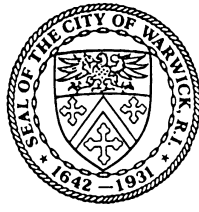


Patricia A. Peshka
Purchasing Agent



Frank J. Picozzi
Mayor

City of Warwick

Purchasing Division
3275 Post Road
Warwick, Rhode island 02886
Tel (401)738-2013
Fax (401) 737-2364

The following notice is to appear on the City of Warwick's website Friday, January 21, 2022. The website address is <http://www.warwickri.gov/bids>.

CITY OF WARWICK BIDS REQUESTED FOR

Bid2022-284 Water Tank Rehabilitation

Specifications are available in the Purchasing Division, Warwick City Hall, Monday through Friday, 8:30 AM until 4:30 PM on or after Friday, January 21, 2022.

Sealed bids will be received by the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 up until **11:00 AM**, Tuesday, February 15, 2022. The bids will be opened publicly commencing at **11:00 AM** on the same day in the Lower Level Conference Room, Warwick City Hall. *Please note that due to COVID-19, employees and visitors must adhere to social distance guidelines. All visitors are advised to wear masks if not fully vaccinated.*

A **mandatory** pre-bid meeting will be held on Thursday, February 3, 2022 10:00 AM at the project site, which is located at 1255 Bald Hill Rd, Warwick, Rhode Island, 02886.

Awards will be made on the basis of the lowest evaluated or responsive bid price. Please note that no bids can be accepted via email or fax.

The City of Warwick, in addition to soliciting bids in response to this bid, may consult, consider, and make an award for any and all open bid offers for a comparable unit as sought herein at the following websites:

RI State MPA: <https://www.ridop.ri.gov/contract-portal/>

NASPO: <https://www.naspo.org/>

NJPA (National Joint Powers Alliance): <https://www.njpacoop.org/cooperative-purchasing>

MHEC (Massachusetts Higher Education Consortium): <https://www.mhec.net/>

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the bid opening date.

Original Signature on File

Patricia A. Peshka
Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

Acknowledgement of Addendum (if applicable)

Addendum Number	Signature of Bidder
_____	_____
_____	_____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY ADDRESS: _____

BIDDER'S SIGNATURE: _____

BIDDER'S NAME (PRINT): _____

TITLE: _____ TEL. NO.: _____

EMAIL ADDRESS: _____*

*Please include your email address. Future bids will be emailed, unless otherwise noted.

=====

II. AWARD AND CONTRACT:

The CITY OF WARWICK, acting as duly authorized through its Purchasing Agent/Finance Director/Mayor, accepts the above bid and hereby enters into a contract with the above party to pay the bid price upon completion of the project or receipt of the goods unless another payment schedule is contained in the specifications. All terms of the specifications, both substantive and procedural, are made terms of this contract.

DATE: _____
Bid2022-284 Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

CERTIFICATION & WARRANT FORM*

**This form must be completed and submitted with sealed bid.
Failure to do so will result in automatic rejection.**

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statutes, laws, ordinances and regulations, in particular, but not limited to Chapter 16- Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

Signature

Date

Company Name

Address

Address

***This form cannot be altered**

**CITY OF WARWICK
NOTICE TO BIDDERS**

Bid2022-284 Water Tank Rehabilitation

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your bid to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

The opening of bids will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any bids on that item has been opened, no other bids on that item will be accepted and any such bid will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a bid thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the bid or has participated in contract negotiations on the part of the City, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for bids, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All bids should be submitted with one (1) original and one (1) copy in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "Bid2022-284 Water Tank Rehabilitation."

Bids received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a bid not properly addressed and identified. No bids will be accepted via facsimile or email.

All proposals submitted become the property of the City and will not be returned. If the company intends to submit **confidential or proprietary information** as part of the proposal, **any limits on the use or distribution of that material should be clearly delineated in writing. This information should be submitted in a sealed envelope, clearly labeled confidential** and where it should be submitted in the response. Please be advised of the Freedom of Information Act as it may pertain to your submittal.

Should you have any questions, please contact Terry DiPetrillo, Water Division Chief, at 401-921-9798.

All bids should be written in ink or typed. If there is a correction with whiteout, the bidder should initial the change.

Negligence on the part of the bidder in preparing the proposal confers no rights for the withdrawal of the proposal after it is open.

Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder should indicate the item or part with the deviation and indicate how the bid will deviate from specifications.

The IRS Form W-9 is available on www.warwickri.gov should be completed and submitted with the bid if the bidder falls under IRS requirements to file this form.

Prevailing Wages will apply to this bid. Current rates may be viewed at <http://www.dlt.state.ri.us/pw>.

The successful bidder must comply with all Rhode Island Laws, applicable to public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The contractor must keep himself informed of and comply with all laws, ordinances and regulations of the federal, state and municipal governments which may apply and be in force during the life of the contract, in any manner which may affect himself/employees or the conduct of the work or the materials used or employed in the work. Before submitting bids, prospective bidders should examine the terms, covenants and conditions of all codes, permits and laws which may apply. By submitting a bid, the bidder agrees to comply with all pertinent laws/regulations if awarded a contract.

Every contractor and subcontractor awarded a contract for public works, construction, alteration and/or repair, including painting and decorating, or public buildings or public works must submit completed RI Certified Weekly Payroll forms listing employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month. These forms may be found at: www.dlt.ri.gov/pw/pwFormsPubs.htm. Certified Payroll forms concerning RI Department of Transportation projects may be submitted on federal forms. However, when a complaint is being investigated by the RI Department of Labor & Training (DLT), the contractor must resubmit the payroll information on the RI Certified Weekly Payroll forms for the entire project.

Awarding authorities, contractors and subcontractors must provide any and all payroll records to the DLT within ten (10) days of any request that is made by the department.

The awarding authority of any public works project will withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the above provisions, as well as any further payments until they comply. The DLT may also impose a penalty of up to \$500 for each calendar day of noncompliance.

Please refer to Rhode Island state laws Section 37-13 for more information.

Bid surety in the form of a bank check, original bid bond or certified check in the amount of

ten (10) percent of the total bid price must be submitted with each bid. If a bid bond is submitted, it must be duly executed by the bidder as principal and having as surety thereon a surety company licensed to do business in the State of Rhode Island and approved by the owner.

The successful bidder must provide the City of Warwick with an original **Certificate of Insurance** for General Liability and Automobile Liability in a minimum amount of \$1 million, naming the **City of Warwick as the additional insured** and so stated on the certificate with the bid name and bid number. It is the vendor's responsibility to provide the City of Warwick with an updated Certificate of Insurance upon expiration of the original certificate.

Failure to provide adequate insurance coverage within the specified duration of time as set forth is a material breach of contract and grounds for termination of the contract.

The successful bidder must furnish a performance and payment bond in the amount of 100 percent of the total bid price.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** from **The Rhode Island Secretary of State** dated no more than thirty (30) days prior to the date upon which the bid approval was made. **Please note that no other State's Certificate of Good Standing will be accepted.**

If required, the successful bidder will provide said **Certificate of Insurance, bonds and State of Rhode Island's Certificate of Good Standing** within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm one year from date of award. Term contracts may be extended for one (1) additional term upon mutual agreement unless otherwise stated.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The contractor must carry sufficient liability insurance and agree to indemnify the City against all claims of any nature, which might arise as a result of his operations or conduct of work.

The Purchasing Agent reserves the right to reject any and all bids, to waive any minor deviations or informalities in the bids received, and to accept the bid deemed most favorable to the interest of the City.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services has been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses

necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the bid specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to bid specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

SPECIFICATIONS

REHABILITATION OF THE BALD HILL & WARWICK NECK WATER TANKS

GENERAL CONDITIONS

ARTICLE 1: CONTRACT DOCUMENTS

The technical specifications and addenda as accepted by the Owner, shall be binding upon the parties to this Agreement as if fully set forth therein. Whenever the term Contract Documents is used, it shall mean and include this Contract, Addenda, and the Technical Specifications. The Owner shall interpret his/her own requirements.

ARTICLE 2: DEFINITIONS

The following terms as used in this Contract are defined as follows:

- a. **CONTRACTOR:** A person, firm or corporation with whom the Contract is made by the Owner.
- b. **OWNER:** Shall mean, for the purpose of this Contract, the City of Warwick.
- c. **SUBCONTRACTOR:** A person, firm, or corporation supplying labor and materials, or only labor, for work at the site of the project; for, and under a separate Contract or Agreement with the Contractor.
- d. **WORK ON THE PROJECT:** Work to be performed at the location of the project, including the transportation of materials and supplies to or from the site by employees of the **CONTRACTOR OR ANY SUBCONTRACTOR**.
- e. **ENGINEER:** Shall mean for the purpose of this Contract the firm who shall act as the authorized representative, of the Owner whenever reference is made for such authorization.

ARTICLE 3: QUANTITIES OF ESTIMATE

Whenever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the documents including the Bid Proposal, they are given for use in comparing bids and the right is especially reserved by the Owner to increase or diminish them as may be deemed necessary or desirable by the Owner. Such increases or decreases shall in no way affect this Contract, nor shall any such increases or decreases give cause for claims or liabilities for damages.

Any provisions in any of the contract documents which may be in conflict or inconsistent with any of the articles in these General conditions, shall be void to the extent of such conflicts or inconsistency.

ARTICLE 4: CONFLICTING CONDITIONS

Any provisions in any of the contract documents which may be in conflict or inconsistent with any of the articles in these General conditions, shall be void to the extent of such conflicts or inconsistency.

ARTICLE 5: PROVISIONS OF LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise, any such provision is not inserted, or is not correctly inserted, the Contract shall forthwith be physically amended to make such insertion or correction.

ARTICLE 6: NOTICE AND SERVICE THEREOF

The service of any notice, letter or other communication shall be deemed to have been made by one of the contracting parties on the other party to the Contract when such letter, notice or other communication has been delivered to the legal office address of the addressee, by a duly authorized representative of the addressor or in person, or when such notice, letter or other communication has been deposited in any regularly maintained mailbox of the United States Post Office, in a properly addressed, postpaid wrapper. The date of such service shall be considered to be the date of such personal delivery or mailing.

The address of the Contractor noted in his/her bid and/or the address of his/her field office on or near the site of work shall be considered his/her legal address for the purposes as set above.

