having regard to the locality of the work involved.

(2) Said notice shall specify the time and place where place and specifications of the proposed work may be had; the time and place of submission of general bids; and the time and place for opening of the general bids. For contracts subject to the provisions of sections forty-four A to H, inclusive, of this chapter, said notice shall also specify the time and place for submission of filed sub-bids, where required pursuant to section forty-four F; and the time and place for opening of said filed sub-bids.

Said notice shall also provide sufficient facts concerning the nature and scope of each project, the type and elements of construction, and such other information as will assist applicants in deciding to bid on such contract."

END OF TEXT

REFER TO ATTACHED

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE PREVAILING WAGE RATES

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form is available from the Department of Labor Standards (DLS) at www.mass.gov/dols/pw and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

On a weekly basis, every contractor and subcontractor is required to submit a certified copy of their weekly payroll records to the awarding authority; this includes the payroll forms and the Statement of Compliance form. The certified payroll records must be submitted either by regular mail or by e-mail to the awarding authority. Once collected, the awarding authority is required to preserve those records for three years from the date of completion of the project.

Each such contractor and subcontractor shall furnish weekly **and** within 15 days after completion of its portion of the work, to the awarding authority directly by first-class mail or e-mail, a statement, executed by the contractor, subcontractor or by any authorized officer thereof who supervised the payment of wages, this form, accompanied by their payroll:

	20
-	, 20
I,	
(Name of signatory party)	(Title)
do hereby state:	
That I pay or supervise the payr	ment of the persons employed by
	on the
(Contractor, subcontractor or public body)	(C 1 0 /
and that all mechanics and apprentices,	teamsters, chauffeurs and laborers employed on
said project have been paid in accordance	ce with wages determined under the provisions of
sections twenty-six and twenty-seven of	f chapter one hundred and forty nine of the
General Laws.	
Signa	ature

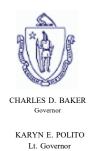
Company's Name:		Address	Address:				Phone No.:		Payroll N	0.:								
Employer's Signature:		Title:								Contra	ct No:	Tax Payer II) Number	Work We	ek Ending:			
Awarding Authority's Name:		Public V	Vorks F	Project	Name:					Public	Works P	roject Loca	ation:	Min. Wag	e Rate Shee	et Number		
General / Prime Contractor's	Name:	Subcon	tractor'	s Name) :							"Employer"	Hourly Fring	e Benefit Co	ontributions			
															(B+C+D+E)	(A x F)		
		Employee is OSHA	_			Но	ours Wo	rked			Project Hours	Hourly	Health &	ERISA		Total	Project Gross Wage s	
Employee Name & Complete	Work	10 certified	Appr. Rate								(A) All Other	Base Wage	Welfare Insurance	Pension Plan	Supp. Unemp.	Hourly Prev. Wage		Check No.
Address	Classification:	(?)	(%)	Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.	Hours	(B)	(C)	(D)	(E)	(F)	Wages	(H)
Are all apprentice employee	s identified abo	ve currei	ntly rea	istered	l with t	he MA	DI S's	Divisio	n of Δ	nnrenti	ce Stanc	larde?		YES		NO		

MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM

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

Date Received I	by Awarding Authority
/	1

Page____of___



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

Prevailing Wage Rates

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

RONALD L. WALKER, II
Secretary
HEATHER E. ROWE
Director

Awarding Authority: Hudson Board of Selectmen

Contract Number: 15-01 City/Town: HUDSON

Description of Work: The work of this project consists of removal and replacement of virgin granular activated carbon (GAC) at the

Cranberry Well PFAS Treatment System.

