



Installing Two (2) New Well Pumps, Piping and Appurtenances, Performance Testing, and Water Quality Sampling

Bid Documents

To be received on May 5, 2026
At 10:00 am

In the Administration Building Located at
7 Wiltshire Drive
East Windsor, New Jersey 08520

Phone: 609-443-6000

Fax: 609-443-3928

TABLE OF CONTENTS
FULL BID PACKET – INSTALLING TWO (2) NEW WELL PUMPS, PIPING AND APPURTENANCES,
PERFORMANCE TESTING AND WATER QUALITY SAMPLING

| | |
|---|----|
| 1. Notice to Bidders | 3 |
| 2. Instructions to Bidders and Statutory Requirements | 4 |
| a. I. General Terms and Conditions | 4 |
| b. II. Submission of Bids | 4 |
| c. III. Qualification of Bidders | 6 |
| d. IV. Bid Security and Bonding Requirements | 6 |
| e. V. Interpretation and Addenda | 8 |
| f. VI. Insurance and Indemnification | 9 |
| g. VII. Pricing Information for Preparation of Bids | 10 |
| h. VIII. Statutory and Other Requirements | 10 |
| i. IX. Method of Contract Award | 16 |
| j. X. Causes for Rejecting Bids | 16 |
| k. XI. Termination of the Contract | 17 |
| l. XII. Domestic Materials | 18 |
| m. XIII. Brand Names | 18 |
| n. XIV. Quantities | 18 |
| o. XV. Payment | 18 |
| p. Bid Document Checklist | 19 |
| q. Bid Forms | |
| i. Bid Proposal Form | 20 |
| ii. Acknowledgement of Receipt of Addenda | 23 |
| iii. Exceptions/Variations Form | 24 |
| iv. Bid Guarantee | 25 |
| v. Consent of Surety | 27 |
| vi. Exhibit A – Equal Employment Opportunity (Goods & Services) | 28 |
| vii. Exhibit B – Equal Employment Opportunity (Construction) | 30 |
| viii. Affirmative Action Compliance Notice | 35 |
| ix. Americans with Disabilities Act Compliance Form | 37 |
| x. Statement of Ownership Disclosure | 39 |
| xi. Business Registration Certificate Requirement | 42 |
| xii. Prohibited Russia–Belarus and Iran Investment Certification | 43 |
| xiii. Pay to Play Vendor Certification | 45 |
| xiv. Non-Collusion Affidavit | 46 |
| xv. New Jersey Worker and Community Right to Know Act | 47 |
| xvi. Prevailing Wage Act | 48 |
| xvii. The Public Works Contractor Registration Act | 49 |
| xviii. State of New Jersey Debarred List Affidavit | 51 |
| xix. Certification of Non-Debarment for Federal Government | 53 |
| xx. Bid Questionnaire | 57 |
| xxi. Affidavit of Compliance with Section 2.36 (East Windsor Twp) | 63 |
| 3. Appendix A - General Specifications | 64 |
| 4. Appendix B – Technical Specifications | 66 |

**NOTICE TO BIDDERS
EAST WINDSOR MUNICIPAL UTILITIES AUTHORITY
7 WILTSHIRE DRIVE, EAST WINDSOR, NJ 08520
609-443-6000**

**WILL ACCEPT BIDS FOR
INSTALLING TWO (2) NEW WELL PUMPS, PIPING AND APPURTENANCES, PERFORMANCE TESTING AND
WATER QUALITY SAMPLING**

Notice is hereby given that sealed bids will be received by the East Windsor Municipal Utilities Authority at the Authority Administration Building, 7 Wiltshire Drive, East Windsor, NJ 08520, Attention: Richard Brand, Executive Director, **until 10:00 a.m. prevailing time on May 5, 2026.**

Bids must be enclosed in a sealed envelope marked appropriately (Wells #9 & #10 Well Pump Installation & Appurtenances) and must have the NAME AND ADDRESS of the bidder on the outside of the envelope. Bids may be submitted in person or by mail. The Authority assumes no responsibility for the loss or non-delivery of any bid sent to it prior to the bid opening.

At the above time and place, all bids will be publicly opened and read aloud. No bids will be accepted after the date and time designated to receive bids. A bid may be withdrawn prior to the time for opening of bids or authorized postponement thereof. No bid may be withdrawn for a period of sixty (60) days.

The Authority reserves the right to reject any or all bids, to waive any informalities deviations, or omissions in any or all bids, and to accept a bid which, in its judgment, best serves the interest of the Authority.

Specifications and bid forms may be examined and printed from our website <https://eastwindsormua.com/>. All bids must conform to the models and directions contained in the Specifications and must be submitted in a complete contract packet.

Bidders are required to comply with all applicable statutory requirements, including the requirements of N.J.S.A. 10:5.31, et seq N.J.A.C. 17:27 (Equal Employment Opportunity), 42 U.S.C.-12101, et seq (Americans with Disabilities Act), N.J.S.A. 34:11-56.25 et seq (Prevailing Wages), and N.J.S.A. 52:32-44, et seq (NJ Business Registration).

A corporation submitting a bid, in response to this advertisement, shall accompany such bid with a resolution authorizing its proper officers to submit such a bid and authorize said officers to execute a contract in the event its bid is accepted.

By: Richard Brand, Executive Director

Date: 4/3/2026

East Windsor Municipal Utilities Authority

Instructions to Bidders and Statutory Requirements

I. General Terms and Conditions

The East Windsor Municipal Utilities Authority (hereinafter the "Authority") reserves the right, if it is in the best interests of the Authority, to reject any or all Bids, select the Bid or combination of Bids which best suits the purposes of the Authority, and to waive any technical irregularity in any or all Bids.

The Authority shall not be liable for any failure on its part to detect or correct errors and no right shall inure to any Bidder as a result of any action taken by the Authority in connection therewith.

In submitting a Bid, the Bidder warrants that he has read thoroughly and understands all documents referenced in the specifications, such other additional material as he may deem relevant to the foundation of his Bid, and further that he has made such site inspection as may be necessary and appropriate to the work for which he is bidding and that the Bid as submitted represents his fully considered judgment as to the price, terms and conditions set forth therein.

In submitting the Bid, the Bidder recognizes that no subsequent claim of misunderstanding or of failure to read any relevant document or consider any relevant factor will relieve him of his obligation to act according to his Bid if the Authority accepts his Bid offer.

A Bid proposal may be withdrawn when written request therefore is received by the Authority **before** the time designated for opening of Bids.

No Bidder may withdraw his Bid within sixty (60) days after the actual date of the opening thereof.

II. Submission of Bids

- A. Sealed bids shall be received by the East Windsor Municipal Utilities Authority, hereinafter referred to as "EWMUA," in accordance with public advertisement as required by law, with a copy of said notice being attached hereto and made a part of these specifications.
- B. Sealed bids will be received by the EWMUA at 7 Wiltshire Dr, East Windsor, NJ 08520 at **10:00 am on May 5, 2026** as stated in the Notice to Bidders, and at such time and place will be publicly opened and read aloud.
- C. The bid shall be submitted in a sealed envelope: (1) addressed to East Windsor M.U.A., 7 Wiltshire Dr, East Windsor, NJ 08520, (2) bearing the name and address of the bidder written on the face of the envelope, and (3) clearly marked "BID" with the contract title and/or bid # of the contract being bid.

- D. It is the bidder's responsibility that bids are presented to the owner at the time and at the place designated. Bids must be hand delivered or mailed to the EWMUA Administrative Office no later than **10:00 am on May 5, 2026**; however, the owner disclaims any responsibility for bids forwarded by regular or overnight mail. If the bid is sent by express mail service, the designation in sub-section C, above, must also appear on the outside of the express mail envelope. Telephone, facsimile or email bid submissions WILL NOT be accepted. All bid proposals will be date and time stamped upon receipt. Bids received after the designated time and date will be returned unopened to the bidder.
- E. Sealed bids forwarded to the owner before the time of opening of bids may be withdrawn upon written application of the bidder who shall be required to produce evidence showing that the individual is or represents the principal or principals involved in the bid. Once bids have been opened, they shall remain firm for a period of sixty (60) calendar days.
- F. All prices and amounts must be written in ink or preferably typed. Bids containing any conditions, omissions, unexplained erasures or alterations, items not called for in the bid proposal form, attachment of additive information not required by the specifications, or irregularities of any kind, may be rejected by the owner. Any changes, whiteouts, strikeouts, etc. in the bid must be initialed in ink by the person signing the bid.
- G. Each bid proposal form must give the full business address, business phone, fax, e-mail, if available, the contact person of the bidder, and be signed by an authorized representative as follows:
- Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing.
 - Bids by corporations must be signed in the legal name of the corporation, followed by the name of the State in which incorporated and must contain the signature and designation of the president, secretary or other person authorized to bind the corporation in the matter.
 - Bids by sole-proprietorship shall be signed by the proprietor.
 - When requested, satisfactory evidence of the authority of the officer signing shall be furnished.
- H. Bidder should be aware of the following statutes that represent "Truth in Contracting" laws:
- N.J.S.A. 2C:21-34, et seq. governs false claims and representations by bidders. It is a serious crime for the bidder to knowingly submit a false claim and/or knowingly make material misrepresentation.

- N.J.S.A. 2C:27-10 provides that a person commits a crime if said person offers a benefit to a public servant for an official act performed or to be performed by a public servant, which is a violation of official duty.
- N.J.S.A. 2C:27-11 provides that a bidder commits a crime if said person, directly or indirectly, confers or agrees to confer any benefit not allowed by law to a public servant.
- Bidder should consult the statutes or legal counsel for further information.

III. Qualification of Bidders

The Authority reserves the power to make such investigations as it deems necessary to determine the ability of a Bidder to perform work, and a Bidder shall furnish to the Authority all such information and data for this purpose as the Authority may request. The Authority reserves the right to reject any Bid if the evidence submitted by or investigation of Bidder fails to satisfy the Authority that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

Where applicable, lump sum price work includes furnishing and delivering all the material to do and perform all the work and labor required to be furnished and delivered, done and performed for the Authority and to complete this contract in strict and entire conformity with the plans and specifications. Shipping will be FOB.

Where unit price items are delineated in the proposal section of the Bid Documents and specifications, it is understood by the Bidder that the Authority may increase, without limit, or decrease, without limit, the quantities to be done under any or all established unit price items. It is further understood by the Bidder that should there be any error, discrepancy or inconsistency in the figures, the unit prices as stated in the proposal shall govern. It is further understood that if his proposal is accepted, it is the unit price which he will receive and which the Authority will pay for the work specified to be done under the items, in the way required and set forth by the Bid documents and specifications without recitation or repetition of said unit prices in the BID proposal PAGE". Shipping will be FOB.

IV. Bid Security and Bonding Requirements

The following provisions, if indicated by an (X), shall be applicable to this bid and be made a part of the bid documents:

A. Bid Guarantee

Bidder shall submit with the bid a certified check, cashier's check or bid bond in the amount of ten percent (10%) of the total price bid, but not in excess of \$20,000, payable unconditionally to the owner. When submitting a Bid Bond, it shall contain a Power of Attorney for the full amount of Bid Bond from a surety company authorized to do business in the State of New Jersey and acceptable to the owner. The check or bond of the unsuccessful bidder(s) shall be returned

pursuant to N.J.S.A. 40A:11-24a. The check or bond of the bidder to whom the contract is awarded shall be retained until a contract is executed and the required performance bond or other security is submitted. The check or bond of the successful bidder shall be forfeited if the bidder fails to enter into a contract pursuant to N.J.S.A. 40A:11-21.

B. Consent of Surety

Bidder shall submit with the bid a Certificate (Consent of Surety) with Power of Attorney for the full amount of bid price from a Surety Company authorized to do business in the State of New Jersey and acceptable to the owner stating that it will provide said bidder with a Performance Bond in the full amount of the bid. This certificate shall be obtained in order to confirm that the bidder to whom the contract is awarded will furnish Performance and Payment Bonds from an acceptable surety company on behalf of said bidder, any or all subcontractors or by each respective subcontractor or by any combination thereof which results in performance security equal to the total amount of the contract, pursuant to N.J.S.A. 40A:11-22.