ARTICLE 7: REPRESENTATIONS OF THE CONTRACTOR

The Contractor represents and warrants:

- a. That he/she is financially solvent and that he/she is experienced and competent to perform the type of work required under this Contract and that he/she is able to furnish the plant, materials, supplies, or equipment that may be necessary to perform the work as specified.
- b. That he/she is familiar with all Federal, State and municipal laws, ordinances, orders, and regulations which may in any way affect the project work, or the employment of persons thereon, including but not limited to any special acts relating to the work or to the project of which it is part.
- c. That such temporary and permanent work required by the Contract Documents to be done by him/her will be satisfactorily constructed and can be used for the purpose for which it was intended and that such construction will not injure any person or damage property.
- d. That he/she has carefully examined the plans, specifications, and addenda, if any, and the site of the work and that from his/her own investigations, he/she has satisfied himself/herself as to the nature and location of the work, the character of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other items that may affect the work.

- e. That he/she is aware of the hazards involved in the work and the danger to life and property both evident and inherent and that he/she will conduct the work in a careful and safe manner without injury to persons or property.

ARTICLE 8: CONTRACTOR'S OBLIGATIONS

The Contractor shall perform all work in a good workmanlike manner, and in accordance with the contract and specifications and any supplements thereto, and according to any directions or orders given by the Owner. He/she shall furnish all supplies, materials, facilities, equipment and means necessary or proper to perform and complete the work required by this Contract. He/she shall furnish, erect, maintain, and remove any construction plant or temporary work as may be required. He/she alone shall be responsible for the safety, efficiency and adequacy of his/her plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract and specifications and shall do, carry on, and complete the entire work to the satisfaction of the Owner.

The Contractor shall be solely responsible for all the work and shall provide all precautionary measures necessary for preventing injury to persons or damage to property. All injury or damage of whatever nature resulting from the work or resulting to persons, property, or the work during its progress, from whatever cause, shall be the responsibility of the Contractor.

The Contractor shall hold the Owner and Engineer, and their duly authorized agents, harmless and defend and indemnify them against damages or claims for damages due to injuries to persons or property arising out of the execution of the project work, and for damages to materials furnished for the work, for infringement of inventions, patents, and patent rights used in doing the work, and for any act, omission, or instance of neglect by the Contractor, his/her agents, employees or subcontractors.

The Contractor shall bear all losses resulting to him/her, including but not limited to losses sustained on account of the character, quality, or quantity of any part of the work, or all parts of the work, or because the nature of the conditions in or on the project site are different from what was estimated or indicated, or on account of the weather, elements, or other causes.

ARTICLE 9: SUPERINTENDENCE BY THE CONTRACTOR

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Owner in every possible way. At the site of the work, the Contractor shall, at all times, employ a construction superintendent who shall have full authority to act for the Contractor. It is understood that the employment of such representative shall be acceptable to the Owner and shall be such a person as can be continued in the capacity for the duration of the Contract, unless he/she ceases to be on the Contractor's payroll.

ARTICLE 10: CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Prior to receiving the "Notice to Proceed", the Contractor shall deliver to the Owner for review and approval, an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the contract documents and the anticipated amount of each monthly

payment that will be come due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner:

1. A detailed estimate, giving a complete breakdown of the contract price; and
2. Periodic itemized estimates of the work done for the purpose of making partial payments thereon.

ARTICLE 11: PAYMENTS BY THE CONTRACTOR

The Contractor shall pay:

- a. For all transportation and utility services not later than the 15th day of each calendar month following that which in services were rendered.
- b. For all materials, tools, and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the 15th day of the calendar month following that in which such items were delivered to the site of work, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which material tools, or equipment are incorporated or used.
- c. To each of his/her subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his/her subcontractors to the extent of such subcontractor's interest therein.

ARTICLE 12: USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor undertakes, at his/her own expense:

- a. To take every precaution against injuries to persons or damage to property.
- b. To store his/her apparatus, materials, equipment, and supplies in an orderly fashion at the site of work as will not unduly interfere with the progress of his/her work or any others.
- c. To brace upon the work or any part thereof, only such loads as are consistent with the safety of that portion of the work.
- d. To clean frequently all refuse, scrap, and debris caused by his/her operations, so that the work site is maintained in a neat, workmanlike appearance.
- e. To affect all cutting, fitting, or patching of his/her work required to make the same to conform to the plans and specifications, and except with the consent of the Owner, not to cut or otherwise alter the work of any other contractor.
- f. Before final payment, to remove all surplus materials false work, temporary structures, including foundations thereof, plants of any description, and debris of any nature resulting from his/her operations, so that the site is left in a neat, orderly and workmanlike condition.

ARTICLE 13: GENERAL GUARANTEE

Neither the final certificate of payment nor any provision in the contract documents nor any partial or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty workmanship or materials. The Contractor shall remedy any defect in the work and pay for any damage to other work resulting there from, which shall appear within a period of one year (1) from the date of final acceptance of the work, unless a longer period is specified by the Owner. The Owner will give final notice of observed defects with reasonable promptness.

ARTICLE 14: PROTECTION OF WORK AND PROPERTY- EMERGENCY

- a. The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this Contract. The Contractor shall at all times safely guard and protect his/her own work, and that of adjacent property, from damage. The Contractor shall replace or make good any such damage, loss, or injury.
- b. In case of an emergency which threatens loss of injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Owner, in a diligent manner. The Contractor shall notify the Owner immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Owner for approval.
- c. Where the Contractor has not taken action but has notified the Owner of an emergency threatening injury to persons or damage to the work or to any adjoining property, the Contractor shall act as instructed or authorized by the Owner.

ARTICLE 15: WEATHER CONDITIONS

In the event of temporary suspension of the work, or during inclement weather, or whenever the Owner shall direct, the Contractor shall, and shall cause his/her subcontractors to protect carefully his/her and their work and materials against damage or injury from weather. If, and in the opinion of the Owner, any work or materials are damaged or injured by reason of failure to protect them on the part of the Contractor, or any of his/her subcontractors, or otherwise damaged or injured by the Contractor's negligence, or are found to be defective; such material or work shall be removed and replaced at the expense of the Contractor.

ARTICLE 16: THE OWNER'S AUTHORITY

The Owner shall give all the orders and directions contemplated under this Contract and specifications relative to the execution of the work. The Owner shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this Contract and shall decide all questions which may arise in relation to said work and construction thereof. The Owner's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said Contract or specifications, the determination or decision of the Owner shall be a condition precedent to the right of the Contractor to receive any money for payment for work under this Contract affected by such questions. The Owner shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found to be obscure or in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor and other contractors performing work for the Owner shall be adjusted and determined by the Owner.

ARTICLE 17: ALL WORK SUBJECT TO CONTROL BY THE OWNER

- a. In the performance of the work, the Contractor shall abide by all orders, directions, and requirements of the Owner; and shall perform all work to the satisfaction of the Owner; and at such times and places, by such methods, and in such manner and sequence as the Owner may require. The Owner shall determine the amounts, quality, acceptability, and fitness of all parts of the work. The Owner shall interpret the plans, specifications, contract documents, all other documents, and the extra work orders. The Owner shall also decide all other questions in connection with the work. The Contractor shall employ no plant, equipment, materials, methods or men to which the Owner objects and shall remove no plant, materials, or equipment or other facilities from the work site without the Owner's permission. Upon request, the Owner will confirm in writing any oral order, direction, requirement, or determination.

- b. Inspectors shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all parts of the work and to the preparation or manufacture of the materials to be used. The presence or absence of an inspector shall not relieve the Contractor from any requirements of the Contract. In case of any dispute arising between the Contractor and the inspector as to materials furnished or the manner in which the work being executed, the inspector shall have the authority to reject material or suspend work until the question has been decided by the Owner. The inspector shall not be authorized to revoke, alter, enlarge, relax, or release any requirement of these specifications, nor to approve or accept any portion of the work, nor to issue any instructions contrary to the contract and specifications. The inspector shall in no case act as foreman or perform other duties for the Contractor, or interfere with the management of the work by the latter. Any advice which the inspector may give the Contractor shall in no way be construed as binding the Owner, or the Engineer in any way, nor releasing the Contractor from the fulfillment of the terms of the Contract.

ARTICLE 18: THE OWNER'S CONTROL NOT LIMITED

The enumeration in this Contract of particular instances in which the opinion, judgment, discretion, or determination of the Owner shall control or in which the work shall be performed to his/her satisfaction or subject to his/her approval or inspection, shall not imply that only matters similar to those enumerated shall be governed and performed, but without exception all the work shall be so governed and performed.

ARTICLE 19: RIGHT OF THE OWNER TO TERMINATE THE CONTRACT

In the event that any of the provisions of this Contract are violated by the Contractor, or any of his/her subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the Contract. If within ten (10) days such violation or delay shall not cease and satisfactory arrangement of correction made, the Contract shall, at the expiration of the ten (10) days, cease and immediately serve notice thereof upon the Surety and the Contractor, and the Surety shall have the power to take over and perform the Contract, provided, however that if the Surety does not commence performing thereof within ten (10) days from the date of mailing to such Surety of Notice of Termination, the Owner may take over the work and prosecute the same to completion by Contract or force account at the expense of the Contractor,

and the Contractor and his/her Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby.

ARTICLE 20: INSPECTION

The authorized representatives and agents of the Owner shall be permitted to inspect all work materials, payrolls, records of personnel, invoices for materials, and other relevant data and records.

ARTICLE 21: SCHEDULES, REPORTS, RECORDS, AND DATA

The Contractor and each of his/her subcontractors, shall submit to the Owner such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning the work performed under this Contract. Prior to the first partial payment estimate the Contractor shall submit construction progress schedules showing the order in which he proposes to carry-on the work; including dates at which he will start the various parts of the work and an estimate date of completion of each part.

ARTICLE 22: SUBCONTRACTORS

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.

The Contractor shall not award work to any subcontractor other than those listed in his/her bid, without the prior written approval of the Owner, which approval will not be given until the Contractor submits a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work, to bind the subcontractors to the contract documents insofar as applicable to the subcontract work and to give the Contractor the same power as regards to terminating any subcontract that the Owner may exercise over the Contractor under any provisions of the contract documents.

Nothing contained in this contract shall create any contractual relationship between the Owner and any subcontractor.

ARTICLE 23: ASSIGNMENTS

The Contractor shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without the written consent of the Owner. In case the Contractor assigns all or part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms, or corporations for services rendered or materials supplied for the performance of the work called for in this Contract.

ARTICLE 24: MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other contractor or subcontractor shall suffer loss or damage to the work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration if such other contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the

Owner shall notify the Contractor who shall indemnify and save harmless the Owner against any such claim.

ARTICLE 25: SEPARATE CONTRACTS

The Owner reserves the right to let other contracts in connection with the construction of the contemplated work of the project, or contiguous projects with the Owner. The Contractor, therefore, will afford to any such other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, will properly connect and coordinate his/her work with theirs, and will not commit or permit any act which will interfere with the performance of their work.