Job Location: Hudson MA

DOCUMENT 00860

SPECIAL CONDITIONS MASSACHUSETTS EQUAL EMPLOYMENT OPPORTUNITY

	Page No.
The Town of Hudson's Policy Statement	2
The Town of Hudson's Affirmative Action Policy Statement	3
The Commonwealth of Massachusetts Supplemental Equal Employment Opportunity Anti-Discrimination And Affirmative Action Program	4-8

DOCUMENT 00905 CHANGE ORDER FORM

ORDER NO:
DATE:
AGREEMENT DATE:
NAME OF PROJECT:
OWNER:
CONTRACTOR:
The following changes are hereby made to the CONTRACT DOCUMENTS:
JUSTIFICATION:
Change to CONTRACT PRICE: \$
Original CONTRACT PRICE: \$
Current CONTRACT PRICE adjusted by previous CHANGE ORDER: \$
The CONTRACT PRICE due to this CHANGE ORDER will be (increased) (decreased) by: \$
The New CONTRACT PRICE including this CHANGE ORDER will be: \$
Change to CONTRACT TIME:
The CONTRACT TIME will be (increased) (decreased) bycalendar days.
The date for completion of all work will be
REQUESTED BY:
RECOMMENDED BY:
ORDERED BY:
ACCEPTED RV

END OF DOCUMENT

DOCUMENT 00945

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner's Project No.	Engineer's Project No.				
Project: Cranberry Well Removal, Disposal & Replacement of GAC Filter Media					
Contractor					
Contract For					
This Certificate of Substantial Conthe following specified parts thereo	npletion applies to all Work under the Contract Documents or to of:				
То	Owner				
And To	Contractor				
The Work to which this Certificate Owner, Contractor, and Engineer, accordance with the Contract Documents	ate applies has been inspected by authorized representatives of and that Work is hereby declared to be substantially complete in aments on				
	Date Of Substantial Completion				
inclusive, and the failure to include complete all the Work in accordant	repleted or corrected is attached hereto. This list may not be all- de an item in it does not alter the responsibility of Contractor to nee with the Contract Documents. The items in the tentative list of Contractor withindays of the above date of Substantial				

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as follows: Responsibilities: Owner: Contractor: The following documents are attached to and made a part of this Certificate: This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents. Executed by Engineer on , 2024 Engineer Contractor accepts this Certificate of Substantial Completion on ________, 2024 Contractor Owner accepts this Certificate of Substantial Completion on , 2024 Owner

END OF DOCUMENT

By _____

DOCUMENT 00950

WAIVER OF LIENS

Contract No.:		Agreement Date:
Owner:		
Project Name: Remov	al & Replacement	of Filter Media & Vessel Repair
Completion Date per A	Agreement and C	hange Orders:
payments received from above have been applie incurred in connection Contract, being Estima equipment incorporated Partial Payment are free those listed below by of	n the Owner on acd by the undersign with Work cove tes Number 1 through the said Project of and clear of all bligee, nature and set to the said Project of the said clear of all bligee, nature and set the said set to the sa	rs under penalty of perjury that (1) all previous progress count of Work performed under the Contract referred to ed to discharge, in full, all obligations of the undersigned red by prior Estimates for Partial Payment under said ough inclusive; and (2) all labor, materials and or otherwise listed in or covered by these Estimates for iens claims, security interests and encumbrances, except amount of obligation and covered by appropriate bond or attached to and made a part of this certification.
Obligation	_	Bond
Date	Contract Signed	by Officer of Corporation
	Title	
COUNTY	OF	
STATE OF		
	knov	, 2024 personally appeared wn to me, who being duly sworn, did depose and save (Officer) of the Contractor above mentioned; that he
executed the above stat therein are true, correct		f said Contractor and that all of the statements contained

NOTARY PUBLIC

DOCUMENT 00960 CERTIFICATE OF FINAL PAYMENT AND COMPLETION OF WORK

Contract No.:	Agreement Date:	
Owner:		
Project Name: Cranberry	Well Removal, Disposal & Replacement of G	AC Filter Media
Completion Date per Agr	eement and Change Orders:	
F	INAL CERTIFICATION OF CONTRACTOR	
Address:		
agrees to accept \$	as full and final payment for	all work completed under
this Contract dated	with the	(Owner)
for Contract No,		
Documents, and that all lal	ion has been carried out in substantial compor, equipment, materials and Subcontractors direments of the General Laws of the Common	have been or will be paid
Date	Contractor	
	Signed by Officer of Corporation	
	Title	

END OF DOCUMENT 00960-1

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.1 SCOPE

A. This Work of this section includes the furnishing of all labor, materials, tools and equipment required by the Contractor to complete the requirements for submittals as specified herein.