C. Performance Bond

Bidder shall simultaneously with the delivery of the executed contract, submit an executed bond in the amount of one hundred percent (100%) of the acceptable bid as security for the faithful performance of this contract. The performance bond provided shall not be released until final acceptance of the whole work and then only if any liens or claims have been satisfied. The surety on such bond or bonds shall be a duly authorized surety company authorized to do business in the State of New Jersey pursuant to N.J.S.A. 17:31-5.

D. Labor and Material (Payment) Bond

Bidder shall with the delivery of the performance bond submit an executed payment bond to guarantee payment to laborers and suppliers for the labor and material used in the work performed under the contract.

Not required for this bid.

E. Maintenance Bond

Upon acceptance of the work by the EWMUA, the contractor shall submit a maintenance bond (N.J.S.A. 40A: 11-16.3) in an amount not to exceed ___% of the project costs guaranteeing against defective quality of work or materials for the period of:

- 1 year
- 2 years

Not required for this bid.

V. Interpretation and Addenda

All Bidders must contact the East Windsor Municipal Utilities Authority's office twenty-four (24) hours before the specified day of the Bid opening in order to insure receipt of all addenda.

No interpretation of the meaning of the specifications or other pre-Bid documents will be made to any Bidder orally. Any oral interpretation, not documented in writing to all Bidders before Bid opening or referenced in the Bid proposal, shall not be binding upon the Authority.

Any interpretation and/or clarification of the meaning of the specifications must be addressed in writing to:

Richard Brand
EWMUA
7 Wiltshire Dr
East Windsor, NJ 08520
adminassistant@eastwindsormua.com

A. The bidder understands and agrees that its bid is submitted on the basis of the specifications prepared by the owner. The bidder accepts the obligation to become familiar with these specifications.

B. Bidders are expected to examine the specifications and related bid documents with care and observe all their requirements. Ambiguities, errors or omissions noted by bidders should be promptly reported in writing to the appropriate official. Any prospective bidder who wishes to challenge a bid specification shall file such challenges in writing with the contracting agent no less than three business days prior to the opening of the bids. Challenges filed after that time shall be considered void and having no impact on the contracting unit or the award of a contract pursuant to N.J.S.A. 40A:11-13. In the event the bidder fails to notify the owner of such ambiguities, errors or omissions, the bidder shall be bound by the requirements of the specifications and the bidder's submitted bid.

C. No oral interpretation and or clarification of the meaning of the specifications for any goods and services will be made to any bidder. Requests for interpretations or clarifications shall be in writing, addressed to the owner's representative stipulated in the specification. In order to be given consideration, a written request must be received at least seven (7) business days prior to the date fixed for the opening of the bid for goods and services.

All interpretations, clarifications and any supplemental instructions will be in the form of written addenda to the specifications, and will be distributed to all prospective bidders. All addenda so issued shall become part of the specification and bid documents, and shall be acknowledged by the bidder in the bid. The owner's interpretations or corrections thereof shall be final.

When issuing addenda, the owner shall provide required notice prior to the official receipt of bids to any person who has submitted a bid or who has received a bid package pursuant to N.J.S.A. 40A:1123c.1.

D. Discrepancies in Bids

1. If the amount shown in words and its equivalent in figures do not agree, the written words shall be binding. Ditto marks are not considered writing or printing and shall not be used.
2. In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall prevail. In the event there is an error of the summation of the extended totals, the computation by the owner of the extended totals shall govern.

VI. Insurance and Indemnification

The insurance documents indicated by an (X) shall be included but are not limited to the following coverages.

A. Insurance Requirements

1. Workers' Compensation Insurance

Workers' Compensation insurance shall be maintained in full force during the life of the contract, covering all employees engaged in performance of the contract pursuant to N.J.S.A. 34:15-12(a) and N.J.A.C. 12:235-1.6.

2. General Liability Insurance

General liability insurance shall be provided with limits of not less than \$1,000,000 any one person and \$1,000,000 any one accident for bodily injury and \$1,000,000 aggregate for property damage, and shall be maintained in full force during the life of the contract.

3. Automotive Liability Insurance

Automotive liability insurance covering contractor for claims arising from owned, hired and non-owned vehicles with limits of not less than \$1,000,000 any one person, and \$1,000,000 any one accident for bodily injury and \$1,000,000 each accident for property damage, shall be maintained in full force during the life of the contract.

4. Other Forms of Insurance Required

The Contractor's insurance company shall provide written notice to the Authority at least fifteen (15) days prior to the cancellation, alteration or expiration of any of the aforementioned policies of insurance.

B. Certificates of the Required Insurance

Certificates of Insurance for those policies required above shall be submitted with the contract. Such coverage shall be with an insurance company authorized to do business in the State of New Jersey and shall name the owner as an additional insured.

Self-insured contractors shall submit an affidavit attesting to their self-insured coverage and shall name the owner as an additional insured.

C. Indemnification

Bidder shall indemnify and hold harmless the owner from all claims, suits or actions, and damages or costs of every name and description to which the owner may be subjected or put by reason of injury to the person or property of another, or the property of the owner, resulting from negligent acts or omissions on the part of the contractor, the contractor's agents, servants or subcontractors in the delivery of goods and services, or in the performance of the work under the contract.

VII. Pricing information for Preparation of Bids

A. The owner is exempt from any local, state or federal sales, use or excise tax.

B. Contractor shall be responsible for obtaining any applicable permits or licenses from any government entity that has jurisdiction to require the same. All bids submitted shall have included this cost.

VIII. Statutory and Other Requirements

The following are mandatory requirements of this bid and contract.

A. Mandatory Affirmative Action Certification

No firm may be issued a contract unless it complies with the affirmative action provisions of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27-1 et seq. The following information summarizes the full, required regulatory text, which is included as Exhibit A of this bid specification.

1. Goods and Services (including professional services) Contracts

Each contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- i. A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter); or
- ii. A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4 et. seq.
- iii. A photocopy of an Employee Information Report (Form AA 302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4 et seq.

2. Maintenance/Construction Contracts

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA201) electronically provided to the public agency by the Division, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7 et seq.

The contractor shall also submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of the contract to the Division and to the public agency compliance officer. The contractor shall also cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the job and/or off-the-job programs for outreach and training of minorities and women.

B. Americans with Disabilities Act of 1990

Discrimination on the basis of disability in contracting for the purchase of goods and services is prohibited. Bidders are required to read Americans with Disabilities language that is included as Appendix A of this specification and agree that the provisions of Title II of the Act are made a part of the contract. The contractor is obligated to comply with the Act and to hold the owner harmless.

C. Stockholder/Ownership Disclosure

N.J.S.A. 52:25-24.2 provides that no corporation or partnership shall be awarded any contract for the performance of any work or the furnishing of any goods and services, unless, prior to the receipt of the bid or accompanying the bid of said corporation or partnership, bidders shall submit a statement setting forth the names and addresses of all stockholders in the corporation or partnership who own ten percent or more of its stock of any class, or of

all individual partners in the partnership who own a ten percent or greater interest therein. The included Statement of Ownership shall be completed and attached to the bid proposal. This requirement applies to all forms of corporations and partnerships, including, but not limited to, limited partnerships, limited liability corporations, limited liability partnerships and Subchapter S corporations. Failure to submit a stockholder disclosure document shall result in rejection of the bid.

Failure to submit the stockholder disclosure documents is a mandatory cause of the bid to be rejected.

D. Proof of Business Registration

N.J.S.A. 52:32-44 requires that each bidder (contractor) submit the proof of business registration with the bid proposal. Proof of registration shall be a copy of the bidder's Business Registration Certificate (BRC). A BRC is obtained from the New Jersey Division of Revenue. Information on obtaining a BRC is available on the internet at www.nj.gov/njbgs or by phone at (609) 292-1730. N.J.S.A. 52:32-44 imposes the following requirements on contractors and all subcontractors that knowingly provide goods or perform services for a contractor fulfilling this contract:

- 1) The contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the contractor;
- 2) Prior to receipt of final payment from a contracting agency, a contractor must submit to the contacting agency an accurate list of all subcontractors or attest that none was used;
- 3) During the term of this contract, the contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into this State.

A contractor, subcontractor or supplier who fails to provide proof of business registration or provides false business registration information shall be liable to a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration not properly provided or maintained under a contract with a contracting agency. Information on the law and its requirements is available by calling (609) 292-1730.

E. Disclosure of Investment Activities in Iran and Prohibited Activities with Russia or Belarus

Pursuant to Public Law 2012, c. 25 any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification attached to attest, under penalty of perjury, that neither the person or entity, nor any of its

parents, subsidiaries, or affiliates (any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity), is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the State of New Jersey, Department of Treasury, Division of Purchase and Property website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>.

Pursuant to Public Law 2022, c. 3 any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification attached to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates (any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity), is identified on the NJ Department of Treasury's list of entities determined to be engaged in prohibited activities in Russia or Belarus. The NJ Department of Treasury's list is found on the State of New Jersey, Department of Treasury website at <https://www.nj.gov/treasury/administration/pdf/RussiaBelarusEntityList.pdf>.

F. Pay to Play

Starting in January 2007, business entities are advised of their responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000 from public entities in a calendar year. Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

G. Non-Collusion Affidavit

The Affidavit shall be properly executed and submitted with the bid proposal.

H. Acknowledgement of Receipt of Addenda

All addenda so issued shall become part of the specification and bid documents, and shall be acknowledged by the bidder in the bid.

Failure to submit the acknowledgement of receipt of addenda is a mandatory cause of the bid to be rejected.

I. Exceptions/Variations

Exceptions and variations between the goods and services described and the goods and services offered are to be fully identified and described by the bidder on a separate sheet and submitted with the bid proposal form. Vendor literature WILL NOT suffice in explaining exceptions to these specifications. In the absence of any exceptions by the bidder, it will be

presumed and required that the goods and services as described in the bid specification be provided or performed.

If boxes of the following items are checked, they are mandatory requirements of the bid proposal and contract.

J. New Jersey Worker and Community Right to Know Act

The manufacturer or supplier of chemical substances or mixtures shall label them in accordance with the N.J. Worker and Community Right to Know Law (N.J.S.A. 34:5A-1 et seq., and N.J.A.C 8:59-5 et seq.). Containers that the law and rules require to be labeled shall show the Chemical Abstracts Service number of all the components and the chemical name. Further, all applicable Material Safety Data Sheets (MSDS) - hazardous substance fact sheet - must be furnished.

K. Prevailing Wage Act

Pursuant to N.J.S.A. 34:11-56.25 et seq., contractors on projects for public work shall adhere to all requirements of the New Jersey Prevailing Wage Act. The contractor shall be required to submit a certified payroll record to the owner within ten (10) days of the payment of the wages. The contractor is also responsible for obtaining and submitting all subcontractors' certified payroll records within the aforementioned time period. The contractor shall submit said certified payrolls in the form set forth in N.J.A.C. 12:60-6.1(c). It is the contractor's responsibility to obtain any additional copies of the certified payroll form to be submitted by contacting the New Jersey Department of Labor and Workforce Development, Division of Workplace Standards. Additional information is available at www.state.nj.us/labor/lse/lspubcon.html.

L. The Public Works Contractor Registration Act

N.J.S.A. 34:11-56.48 et seq. requires that a general or prime contractor and any listed subcontractors named in the contractor's bid proposal shall possess a certificate at the time the bid proposal is submitted. After bid proposals are received and prior to award of contract, the successful contractor shall submit a copy of the contractor's certification along with those of all listed subcontractors. All non-listed subcontractors and lower tier sub-subcontractors shall be registered prior to starting work on the project. It is the general contractor's responsibility that all non-listed sub-contractors at any tier have their certificate prior to starting work on the job.

Under the law a "contractor" is "a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract" which is subject to the provisions of the New Jersey Prevailing Wage Act [N.J.S.A. 34:11-56.25, et seq.] It applies to contractors based in New Jersey or in another state.