The Contractor shall coordinate his/her operations with those of other contractors. Cooperation will be required in the arrangement for storage of materials and in the detailed execution of the work. Failure by the Contractor to keep informed on the progress of the work, or failure to give notice of the lack of progress or defective workmanship by others, shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with and performance of his/her own work.

ARTICLE 26: WAGE RATES

There shall be paid each laborer or craftsman of the Contractor or Subcontractor engaged in work on the project under this Contract, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and any such laborers and craftsmen, not less than the minimum hourly wage rates determined by the Department of Labor in the construction industry for various classifications of work to be performed.

The Contractor shall post at appropriate conspicuous points at the site of the project a schedule showing all determined minimum wage rates for the various classes of laborers and mechanics to be engaged in work on the project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

ARTICLE 27: WAGE UNDERPAYMENTS AND ADJUSTMENTS

The Contractor agrees that in the case of underpayment of wages to any worker on the project under this Contract by the Contractor or any of his/her subcontractors, the Owner will withhold from the Contractor out of payments due to him, an amount sufficient to pay such worker that difference between the wages required to be paid under this contract and the wages actually paid such worker for the total number of hours worked, and that the Owner may disburse such amount so withheld by it for and on account of the Contractor to the employee to whom such amount is due. The Contractor further agrees that the amount withheld is pursuant to this article may be in addition to the percentages to be retained by the Owner pursuant to other provisions of this Contract.

ARTICLE 28: PAYMENT OF EMPLOYEES

The Contractor and each of his/her subcontractors shall pay each of their employees engaged in the work on the project under this Contract in full, and not less than once a week, less legally required deductions, by check which may be cashed without charge, trade requirements, or inconvenience to the worker.

ARTICLE 29: NON-DISCRIMINATION IN EMPLOYMENT

In connection with the performance of the work under this Contract, the Contractor agrees not to discriminate against employee because of race, religion, color, or national origin. The aforesaid provisions shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation and selection for training, including apprenticeship.

ARTICLE 30: APPRENTICES

Apprentices shall be permitted to work only under a bona fide apprenticeship program registered with a State Apprenticeship Council which is recognized by the Federal Committee on Apprenticeship, United States Department of Labor; or if no such council exists in a State, under a program registered with the Bureau of Apprenticeship, United States Department of Labor.

ARTICLE 31: SAFETY AND HEALTH REGULATIONS

These Contract Documents, and the joint and several phases of construction hereby contemplated, are to be governed, at all times, by the applicable provisions of the Federal law (s) including but not limited to the following:

- a. Williams-Steiger Occupational Safety and Health Act, 1970, Public Law 92-596;
- b. Part 1910 of the Occupational Safety and Health Standards, chapter XVII of Title 29, Code of Federal Regulations.
- c. This project is subject to all of the Safety and Health Regulations (CFR 29, Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974. Contractors are urged to become familiar with the requirements of these regulations.

In the event of any inconsistencies between the above laws and regulations and the provisions of these Contract Documents, the laws and regulations shall prevail.

ARTICLE 32: MATERIALS, SERVICES AND FACILITIES

It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever, necessary to protect, execute, complete, and deliver the work within the specified time.

If approved by the Owner, any work necessary to be performed after regular hours; on Saturdays, Sundays or legal holidays; shall be performed by the Contractor without additional expense to the Owner.

ARTICLE 33: INSPECTION AND TESTING OF MATERIALS

All materials and equipment used in the construction of the project shall be new and of current manufacture. Testing will be done in accordance with accepted standards and as directed by the Owner; the laboratory or inspection agency shall be selected by the Owner. Except as specified elsewhere in these specifications, the Owner will pay for laboratory inspection.

All materials and workmanship shall be subject to inspection, examination, and testing by the Owner at any and all times during manufacture and/or construction and at any and all places where such manufacture and or construction is carried on, to establish conformance with these specifications and suitability for uses intended. Without additional charge, the Contractor shall furnish promptly all reasonable facilities, labor, and materials necessary to make tests so required safe and convenient he shall also furnish and mill, factory, or other such tests based on the standards and Tentative Standards of the American Society for Testing Materials (A.S.T.M.) as required by the Owner.

ARTICLE 34: ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the Contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the contract documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Owner will prepare a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing, and installation of materials, supplies, and equipment, and the completion of the various parts of the work; each schedule to be subject to change from time to time in accordance with the progress of the work.

ARTICLE 35: MATERIALS, SERVICES AND FACILITIES

It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever, necessary to protect, execute, complete, and deliver the work within the specified time.

If approved by the Owner, any work necessary to be performed after regular hours; on Saturdays, Sundays or legal holidays; shall be performed by the Contractor without additional expense to the Owner.

ARTICLE 36: "OR APPROVED EQUAL CLAUSE"

- a. Whenever a material or article required is specified or shown on the specifications or plans by using the name of the proprietary product or of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design may be considered equal and satisfactory providing the material or article so proposed is of equal substance and function in the Owner's opinion. It shall not be purchased or installed without the Owner's written approval.
- b. If two or more brands, makes of material, devices or equipment are shown or specified, each should be regarded as the approved equal of the other. Any other brand, make or material, device or equipment, which, in the opinion of the

Owner or his/her authorized agent, is the recognized approval equal of that specified, considering quality, workmanship, and economy of operation, and is suitable for the purpose intended, may be accepted.

- c. If any other material or article is substituted for items shown or specified, the project must result in a savings in the contract price and the Contractor shall submit evidence that the substitute product is equal. Upon approval of the substitute project, the Owner will issue a deductive change order.
- d. If an equipment manufacturer must have a specified period of experience with his/her project, equipment which does not meet with the specified experience period can be considered, subject to owner's authorization, if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified time period which will guarantee replacement of that equipment in the event of failure.

ARTICLE 37: PATENTS

- a. The Contractor shall hold and save the Owner harmless from liability of any nature or kind, including costs and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the Contract, including its use by the Owner.
- b. License and/or royalty fees for the use of a process which is authorized by the Owner must be reasonable, and paid to the holder of the patent, or his/her authorized agent, directly by the Contractor.
- c. If the Contractor uses any design, device or material covered by letters, patent, or copyright he shall provide for such use by suitable agreement with the Owner of such patent or copyrighted design, device, or material.
- d. It is mutually agreed and understood that, without exception, the contract prices shall include all royalties, license fees, or costs arising out of the use of such process, design, device, or materials, in any way involved in the work. The Contractor and/or his/her Surety shall indemnify and save the Engineer and the Owner harmless from all claims for infringement by reason of use of such patented material, device or design, in connection with the work under this Contract, and shall indemnify the Engineer and the Owner for any cost, expense, or damage which it may be obligated to pay for reason of such infringement at any time during the prosecution of the work.

ARTICLE 38: SURVEYS, PERMITS, AND REGULATIONS

The Contractor shall procure and pay for all permits, licenses, and approvals necessary for the execution of the Contract work.

The Contractor shall comply with all laws, regulations, ordinances, orders, and rules relating to the performance of the work, the protection of the adjacent property, and the maintenance of passageways, guard fences, and other protective facilities.

ARTICLE 39: COMPENSATION TO BE PAID TO THE CONTRACTOR

- a. The Owner will pay and the Contractor shall receive as full compensation for everything furnished and done by the Contractor under this Contract, the unit prices and lump sum prices set opposite the respective items in the accepted bid form herein contained, and payment for approved extra work. The cost of all work required not specifically included in any items herein mentioned, and also for all loss or damage arising out of the nature of the work aforesaid or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, and for assuming all duties, and liabilities, herein required, and for well and faithfully completing the work, and the whole thereof, as herein provided, shall be the responsibility of the Contractor.
- b. The amount of the Contract (accepted bid prices) listed in the bid is based on the estimated quantities and the unit and/or lump sum prices as set forth in the bid. It is understood and agreed that the Contractor will accept as payment the actual measured quantities at the unit and/or lump sum price as set forth in the accepted bid.
- c. The estimated quantities, if provided, given in the bid proposal for the various items of work are given for the purpose of comparing the bids offered for the work under this Contract and if it is found in the performance of the Contract work that any or all of the said estimated quantities are not even approximately correct the Contractor shall have no claim for anticipated profits, or for loss of profit, or for increase in prices as listed in the accepted bid because of the difference between the quantities of the various items of work actually done and the estimated quantities stated in the accepted bid.
- d. No payment or compensation will be made to the Contractor for damages because of hindrance or delay from any cause in the progress of the work, whether such hindrances or delays are avoidable or unavoidable.

ARTICLE 40: TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- a. It is hereby understood and mutually agreed by and between the Contractor and the Owner that the date of beginning and the time of completion of the work as specified in this Contract are ESSENTIAL CONDITIONS of this Contract, and it is further mutually understood and agreed that the work embraced in this Contract shall be commenced on a date to be specified in the Notice to Proceed.
- b. The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified, and further that time of completion as agreed upon is reasonable, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- c. If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a partial consideration for the awarding of this Contract, to pay to the Owner the amount specified in the Contract, not as a penalty, but as liquidated damages for such breach of Contract as hereinafter set

forth for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the work. **There will be a deadline of 200 calendar days and a \$500/day penalty to complete the project.**

- d. The said amount is fixed and agreed upon by and between the Owner and the Contractor, and said amount is agreed to be the amount of damages the Owner would sustain in such an event as the above-mentioned, and said amount shall be retained from time to time by the Owner from current periodical payments.
- e. It is further agreed that time is of the essence in each and every portion of the Contract and specifications; where in a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence in this Contract. Provided that the Contractor shall not be charged when the delay in completion of the work is due to:
 1. Any preference, priority, or allocation order duly issued by the government, subsequent to the date of the Contract.
 2. 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, act of the Owner, acts of another contractor, fires, floods, epidemics, strikes, and unusually severe weather.
 3. Any delays of subcontractors or suppliers approved by the Owner. Provided further that the Contractor shall within ten (10) days from the beginning of the delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the Contract, notify the Owner in writing of the causes of the delay and notify the Contractor within a reasonable time of its decision in the matter.
- f. The Completion 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, consisting of the satisfactory fulfillment, in the opinion of the Engineer, of all punch list items, correction of any defective work, start-up/training, testing of equipment, submission and approval of Operations and Maintenance Manuals and record drawings. Should the Completion not be achieved by the Contractor within the Contract Time, or extension of time granted by the Owner, then the provisions of liquidated damages shall apply.

ARTICLE 41: CORRECTION OF WORK

All work, materials, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Owner, who shall be the final judge of the quality and suitability of the work performed under this Contract. Should any of the work performed fail to meet with his/her approval, it shall be forthwith constructed, made good, replaced, and/or corrected as the case may be, by the Contractor, at his/her own expense. Rejected material shall be immediately removed from the site. If, in the opinion of the Owner, it is undesirable to replace, reconstruct, or correct any of the work not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor shall be reduced by such amounts as in the judgment of the Owner shall be equitable.