1.2 BEFORE STARTING WORK

A. Progress Schedule

- 1. The Contractor shall prepare and submit to the Engineer for approval, a progress schedule. This submittal shall be made within ten (10) days from the effective date of Agreement. The method of schedule preparation required is a Gantt Chart or other type of graphic description showing the proposed sequence and dates for Work activities.
- 2. Approval of the schedule by the Owner is advisory only and shall not relieve the Contractor of its responsibility for accomplishing the Work within the contract times. Omissions and errors in the approved schedule shall not excuse performance less than that required by the Contract. Approval by the Engineer in no way relieves the Contractor from any liabilities for time or cost overruns from shortcomings in such schedules.

B. Schedule of Values

1. The Contractor shall submit to the Engineer a schedule of values representing a detailed subdivision of the lump sum and unit prices in the Contract. This subdivision, when approved by the Engineer, will become the basis for computing the Contractors' monthly progress payments. If practical, the schedule of values shall be developed by assigning a cost value to the appropriate activities contained in the preliminary progress schedule. If activities, or other line items, in the schedule of values contain costs associated with material, labor or subcontracts these costs are to be identified separately by listing the activity multiple times and identifying material, labor and subcontract with a suffix M, L and S respectively. Cost values for activities representing materials, equipment only shall be assigned to the activity representing delivery of such material and equipment to the Project site.

- 2. In addition to the cost of material, labor and subcontracts, the following costs are to be identified separately in the schedule of values accompanied by such supporting documentation as required by the Engineer to substantiate the amounts listed.
 - a. Mobilization To include Contractor's actual cost to setup temporary facilities at the Project site.
 - b. Bonds, Insurance To reflect premiums paid, or to be paid, for Bonds and insurance required to be provided per the Contract Documents. Additional insurance coverage or bonds purposed by the Contractor at its option shall be considered general overhead and apportioned to construction activity costs.
 - c. Project Site Overhead To reflect the cost of maintaining the temporary facilities at the Project site including the cost of direct field supervision. This value, when approved, will be paid to the Contractor in equal monthly increments based on the number of months between mobilization and final completion.
 - d. Demobilization To reflect the cost of removing the temporary facilities and final site cleanup.
 - e. Permits To include fees required for any permits which Contractor is required to obtain including inspection fees associated with such permits.
 - f. Containment To reflect the cost of erecting and maintaining an approved containment system in accordance with the Contract Documents.
 - g. First Anniversary Inspection To include the cost of all labor, tools, equipment, and materials for coordination, site visit, inspection, and all related Work to perform the First Anniversary Inspection.
 - h. The cost of home office overhead, profit, financing, contingencies, first anniversary inspection are to be apportioned to the construction activities in the schedule of values based on the percentage that each construction activity cost represents when compared to the subtotal of all construction activity costs. This subtotal is excluding mobilization, demobilization, job site overhead, permits, home office overhead, profit, financing, and contingencies. The total of all items in the schedule of values shall equal the total Contract amount.

C. Cash Flow Schedule

- 1. Accompanying the progress schedule required above, the Contractor shall submit to the Engineer, for approval, a Cash Flow Schedule. The Cash Flow Schedule shall show the amounts of money by months that will be required to reimburse the Contractor for Work performed during each month of the Contract schedule. The sum of all the monthly cash requirements shall equal the total Contract amount. The monthly cash requirements shall be proportioned based on the progress schedule. The approved cash flow schedule will reflect the Contractor's schedule performance as of the date of approval. This process of approving cash flow schedules will occur with each required schedule update.
- 2. The approved cash flow schedule will be used by the Owner to program funds for progress payments to the Contractor. Monthly payments will be made to the Contractor in accordance with the Contract Agreement, but at no time will the aggregate amount of payments exceed the accumulated amount of payments for the same period of the approved cash flow schedule.