The law defines “public works projects” as contracts for "public work" as defined in the Prevailing Wage statute [N.J.S.A. 34:11-56.26(5)]. The term means:

- “Construction, reconstruction, demolition, alteration, or repair work, or maintenance work, including painting and decorating, done under contract and paid for in whole or in part out of the funds of a public body, except work performed under a rehabilitation program.”
- "Public work" shall also mean construction, reconstruction, demolition, alteration, or repair work, done on any property or premises, whether or not the work is paid for from public funds...”
- “Maintenance work" means the repair of existing facilities when the size, type or extent of such facilities is not thereby changed or increased. While “maintenance” includes painting, and decorating and is covered under the law, it does not include work such as routine landscape maintenance or janitorial services.

To register, a contractor must provide the State Department of Labor with a full and accurately completed application form. The form is available online at www.state.nj.us/labor/lsse/lspubcon.html.

N.J.S.A. 34:11-56.55 specifically prohibits accepting applications for registration as a substitute for a certificate of registration.

M. New Jersey/Federal Debarred List

The Contractor shall submit with his bid a sworn statement, as set forth herein signed by an officer or partner of the Contractor, indicating whether or not the Contractor is at the time of the bid, included on the State Treasurer’s List of Debarred, Suspended, or Disqualified Bidders.

N. Bidder Questionnaire

The bidder shall submit with the bid the completed questionnaire, providing information related to the business, equipment, references, present and prior contracts, and proposed subcontractors.

O. Affidavit of Compliance with Section 2.36 of the Revised General Ordinances of East Windsor Township

The bidder shall submit with the bid the completed Affidavit, declaring that certain political contributions have not been made to applicable candidates, officials, party committees, or political action committees.

IX. Method of Contract Award

- A. The Contractor shall complete all work on the wells and pumping system by August 14, 2026. Liquidated damages: \$500 per calendar day for delays beyond the required completion date, unless delays are deemed beyond Contractor control by the Owner.
- B. Pursuant to requirements of N.J.A.C. 5:30-5.1 et seq., any contract resulting from this bid shall be subject to the availability and appropriation of sufficient funds annually. Please see Section XI, Termination of Contract, Sub-section F, for additional information.
- C. The Owner shall award the contract or reject all bids within the time specified in the invitation to bid, but in no case more than 60 days, except that the bids of any bidders who consent thereto may, at the request of the contracting unit, be held for consideration for such longer period as may be agreed. All bidders will be notified of the EWMUA's decision, in writing by certified mail.
- D. The Owner reserves the right to reject any bid not prepared and submitted in accordance with the provisions hereof, and to reject any or all bids. In the event that the Owner rejects all bids; the Owner shall publish a notice of re-bid no later than ten days, Saturdays, Sundays and holidays exempted, prior to the date for acceptance of bids.
- E. Within fourteen (14) calendar days of the award of the contract, the Owner shall notify the successful bidder in writing, at the address set forth in the Bid Proposal and such notice shall specify the place and time for delivery of the executed contract, the performance bond, and the appropriate affirmative action documentation. Failure to deliver the aforementioned documents as specified in the notice of award shall be cause for the EWMUA to declare the contractor non-responsive and to award the contract to the next lowest bidder.
- F. When two or more Bids are equal in all respects, award may be made at the discretion of the Authority by a lottery drawing which shall be witnessed by at least three (3) persons and which may be attended by the Bidders or their representatives.

X. Causes for Rejecting Bids

- A. All bids pursuant to N.J.S.A. 40A:11-13.2;
- B. If more than one bid is received from an individual, firm or partnership, corporation or association under the same name;
- C. Multiple bids from an agent representing competing bidders;
- D. The bid is inappropriately unbalanced;

- E. The bidder is determined to possess, pursuant to N.J.S.A. 40A:11-4b, Prior Negative Experience; or,
- F. If the successful bidder fails to enter into a contract within 21 days, Sundays and holidays excepted, or as otherwise agreed upon by the parties to the contract. In this case at its option, the owner may accept the bid of the next lowest responsible bidder. (N.J.S.A. 40A:11-24b)

XI. Termination of the Contract

- A. Any violation of these specifications shall be sufficient cause for the immediate cancellation of the contract by the Owner, who may thereupon employ the necessary labor to perform the work or readvertise or re-let work, at the expense of the offending Contractor and his sureties.
- B. If, through any cause, the contractor shall fail to fulfill in a timely and proper manner obligations under the contract or if the contractor shall violate any of the requirements of the contract, the owner shall there upon have the right to terminate the contract by giving written notice to the contractor of such termination and specifying the effective date of termination. Such termination shall relieve the owner of any obligation for balances to the contractor of any sum or sums set forth in the contract. Owner will pay only for goods and services accepted prior to termination.
- C. Notwithstanding the above, the contractor shall not be relieved of liability to the owner for damages sustained by the owner by virtue of any breach of the contract by the contractor and the owner may withhold any payments to the contractor for the purpose of compensation until such time as the exact amount of the damage due the owner from the contractor is determined.
- D. The contractor agrees to indemnify and hold the owner harmless from any liability to subcontractors/suppliers concerning payment for work performed or goods supplied arising out of the lawful termination of the contract by the owner under this provision.
- E. In case of default by the contractor, the owner may procure the goods or services from other sources and hold the contractor responsible for any excess cost.
- F. Continuation of the terms of the contract beyond the fiscal year is contingent on availability of funds in the following year's budget. In the event of unavailability of such funds, the owner reserves the right to cancel the contract.
- G. Acquisition, Merger, Sale and/or Transfer of Business, etc.

It is understood by all parties that if, during the life of the contract, the contractor disposes of his/her business concern by acquisition, merger, sale and or/transfer or by any means

convey his/her interest(s) to another party, all obligations are transferred to that new party. In this event, the new owner(s) will be required to submit all documentation/legal instruments that were required in the original bid/contract. Any change shall be approved by the Owner.

- H. The contractor will not assign any interest in the contract and shall not transfer any interest in the same without the prior written consent of the owner.
- I. The owner may terminate the contract for convenience by providing 60 calendar days advanced notice to the contractor.

XII. Domestic Materials

The successful Bidder shall comply with Chapter 107, P.L. 1982 (N.J.S.A. 40A:11-18) and Chapter 90, P.L. 1934 (N.J.S.A. 52:33-1 et seq.) which require that only manufactured and farm products of the United States, whenever available, shall be used in this project.

XIII. Brand Names

Brand Names and/or description used in this proposal are to acquaint bidders with the type of commodity desired and will be used as a standard by which alternate or competitive materials offered will be judged. Competitive items must be equal to the workmanship. Variations between the materials described and materials offered are to be fully explained by the Bidder in an accompanying letter. All commodities must be in current production detail wherein the material offered differs from the specifications. If no exceptions are indicated, it will be required that the material or service be delivered or performed as per the specifications.

XIV. Quantities

Bidders should be aware that the quantities mentioned in the Bid Specifications and/or Bid Proposal are estimates based on historical data. The actual quantities required may be slightly higher or lower during this contract period. The Bid prices will remain in effect from date of contract acceptance for the actual quantity ordered during this contract period.

XV. Payment

- A. Payment will be made within 30 days of submission of invoices to the Authority in the manner required of contracting organizations in New Jersey.
- B. All invoices issued by the successful bidder shall make reference to the Authority's purchase order number, which will be issued by the Authority at the time of the award and subsequently from time-to-time, as necessary. All purchase orders shall be signed by the vendor in the space provided for "claimant's declaration".

East Windsor Municipal Utilities Authority

BID DOCUMENT CHECKLIST

| Reference in Bid Document | Required by Owner | Document | Initial each required entry and if required submit the item |
|----------------------------------|-------------------------------------|---|--|
| Specifications | <input checked="" type="checkbox"/> | Bid Proposal Form | |
| V VIII H | <input checked="" type="checkbox"/> | Acknowledgment of Receipt of Addenda Failure to submit shall result in rejection of the bid | |
| VIII I | <input checked="" type="checkbox"/> | Exceptions/Variations | |
| VIII A | <input checked="" type="checkbox"/> | Mandatory Affirmative Action Language (Exhibit A & B) Affirmative Action Compliance Notice | |
| VIII B | <input checked="" type="checkbox"/> | Americans with Disabilities Act of 1990 Language | |
| VIII C | <input checked="" type="checkbox"/> | Stockholder/Ownership Disclosure Certification Failure to submit shall result in rejection of the bid | |
| VIII D | <input checked="" type="checkbox"/> | Proof of Business Registration | |
| VIII E | <input checked="" type="checkbox"/> | Disclosure of Prohibited Activities in Russian and Belarus & Investment Activities in Iran | |
| VIII F | <input checked="" type="checkbox"/> | Pay to Play Vendor Certification | |
| VIII G | <input checked="" type="checkbox"/> | Non-Collusion Affidavit | |
| VIII J | <input checked="" type="checkbox"/> | NJ Worker and Community Right to Know | |
| VIII K | <input checked="" type="checkbox"/> | Prevailing Wage | |
| VIII L | <input checked="" type="checkbox"/> | Public Works Contractor Certificate | |
| VIII M | <input checked="" type="checkbox"/> | NJ Debarred List | |
| VIII M | <input checked="" type="checkbox"/> | Federal Debarred List | |
| VIII N | <input checked="" type="checkbox"/> | Bidder Questionnaire | |
| VIII O | <input checked="" type="checkbox"/> | Affidavit of Compliance with Section 2.36 of the Revised General Ordinances of East Windsor Township | |

EAST WINDSOR MUNICIPAL UTILITIES AUTHORITY

BID PROPOSAL FORM

Installation of Well Pumps, Piping, and Appurtenances, Performance Testing & Water Quality Sampling

The undersigned declares that he/she has carefully examined the Notice, Instructions, and Specifications; and will contract to carry out said project as specified and delineated at the price outlined below:

Breakdown of Bid Proposal

| Description | Unit of Measure | Quantity | Unit Cost (\$) | Total Cost (\$) |
|---|------------------------|-----------------|-----------------------|------------------------|
| Mobilization/Demobilization | | | | |
| Well Pump #9 (Install) | | | | |
| Well Pump #10 (Install) | | | | |
| Piping | | | | |
| Valves/Appurtenances | | | | |
| Raw Water Meters | | | | |
| Electrical | | | | |
| 4-Hour Step Test per well | | | | |
| 72-Hour Pump Test | | | | |
| Water Quality Sampling – Field Collection | | | | |
| NJDEP-Certified Laboratory Analysis | | | | |
| PFAS / Specialty Testing (if required) | | | | |
| Data Collection & Reporting | | | | |

Labor Costs

Estimated Hours: _____

Hourly Rate: _____

Total Labor Cost: _____

Equipment Costs

Pumps & Materials: _____

Testing Equipment: _____

Sampling Equipment (bottles, preservatives, coolers): _____

Temporary Piping: _____

Generators: _____

Other Costs

NJDEP Permit Fees: _____

Lab Courier/Shipping: _____

Site Restoration: _____

Contingency: _____

Total Bid

Total Bid Amount: _____

Schedule

Start Date: _____

Completion Date: _____

The undersigned declares that the bid prices as stated are inclusive of all charges, including delivery.

Date: _____

Name of Bidding firm: _____

Address: _____

Phone Number: _____ Fax: _____

Email Address: _____

By: _____
Signature/Title

Print Name

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned Bidder hereby acknowledges receipt of the following Addenda:

| Addendum Number | Dated | Acknowledge Receipt (Initial) |
|------------------------|--------------|--------------------------------------|
| | | |
| | | |
| | | |
| | | |

No addenda were received

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

EXCEPTIONS/VARIATIONS

List any and all exceptions and variations to specifications below.

The East Windsor Municipal Utilities Authority reserves the right to accept or reject bids and to award contract based on the best interest of the Authority.