ARTICLE 42: CHANGES IN THE WORK

No changes in the work covered by the approved Contract Documents shall be made without having prior written approval of the Owner. Charges or credits for the work covered by the approved changes shall be determined in accordance with the Contract Documents.

ARTICLE 43: EXTRAS

- a. The Owner may, at any time, without notice of the sureties, by written order designated or indicated to be a Change Order, make any change in the work within the general scope of this Contract, including but not limited to changes:
 1. In the Specifications (including drawings and designs);
 2. in the method or manner of performance of the work;
 3. In the Owner-furnished facilities, equipment's, materials, services, or site;
or
 4. Directing acceleration in the performance of the work.
- b. Any other written order or an oral order (which terms as used in this paragraph shall include direction, instruction, interpretation or determination) from the Owner, which causes any such change, shall be treated as a change order under this clause, provided that the Contractor gives the Owner written notice stating the date, circumstances and source of the order and that the Contractor regards the order as a Change Order.
- c. Except as herein provided, no order, statement, or conduct of the Owner shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.
- d. If any change, by change order, causes an increase or a decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly: Provided, however, that no claim for any change order above shall be allowed for any costs incurred more than twenty (20) days before the Contractor gives written notice as therein required: and, provided, further, that in case of defective specifications for which the Owner is responsible, the equitable adjustment shall include only increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.
- e. If the Contractor intends to assert a claim for an equitable adjustment under this clause, he/she must, within thirty (30) days after receipt of a written change order under (a) above or the furnishing of a written notice under (b) above, submit to the Owner a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Owner. The statement of claim hereunder may be included in the notice under (b) above, submit to the Owner a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Owner. The statement of claim hereunder may be included in the notice under (b) above.

- f. No claim by the Contractor for an equitable adjustment hereunder for any amount shall be allowed unless agreed to by Change Order prior to the work being done.

ARTICLE 44: CLAIMS FOR EXTRA COST

No claims for extra work or cost will be allowed unless the same were done in pursuance of a written order of the Owner as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When the work is performed under terms specified elsewhere in the Contract, the Contractor shall furnish satisfactory bills, payrolls, and vouchers covering all items of cost and upon the Owner's request, give him/her full access to the accounts relating thereto.

ARTICLE 45: FINAL ACCEPTANCE OF THE FINAL PAYMENT CONSTITUTES RELEASE

- a. **SUBSTANTIAL COMPLETION** - Upon written notice from the Contractor of presumptive substantial completion of the project, the Engineer will make an inspection. If all work provided for in the contract is found completed to his satisfaction, that inspection shall constitute substantial completion inspection. The Engineer shall make a written acceptance of the physical work, which shall relieve the Contractor from further responsibility of the physical work except for the maintenance of seeded surfaces required prior to final acceptance.
- b. **FINAL COMPLETION** - Upon written notice from the Contractor of presumptive final completion of the project, the Engineer will make an inspection. If all work provided for in the contract, including final seeded surfaces is found completed to his satisfaction, that inspection shall constitute final inspection. The Engineer shall make a written acceptance of the physical work, which shall relieve the Contractor from further responsibility only with respect to the physical work, notwithstanding any other warranties remaining in effect under the terms of the contract. Subsequent to the final acceptance of the physical work and upon compliance with the terms of the contract relating to submission of required reports or other documents, the Engineer will recommend final acceptance of the contract to the Owner.
- c. The acceptance of the Final Payment by the Contractor shall be and shall operate as a release to the Owner for all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act or neglect of the Owner and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate as a release of the Contractor or his/her Surety from any obligations under this Contract or the performance and payment bond.

END OF SECTION

SUPPLEMENTAL CONDITIONS

GENERAL:

- a. The Owner and the Contractor agree that the following supplemental general provisions shall apply to the work to be performed under this Contract and that such provisions shall supersede any conflicting provisions of this Contract.
- b. The rights and remedies of the Owner provided for in these clauses are in addition to any other rights and remedies provided by law and under this Contract.

ARTICLE 1: SCOPE OF WORK

The Contractor shall furnish all labor, materials, supplies, equipment, and other facilities, necessary to complete the work contemplated by this Contract as required by and in strict accordance with the plans, specifications, and addenda and/or required by and in strict accordance with such changes as ordered and approved pursuant to this Contract and the Contractor shall perform all other obligations imposed on him/her by this Contract. The Contractor shall be responsible for materials delivered and work performed until completion and final acceptance. Upon completion of the Contract, the work shall be delivered complete and undamaged.

ARTICLE 2: PROVISION FOR FLOW OF PRESENT DRAINAGE

The Contractor shall provide provision for the flow in all sewers, drains, and watercourses that are met or altered during the construction and all connections shall be restored without extra charge. All offensive matter shall be removed immediately with such precautions as may be directed. If required, the Contractor shall install temporary bypass connections for sewer, drains, and water facilities to provided uninterrupted or continuous service during the work of construction.

ARTICLE 3: WORK TO BE ACCOMPLISHED IN ACCORDANCE WITH THE SPECIFICATIONS

The work, during its progress and at its completion, shall conform to the specifications and to the directions given by the Owner from time to time, subject to such modifications or additions as he/she shall determine to be necessary during the execution of the work; and in no case will any work be paid in excess of such requirements.

ARTICLE 4: CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES

The Contractor will be required to check all dimensions and quantities shown on the documents or schedules given to him/her by the Owner, and shall notify the Owner of all errors therein which he/she may discover by examining and checking the same. The Contractor shall not take advantage of any error or omissions in these specifications, drawings, or schedules. The Owner will furnish all instructions should such error or omissions be discovered, and the Contractor shall carry out such instructions as if originally specified.

ARTICLE 5: PROTECTION OF LANDSCAPING

The Contractor shall take special care to preserve and protect from injury all trees and other permanent structures (e.g. retaining walls) located along the lines of construction, and no such trees shall be cut down, trimmed, or otherwise cut without permission from the Owner.

ARTICLE 6: HURRICANE PROTECTION

Should hurricane warnings be issued, the Contractor shall take every precaution to minimize danger to person, to the work and to adjacent property. These precautions shall include closing all openings, removing all loose materials, tools and equipment from exposed locations, and removing all scaffolding and other temporary work.

ARTICLE 7: CONFORMANCE WITH DIRECTIONS

The Owner may make alterations to the line, grade, plan, form, dimension, or materials of the work, or any part thereof, either before or after the commencement of construction. Should such alterations diminish the quality included in any item of work to be done and paid for at a unit price, the contractor shall have no claim for damages or for anticipated profits on the work that thus may be dispensed with. If they increase the quantity included in any such item, such increase shall be paid for at the stipulated prices.

ARTICLE 8: PROTECTION AGAINST HIGH WATER AND STORM

The Contractor shall take precautions to prevent damage to work or equipment by high water or by storms. The Owner may prohibit the carrying out of work at any time when in his/her judgment high waters or storm conditions are unfavorable or unsuitable, or at any time regardless of the weather when proper precautions are not being taken to safeguard previously constructed work or work in progress.

In case of damage caused by failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make such repairs or rebuild parts of the damaged work as the Owner may require, at no additional cost to the Owner.

ARTICLE 9: SEQUENCE OF THE WORK

The Contractor shall be required to prosecute his/her work in accordance with a schedule prepared by him/her in advance and in accordance with additional requirements specified herein and approved by the Owner. This scheduling shall state the methods and shall forecast the times of doing each portion of the work. Before beginning any portion of the work, the Contractor shall give the Owner at least twenty-four (24) hours advance notice and ample time for making necessary preparations. 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.

ARTICLE 10: COMPETENT HELP TO BE EMPLOYED

The Contractor shall employ experienced foremen, craftsmen and other workmen competent in the work in which they are to be engaged.

ARTICLE 11: LIGHTS, BARRIER, WATCHMEN, AND INDEMNITY

The Contractor shall erect and maintain such barriers, lighting, warning lights, danger warning signals, and signs that will prevent accidents during the construction work and protect the work and insure the safety of personnel and the public at all times and places; the Contractor shall indemnify and protect the Owner and Engineer in every respect from injury or damage whatsoever caused by any act of neglect by the Contractor or his/her subcontractors, or their servants or agents.

In addition to the above, when and as necessary, or when required by the Owner, the Contractor shall post signs and employ watchmen or flagmen for the direction of traffic at the site and for excluding at all times unauthorized persons from the work site, for which the Contractor shall be paid no additional compensation.

The Contractor shall be responsible for excluding at all times from the land within the work areas, all persons not directly connected with the work.

No work shall occur on state and local streets.

ARTICLE 12: NIGHT WORK

Night work, or work on Saturdays, Sundays, or legal holidays requiring the presence of an Engineer or inspector, will not be permitted except in case of an emergency, and only upon the approval of the Owner, or as required by the Contract Documents. Should it be necessary for the Owner to operate an organization for continuous night work or for emergency night work; the lighting, safety and other facilities which are deemed necessary shall be provided by the Contractor. Compensation for this work shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid, and no extra compensation will be paid by the Owner. Night work required per the Contract Documents shall be fully executed in accordance with the Contract Documents at no additional cost to 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 his/her personnel required for inspection or observation will be deducted monthly from any sums due or which will become due to the Contractor.

ARTICLE 13: WORK IN COLD WEATHER

The Owner may determine when conditions are unfavorable for work and may order the work, or any portion thereof, suspended whenever, in his/her opinion, the conditions are not such as will insure first class work.

ARTICLE 14: RESERVED MATERIALS

Materials found on the work site suitable for any special use, shall be preserved for that purpose. Where permitted, the Contractor may use in the various parts of the work, without charge, any materials taken from the excavation.

ARTICLE 15: DISPOSAL OF MATERIALS

The materials used in the construction of the work, shall be deposited in such manner so they will not endanger persons or the work, and so that free access may be had at any time to all hydrants and gates in the vicinity of the work. The materials shall be kept trimmed up so that as little inconvenience as possible to the public or adjoining tenants is caused.

ARTICLE 16: MATERIALS

All material furnished and used in the completed work shall be new; of best quality, workmanship, and design; and recognized as standard in the work to be done under this Contract. Whenever a specification number of reference is given the subsequent amendments (if any) shall be included. The standards set forth in the selection of materials and supplies are intended to conform with

those standards adopted by the Owner. Preference in manufacture shall be given to adopted standards and the Contractor shall further familiarize himself with the requirements of the Owner when the occasion or choice of materials so demands.