1.3 REQUIREMENTS FOR CONFORMING TO SCHEDULE

A. If, in the opinion of the Engineer, the Contractor falls behind the progress schedule, the Contractor shall take such steps as will be necessary to improve its progress, and Owner may require Contractor to increase the number of shifts and overtime operations, days of Work, and the amount of construction planned, and to submit for approval such supplementary schedule or schedules as may be deemed necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the Owner. An updated cash flow schedule will be required in this occurrence and shall be provided with the supplementary schedules referenced above.

1.4 ADJUSTMENT OF PROGRESS SCHEDULE AND CONTRACT TIMES

A. If the Contractor desires to make changes in his method of operating which affect the approved progress schedule, it shall notify the Engineer in writing stating what changes are proposed and the reason for the change. If the Engineer approves these changes, the Contractor shall revise and submit for approval, without additional cost to the Owner, all of the affected portions of the schedule.

- B. The Contract schedule will be adjusted only for causes specified in the General Conditions. In the event the Contractor requests an adjustment of the Contract completion schedule, it shall furnish such justification and supporting evidence as the Engineer may deem necessary for a determination as to whether the Contractor is entitled to an adjustment of Contract schedule under the provisions of the General Conditions. The Engineer will, after receipt of such justification and supporting evidence, make findings of fact and will advise the Contractor in writing thereof. If the Engineer finds that the Contractor is entitled to any adjustment of the Contract schedule the Engineer determination as to the total number of days adjustment shall be based upon the currently approved progress schedule and on all data relevant to the adjustment. The Contractor acknowledges and agrees that actual delays in activities, which, according to the progress schedule, do not affect the Contract completion date, will not be the basis for an adjustment of Contract schedule.
- C. From time to time it may be necessary for the progress schedule and contract times to be adjusted by the Owner to reflect the effects of job conditions, weather, technical difficulties, strikes, unavoidable delays on the part of the Owner, and other unforeseeable conditions which may indicate schedule and contract time adjustments. Under such conditions, the Owner shall direct the Contractor to reschedule the Work and contract time to reflect the changed conditions, and the Contractor shall revise its schedule accordingly. No additional compensation shall be made to the Contractor for such schedule changes except as provided in the General Conditions. Unless otherwise directed, the Contractor shall take all possible actions to minimize any extension to the Contract schedule and any additional cost to the Owner.

1.5 SAMPLES

- A. When required by the Owner or where noted in other Sections of these Specifications, samples or materials shall be submitted for approval.
- B. Include identification on each sample, with full Project information.
- C. Submit the number or samples specified in individual specification sections; one of which will be retained by Owner.
- D. Reviewed samples that may be used in the Work are indicated in individual specification sections.

1.6 PROGRESS PAYMENTS

The detailed arrangement for submittal of progress payments shall be discussed at Α. the initial job conference. In general, progress payments shall be submitted monthly in a format acceptable to the Engineer. The progress payment request shall be based on the approved schedule of values and should provide the percentage of completion, total dollar value completed, dollar value completed prior to the current payment, and the amount requested for this progress payment for each line item contained in the schedule of values. Progress payment requests for material and equipment suitably stored but not yet incorporated into the Work shall be accompanied by a copy of the appropriate manufacturers invoice, shipping order, bill of lading, etc. and the progress payment amount shall be the direct cost to the Contractor, for such material. Payment will not be made to the Contractor if, upon inspection by the Engineer, it is determined that the material or equipment does not conform to the requirements of the Contract Documents including proper storage, receipt of approved product submittals, receipt of any special guarantees, Bonds, insurance coverage, any evidence of damage or imperfections, etc.

1.7 CONTRACTOR'S DAILY REPORTS

- A. The Contractor shall prepare and submit daily reports containing the following information:
 - The number of workers and hours worked;
 - A description of work activities performed;
 - A description of any material or equipment deliveries;
 - A description of obstructions encountered; and
 - Temperature, humidity and weather conditions.
- B. The daily reports shall be submitted by the end of the next business day.
- C. Information provided on the daily report shall not constitute notice of delay or any other notice required by the Contract Documents. Notice shall be as required therein.

PART 2 PRODUCTS

A. Specific system submittals will be required for approval on all alternatives not outlined in the Contract Documents.

PART 3 EXECUTION – Not Used.