If no exceptions, state NOTE.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

BID GUARANTEE

Accompanying this Proposal is a Consent of Surety and a Bid Guarantee, in the form of a Bid Bond (), or a Certified or Cashier's Check (), payable to the order of the East Windsor Municipal Utilities Authority in the sum of

_____ Dollars (\$_____)

which the undersigned agrees is to be forfeited as liquidated damages, and not as a penalty, if the Contract is awarded to the undersigned and the undersigned shall fail to execute the Contract for the project or to furnish the Performance Bond required within the stipulated time, otherwise the check will be returned to the undersigned.

The undersigned is a:

- corporation
- individual
- partnership
- limited liability company

under the laws of the State of _____ having

principal offices at _____

Telephone number: _____

Trade name of bidder: _____

1. Signed by _____

Signature _____

Title _____

2. Signed by _____

Signature _____

Title _____

3. Signed by _____

Signature _____

Title _____

Signed this _____ day of _____, 20_____.

NOTE: If a partnership, all partners must sign. If a corporation, the president and at least one other officer must sign. If a proprietorship, the proprietor must sign. Proposals signed by an agent must be accompanied by a Power-of-Attorney for the Principal or Principals involved. Attach additional signature sheets in the above form, if necessary.

CONSENT OF SURETY

A performance bond will be required from the successful contractor on this project, and consequently, all bidders shall submit, with their bid, a consent of surety in substantially the following form:

To: East Windsor Municipal Utilities Authority
(Owner)

Re: _____
(Contractor)

(Project Description)

This is to certify that the _____
(Surety Company)

will provide to the East Windsor Municipal Utilities Authority a performance bond in the full amount of awarded contract in the event that said contractor is awarded a contract for the above project.

(Contractor)

(Authorized Agent of Surety Company)

Date: _____

CONSENT OF SURETY MUST BE SIGNED BY AN AUTHORIZED AGENT OR REPRESENTATIVE OF A SURETY COMPANY AND NOT BY THE INDIVIDUAL OR COMPANY REPRESENTATIVE SUBMITTING THE BID.

EXHIBIT A

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L. 1975, c. 127)

N.J.A.C. 17:27 et seq.

GOODS, GENERAL SERVICE AND PROFESSIONAL SERVICES CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

1. Letter of Federal Affirmative Action Plan Approval;
2. Certificate of Employee Information Report; or
3. Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at http://www.state.nj.us/treasury/contract_compliance).

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase and Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase and Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1 et seq.

(REVISED 4/10)

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union with which it has a collective bargaining agreement a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

- (A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to provide such opportunities minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with this equal employment opportunity goals set forth in this chapter.
- (B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:
 - (1) To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation as with applicable State and Federal court decisions;

(6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

(i) The contractor or subcontractor shall interview the referred minority or woman worker;

(ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and nondiscrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

(iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be consideration for employment as described in (i) above whenever vacancies occur. At the request of the Division the contractor or subcontractor shall provide evidence of its good faith efforts to employ woman and minorities from the list to fill vacancies.

(iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced

trainee or apprentice, the contractor or subcontract shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Division.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) electronically provided to the public agency by the Division through its website for the distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer. The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women. (D) The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment

Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code (NJAC 17:27)**.

AFFIRMATIVE ACTION COMPLIANCE NOTICE
N.J.S.A. 10:5-31 and N.J.A.C. 17:27

This form is a summary of the successful bidder's requirement to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

GOODS AND SERVICES CONTRACTS (INCLUDING PROFESSIONAL SERVICES)

The successful bidder shall submit to the public agency, after notification of award but prior to execution of this contract, one of the following three documents as forms of evidence:

(a) A photocopy of a valid letter that the contractor is operating under an existing Federally approved or sanctioned affirmative action program (good for one year from the date of the letter);

OR

(b) A photocopy of a Certificate of Employee Information Report approval, issued in accordance with N.J.A.C. 17:27-4;

OR

(c) A photocopy of an Employee Information Report (Form AA302) provided by the Division and distributed to the public agency to be completed by the contractor in accordance with N.J.A.C. 17:27-4.

The successful vendor may obtain the Affirmative Action Employee Information Report (AA302) from the contracting unit during normal business hours.

The successful vendor(s) must submit the copies of the AA302 Report to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division). The Public Agency copy is submitted to the public agency, and the vendor copy is retained by the vendor.

CONSTRUCTION CONTRACTS

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer. The undersigned vendor certifies that he/she is aware of the commitment to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27.1 et seq. and agrees to furnish the required forms of evidence. The undersigned vendor further understands that his/her bid shall be

rejected as non-responsive if said contractor fails to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27-1 et seq.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

AMERICANS WITH DISABILITIES ACT OF 1990
Equal Opportunity for Individuals with Disability

The contractor and the East Windsor Municipal Utilities Authority, (hereafter "owner") do hereby agree that the provisions of Title 11 of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. S121 01 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant there unto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event that the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages, of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the owner's grievance procedure, the contractor agrees to abide by any decision of the owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the owner, or if the owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim, If any action or administrative proceeding is brought against the owner or any of its agents, servants, and employees, the owner shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or other process received by the owner or its representatives.

It is expressly agreed and understood that any approval by the owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the owner pursuant to this paragraph.

It is further agreed and understood that the owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the owner from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: _____

Organization Address: _____

Part I Check the box that represents the type of business organization:

- Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- For-Profit Corporation (any type) Limited Liability Company (LLC)
- Partnership Limited Partnership Limited Liability Partnership (LLP)
- Other (be specific): _____

Part II

The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. **(COMPLETE THE LIST BELOW IN THIS SECTION)**

OR

No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART IV)**

(Please attach additional sheets if more space is needed):

| Name of Individual or Business Entity | Home Address (for Individuals) or Business Address |
|---------------------------------------|--|
| | |
| | |
| | |

Part III

DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed.**

| Website (URL) containing the last annual SEC (or foreign equivalent) filing | Page #s |
|--|----------------|
| | |
| | |
| | |

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above.** The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

| Stockholder/Partner/Member and Corresponding Entity Listed in Part II | Home Address (for Individuals) or Business Address |
|--|---|
| | |
| | |
| | |

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the **East**

Windsor Municipal Utilities Authority is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with the **East Windsor Municipal Utilities Authority** to notify the **East Windsor Municipal Utilities Authority** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the **East Windsor Municipal Utilities Authority** to declare any contract(s) resulting from this certification void and unenforceable.

| | |
|--------------------|--|
| Full Name (Print): | |
| Signature: | |
| Title: | |
| Date: | |

BUSINESS REGISTRATION CERTIFICATE

As a condition to enter into a contract, effective January 18, 2010, pursuant to an amendment to N.J.S.A. 52:32-44, State and local entities are prohibited from entering into a contract with an entity unless the bidder and each subcontractor named in the bid proposal has a valid Business Registration Certificate on file with the Division of Revenue.

The contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of the Treasury the used tax due pursuant to the "Sales and Use Tax Act, P.L. 1966, c. 30 (N.J.S.A. 54:32B-1 et seq.) on all their sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Revenue at (609) 292-1730. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.htm>.

A copy of the current New Jersey Business Registration Certificate must be submitted at the time of the bid proposal.

NON-COMPLIANCE RENDERS BID NON-RESPONSIVE AND INCURABLE.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

Prohibited Russia-Belarus Activities & Iran Investment Activities

Person or Entity

Part 1: Certification

COMPLETE PART 1 BY CHECKING ONE OF THE THREE BOXES BELOW

Pursuant to law, any person or entity that is a successful bidder or proposer, or otherwise proposes to enter into or renew a contract, for goods or services must complete the certification below prior to contract award to attest, under penalty of perjury, that neither the person or entity, nor any parent entity, subsidiary, or affiliate, is identified on the Department of Treasury's Russia-Belarus list or Chapter 25 list as a person or entity engaging in prohibited activities in Russia, Belarus or Iran. Before a contract for goods or services can be amended or extended, a person or entity must certify that neither the person or entity, nor any parent entity, subsidiary, or affiliate, is identified on the Department of Treasury's Russia-Belarus list. Both lists are found on Treasury's website at the following web addresses:

<https://www.nj.gov/treasury/administration/pdf/RussiaBelarusEntityList.pdf>
www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf.

As applicable to the type of contract, the above-referenced lists must be reviewed prior to completing the below certification.

A person or entity unable to make the certification must provide a detailed, accurate, and precise description of the activities of the person or entity, or of a parent entity, subsidiary, or affiliate, engaging in prohibited activities in Russia or Belarus and/or investment activities in Iran. The person or entity must cease engaging in any prohibited activities and provide an updated certification before the contract can be entered into.

If a vendor or contractor is found to be in violation of law, action may be taken as appropriate and as may be provided by law, rule, or contract, including but not limited to imposing sanctions, seeking compliance, recovering damages, declaring the party in default, and seeking debarment or suspension of the party.

CONTRACT AWARDS AND RENEWALS

I certify, pursuant to law, that neither the person or entity listed above, nor any parent entity, subsidiary, or affiliate appears on the N.J. Department of Treasury's lists of entities engaged in prohibited activities in Russia or Belarus pursuant to P.L. 2022, c. 3 or in investment activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. (Skip Part 2 and sign and complete the Certification below.)

CONTRACT AMENDMENTS AND EXTENSIONS

I certify, pursuant to law, that neither the person or entity listed above, nor any parent entity, subsidiary, or affiliate is listed on the N.J. Department of the Treasury's lists of entities determined to be engaged in prohibited activities in Russia or Belarus pursuant to P.L. 2022, c. 3. I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. (Skip Part 2 and sign and complete the Certification below.)

IF UNABLE TO CERTIFY

| | |
|--------------------------|--|
| <input type="checkbox"/> | <p><i>I am unable to certify as above because the person or entity and/or a parent entity, subsidiary, or affiliate is listed on the Department's Russia-Belarus list and/or Chapter 25 Iran list. I will provide a detailed, accurate, and precise description of the activities as directed in Part 2 below, and sign and complete the Certification below. <u>Failure to provide such will prevent the award of the contract to the person or entity, and appropriate penalties, fines, and/or sanctions will be assessed as provided by law.</u></i></p> |
|--------------------------|--|

Part 2: Additional Information

PLEASE PROVIDE FURTHER INFORMATION RELATED TO PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS AND/OR INVESTMENT ACTIVITIES IN IRAN.

You must provide a detailed, accurate, and precise description of the activities of the person or entity, or of a parent entity, subsidiary, or affiliate, engaging in prohibited activities in Russia or Belarus and/or investment activities in Iran in the space below and, if needed, on additional sheets provided by you.

Part 3: Certification of True and Complete Information

I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments there, to the best of my knowledge, are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity.

I acknowledge that the Contracting Unit is relying on the information contained herein and hereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the Contracting Unit to notify the Contracting Unit in writing of any changes to the answers of information contained herein.

I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with the Contracting Unit and that the Contracting Unit at its option may declare any contract(s) resulting from this certification void and unenforceable.

| | | | |
|--------------------------|--|--------------|-------------|
| Full Name (Print) | | Title | |
| Signature | | | Date |

PAY TO PLAY VENDOR CERTIFICATION

Starting in January 2007, all business entities are advised of their responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000 from public entities in a calendar year. Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

NON-COLLUSION AFFIDAVIT

State of New Jersey
County of _____

SS:

I, _____ residing in _____
(name of affiant) (name of municipality)
in the County of _____ and State of _____ of full
age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____
(title or position) (name of firm)

_____ the bidder making this Proposal for the bid

entitled _____, and that I executed the said proposal with
(title of bid proposal)

full authority to do so that said bidder has not, directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this affidavit are true and correct, and made with full knowledge that the _____

_____ relies upon the truth of the statements contained in said Proposal
(name of contracting unit)

and in the statements contained in this affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by _____.