ARTICLE 17: DEFECTIVE MATERIALS AND TESTING

No materials shall be laid or used which are known, or may be found to be in any way defective. Any materials found to be defective at the site of work or upon installation shall be replaced by the Contractor at his/her own expense. Notice shall be given to the Owner of any defective or imperfect material. Defective or unfit material found to have been laid, shall be removed or replaced by the Contractor with sound and unobjectionable material without additional cost to the Owner.

All materials furnished by the Contractor are subject to thorough inspection and tests by the Owner. The Contractor shall submit samples, as required by the Owner, of the various materials used on the Contract work for testing purposes.

All ordering lists shall be submitted by the Contractor to the Owner for approval and shall be approved before the ordering of the materials.

ARTICLE 18: SANITARY REGULATIONS

Adequate sanitary conveniences for use of workman on the premises, properly secluded from public observance, shall be provided and maintained by the Contractor, in accordance with local and State health requirements, and in such a manner and at such points as shall be approved by these authorities, and their use shall be strictly enforced. Sanitary waste shall be treated and disposed of in a manner satisfactory to the Owner and the local and State authorities. Under no circumstances shall sanitary wastes be allowed to flow on the surface of the ground.

The Contractor shall rigorously prohibit the committing of nuisances upon the lanes or right-of-way of the Owner, about the work, or upon adjacent public or private property.

The cost of sanitary conveniences and maintaining the same will be considered to be included in the prices stipulated for the appropriate items of work as listed in the bid, and not as a separate payment.

ARTICLE 19: SPIRITUOUS LIQUORS

The Contractor shall neither permit nor suffer the introduction of spirituous liquors upon the work embraced in this Contract, nor the use of the same.

ARTICLE 20: FINISHING AND CLEANING UP

In completing his/her operations, the Contractor shall immediately remove all surplus material, tools, and other property belonging to him/her operations, the Contractor shall immediately remove all surplus material, tools, and other property belonging to him/her, leaving the entire street or surroundings free and clean and in good order, at no additional expense to the Owner. The Contractor shall exercise special care in keeping the rights-of-way and private lands upon which work is performed free and clean of all debris, and shall remove all tools and other property when they are not in use.

ARTICLE 21: CLEAN-UP AT CONTRACTOR'S EXPENSE

In case the Contractor fails or neglects to promptly remove all surplus materials tools, and incidentals after backfilling, leaving the street or surrounding area clean and free of debris, and do the required repaving when ordered, the Owner may, after 24 hours' notice, cause the work to be done and the cost thereof deducted from any payment due to the Contractor.

ARTICLE 22: RIGHTS OF ACCESS

Nothing herein contained or shown on the drawings shall be construed as giving the Contractor exclusive occupancy of the work area. The Owner or any other contractors employed by him/her, the various utility companies, contractors or subcontractors employed by State or Federal agencies, or any other agencies involved in the general project or upon public rights-of-way, may enter upon or cross the area of work or occupy portions of the area as is directed or necessary. When the territory of one contract is the convenient means of access to the other, the Contractor shall arrange his/her work in such a manner as to permit such access to the other and prevent unnecessary delay to the work as a whole.

ARTICLE 23: LOADING

No part of the structures involved in this contract shall be loaded during construction with a load greater than it is calculated to carry with safety. Should any accidents or damage occur through any violation of this requirement, the Contractor will be held responsible under his/her Contract and bond.

ARTICLE 24: COMPLETENESS OF THE WORK

In addition to the specified or described portions of the work, all other work and all other materials, equipment and labor of whatever description, necessary or required to complete the work, or for carrying out the full intent of the drawings and specifications; such work, labor, materials, and equipment shall be provided by the Contractor, and payment therefore shall be considered as having been included in the prices stipulated for the appropriate item of work listed in the bid.

ARTICLE 25: CARE OF THE WORK

The Contractor shall be responsible for all damages to persons or property that occur as a result of his/her fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the Owner, whether or not the same has been covered by partial payments made by the Owner.

ARTICLE 26: INDEMNITY

The Contractor shall at all times indemnify and save harmless the Owner and the Engineer, their servants and agents, from any and all claims and from any suits, litigations, damages, losses or the like arising out of injuries sustained or alleged to have been sustained by any persons or property in connection with the contract work, caused in whole or in part by acts or omissions of the Contractor, his/her subcontractors, material men or anyone directly or indirectly connected with the contract work.

ARTICLE 27: FIRE PREVENTION AND PROTECTION

All State and municipal rules and regulations with respect to fire prevention, fire-resistant construction, and fire protection shall be strictly adhered to and all work and facilities necessary therefore shall be provided and maintained by the Contractor in an approved manner.

All fire protection equipment such as water tanks, hoses, pumps, extinguishers, and other materials, and apparatus, shall be provided for the protection of the contract work, temporary work, and adjacent property. Trained personnel experienced in the operation of all fire protection equipment and apparatus shall be available on the site whenever work is in progress, and at such other times as may be necessary for the safety of the public and the work.

ARTICLE 28: WORK BY OTHERS

The Owner reserves the right to do any other work which may be connected with, or become a part of, or be adjacent to the work embraced by this CONTRACT, at any time, by Contract or otherwise. The Contractor shall not interfere with the work of such others as the Owner may employ, and shall execute his/her own work in such a manner as to aid in the execution of the work of others as may be required.

ARTICLE 29: CHANGES AND MODIFICATIONS

The Owner reserves the right to delete or cancel any item or items or parts thereof as listed in the bid, without recourse by the Contractor. The Owner also reserves the right to add any item as listed in the bid. The compensation to be paid to the Contractor for such additional extensions, appurtenances, or items shall be made under the applicable items in the bid. If no applicable items are provided in the bid, the compensation to be paid the Contractor shall be set forth under the article entitled "Changes in the Work" as found in the GENERAL CONDITIONS.

ARTICLE 30: CONSTRUCTION SCHEDULE

In addition to other requirements specified, and prior to receiving the written notice to proceed, the Contractor shall submit a construction schedule to the Owner for review and approval, which is to include all the work under this Contract. The Contractor shall perform the work of this Contract to conform with the schedule as approved by the Owner, except that the Owner reserves the right to amend and alter the construction schedule at any time, in a manner which is deemed to be in the best interest of the Owner to do so. The Contractor shall arrange his/her work to conform with this schedule as it may be revised from time to time by the Owner, at no additional expense to the Owner. The Contractor shall notify the Owner immediately of any circumstances which may affect the performance of the work in accordance with the current construction schedule.

ARTICLE 31: TEMPORARY POWER

Electrical power is available at the site for use by the Contractor inside an existing storage shed owned by the City. The Contractor shall have a licensed electrician determine if this existing power supply is suitable for the expected demand from the Contractor's equipment. If the existing electrical service is not suitable, the Contractor shall make all the necessary arrangements with the power company for providing temporary electrical power for his/her use. All unauthorized sources of power, such as neighboring homes, shall be prohibited.

ARTICLE 32: FAILURE TO REPAIR

Any emergency arising from the interruption of electric, gas, water, or sewer service due to the activities of the Contractor, shall be repaired by the Contractor as quickly as is possible.

If and when, in the opinion of the Owner, the Contractor is not initiating repair work as expeditiously as possible upon notification to do so, the Owner may, at his/her own option, make the necessary repairs using his/her own forces or those of others. The cost of such repairs shall be subtracted from the payments due to the Contractor.

ARTICLE 33: DIFFERING SITE CONDITIONS

- a. The Contractor shall promptly and before such conditions are disturbed, notify the Owner in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this Contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Owner shall promptly investigate the conditions, and if he/she finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any of the work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the Contract modified in writing accordingly.
- b. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above; provided, however, the time prescribed therefore may be extended by the Owner.
- c. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

ARTICLE 34: AUDIT, ACCESS TO RECORDS

The Contractor shall maintain books, records, documents, and other evidence directly pertinent to performance of work under this Contract in accordance with generally accepted accounting principles and practices. The Contractor shall also maintain the financial information and data used by the Contractor in the preparation or support of the cost submission or for any negotiated contract or change order and a copy of the cost summary submitted to the Owner. The Contractor will provide proper facilities for such access and inspection.

Audits conducted pursuant to this Provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit agencies.

The Contractor agrees to the disclosure of all information and reports resulting from the access to records pursuant to paragraphs above, to any of the agencies referred to above, provided that the Contractor is afforded the opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report that the final audit report will include written comments of reasonable length, if any, of the Contractor.

Records under paragraphs above, shall be maintained and made available during performance on work under this Contract and until three (3) years from the date of final payment for the project. In addition, those records which relate to any "Dispute", appeal agreement, or litigation, or the settlement of claims arising out of such performance, or costs or items to which an audit exception

has been taken, shall be maintained and made available until three (3) years after the date of resolution of such appeal, litigation, claim or exception.

ARTICLE 35: COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Owner shall have the right to annul this Contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE 36: GRATUITIES

- a. If it is found, after notice and hearing, by the Owner that gratuities (in the form of entertainment, gifts or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any official, employee or agent of the Owner, or of the State, with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this Contract or may pursue such other rights and remedies provided by law or under this Contract; provided, that the existence of the facts upon which the Owner makes such findings shall be in issue and may be reviewed in proceedings pursuant to the "Remedies clause of this Contract.
- b. In the event this Contract is terminated as provided in Paragraph (a) hereof, the Owner shall be entitled (1) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor, and (2) as a penalty in addition to any other damages to which it may be entitled to by law, to exemplary damages in an amount (as determined by the Owner) which shall be not less than three (3) nor more than ten (10) times the cost incurred by the Contractor in providing any such gratuities to any such officer or employee.

ARTICLE 37: CONTRACTOR TO LAY OUT HIS/HER OWN WORK

The Owner will establish such general reference points as in his/her judgment will enable the Contractor to proceed with the work. The Contractor, at his/her own expense, shall provide all materials and equipment and such qualified helpers as the Owner may require for setting the general reference points and shall protect and preserve all stakes, benches, and other markers used to identify the reference points. The Contractor shall lay out all the contract work from the above and shall be responsible for the accuracy of all lines, grades, and measurements.

ARTICLE 38: PROTECTION OF CONSTRUCTION FEATURES

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, berms, pavements, utilities, adjoining property and such incidentals, and to avoid damage thereto. The Contractor shall completely repair any damage at no additional expense to the Owner.

END OF SECTION

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. This section specifies the design and construction of rehabilitation and retrofit work to be completed on the existing concrete water storage tanks; including all concrete tank cleaning, application of new coatings, concrete work, appurtenances, and disinfection directly related to the tanks, unless otherwise specified.