END OF SECTION

SECTION 01 70 00

PROJECT CLOSEOUT

PART 1 GENERAL

1.1 SCOPE

A. The Work of this section includes the furnishing of all labor, tools, equipment, materials to comply with the requirements of this section.

1.2 MEASUREMENT AND PAYMENT

- A. Measurement and payment for Work described in this section will be made in accordance with the provisions as follows:
 - 1. All costs associated with the Work of this section shall be included in the applicable lump sum prices Bid.
 - 2. There will be no separate payment for the Work of this section.

PART 2 PRODUCTS – Not Used.

PART 3 EXECUTION

3.1 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for the Engineer and Owners inspection. Provide submittals to Engineer that are required by governing or other authorities. Submit Application for final payment identifying total adjusted Contract sum, previous payments, and sum remaining due.

3.2 RESTORATION

A. The Contractor shall restore paving, lawn, gravel, shrubbery, fences, sod or other disturbed surfaces and structures to a condition equal to that before the Work began and to the satisfaction of the Engineer and Owner and shall furnish all labor and materials incidental thereto.

END OF SECTION

SECTION 466313.11

GRANULAR ACTIVATED CARBON

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes

- 1. Furnish all labor, materials, equipment, and supervision for the removal, transport, and reactivation of spent GAC from the filters.
- 2. Furnish all labor, materials, equipment, and supervision for the supply, and installation of Filtrasorb 400 pH granular activated carbon (GAC) into the filters.
- 3. The Owner has determined that specifying this proprietary material for the Project is in the public's best interest as a pilot study was conducted using Calgon Filtrasorb 400 that that was specific to the PFAS being removed and the type of raw water (groundwater) at the Project Site and approved by MassDEP and it was determined to be the only acceptable media.

1.2 PRICE AND PAYMENT PROCEDURES

A. Measurement and payment requirements: per General Conditions.

1.3 REFERENCES

A. Reference Standards

- 1. American Water Works Association (AWWA)
 - a. AWWA B604 Granular Activated Carbon
- 2. ASTM International (ASTM)
 - a. ASTM D2854 Standard Test Method for Apparent Density of Activated Carbon
 - b. ASTM D2862 Standard Test Method for Particle Size Distribution of Granular Activated Carbon

- c. ASTM D2867 Standard Test Methods for Moisture in Activated Carbon
- d. ASTM D4607 Standard Test Method for Determination of Iodine Number of Activated Carbon
- 3. International Organization for Standardization (ISO)
 - a. ISO 9001:2015 Management System Standard
- 4. U.S. Pharmacopeia
 - a. Food Chemical Codex (FCC)
- 5. NSF International (NSF)
 - a. NSF/ANSI 61 Drinking Water System Components Health Effects

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordination, sequencing, and scheduling: per Owner's Requirements.

1.5 SUBMITTALS

- A. Submit in accordance with General Requirements.
- B. Product data for virgin GAC.
- C. Detailed carbon transfer procedure based on preferred method of hydraulic water eduction for installation, Owner providing potable water supply (compressed air is not available) and Contractor providing connecting piping, valves, and equipment as required for carbon transfer

D. Certificates

- 1. Certificate of compliance verifying GAC is 100 percent virgin with no reactivated carbon content whatsoever, 100 percent bituminous coal-based re-agglomerated material manufactured the United States.
- 2. Certificate of Analysis certifying the GAC is in full compliance with Specifications.
- E. Affidavit of Compliance: 20 Year virgin GAC manufacturing experience
- F. Affidavit of Compliance: Owner of two (2) exclusively dedicated potable reactivation facilities

- G. Source of coal, carbon manufacturing location, and description of the reagglomeration/thermal process
- H. Source and field quality control submittals
 - 1. Source of coal, carbon manufacturing location, description of reagglomeration or thermal process, and capacity of the manufacturing facility.
- I. Qualification statements
 - 1. Names and qualifications of personnel or firm performing disinfection and dechlorination Work.
 - 2. Evidence of ability to meet requirements specified in Article 1.06.
- J. Closeout and maintenance material submittals: per Division 01 General Requirements.