Subscribed and sworn to

before me this day

Signature

_____, 2____

(Type or print name of affiant under signature)

Notary public of

My Commission expires _____

(Seal)

NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW ACT

The manufacturer or supplier of chemical substances or mixtures shall label them in accordance with the N.J. Worker and Community Right to Know Law (N.J.S.A. 34:5A-1 et seq., and N.J.A.C 8:59-5 et seq.). Containers that the law and rules require to be labeled shall show the Chemical Abstracts Service number of all the components and the chemical name. Further, all applicable Material Safety Data Sheets (MSDS) - hazardous substance fact sheet - must be furnished.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

PREVAILING WAGE ACT

Pursuant to N.J.S.A. 34:11-56.25 et seq., contractors on projects for public work shall adhere to all requirements of the New Jersey Prevailing Wage Act. The contractor shall be required to submit a certified payroll record to the owner within ten (10) days of the payment of the wages. The contractor is also responsible for obtaining and submitting all subcontractors' certified payroll records within the aforementioned time period. The contractor shall submit said certified payrolls in the form set forth in N.J.A.C. 12:60-6.1(c). It is the contractor's responsibility to obtain any additional copies of the certified payroll form to be submitted by contacting the New Jersey Department of Labor and Workforce Development, Division of Workplace Standards. Additional information is available at www.state.nj.us/labor/lsse/lspubcon.html.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT

N.J.S.A. 34:11-56.48 et seq. requires that a general or prime contractor and any listed subcontractors named in the contractor’s bid proposal shall possess a certificate at the time the bid proposal is submitted. After bid proposals are received and prior to award of contract, the successful contractor shall submit a copy of the contractor’s certification along with those of all listed subcontractors. All non-listed subcontractors and lower tier sub-subcontractors shall be registered prior to starting work on the project. It is the general contractor’s responsibility that all non-listed sub-contractors at any tier have their certificate prior to starting work on the job.

Under the law a “contractor” is “a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract” which is subject to the provisions of the New Jersey Prevailing Wage Act [N.J.S.A. 34:11-56.25, et seq.] It applies to contractors based in New Jersey or in another state.

The law defines “public works projects” as contracts for "public work" as defined in the Prevailing Wage statute [N.J.S.A. 34:11-56.26(5)]. The term means:

- “Construction, reconstruction, demolition, alteration, or repair work, or maintenance work, including painting and decorating, done under contract and paid for in whole or in part out of the funds of a public body, except work performed under a rehabilitation program.”
- "Public work" shall also mean construction, reconstruction, demolition, alteration, or repair work, done on any property or premises, whether or not the work is paid for from public funds...”
- “Maintenance work" means the repair of existing facilities when the size, type or extent of such facilities is not thereby changed or increased. While “maintenance” includes painting, and decorating and is covered under the law, it does not include work such as routine landscape maintenance or janitorial services.

To register, a contractor must provide the State Department of Labor with a full and accurately completed application form. The form is available online at www.state.nj.us/labor/lse/lspubcon.html.

N.J.S.A. 34:11-56.55 specifically prohibits accepting applications for registration as a substitute for a certificate of registration.

COMPANY: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

STATE OF NEW JERSEY DEBARRED LIST AFFIDAVIT

The Contractor shall submit with his bid a sworn statement, as set forth herein signed by an officer or partner of the Contractor, indicating whether or not the Contractor is at the time of the bid, included on the State Treasurer’s List of Debarred, Suspended, or Disqualified Bidders.

The Contractor will immediately notify the Owner whenever it appears that a Contractor is on the State Treasurer’s List. The NJ DEP if the Contractor commits any of the acts listed in N.J.A.C 7:1D-2.2.

STATE OF NEW JERSEY

COUNTY OF

I, _____ of the City _____

In the County of _____ and the State of _____

of full age, Being duly sworn according to law on my oath depose and say that:

I am _____, an officer of the firm of _____ the bidder making the Proposal for the above-named work, and That I executed the said Proposal with full authority to do so that said bidder at the time of making of this bid, is not included on the State of New Jersey, State Treasurer’s List of Debarred, Suspended and Disqualified Bidder; and that all statements contained in said Proposal and in the affidavit are true and correct, and made with the full knowledge that the Owner as Local Unit relies upon the truth of the statements contained in said Proposal and in the statements contained in this affidavit in awarding the contract for said work.

The undersigned further warrants that should the name of the firm making this bid appear on the State Treasurer’s List of Debarred, Suspended and Disqualified Bidders at any time prior, and during the life of this contract, including the Guarantee Period, that the East Windsor Municipal Utilities Authority shall be immediately notified by the signatory of this Eligibility Affidavit.

The undersigned understands that the firm making the bid as a Contractor is subject to debarment, Suspension and/or disqualification in contracting with the State of New Jersey and the Department of Environmental Protection if the Contractor, pursuant to N.J.A.C. 7:1 D-2.2 commits any of the acts listed therein, and as determined according to applicable law and regulation.

(Insert Name and Address of Contractor)

(Insert Name and Title of Affiant)

Subscribed and sworn

Before me this _____ day

Of _____ 20 _____

Notary Public of _____

My commission expires _____, 20 _____

**CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS**

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

| PART I: VENDOR INFORMATION | |
|--|--|
| Individual or Organization Name | |
| Physical Address of Individual or Organization | |
| Unique Entity ID (if applicable) | |
| CAGE/NCAGE Code (if applicable) | |
| <u>Check the box that represents the type of business organization:</u> | |

- Sole Proprietorship (skip Parts III and IV)
 Non-Profit Corporation (skip Parts III and IV)
 For-Profit Corporation (any type)
 Limited Liability Company (LLC)
 Partnership
 Limited Partnership
 Limited Liability Partnership (LLP)
 Other (be specific): _____

| PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization | | | |
|---|--|--------|--|
| I hereby certify that the individual or organization listed above in Part I is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the <name of contracting unit> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by <type of contracting unit> to notify the <type of contracting unit> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the <type of contracting unit> , permitting the <type of contracting unit> to declare any contract(s) resulting from this certification void and unenforceable. | | | |
| Full Name (Print): | | Title: | |
| Signature: | | Date: | |

| PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization |
|---|
| |

| Section A (Check the Box that applies) | |
|--|---|
| <input type="checkbox"/> | Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be. |
| Name of Individual or Organization | |
| Physical Address | |
| OR | |
| <input type="checkbox"/> | No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be. |
| Section B (Skip if no Business entity is listed in Section A above) | |
| <input type="checkbox"/> | Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be. |
| Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity | |
| Physical Address | |
| OR | |
| <input type="checkbox"/> | No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be. |
| Section C – Part III Certification | |
| I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the Organization listed above in Part I or, if applicable, owns greater than 50 percent of a parent entity of <i>East Windsor Municipal Utilities Authority</i> . I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the <i>East Windsor Municipal</i> | |

Utilities Authority is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award **East Windsor Municipal Utilities Authority** to notify the **East Windsor Municipal Utilities Authority** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the **East Windsor Municipal Utilities Authority**, permitting the **East Windsor Municipal Utilities Authority** to declare any contract(s) resulting from this certification void and unenforceable.

| | | | |
|--------------------|--|--------|--|
| Full Name (Print): | | Title: | |
| Signature: | | Date: | |

| Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities | |
|--|--|
| Section A | |
| <input type="checkbox"/> | Below is the name and address of the corporation(s) in which the Organization listed in Part I owns more than 50 percent of voting stock, or of the partnership(s) in which the Organization listed in Part I owns more than 50 percent interest therein, or of the limited liability company or companies in which the Organization listed above in Part I owns more than 50 percent interest therein, as the case may be. |
| Name of Business Entity | Physical Address |
| | |
| | |
| **Add additional sheets if necessary** | |
| OR | |
| <input type="checkbox"/> | The Organization listed above in Part I does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company. |

| Section B (skip if no business entities are listed in Section A of Part IV) | |
|--|---|
| <input type="checkbox"/> | Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company). |
| Name of Business Entity Controlled by Entity Listed in Section A of Part IV | Physical Address |
| | |
| | |

| | | | |
|--|--|--------|--|
| | | | |
| **Add additional Sheets if necessary** | | | |
| OR | | | |
| <input type="checkbox"/> | No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company. | | |
| Section C – Part IV Certification | | | |
| <p>I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the East Windsor Municipal Utilities Authority is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by East Windsor Municipal Utilities Authority to notify the East Windsor Municipal Utilities Authority in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the East Windsor Municipal Utilities Authority, permitting the East Windsor Municipal Utilities Authority to declare any contract(s) resulting from this certification void and unenforceable.</p> | | | |
| Full Name (Print): | | Title: | |
| Signature: | | Date: | |

BIDDER QUESTIONNAIRE

This Questionnaire must be completed and submitted with each bid proposal. The information requested is necessary for determination of the ability and responsibility of the Contractor to perform pursuant to the Specifications. Any information or inaccurate information may be a basis for invalidating the Bid Proposal.

- 1. Bidder name, nature of entity (corporation, partnership, sole proprietorship), address, phone number, and contact person:

- 2. Is your principal place of business in New Jersey?

Yes No ; If your answer is no, state your principal place of business: _____

- a. State here the name, address, and phone number of the person authorized to accept legal process in New Jersey.

- 3. Is the bidding entity a subsidiary of or affiliated with any other business entity?

Yes No

If your answer is Yes, list here the names and addresses of said business entities and the nature of the interest or affiliation.

| Name | Address |
|------|---------|
| | |
| | |
| | |

4. List the names and addresses of all officers of the bidding entity and/or all other persons having an interest as principals in the accompanying bid:

| Name | Address |
|------|---------|
| | |
| | |
| | |
| | |

5. Have any of the above individuals or any other principal in the bidding company been in bankruptcy? Yes No

If yes, provide information:

6. Have any of the individuals referred to in questions #4 and #5 been an officer in a company which has been in bankruptcy? Yes No If yes, provide information:

7. State the number of years this bidding entity has been in business _____.

8. Has the Company always been in the same business? Yes No

If no, list the Company's business history with specific dates:

9. Has this Company ever failed to complete work on or been declared in default on any Contract? Yes No If yes, provide information:

10. List the number of permanent employees in the Company.

Supervisory _____ Labor _____

11. Attach hereto a statement of current financial condition and/or a current Dun and Bradstreet rating.

12. List any business references.

| Name & Type of Business | Address | Phone/Fax Numbers |
|-------------------------|---------|-------------------|
| | | |
| | | |
| | | |

13. Disclose here any prior, current, or pending liens or encumbrances of any kind filed against any of your contracts or those of other principals identified in questions #3 and #4.

14. Disclose here any prior, current, or pending litigation concerning failure to perform or non-compliance with specifications.

15. List all similar or related contracts that your Company commenced and/or completed during the past three (3) or more years. Attach additional pages if necessary. For each contract listed, include the following information: the name and address of the contracting unit, the name of the individual to contact at said location, the telephone number thereof, a description of the work undertaken, date started, date completed, and the name and address of the surety providing security for each contract:

16. List the trucks and other equipment owned by the bidding entity which will be available for the proposed contract. Include the number of vehicles, the make, size, capacity, age, and condition.

17. List equipment which you expect to rent to accomplish the work.

18. List equipment which you expect to purchase to complete the contract.

19. Will any part of the work be subcontracted? Yes No Bidders must identify all subcontractors who will be used in the work except vendors and must actually use the subcontractors listed.

Name: _____

Address: _____

Trade: _____ License/Permit: _____

20. Bidders must offer proof of current licenses/permits issued by controlling government agencies, particularly the NJDEP, as applicable to the work under said contract(s). Provide below data as to all current licenses/permits, including those of land application sites and those of subcontractors listed in question #19. Attach hereto copies of the licenses/certificates identified herein. Failure to provide any of the foregoing information will result in rejection of the bid. Attach additional information if necessary.

21. Do you have a current valid letter from the Office of Federal Contract Compliance Programs verifying approval of a Federal Affirmative Action Plan and/or do you have a current valid New Jersey Certificate of Employee Information Report. If yes, attach copy hereto. If you have neither of the above, and if you are the successful bidder, you will be provided with and required to submit a New Jersey Affirmative Action Employee Information Report (Form AA 302).

The undersigned certifies that all of the responses to the twenty-one (21) items contained in the Bidder Questionnaire are true and correct.