- B. Summary of Work
 - 1. Interior tank cleaning and sediment removal
 - 2. Preparation of interior floor and wall concrete
 - 3. Installation of new elastomeric waterproof coating system on the interior wall and floor surfaces
 - 4. Exterior cleaning of the tank wall and dome
 - 5. Exterior concrete spall and crack repair
 - 6. Application of a new exterior architectural coating system to the wall and dome
 - 7. Removal and replacement of the existing two (2) dome access hatches
 - 8. Removal and replacement of the existing dome vent
 - 9. Final cleaning and disinfection of the tank interior

1.2 QUALITY ASSURANCE

- A. Qualifications & Experience

The contractor shall be a specialist tank contractor experienced in the rehabilitation of AWWA D-110 Type III tanks, with the following minimum experience:

- 1. The rehabilitation, in their own name, of at least 10 AWWA D-110 prestressed concrete tanks in the last 10 years of equal size or greater, which have been in successful service for a minimum of five (5) years since the work was completed.
- 2. The restoration of at least ten (10) AWWA D-110 prestressed concrete tanks with deteriorated concrete / shotcrete walls and or domes within the last five (5) years.
- 3. The restoration of at least five (5) AWWA D-110 prestressed concrete tanks which required the re-tensioning of and or replacement of damaged prestress wire.

4. The successful application of at least 10 similar concrete tank coating projects for potable water and shall have installed a minimum of 500,000 square feet of C.I.M. coatings during the last 10 years prior to bid submittal.
5. A professional engineer on staff, registered in the State of Rhode Island, experienced in the design and rehabilitation of AWWA D-110 prestressed concrete tanks, who will be the specialist tank contractor's engineer of record for the project.
6. Financial capabilities will be considered.

B. Prequalification Standards

1. Project Experience – The tank contractors not previously prequalified shall submit a complete record of their experience in the rehabilitation of precast, prestressed concrete tanks conforming to AWWA D110, Type III with a minimum capacity of 1.0 MG. The record shall indicate the size of the tank, the name and address of the OWNER, the year of rehabilitation, and the name of the ENGINEER for each project. Experience in the rehabilitation of AWWA D110 Type I or Type IV tanks is not acceptable.
2. Company Personnel – Provide the names, project responsibilities, experience on similar projects and resumes for personnel responsible for the following:
 - Project Manager
 - Design Engineer
 - Site Superintendent
 - Quality Control Manager
4. Construction Equipment, Materials and Methods – Provide the following:
 - Summary of all equipment to be used in the rehabilitation of the tank.
 - Construction schedule and plan including labor requirements and responsibilities, sequencing, materials and methods.
 - Quality control plan and procedures including testing, correcting deficiencies, systems and methods, schedule and responsibilities.
 - List all major suppliers and subcontractors who may work on this project.
5. Financial Capacity – Provide the following:
 - References for bank and bonding company
 - Insurance Limits
 - Warranty Statement
 - Annual Reports and/or financial statements
6. The contractor shall sign and date the information provided and certify that to the extent of the Contractor's knowledge, the information is true and accurate, and the design and construction supervisory personnel for the tank construction will be directly involved with and used on this project. Substitutions of

personnel and/or methods will not be allowed without the written authorization of the Owner.

C. Codes & Standards

All Codes shall be considered the most current version of that code unless noted otherwise.

1. ACI 301 Specifications for Structural Concrete
2. ACI 305 Hot Weather Concreting
3. ACI 306 Cold Weather Concreting
4. ACI 309R Guide for Consolidation of Concrete
5. ACI 318 Building Code Requirements for Reinforced Concrete and Commentary
6. ACI 350 Code Requirements for Environmental Engineering Concrete Structures and Commentary
7. ACI 350.3 Seismic Design of Liquid Containing Concrete Structures and Commentary
8. ACI 372R Design and Construction of Circular Wire- and Strand Wrapped Prestressed Concrete Structures
9. ACI 506R Guide to Shotcrete
10. ASTM A185 Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete
11. ASTM A416 Standard Specification for Steel Strand, Uncoated Seven-Wire for Prestressed Concrete
12. ASTM A421/A421M Standard Specification for Uncoated Stress-Relieved Steel Wire for Prestressed Concrete
13. ASTM A475 Standard Specification for Zinc-Coated Steel Wire Strand
14. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
15. ASTM A706/A706M Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement
16. ASTM A821 Standard Specification for Steel Wire, Hard Drawn for Prestressing Concrete Tanks

17. ASTM A1008/A1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable
18. ASTM C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field
19. ASTM C33 Standard Specification for Concrete Aggregates
20. ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
21. ASTM C231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
22. ASTM C920 Specification for Elastomeric Joint Sealants
23. ASTM D1056 Standard Specification for Flexible Cellular Materials – Sponge or Expanded Rubber
24. ASCE Standard 7 Minimum Design Loads for Buildings and Other Structures
25. AWWA C652 Standard for Disinfection of Water-Storage Facilities
26. AWWA D110 Wire and Strand Wound, Circular, Prestressed Concrete Water Tanks

D. Construction Submittals for Review Prior to Use:

1. Design proportions for all concrete and shotcrete and concrete strengths of trial mixes for all concrete.
2. Admixtures to be used in the concrete and their purpose.
3. Shop drawings shall be stamped by Professional ENGINEER, experienced in the design and retrofit of AWWA D110, Type III tanks and registered in the State of Rhode Island.

1.3 GUARANTEE

- A. The CONTRACTOR shall guarantee the work against defective materials or workmanship for a period of one (1) year from the date of completion. If any materials or workmanship prove to be defective within one (1) year, they shall be replaced or repaired by the CONTRACTOR at the CONTRACTOR's expense.

1.4 WORK SCHEDULE

- A. Within ten (10) days of notification of award of the contract, the Contractor shall submit to the Owner a detailed schedule showing dates when each work task is planned to begin and end.
- B. The Contractor shall schedule a pre-construction conference with representatives of the Owner prior to the start of any work on the tank(s).

1.5 MEASUREMENTS AND PAYMENTS

- A. For those items to be paid on a unit price basis, submit measurements for work complete with each requisition for payment.
- B. Before submitting measurements for unit price items, obtain verification from the owner's site representative of measurements performed by the Contractor.

1.6 CONSTRUCTION METHODS, MEANS AND SAFETY

- A. The Contractor shall be responsible for all construction methods and means.
- B. The Contractor shall be responsible for safety at the job site and shall comply with OSHA and Rhode Island State requirements for scaffolding, rigging, other means of access, and protection of contractor personnel and authorized representatives of the Owner when at the site.

1.7 SERVICES PROVIDED BY THE OWNER

- A. The Owner will provide to the Contractor, without charge, the following temporary service during the construction period.
 - 1. Water for construction operations.

1.8 TEMPORARY FACILITIES PROVIDED BY THE CONTRACTOR

- A. Temporary Light and Power
 - 1. Furnish temporary light and power, complete with wiring, lamps and similar equipment as required to adequately light all work areas and with sufficient power capacity to meet the reasonable needs of all subcontractors. Make all necessary arrangements with the local electric company for temporary electric service, if required, and pay all expenses in connection therewith.
- B. Furnish all necessary tools, compressed air and hoses for water hook-ups at the location on the site where the water will be made available by the Owner.

1.9 EXISTING UTILITIES

- A. All utilities interfered with or damaged by the Contractor shall be immediately and properly restored by the Contractor.

1.10 DISPOSAL OF SURPLUS MATERIAL AND DEBRIS

- A. During the progress of work the Contractor shall maintain the work site and adjoining areas in a neat and orderly manner and shall not allow the accumulation of construction debris. The Contractor shall use a suitable rubbish container at the site if so directed by the Owner. Should the Contractor neglect to maintain the site free of accumulated debris, the Owner reserves the right to have the service performed by others at the Contractor's expense.
- B. Before acceptance and payment for the work at the substantial completion and final completion stages of construction, all temporary structures, surplus materials, equipment, abandoned units, and debris which the Contractor may have accumulated during the work on the site or any adjoining property shall be removed of and properly disposed of at the Contractor's expense.

1.11 EMERGENCY SERVICE

- A. The Contractor shall maintain a full-time telephone service with access to his/her representative having the authority to respond to emergency situations such as settled trenches, weather damage, etc. The emergency telephone service number and list of contact personnel shall be submitted to the Owner prior to beginning work, and shall be maintained throughout the progress of work and the full contract period. The Contractor shall provide the City with a list of cell phone numbers for his/her contact personnel, such as the site superintendent.
- B. The Contractor is required to provide response personnel at the work site within one (1) hour of an emergency.

1.12 HOURS OF OPERATION

- A. No outdoor activity by the Contractor shall be permitted on the site outside of the hours of 7:00 to 17:00, Monday through Friday, except as required by the Contract Documents.
- B. The Owner may approve other work hours for special considerations such as work to be completed during off-peak hours. The Contractor must receive written approval from the Owner prior to working during such hours.

1.13 VISUAL RECORDING

- A. Before beginning construction, the Contractor shall make a color video (Digital format) recording of the entire exterior surface of each tank and the adjoining site. Two (2) complete recordings shall be furnished to the Owner prior to the start of the work.

1.14 NOTIFICATION OF CONSTRUCTION

- A. At least five (5) business days prior to beginning the work the Contractor shall notify the following agencies to provide information regarding proposed construction:
 - 1. DIG SAFE;

2. Warwick Water Division
3. Warwick Public Works;
4. Warwick Police Department;
5. Warwick Fire Department;
7. Owner's Site Representative; and
8. Engineer

1.15 TEMPORARY FACILITIES PROVIDED BY THE CONTRACTOR

A. Temporary Light and Power

1. Electrical power is available at the site for use by the Contractor inside an existing storage shed owned by the City. The Contractor shall have a licensed electrician determine if this existing power supply is suitable for the expected demand from the Contractor's equipment. If the existing electrical service is not suitable, the Contractor shall make all the necessary arrangements with the power company for providing temporary electrical power for his/her use. All unauthorized sources of power, such as neighboring homes, shall be prohibited.
2. Night work is not allowed on this project, however if temporary lighting is required to prosecute the work the Contractor shall provide such lighting at no additional expense to the Owner.

B. Temporary Weather Protection or Heat

1. Furnish temporary weather protection and heat, as needed.

C. Furnish all necessary tools, compressed air and hoses for water hook-ups at the location on the site where the water will be made available by the Owner. The Contractor shall furnish and install a Reduced Pressure Zone (RPZ) backflow preventer at any temporary water service.