1.6 QUALITY ASSURANCE

- A. Provide in accordance with Division 01 General Requirements.
- B. Qualifications: per Division 01 General Requirements and as follows.
 - 1. Trained personnel or firm with minimum 15 years' experience with GAC manufacturing.
 - 2. The GAC manufacturer's field services supervisor with minimum of 5 years' experience in performing carbon exchanges

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Provide in accordance with Division 01 General Requirements.
- B. Ship by bulk hopper truck with a minimum capacity of 20,000 lbs. accompanied by weight certificates of certified weighers.
- C. Submit carbon transfer procedure prior to shipment.

1.8 SITE CONDITIONS

A. Existing conditions: per Division 01 General Requirements.

PART 2 – PRODUCTS

2.1 GENERAL

A. Comply with AWWA B604.

- B. Products in contact with raw or drinking water: in conformance with NSF/ANSI 61 requirements.
- C. Manufacturing: in a facility certified to conform to the Management System Standard ISO 9001 quality standards and at the specific plant or site holding such certification,
- D. The coal shall be mined and the corresponding GAC manufactured in the United States.
- E. The GAC product designated by the bidder as the material to be supplied for this bid shall have twenty (20) years of history of use in municipal drinking water facilities in North America with a minimum of ten (10) installations

2.2 VIRGIN GAC

- A. Provide Calgon Carbon Corporation (Filtrasorb 400 pH) GAC.
- B. Provide 100 percent virgin and 100 percent re-agglomerated bituminous coalbased product sized to a granular form prior to thermal activation compliant with the requirements for activated carbon as defined by the FCC and the coal mined and GAC manufactured in the United States.
- C. Product Requirements

Parameter	Units	Value	Test Method
Iodine Number, min.	mg/g	1000	TM-4, ASTM D4607
Moisture, max.	weight %	2	TM-1, ASTM D2867
Effective size	mm	0.55-0.75	TM-47, ASTM D2862
Uniformity Coefficient, max.		1.9	TM-47, ASTM D2862
Abrasion No, min.		75	TM-9, AWWA B604
Screen Size (US Sieve)			
Larger than No. 12, max.	weight %	5	TM-8, ASTM D2862
Smaller than No. 40, max.	weight %	4	TM-8, ASTM D2862
Ash, max.	weight %	10	TM-5, ASTM D2866
Apparent Density, min.	g/cc	0.50	TM-7, ASTM D2854
Water Extractables, max.	weight %	4	TM-43, FCC

PART 2 – EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's installation instructions and as specified.
- B. Provide compressed air, temporary piping, fittings, supports, and restraints as required for delivery and installation of GAC.
 - 1. Potable water for carbon slurry preparation and carbon transfer will be provided by Owner.
- C. Provide labor, equipment, tools, and connections required to complete backwash of GAC media.
 - 1. Backwash vessels after GAC media installation to produce a 30 percent bed expansion with 55-75 degree F water.
 - 2. Do not allow uncontrolled discharge of backwash water.
 - 3. Provide temporary piping for routing of backwash water to temporary containment. Connect to 8-inch diameter flanged discharge point and route piping to containment.
 - 4. Provide temporary piping and storage tanks of adequate volume to contain water produced by backwashing. Minimum volume: 40,000 gallons.
 - 5. Provide dechlorination of backwash water prior to discharge to stormwater Provide piping, valves, and appurtenances as required to control discharge flow and prevent overland flow, erosion, and damage to adjacent wetlands.
- D. Comply with approved carbon exchange procedure.

3.2 FIELD QUALITY CONTROL

- A. Provide manufacturer's field service engineer to supervise GAC exchange employed directly by GAC manufacturer.
- D. Utilize hydraulic eduction for spent GAC removal.
 - 1. Owner will provide water supply if required.
- B. Transport spent GAC removed from filters to a carbon reactivation facility for reactivation for either pool or custom reactivation subject to carbon acceptance testing. Provide analyzation by the Supplier of spent carbon sample and if deemed unacceptable by the supplier, send the spent GAC for legal disposal via landfill, incineration, or other means as mutually acceptable by the Supplier and Owner.

3.3 CLOSEOUT ACTIVITIES

A. Provide in accordance with Section 01 70 00 Requirements.

END OF SECTION