Bidder

By: _____
Signature

Print name and title

Sworn and subscribed to before me this

_____ day of _____, 2026

My Commission expires _____

**TOWNSHIP OF EAST WINDSOR
AFFIDAVIT OF COMPLIANCE WITH SECTION 2.36 OF THE REVISED
GENERAL ORDINANCES OF EAST WINDSOR TOWNSHIP**

State of _____:

: SS

County of _____;

I, _____ being duly sworn,

(Name of Professional Business Entity(s) if a corporation, name of officer make affidavit)

affirm that I am aware of the provisions of Section 2.36 of the Revised General Ordinances of East Windsor Township, which was enacted by Ordinance No. 2004-21, adopted by the East Windsor Township Council on January 1, 2005 and made effective as of April 1, 2005. In accordance with that Ordinance, I further declare that neither the professional business entity with which I am associated, nor I, have made any contributions in excess of the limits permitted under Section 1, subparagraph (d) of the said Ordinance within the past calendar year, to any East Windsor Township Council candidate or office holder, or to any municipal or county party committee or to any political action committee that is organized for the purpose of promoting or supporting East Windsor Township candidate or office holders. I further declare that I am aware that if it is determined that such contributions have been made, that it will be deemed as a material breach of any professional services agreement that have entered into with the Township of East Windsor and that may be subject to penalties as may be provided by law, including those set forth in Section 2.36 of the Revised General Ordinance of East Windsor Township.

Signature of Person Make Affidavit

Sworn and subscribed to before me this

_____ day of _____, 2026

My Commission expires _____

Appendix A: General Specifications

Project Information

Project Name: Installation of Well Pumps, Piping, and Appurtenances, Performance Testing & Water Quality Sampling

Project Location: 140 Millstone Road

Owner/Utility Name: East Windsor MUA

NJDEP System ID (PWSID): 1101002

Bid Opening/Submission Deadline: May 5, 2026

Scope of Work

- Installation of two (2) well pumps
- Installation of piping, valves, and meters
- Electrical connections/startup (if required)
- 4-hour step-drawdown pump test
- 72-hour constant rate pump test
- **NJDEP-compliant water quality sampling and reporting**
- Monitoring, data collection, and reporting

NJDEP Water Quality Sampling Requirements

Sampling shall comply with NJDEP regulations for new or rehabilitated public water supply wells:

Required Sampling Events

- Sampling during 72-hour pump test (as required)

Minimum Parameter List (See Technical Specifications Section 3.02 - 12)

Microbiological:

- Total Coliform
- E. coli

Inorganic Chemicals (IOC):

- Nitrate / Nitrite
- pH
- Iron
- Manganese

Volatile Organic Compounds (VOCs):

- Full VOC Scan (EPA Method 524.2 or equivalent)

Secondary Contaminants (Recommended):

- Hardness
- Chloride
- Sulfate

Other:

- PFAS (PFOA, PFOS, PFNA, HFPO-DA (Gen X), PFHxS, PFBS)
 - Radionuclides (Gross Alpha, Radium)
 - SOCs (Pesticides/Herbicides)
-

NJDEP Compliance Requirements

- All samples collected by NJ-certified personnel (if required)
- Laboratory must be NJDEP-certified
- Chain-of-custody documentation required
- Proper sample preservation, handling, and hold times maintained
- Sampling taps meet NJDEP standards (no treatment bypass unless approved)
 - Results submitted to NJDEP (via Electronic Data Interchange, if required)
 - Compare results to NJ Maximum Contaminant Levels (MCLs)

Testing & Reporting Requirements

- Provide calibrated instruments for flow and water level measurement
- Record drawdown, flow rate, and recovery data
- Submit pump test report with performance curves and specific capacity
- Submit - water quality report
- Include certified lab reports and chain-of-custody forms

Appendix B: Technical Specifications

SECTION 331113

WELL PUMPING EQUIPMENT & TESTING

EAST WINDSOR MUA WELL #9 & #10 FACILITY

GENERAL

1. SUMMARY - This Section includes furnishing, installation, testing, and commissioning of groundwater supply wells and pumping equipment for **Well No. 9** and **Well No. 10**.
2. Wells are permitted as **test wells**, with potential for future conversion to **Public Water Supply (PWS) production wells**.

1.01 SCOPE OF WORK

A. Work includes, but is not limited to:

- Installation of vertical turbine well pumps.
- Installation of pump column assemblies, discharge heads, and motors.
- Installation of above-grade discharge piping, valves, and associated appurtenances.
- Installation of a reinforced concrete pad for pump/motor assembly.
- Installation of monitoring tubing and instrumentation.
- Installation of flow measurement devices and isolation valves.
- Startup and commissioning of pumping equipment.
- Pump Performance Test (minimum 4 hours)
- Aquifer Performance Test (**72-hour constant-rate aquifer pumping test**).
- Collection, documentation, and reporting of pumping test data.

B. Related Standards:

1. NJDEP Regulations

- N.J.A.C. 7:9D – Water Well Construction and Maintenance
- N.J.A.C. 7:10 – Safe Drinking Water Regulations

2. AWWA Standards

- A100 – Water Wells
- C200 – Steel Water Pipe (6 in. and larger)
- C206 – Field Welding of Steel Water Pipe
- C654 – Disinfection of Wells
- E103 – Vertical Line Shaft Pumps

3. NSF/ANSI Standards

- 61- Leach contaminants
- 372 – Lead free

4. ASTM Standard

- A53 – Column Pipe Specifications

C. Well pumps for this project shall be vertical turbine open line shaft design with production lubrication, including a bowl assembly, column assembly, discharge head and driver. The discharge head shall be designed to carry the entire weight of the bowl and column assembly along with the specified driver without excessive vibration or noise.

D. Pump Performance Step Test

1. The scope of work to be performed shall include specific capacity and pump performance testing of Wells No. 9 and Well No. 10.
2. The estimated length of the specific capacity / pump performance step test, including recovery is 8 hours (4 hours for each pump). However, the Owner shall be the sole judge as to the length of the test and therefore may increase or decrease the total pumping and/or recovery time.
3. Pumps flow will be recorded at a minimum of five (5) different flow points (See section 3.01). Vibration analysis (5 points), head, flow, amperage, pumping levels and determination of specific capacity will be recorded in a excel file. The contractor will utilize some of this information for plotting each pump curve as part of the final record of each well.
4. Preliminary specific capacity/pump performance test for both (2) Wells will utilize the new well pump and equipment.
5. The Contractor shall provide an orifice plate weir and manometer for measuring flow, and electronic pressure transducer/data logger to measure the water level at 1-minute intervals.

6. During the test the well shall be monitored for presence of sand. The Contractor shall provide and install a sand tester during the course of the testing.

7. See section 3 (Execution), 3.01

E. Performance of a 72 – hour constant rate aquifer pumping test

1. The scope of work to be performed shall include Constant rate testing of both Wells No. 9 and Well No. 10 operating simultaneously. The main objective is to put as much stress on the aquifer to demonstrate full buildout.
2. The Contractor shall provide an orifice plate weir and manometer for measuring flow, and electronic pressure transducer/data logger to measure the water level at 1-minute intervals.
3. Conduct per NJ Geological and Water Survey Technical Memorandum 12-2 (2012).
4. See section 3 (Execution), 3.02

F. Well Modifications

Contractor shall provide the labor, materials and equipment necessary for the installation of the new well pumping equipment for Wells 9 and 10. In addition, Contractor shall provide all labor, materials and equipment required for all other well modifications required by the Contract Documents.

1.02 PUMP/MOTOR INFORMATION

- A. Pertinent information on the existing wells is included as Attachment to this specification.
- B. Pumping equipment shall comply with AWWA E-102-17 Standards
- C. Disinfection of well/pumping equipment shall comply with AWWA C-654-13 Standards)

1.03 SUBMITTALS

- A. General

1. The CONTRACTOR shall furnish EWMUA with drawings, cuts and certified curves of the pumps for approval before placing an order. Including but not limited to:
 - a. Name of Manufacturer
 - b. Type and Model
 - c. Design Rotational Speed
 - d. Number of Stages
 - e. Type of Bowl Bearings
 - f. Type of line shaft bearings
 - g. Size of Shafting
 - h. Size of Pump Column
 - i. Size of Discharge Outlet
 - j. OD of Pump Bowls
 - k. Weight
 - l. Type of Finish
 - m. Total Weight
 - n. Total Pump Length
 - o. Complete performance curves showing capacity versus head, NPSH required, efficiency, and BHP plotted scales consistent with performance requirements

2. CONTRACTOR shall provide six (6) sets of Operation and Maintenance Manuals for each piece of equipment supplied under this Contract.

B. Warranty

1. The manufacturer shall warrant their pumps to be free of defects for a period of Two years after the product is put into full operation.

C. **Shop Drawing Procedure:**

1. **Preparation**

- a. Prepare shop drawings in **accordance with AWWA, NJDEP, and Owner standards.**
- b. Include layout, assembly, and installation details for pumps, motors, column pipe, line shaft, concrete pad, valves, instrumentation, and above-grade piping.
- c. Clearly indicate **dimensions, materials, coating systems, valve types, and locations.**
- d. Provide sequence of installation and any special coordination notes.

2. **Review Submittals**

- a. Submit drawings to the Owner and Engineer **electronically (PDF)** and in **hard copy**.
- b. Allow **10 business days** for review.
- c. Respond to **comments or revisions** requested by Owner/ Engineer; resubmit revised drawings promptly.

3. Approval and Distribution

- a. Obtain **Owner/Engineer approval** prior to fabrication or procurement.
- b. Maintain **approved drawings on-site** for reference during construction.
- c. Submit a **complete set of record shop drawings** at project closeout, including any revisions during construction.

D. Shop drawings shall clearly indicate:

- Pump setting depth
- Column assembly configuration
- Line shaft materials and bearing locations
- Coating systems
- Concrete pad dimensions and reinforcement layout
- Valve locations and type
- Instrumentation installation points

E. Submit the following documentation:

- Pump test reports
- Equipment certifications
- Installation, operation, and maintenance manuals

F. SHOP DRAWING CHECK LIST

Shop Drawing Review Checklist – Water Supply Wells Pumps & Testing (Section 331113)

| Item No. | Component / Drawing | Key Review Criteria | Action / Notes |
|-----------------|--------------------------------|--|--|
| 1 | Vertical Turbine Pump | Manufacturer, model, capacity, TDH, pump speed, efficiency, material, NSF compliance | Confirm matches spec & project requirements |
| 2 | Motor | Type (VFD compatible), horsepower, efficiency, shaft grounding, voltage, rotation | Verify compatibility with pump & VFD |
| 3 | Pump Column & Line Shaft | Material, diameter, length, threaded couplings, bearing locations, protective sleeves | Ensure compliance with AWWA/NJDEP requirements |
| 4 | Pump Head / Discharge Assembly | Material, impeller type, coating system, alignment, mounting | Verify protective coating and NSF compliance |
| 5 | Concrete Pad | Dimensions, reinforcement, design load, finish, slope for drainage | Confirm ACI compliance and structural adequacy |
| 6 | Above-Grade Piping | Material, diameter, class, flanges, stub connection, layout | Verify matches layout and piping spec |
| 7 | Valves | Type (gate, butterfly, check, isolation), size, flanged connections, handwheel direction | Confirm correct placement & type |
| 8 | Instrumentation | Flow meter, pressure transmitter, monitoring tubes | Ensure proper locations, sizing, and connection points |
| 9 | Protective Coatings | Type, application procedure, NSF certification, cure time | Verify coating type, thickness, and prep procedure |
| 10 | Installation Procedure | Step-by-step assembly, alignment, coordination, safety | Confirm installation sequence is clear and feasible |
| 11 | Shop Drawing Documentation | Approval stamp, revision history, compliance notes | Ensure all drawings are approved before fabrication |

Instructions / Notes:

1. Contractor to submit all shop drawings to **Owner/Engineer** for review prior to procurement or fabrication.
2. Owner/Engineer to review for **completeness, compliance with specifications, and coordination** with other project elements.
3. Contractor shall address all comments and resubmit **revised drawings** for approval.
4. Maintain **approved shop drawings on-site** during construction.