1.6 BASIS OF PAYMENT

- ### **A. Payment for all materials, permits, equipment and labor necessary to complete the project shall be included on the lump sum bid amount. Payment will be made to the Contractor by the City upon completion of the work complete in place and accepted by the City. Partial payments will be paid as a percentage of the work is completed and accepted by the City.**

END OF SECTION

PART 2 - MATERIAL

2.1 CONCRETE

- A. Concrete shall conform to ACI 301.
- B. Cement shall be Portland cement Type I or Type II.
- C. Admixtures, other than air-entraining, superplasticizers, shrinkage reducing and water reducing admixtures will not be permitted unless approved by the Engineer.
- D. Concrete for tank dome restoration shall have a minimum compressive strength of 4,000 psi at twenty-eight days and a maximum water to cementitious ratio of 0.42. All baffle wall concrete shall be air-entrained.
- E. Proportioning for concrete shall be in accordance with ACI 301.
- F. All concrete shall have a maximum water soluble chloride ion concentration of 0.06% by weight of cementitious material.

2.2 SHOTCRETE AND CONCRETE RESTORATION

- A. Patching material: Euco Repair V100, Tammspatch II and Tamms Structural Mortar by Euclid Chemical Company or other approved equal.
- B. Shotcrete material: Wet or dry mix in accordance with AWWA D110, ACI 301 & 506R or other approved equal.
- C. Anti-corrosion Reinforcing Primer: ECB by Conproco, Dural Prep AC by Tamms, or other approved equal.
- D. Replacement Reinforcement Anchors: ¼ in. x 1 ½ in. stainless steel expansion anchors or stainless steel concrete anchor screws as manufactured by the Powers Fasteners, Brewster, NY 10509, WEJ-IT, Tulsa, OK 74152, Hilti, Tulsa, OK 74121, Tapcon, or other approved equal.

2.3 REINFORCING STEEL

- A. Reinforcing steel shall be new billet steel Grade 60, as shown on the Drawings, meeting the requirements of ASTM A615. Welded wire fabric and weldable reinforcing steel shall conform to ASTM A185 and ASTM A706, respectively.
- B. Reinforcing steel shall be accurately fabricated and shall be free from loose rust, scale, and contaminants, which reduce bond.
- C. Reinforcing steel shall be accurately positioned on supports, spacers, hangers, or other reinforcements and shall be secured in place with wire ties or suitable clips. Rebar chair supports may be either steel with plastic tips, turned up legs or plastic.

2.4 POLYURETHANE GROUT INJECTION

- A. Injection Grout
 - 1. Hydro Active Flex LV by deNeeff Construction Chemicals, Inc., Waller, TX.
 - 2. SikaFix HH LV by Sika Corporation, Inc., Lyndhurst, NJ.
 - 3. AV-202 Multigrout by Avanti International, Webster, TX.
 - 4. Or equivalent.

2.5 EXTERIOR TANK CLEANING AND ARCHITECTURAL COATING

- A. Exterior Tank Coating
 - 1. The basecoat and topcoat shall be Tammscoat as manufactured by Euclid Chemical Company or approved equal.
 - 2. Color shall be as selected by the Owner.
- B. Polyurethane Joint Sealant
 - 1. Eucolastic 1NS as manufactured by Euclid Chemical Company, Cleveland, OH or approved equal.

2.6 APPURTENANCES

- A. Dome Access Hatches
 - 1. The roof hatches shall be USF Fabrication Model SRRI or equal aluminum roof hatch mounted on a new reinforced concrete curbs in accordance with the shop drawings.
- B. Dome Vent

New vent shall be minimum 2 ft diameter aluminum fail safe (frost free) pallet vent with aluminum 24 x 24 insect screen.

2.7 INTERIOR ELASTOMERIC COATING

- A. Coating material shall be C.I.M. 1061, a high solids, two component liquid, cold applied, asphalt extended urethane elastomer that cures to a durable abrasion resistant film and forms a flexible, impermeable barrier to water, as manufactured by C.I.M. Industries Inc., or approved equal.
 - 1. Coating material shall comply with NSF61 criteria for direct contact with potable water.

2. Minimum thickness: 60 mils. wet film / 55 mils. dry film
 3. Maximum coverage: 26 sq. ft. per gal.
 4. Solids by volume: 88 percent
 5. Volatile Organic Compounds (VOC): 0.75 pounds per gallon
 6. Elongation: 350 percent
- B. Patching material for treatment of cracks shall be trowel grade C.I.M. 1000 Trowel Grade. Liquid applied, chemical and corrosion resistant urethane elastomer, chemically thickened to allow trowel application with minimum sag.
1. Potable Water Service: Classified for potable water contact in tanks, reservoirs, pipes, and joints in accordance with ANSI/NSF 61 up to 180 degrees F (82 degrees C).
 2. Solids by volume: 89 percent.
 3. Extension to Break, ASTM D412: 300 percent.
 4. Abrasion Resistance, Weight Loss, ASTM D4060: 1.2 mg.
 5. Adhesion to Concrete, Dry, Elcometer: 350 pounds per square inch.
- C. Primer shall be CIM EMT Epoxy Primer. Two-component, high solids, moisture tolerant epoxy primer.
1. Potable Water Service: Classified for potable water contact in tanks, reservoirs, pipes, and joints in accordance with ANSI/NSF 61.
 2. Solids by Volume: 89 percent mixed.
 3. Volatile Organic Compounds (VOC): 2.0 pounds per gallon (240 g/L).
- D. Material for reinforcing coating material applied to floor and column footings shall be C.I.M Flexible Stitchbonded Polyester Scrim.
1. Weight: 3 oz. per square yard
 2. Tensile Strength: 57.1 lbs. average (ASTM D 1682)
 3. Elongation: 61.65% average (ASTM D 1682)
 4. Mullen Burst Strength: 176.8 lbs. (ASTM D 3786)
 5. Trapezoidal Tear Strength: 16.1 lbs. average (ASTM D1117)

- E. Bonding agent shall be C.I.M VOC Compliant Bonding Agent, an organosilane compound dispersed in acetone.
 - 1. Potable Water Service: Classified for potable water contact in tanks, reservoirs, pipes, and joints in accordance with ANSI/NSF 61.
 - 2. Solids by Volume: Less than 1 percent.
 - 3. Volatile Organic Compounds (VOC): 0 pounds per gallon (0 g/L).

2.8 CHLORINATION AND DISINFECTION

- A. Calcium Hypochlorite granules or crushed tablets
- B. Sodium Hypochlorite

PART 3 – EXECUTION

3.01 SHOTCRETE AND CONCRETE RESTORATION

- A. Removal of Unsound Shotcrete / Concrete
 - 1. Sound the exterior of the tank wall to determine the condition of the shotcrete covercoat.
 - 2. Remove loose and unsound shotcrete / concrete with appropriate chipping hammer to sound shotcrete with a minimum depth of 3/8 in. over the complete repair area, except do not cut any sound (substantially uncorroded) mesh reinforcing.
 - 3. Hollow or drummy shotcrete shall be inspected and remain if found to be not deteriorated or cracked.
- B. Surface Preparation
 - 1. Clean the surface by removing any dust, unsound or contaminated material, laitance, and corrosion deposits. Clean loose corrosion deposits from exposed reinforcing. Where chipping is not required to remove unsound material, roughen the surface and remove any laitance by light scrubbing. High-pressure wash with clean water, at a minimum pressure of 3,500 psi, prior to priming exposed reinforcing and substrate.
 - 2. Prime exposed existing reinforcing steel by applying one full coat of approved priming material. Allow to dry before applying patching. If any doubt exists about having achieved an unbroken coating, a second application shall be made and, again, allowed to dry before applying patching.
 - 3. Prime substrate after it is saturated surface dry (i.e.: thoroughly soaked with clean water and any excess water removed) with a slurry of the repair mortar in accordance with the manufacturer's directions. Using a stiff mason's

brush, the slurry shall be scrubbed into the substrate where access is not impeded by new wire mesh reinforcing. The repair mortar shall be installed as soon as the slurry becomes tacky and before it dries.

4. Mix patching mortar in strict accordance with manufacturer's directions. Use only material from original bags and containers.

C. Application of patching mortar.

1. Exposed steel reinforcing bars and welded wire fabric shall be firmly secured to avoid movement during the application process, as this will affect mortar compaction, build and bond.
2. Apply the patching mortar to the prepared substrate by gloved hand or trowel. First, work a thin layer of the mortar into the slurry and then build the mortar onto this layer. Thoroughly compact the mortar onto the primed substrate and around the exposed reinforcement.
3. Apply the patching mortar in strict accordance with the manufacturer's directions.
4. If sagging occurs during applications, the patching mortar shall be completely removed and reapplied at a reduced thickness onto the correctly re-primed substrate.

D. Finish the patching mortar by striking off with a straight edge and closing with a steel float. Finish of the shotcrete surface shall be a nozzle or gun finish. The completed surface shall not be overworked.

E. Low temperature conditions: In cold weather, normal precautions for winter when working with cementitious materials shall be adopted. The material shall not be applied when the substrate and/or air temperature is 45°F (7°C) and falling. At 45°F (7°C) static temperature or at 45°F (7°C) and rising, the application may proceed. Do not apply if the temperature is expected to fall below 45°F (7°C) within 24 hours of application. Comply with manufacturer's directions for cold weather applications.

F. High temperature conditions at ambient temperatures about 80°F (26°C), the materials shall be stored in the shade. Comply with manufacturer's directions for hot weather applications.

G. Water cure finished surfaces of patches using fine mist spray or wet burlap against surface for a minimum of seven (7) days after initial set of patch material.

H. Cure finished surfaces of interior patches by method acceptable to owner.

I. Store all materials in cool, dry conditions in the original unopened bags or cans, and in strict accordance with manufacturer's directions. Do not use materials that have been stored for periods longer than the manufacturer's recommended shelf life.

3.02 POLYURETHANE GROUT INJECTION

A. General

1. All cracks or joints exhibiting any form of leakage (efflorescence, dampness, weeping, or flowing) shall be sealed to eliminate liquid infiltration through the cracks or joints as identified by the Engineer. This includes leaks that develop after completion of a portion or all of the grouting.

B. Injection Equipment

1. The pumps used for pressure water and grout injection shall be capable of providing pressures at the injection gun or nozzle of up to 1000 psig, and the gun shall be fitted with a gauge for measuring the injection pressure. Check valves shall be placed in the hoses at the proper locations to prevent backflow (a reversal in the direction of flow) and unintentional formations of foam or gel. Follow manufacturer's current printed recommendation for equipment utilized for addition of accelerator.

C. Surface Preparation

1. Use suitable tools and equipment to remove any and all deleterious materials from within cracks and joints to be treated including, but not limited to, coatings/resurfaces, mold, mildew, dirt, grease and efflorescence in order to expose the full length of the crack or joint.