Include this checklist with final **record drawings** at project closeout.

1.04 PROJECT LOCATION

A. Project Site

East Windsor Municipal Utilities Authority (EWMUA)
Wastewater Treatment Facility
140 Millstone Road
(Approximately 2,500 feet north of Old Trenton Road)
East Windsor Township, Mercer County, New Jersey.

- B. The project site encompasses approximately **170 acres** of EWMUA-owned property.

PART 2 - PRODUCTS

2.01 SPECIFIC CAPACITY STEP TEST

A. Flow Measuring Device

1. Provide machined orifice plate(s) and manometer device capable of measuring the pump discharge within plus or minus 5% of true flow for flow rates from 100 gpm to 2,200 gpm.
2. Provide electronic pressure transducer equipment in the well for the test. The pressure transducer equipment will be set to collect data at a linear 1-minute time scale throughout the test. At the end of the test, the Contractor shall provide the Owner with a report of the data gathered and printed in a spreadsheet format.
3. Provide the Owner with the appropriate orifice table used to estimate the flow rate.

- B. Discharge Piping - Furnish, install, maintain, and operate discharge piping for the pump unit of sufficient size to conduct pumped water to the nearest discharge inlet as designated by the Owner.

- C. Sand Content Measuring Device - Provide a sand content measuring device such as a centrifugal sand separator as manufactured by Rossum or equal. The measuring device shall be capable of measuring a minimum sand content of 5 parts per million.

2.02 WELL PUMPS

A. Discharge Head Assembly

1. The pumps shall have surface discharge heads of fabricated cast iron with discharge flanges drilled for through bolting and to receive an ANSI class 125 pipe flange. The pump discharge head shall be designed for withstanding the maximum suction pressure and the shutoff head of the pump. The discharge head shall be designed to carry the entire weight of the complete pump and drive without distortion when spanning an opening of sufficient size to permit removal of the complete pump assembly. The discharge head shall be provided with a coupling guard and lifting lugs as standard.
2. The Contractor shall furnish and install the following new materials when installing the discharge head assembly:
 - a. New cast iron stuffing box with a bearing that shall be ASTM B505 alloy 836 bronze.
 - b. Split-type packing gland (Bronze ASTM B585 ALY 836).
 - c. Water Slinger (rubber or steel).
 - d. Packing gland studs and cap screws. (316 Stainless)
 - e. Complete set of packing materials.
 - f. Stuffing box lubrication fitting.
 - g. Stuffing box gasket.
 - h. Top column bolts and pipe gasket.
 - i. Motor bolts and nuts. (308 Stainless)
 - j. Non-Shrink grout around the base of the discharge head.
 - k. Discharge head have holes for proper fitting of two (2) 1 ¼" polypipe and two (2) stainless steel air lines.

B. Column Assembly

1. Column Pipe - Furnish and install new column pipes that shall be of ASTM A53, Grade B steel pipe, ten-inch (10") diameter and the associated couplings. Ends shall be machine with 8 threads per inch with a 1/8-inch taper and faced parallel to butt against machined shoulders in the column couplings. Intermediate sections of column shall not exceed 10 feet.

| Location | Pump Setting Depth (feet) | Column Pipe Diameter (inches) |
|----------|---------------------------|-------------------------------|
| Well 9 | 120 | 10" |
| Well 10 | 120 | 10" |

2. Line shaft and Head shaft - Furnish and install new line shaft and head shaft that shall be 416 stainless steel, of a size that conforms to the requirements of ANSI Standard Specifications for Deep Well Vertical Turbine Pumps, Number B58.1 current version. The line shaft shall be furnished in interchangeable sections having a nominal length of not more than ten (10') feet. The butting faces shall be machined square to the axis of the shaft. The line shafts shall be coupled with stainless steel couplings and shall have a left-hand thread to tighten during pump operation. The shaft shall be provided with a non-corrosive sleeve of 416 stainless steel at the location of each guide bearing. The shaft size shall be a minimum of 1 11/16". The head shaft and line shaft size shall be sufficient to withstand the torque transmitted by the motor.
3. Line Shaft Bearings and Bearing Retainers - Furnish and install new line shaft rubber bearings that shall be designed for vertical turbine pump service to be lubricated by the liquid being pumped and bearing retainers which shall be a bronze bearing retainer (ASTM B584) and shall be held in position in the column couplings by means of the butted ends of the column pipes. The bearing retainer shall be spaced at intervals of not more than ten (10') feet.

C. Bowl Assembly:

1)Furnish and install a new pump/bowl assembly for each (2) Well as per the following schedule:

| Location | Flow | TDH | # of Stages | Model |
|----------|-----------|----------|-------------|-------|
| Well 9 | 2,200 gpm | 271 feet | | |
| Well 10 | 2,200 gpm | 273 feet | | |

2)The suction bowl shall be designed to provide conservative entrance velocities and direct the flow to the first stage impeller. The inner surface of the suction bell shall be smooth and free of sharp projections which could cause turbulence or cavitation. The suction casing shall be designed to house the suction bell bearing by means of four vanes.

3)The bowls shall be smooth and free of sharp projections and shall have register fits for alignment and be connected by flanged and bolted construction. Bowl sizes 6" to 15" shall be porcelain enameled on the bowl interior. Bowl sizes 16" and larger shall be epoxy-lined.

4)The impellers shall be 316 stainless and machined and finished smooth to insure proper performance. They are to be balanced prior to assembly. The impellers shall be connected to the bowl shaft by means of collet design.

5)The suction strainer shall be a threaded cone design and have a free inlet area of at least 3-4 times the impeller eye area. The suction strainer shall be connected to the bowl assembly suction casing.

D. Air Line - Furnish and install two (2) new 304 stainless steel air lines, complete with hand pump air valves, direct reading four (4") inch diameter gauges and all fittings required. The Stainless-steel line shall be continuous line and shall be securely attached to the column pipe at every joint using stainless steel straps. The S.S. lines shall extend from the first joint above the pump to two feet (2ft.) top of the pump foundation pad where the gauge is to be located.

E. Level Transducer, Transducer Housing and M-Scope Access Tube

1. Contractor shall furnish and install two (2) – one & one quarter inch (1¼") diameter poly pipe for the pressure transducer and M-scope access line. The pipe shall be a full length; pipe joint or splices are not allowed. Use stainless steel strap to tie the pipe to the column pipe. The bottom pipe shall be slotted or drilled with holes to allow water into the pipe. The end of pipe shall be capped.
2. Provide and install a new level transducer for each Well, model PTX 1830/1880 (4-20 mA) series by G.E. Druck with a Sensor Termination Enclosure STE-110. A 24-volt power supply shall be provided with remote digital readout for future installation under a separate contract. Cable length shall be sufficient to place the transducer from the bowl assembly up to the pump motor control center where the local readout will be installed. Adequate cable length to be left for future installation, under a separate contract.

F. Drive/Motor

1. General

- a. Vertical hollow shaft motor shall be provided by the pump supplier and shall be coordinated by the pump supplier with the pump and associated drive equipment.
- b. Motor shall be capable of withstanding all forces that may be imposed during the course of normal operation, including starting and normal stops.
- c. Motor shall be suitable for across the line starting and shall be able to start and accelerate the connected load to full load speed with 80% of rated voltage at the motor terminals.
- d. Motor shall be capable of continuous operation at full load and rated frequency with a voltage variation of $\pm 10\%$.
- e. Motors shall be supplied with non-reverse ratchets of ample size to withstand the stresses that can be developed by reverse flow through the discharge column. Non-reverse ratchet assemblies shall be dynamically balanced to no more than .01 oz.-in. residual unbalance per pound of mass.
- f. Motors shall be equipped with a head shaft and shall be flange coupled to the pump line shaft.
- g. Motors shall be provided with grease lubricated antifriction lower guide bearings, ball or roller type.
- h. Drive units shall be of ample rating such that rated horsepower, not including the specified service factor, shall not be exceeded at any point on the pump characteristic curve within the specified operating range.
- i. Motors shall be designed to carry the full thrust of the pumps and associated drive equipment at all points on the pump performance curve. Motors specially designed for high thrust conditions shall be provided as required.
- j. Motors shall be provided with lifting eyes or other means for convenient attachment to overhead hoisting equipment. Lifting attachments shall be capable of sustaining the weight of the motor less the discharge head and pump assembly.
- k. Motors shall be provided with heaters.

2. Stator Construction - The stator iron core plate shall be a high-grade low loss silicon steel. Stator coils shall be provided with random wound VPI insulation. Temperature rise at the full load shall be 60 degree C by resistance.
3. Rotor Construction
 - a. Rotors shall be cast aluminum.
 - b. The method of brazing shall be by induction heating. When copper bars or copper end rings are used, they shall be made of "oxygen free" copper to minimize embrittlement of copper on outer edges.
 - c. All bars shall be maintained tight in the slot to limit vibration and thus fatigue of bar. The rotor cage shall be maintained centered on the rotor laminations by providing end stops to limit ratcheting of bars. Preferred method is pieces of bar symmetrically spaced on the overhanging sections of the bars about the rotor and brazed to the current carrying rotor bars (active bar).
 - d. Rotors shall be dynamically balanced to no more than 0.01 oz.-in. residual unbalance per pound mass.
4. Bearings - The motor bearing loading for the driver shall include the total pump line shaft downthrust. The motor bearings shall be designed to withstand any momentary total upthrust equivalent to at least 30% of the maximum downthrust developed. Motor bearings shall be of high precision manufacture, anti-friction type, oil (preferred) or grease lubricated to handle all radial and thrust loads encountered throughout the operating range of the motor. A minimum B-10 bearing life of 100,000 hours at the design point load on the motor shall be provided. Provide lubrication fittings and removable drain plugs.
5. Enclosure – The motor enclosure shall be as specified in the schedule and meet IP68 rating.
6. Insulation - Motor insulation shall be as specified in the schedule.
7. Nameplate
 - a. Motor nameplate shall be stainless steel, and shall be securely fastened to the motor frame with stainless steel pins.
 - b. The following information shall be contained on the motor nameplate as a minimum.
 - 1) Rated horsepower

- 2) Full load speed
- 3) Frequency
- 4) NEMA kVA code
- 5) Rated voltage and phase
- 6) Manufacturer's serial number and type
- 7) Service factor
- 8) Insulation class
- 9) Maximum ambient
- 10) Full load current at nameplate voltage
- 11) Frame size designation
- 12) Motor efficiency @ full load
- 13) Bearing data

8. Terminal Boxes

- a. Terminal boxes (Pecker Head) shall meet IP68 rating, be of cast iron construction and to be compatible with the motor enclosure specified and when possible, shall be diagonally split and capable of rotation in 90° increments. Boxes not suitable for rotation must be capable of top and bottom entry.
- b. The area in which the main terminal box is connected with the motor frame shall be fully gasketed in order to prevent entrance of foreign matter into the motor and to provide support for the stator leads where they pass through the motor frame.
- c. A properly sized grounding terminal shall be mounted in the main terminal box.
- d. Main terminal box shall be provided in one size above the standard, unless approved by Engineer, to allow terminations of power cables and bug connections of the sizes indicated on the Plans.
- e. Auxiliary terminal boxes shall be provided to house connections for accessory devices not mounted in the main terminal box. **(Under Separate Contract)**

9. Leads - Main motor leads shall have EPDM type jackets and shall be permanently tagged for identification.

10. Motor Schedule

| LOCATION | SIZE (Hp) | Electric | Insulation | Enclosure | Manufacturer |
|------------|-----------|-------------------------|---------------------|-----------|--------------|
| Well No. 9 | 125 HP | 460 VAC, 3 phase, 60 Hz | Min. Rating Class F | WP1 | |
| Well No.10 | 125HP | 460 VAC, 3 Phase,60Hz | Min. Rating Class F | WP1 | |

G. Base Plate, Anchor Bolts

1. Steel base plates shall be provided between the pump discharge head and the concrete support pad. The top surface shall be machined to match the bottom surface of the discharge head.
2. Anchor bolts shall be furnished by the equipment manufacturer and shall be of ample size and strength for the purpose intended, and shall be 316/416 stainless steel.
3. Anchor bolts shall be complete with nuts and sleeves and shall be of sufficient length to permit proper embedment in the foundation concrete.