D. Injection Grout Procedures

1. Drill 5/8-in diameter holes around the leak's exit path starting at the bottom of the leak, crack or joint and continuing upward. Placement of holes will require the experience and discretion of the grouters and shall be subject to the approval of the Engineer.
2. Holes shall be drilled directly into leak path or at a 45 degree angle to intersect cracks or joints in the concrete by starting drill holes 2 – 6 – in away from leaking cracks or joints and drilling sufficiently deep to intersect the leak path.
3. Set and tighten mechanical packers in the holes.
4. Pump water only through the packers to determine if communication has been achieved between packers and crack or joint.
5. Pump the grout at approximately 50 to 100 psig using a staged or stepped grouting procedure by pumping grout into a packer and closely watching the response signs at the leak area. Higher pressures shall only be used when cracks are very tight or when injecting deep (10-in to 12-in) into the holes in the concrete. Continue to pump from packer to packer allowing approximately 2 to 5 minutes for gel time for the grout until gas bubbles are pushed out the leak's exit path followed by the flow of liquid grout and then foam. When foaming occurs, pump more grout through each packer around

the leak and wait until the leak is fully sealed (5 to 30 minutes depending on temperature). If liquid grout flow continues out a leak's exit for more than approximately 30 seconds, oakum shall be chinked or compressed into the leak to aid the grout's gel time as a dam.

6. If grout does not exude from the full length of the crack or joint, drill additional 5/8-in diameter holes, install packers and inject water and grout until complete sealing of the crack or joint has been achieved.
7. Once water cut-off has been achieved, the packers shall be completely removed. Holes shall be cleaned of residual polyurethane grout to a minimum depth of 3/4", as measured from the face of the concrete surface, and filled with concrete repair material per Section 2.01.

3.03 EXTERIOR TANK CLEANING AND ARCHITECTURAL COATING

A. High Pressure Water Washing & Surface Preparation

1. High-pressure wash exterior surfaces of dome, dome ring, and tank wall to remove all foreign matter, efflorescence, dust, dirt, laitance or other surface contaminants. Minimum water pressure shall be 3,000 psi and the maximum water pressure shall be 5,000 psi.
2. After completion of the high pressure washing, low-pressure wash exterior surface as required with a 5% chlorine solution and thoroughly rinse with clean water to kill any algae, fungus or other surface contaminants.
3. Restore exterior wall surface, as required, with high strength patching material to provide a sound surface for the application of the exterior tank coating.
4. Detail and fill any dome shrinkage cracks less than 1/16" with Tammscoat manufactured by Euclid Chemical by working the material into the crack with a brush.
5. Detail any dome shrinkage cracks great than 1/16" with Eucolastic 1NS manufactured by Euclid with conventional caulking equipment and striking the material flush with the surrounding surface. Crack detailing products can be applied over the existing coating

B. Mixing and Application of Exterior Tank Coating

1. Mix and apply the coating in strict accordance with the manufacturer's directions.
2. Do not apply coating when the temperature is below 45°F, or when the temperature is expected to fall below 45°F within 24 hours after completing application.

3.04 APPURTENANCE

- A. Dome Access Hatches
 - 1. Remove existing dome hatches.
 - 2. Pour new concrete curbs as required to accept new dome hatches.
 - 3. Install new roof hatches in accordance with manufacturer's literature and approved shop drawings.
- B. Dome Vent
 - 1. Remove existing dome vent.
 - 2. Pour new concrete curb as required to accept new dome vent.
 - 3. Fasten the vent with new stainless steel anchors.
 - 4. Seal the new vent to the concrete curb with a new gasket and caulking.

3.05 INTERIOR CLEANING

- A. High Pressure Water Washing & Surface Preparation
 - 1. High-pressure wash interior surfaces of the tank wall to remove all foreign matter, dust, dirt, laitance or other surface contaminants. Minimum water pressure shall be 3,000 psi and the maximum water pressure shall be 5,000 psi.
- B. Sediment Removal
 - 1. Remove all wash water and sediment from the tank interior and dispose of onsite as directed by the Owner.

3.06 INTERIOR ELASTOMERIC COATING

- A. Surface Preparation
 - a. Prepare all surfaces where the elastomeric coating is to be applied by high pressure hydro blasting or abrasive blasting to obtain the surface profile required by the manufacturer, CSP 4-6.
 - b. Interior surface of tank wall shall be dry and have a minimum temperature of at least 5°F above the dew point at time of application of coating.
 - c. Verify and document the interior atmospheric and concrete conditions prior to any application. All conditions shall be in accordance with the coating manufacturer's recommendations.
- B. Application of Elastomeric Interior Coating

- a. Apply a 15 WFT coating of CIM EMT Primer to the interior wall and floor surfaces and cure in accordance with the manufacturer's recommendations.
- b. Construction Joints: Apply a tack coat of CIM 1000 Trowel Grade to the cured primer and embed 12 inch wide CIM polyester scrim into the tack coat of CIM and allow to cure as required.
- c. Floor Cracks: Pretreat all floor cracks with a 60 WFT (55 DFT) base coat of CIM 1061.
- d. Apply a 60 WFT (55 DFT) topcoat of CIM 1061 to the interior wall and floor surfaces. Fully encase all polyester scrim at construction joints.
- e. Fully cure the coating in accordance with the manufacturer's recommendations.
- f. Use only factory-trained applicators in field crew.

3.07 CHLORINATION AND DISINFECTION

- A. Disinfect tank by cleaning, chlorinating and testing in accordance with AWWA C652-92 Standard for Disinfection of Water-Storage Facilities.
 1. Obtain approval of proposed procedure for chlorination (either Method 2 or Method 3 given in C652) prior to start of procedure.
 2. Before the tank is returned to service sample and test for coliform organisms in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, and WEF, Washington, D.C. using a state approved laboratory. Testing to be arranged and paid for by the Owner.
- B. Prior to disposal of heavily chlorinated water, consult with the Owner, to ascertain any special disposal requirements. Cost of de-chlorinated and disposal of water shall be borne by the Contractor.

END OF SECTION

HEALTH AND SAFETY PLAN

PART 1 - GENERAL

1.0 GENERAL

- A. Although there is no indication that hazardous materials are present at the project site, the Contractor shall take steps as described herein to be prepared for the possibility of a chance encounter.
- B. Prior to the start of work on the site, Contractor shall submit a site specific health and safety plan, for record purposes only, prepared or reviewed by a Certified Industrial Hygienist, which includes consideration of all potential hazards at the site. The plan shall be submitted not more than fourteen (14) days after receipt of the written Notice to Proceed from the Owner. Work may not proceed at the project site until the Contractor's health and safety plan has been received by the Engineer.
- C. Contractor shall be cognizant of the minimum standards set forth in OSHA 29CFR 1910.120. The health and safety plan shall include, but shall not necessarily be limited, to the following:
 - 1. Identification of Contractor's Site Safety Officer.
 - 2. Identification of Hazards and Risks Associated with Project.
 - 3. Contractor's Standard Operating Procedures, including Personnel Training and Field Orientation.
 - 4. Respiratory Protection Training Requirements.
 - 5. Levels of Protection and Selection of Equipment Procedures.
 - 6. Type of Medical Surveillance Program.
 - 7. Personal Hygiene Requirements and Guidelines.
 - 8. Zone Delineation of the Project Site.
 - 9. Site Security and Entry Control Procedures.
 - 10. Field Monitoring of Site Contaminants.
 - 11. Contingency and Emergency Procedures.
 - 12. Listing of Emergency Contacts.
- D. The personal protective equipment required to provide the appropriate level of dermal and respiratory protection shall be determined based on the results of continuous air monitoring performed by the Contractor and the standards set forth

in the Contractor's health and safety plan. The Engineer may conduct duplicate air monitoring for quality control purposes.

PART 2 - BASIS OF PAYMENT

2.1 BASIS OF PAYMENT

- A. Payment for all materials, permits, equipment and labor necessary to complete the project shall be included on the lump sum bid amount. Payment will be made to the Contractor by the City upon completion of the work complete in place and accepted by the City. Partial payments will be paid as a percentage of the work is completed and accepted by the City.

END OF SECTION

CITY OF WARWICK
BID AND CONTRACT FORM

TITLE OF SPECIFICATION: Bid2022-284 Water Tank Rehabilitation

I. BID:

WHEREAS, the CITY OF WARWICK has duly asked for bids for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the bid price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this bid or another bid on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the bid into a contract. This bid and contract will be secured by Bonds, if required by the specifications.

Pricing as follows

Continued next page

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

Bid2022-284 Water Tank Rehabilitation

Interior Rehabilitation and Waterproofing

All labor, equipment, materials and incidentals must be provided to clean interior wall and floor surfaces. Cleaning to be done by high-pressure water blasting to the interior wall and floor surfaces of the tank. Removal of all slit, dirt, and debris and disposing of it onsite. Restoration of the interior concrete surfaces and cracks. Application of 60 mil thick coating of CIM 1061 with epoxy primer as manufactured by C.I.M Industries, INC. Upon the completion of work, the tank must be disinfected in accordance with AWWA C652.

5.5MG (Bald Hill Tank#1) \$ _____

6.5MG (Bald Hill Tank#2) \$ _____

Total \$ _____

Exterior Rehabilitation

All labor, equipment, materials and incidentals must be provided to clean the exterior surface of the tank wall and dome. Cleaning to be done by high-pressure water blasting to the exterior surface of the exposed tank wall and dome including a rinse down using a minimum of five percent chlorine solution to kill all mold and mildew. Removal of any efflorescence and minor patching to provide a sound surface for the application of a water resistant coating. Application of two (2) coats of Tammscoat to each tank wall and dome.

(Note: Pricing for the 6.5MG- Bald Hill Tank #2 includes approximately 300 SF of exterior gunite restoration)

5.5MG (Bald Hill Tank#1) \$ _____

6.5MG (Bald Hill Tank#2) \$ _____

Total \$ _____

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PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

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Bid2022-284 Water Tank Rehabilitation

Dome Access Hatch Replacement(s)

All labor, equipment, materials and incidentals must be provided for the replacement of two (2) existing roof access hatches. The installation of two (2) new reinforced concrete curbs and the installation of two (2) new aluminum, flood tight and lockable hatch covers. Covers are to be secured to the new concrete curbs with stainless steel anchors.

5.5MG (Bald Hill Tank#1) \$ _____

6.5MG (Bald Hill Tank#2) \$ _____

Total \$ _____

Dome Vent Replacement

All labor, equipment, materials and incidentals must be provided for the removal and replacement of the existing dome vent on the 6.5 MG (Bald Hill Tank #2). With a new aluminum fail safe/frost free dome vent. The vent is to be secured to the existing concrete curb with stainless steel anchors.

Total \$ _____