H. Discharge Piping, Valves and Fittings

1. All pipe valves and fittings for the well house shall be furnished and installed by the Contractor and shall include all necessary appurtenances on the pump discharge complete as shown on the drawings and/or specified herein. Valves shall include a combination air release/ vacuum valve, silent check valve, electrically actuated butterfly valve and others complete as shown on the construction drawings and/or specified herein. All bolts shall be complete with nuts and shall be of ample size and strength for the purpose intended, and shall be stainless steel 304/316.
2. Discharge piping for the pump unit (2) shall be of sufficient size to pumped water to the future water treatment plant aerators at a total head of 173'. The pumps and piping shall be designed to deliver 2,200 gpm to the top of the aerators.
3. Discharge Piping protective coating specifications and application procedures (See specification 099000)

4. Air release valve - The Contractor shall provide and install an air release valve and appurtenances at the well discharge as shown on the drawings. (See specification 400551 – Combination Air Release/ vacuum valve)
5. Flow Switch
 - a. The Contractor shall provide and install one (1) flow switch, FCI Model No. FLT 93 (vapor proof) or equal, on the pump discharge.
 - b. The flow switch shall be designed to operate at a maximum of 300 psi and at a temperature of 30°F. Each flow switch shall be listed by the Underwriters Laboratories. All wetted parts of the flow switch shall be stainless steel.
 - c. The flow switch shall be equipped with a single pole, double throw switch, of the snap action type.
 - d. The adjustment shall be provided on the side of the flow switch for making the switch more sensitive or less sensitive to the flow in the pipeline.
 - e. All wiring within the flow switch housing shall be completely shielded from the switch action.
 - f. A sealed tube of non-magnetic stainless steel shall be provided to isolate the switch compartment from the liquid and the pressure in the pipeline.
 - g. The switch contacts shall make at a minimum 203 gpm (1.3 feet per pound) of flow, and break at a 125 gpm (.08 feet per second) of flow.
 - h. The flow switch shall have a 1-1/4" diameter male iron pipe threads, for installation of a flow switch in the discharge piping with isolation valve (1/4 " ¼ turn pet cock) and clean out .
 - i. Extend electrical conductors to all items requiring power including but not limited to solenoid valve and bubbler system.
 - j. The enclosure shall be IP68 rating
6. Expansion Joint Coupling – Provide expansion joint coupling in the discharge piping assembly as per the plan detail. The coupling shall be PROCO 242 or approved equal.

I. SILENT CHECK VALVE

1. Refer to Specification 400551.

J. ELECTRICALLY ACTUATED BUTTERFLY VALVE

1. Refer to Specification 400551

K. WATER METER

1. Refer to Specification 400551

L. COMBINATION AIR RELEASE / VACUUM VALVE

1. Refer to Specification 400551

M. ISOLATION GATE VALVE (For Combination Air Release/Vacuum Valve)

1. Refer to Specification 400551

N. Vibration Analysis

1. Contractor shall provide the necessary equipment and have the capability to perform and interpret a vibration analysis of the pumping equipment at the time of the final pump test, and as required thereafter (minimum 5 point).
2. Analysis shall include recording displacement and velocity readings at all the necessary positions and frequencies to determine the particular sources of vibration generated by the pumping unit.
3. Contractor shall submit a complete report on his findings. Contractor shall designate and record exact points of reference (minimum of 5) on the motor, discharge head and motor drive shaft. At each of these reference points a typical "signature" of the vibration of the unit shall be recorded by hand and by "hard copy" printed directly on continuous tape by the analyzing equipment. Original copies of results for 1) sharp signature, 2) machine start up/coast down (with pump shaft disconnected from motor) and 3) bearing condition check (spike energy) shall be submitted to the Engineer for the files and records of the Owner. Vibration analysis of the pumping equipment shall be run at the normal discharge rate into the system.
4. Contractor shall certify that the pump is operating at or below the manufacturer's recommended vibration limits. Vibration conditions, which exceed these limits shall be corrected by Contractor and a follow up vibration analysis performed to check results. This procedure shall be followed until the limits are met.

O. Shop Painting

1. Shop coats shall be as recommended by the manufacturer.
2. Field painting shall be as specified in section 099000 "Field Painting".

PART 3 - EXECUTION

3.01 SPECIFIC CAPACITY/ PUMP PERFORMANCE STEP TEST

- A. Installation of Pumping Equipment - The test pump, flow measuring device(s), discharge piping, check valve, overboard piping, combination valve – Air/vacuum relief, and other necessary appurtenance shall be installed for the well pumping test.

- B. Pump Capacity Performance Testing
 - 1. Prior to the pump test, the Contractor shall disinfect the well and pump assembly. The well and pump assembly shall be disinfected in accordance with the applicable requirements of the American Water Works Association (AWWA).

 - 2. Run a specific capacity/performance pumping test by operating the test equipment continuously at such rates of discharge and for such periods of time as deemed necessary by the Owner. Duration of the specific capacity / pump performance test shall be minimum (approximately) 8 hours (4 hours/pump – ½ hour to ¾ hour at each flow rate).

 - 3. During the entire duration of the test, the Contractor shall make regular water level measurements from the access pipe and shall provide to the Owner regular flow rate readings as deemed necessary by the Owner.

 - 4. At completion of the pumping portion of the specific capacity / pump performance step test, the water level in the well shall be allowed to recover for a time equal to 25% of the total pumping time to allow accurate water level recovery measurements to be taken by the Contractor.

 - 5. The pump test shall be conducted by the Contractor in the presence of the EWMUA and its Engineer. Test shall be run continuously with readings of discharge, pumping level and other pertinent data taken every ten (10) minutes. The test shall be conducted against the required discharge head. The flow over the four-hour test period shall not be less than capacity indicated on the pump curve. The total test period will be a minimum of four hours. The test shall be for the following flow rates:

| Well No. 9 | Well No. 10 |
|------------|-------------|
| 500 gpm | 500 gpm |
| 750 gpm | 750 gpm |
| 1,000 gpm | 1,000 gpm |
| 1,500 gpm | 1,500 gpm |
| 2,200 gpm | 2,200 gpm |

Note: Well drawdown and specific to be taken at each flow point and recorded.

C. Disposal of Water

1. Disposal of water from well pumping tests will be to the nearest discharge inlet as designated by the Owner. The Contractor is responsible for construction of erosion and flood control measures, such work may include the installation of water diversion structures, diversion ditches, detention ponds and mulching areas to prevent erosion and flooding. Any soil erosion as a result of the testing shall be repaired by the Contractor.

3.02 CONSTANT RATE AQIFER PUMP TESTING

A. Performance of a 72 – hour constant rate aquifer pumping test

1. The scope of work to be performed shall include constant rate pump testing of both Wells No. 9 and Well No. 10 operating simultaneously. The main objective is to put as much stress on the aquifer to demonstrate full buildout.
2. The Contractor shall provide an orifice plate weir and manometer for measuring flow, and electronic pressure transducer/data logger to measure the water level at 1-minute intervals.
3. Conduct per NJ Geological and Water Survey Technical Memorandum 12-2 (2012).
4. Minimum duration 72 hours.
5. Continue until drawdown stabilization < 0.2 ft/hr for 72 hrs.
6. During the test the well shall be monitored for presence of sand. The Contractor shall provide and install a sand tester during the course of the testing
7. Manual measurements shall be as follows:
 - Every 10 min first hour
 - Every 30 min next 5 hours
 - Hourly thereafter
 - Recovery: same schedule

8. EWMUA staff and its engineers will monitor the three (3) monitoring wells and pilot well that is located on the property at the same intervals as 3.02 A-7.
9. The Contractor shall collect a sample for chemical analysis and bacterial analysis.
10. The sample shall be taken to a certified laboratory, approved by the Engineer, for analysis. The laboratory shall perform all bacteriological and chemical tests presently required by the Authority/Engineer and the New Jersey Department of Environmental Protection on the respective samples. The cost for the laboratory testing shall be borne by the Contractor and shall be included in this bid price.
11. Bacteria Test shall include total coliforms, plate count, pH and chlorine residual analysis.
12. During the final hour of the constant rate pumping test, a chemical analysis shall be performed on the raw water from each (2) of the new wells by a laboratory certified by the NJDEP for the following parameters:

Secondary Standards

Physical Characteristics

Color (units)
 pH (optimum range)
 Odor (threshold number)
 Taste
 Coliform Bacteria
 Turbidity (units)

Chemical Characteristics (ppm)

ABS/L.A.S.
 Aluminum
 Chlorides
 Fluoride
 Free Carbonic Acid (CO₂)
 Carbonate Hardness
 Non-Carbonate Hardness
 Calcium Hardness
 Total Hardness
 Manganese
 Iron
 Silver
 Sulfate (SO₄)

Sodium
 Alkalinity - M.O.
 Total dissolved solids
 Zinc

Inorganic Contaminants

Contaminants (ppb)

Antimony
 Arsenic
 Asbestos, fibers/liter
 Barium
 Beryllium
 Cadmium
 Chromium (Hexavalent Cr+6)
 Copper
 Cyanide
 Lead
 Mercury
 Nickel
 Nitrate Nitrogen as NO₃
 Nitrite (combined nitrate/nitrite)
 Selenium
 Thallium

Radiological

Contaminants (pCi/L)

Radon

Radium - 226

Radium - 228

Gross Alpha*

Uranium

* - Gross Alpha must be tested within 48 hours of collecting samples and shall be of the precipitation method (711-OC) or the evaporation method (900.0). All Gross Alpha samples must be collected in bottles acidified with hydrochloric acid.

Synthetic Organic Compounds

Contaminants (ppb)

Alachlor
Aldicarb
Aldicarb Sulfone
Aldicarb Sulfoxide
Atrazine
Benzo[a]pyrene (PAHs)
Carbofuran
Chlordane
Dalapon
Dibromochloropropane (DBCP)
Di[ethylhexyl]adipate
Di[ethylhexyl]phthalate
Dinoseb
Diquat
Endothall
Endrin
Ethylene dibromide
Glyphosphate
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Lindane
Methoxychlor
Oxamyl (Vydate)
PCBs
Pentachlorophenol
Picloram
Simazine
Toxaphene
2,3,7,8-TCDD (Dioxin)
2,4-D
2,4,5-TP (Silvex)

Perfluorooctanoic-Acids Six samples -(PFOAs, PFNA's and PFAs; HFPO-DA (Gen X); PFHxS; and PFBS)

Volatile Organic Compounds (VOCs) (Complete VOC Scan)

Contaminants (ppb)

Benzene
Carbon Tetrachloride
meta-Dichlorobenzene
ortho-Dichlorobenzene
para-Dichlorobenzene
1,1-Dichloroethane
1,2, Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
1,2-Dichloropropane
Dichloromethane
1,4-Dioxane
Ethylbenzene
Methyl-tertiary Butyl Ether
Methylene Chloride
Monochlorobenzene
Naphthalene
Petroleum Hydrocarbons
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2,4-Trichlorobenzene
1,1,1,-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride
Xylene

and any other chemical substance currently regulated or monitored as required by the NJDEP Bureau of Water System Engineering for a new groundwater source.

1. INSTALLATION OF THE PUMP ASSEMBLY

- A. The Contractor shall install the new pump assembly complete with all appurtenances and accessories as specified or required. This item shall also include:
 - a. Prime and paint piping (above ground) and valving with non-lead, non-VOC, NJDEP approved paint in accordance with Specification 099000.
 - b. The Contractor shall utilize "Permatex" on the threads of the column pipe and column couplings and "Keytite" on both faces of the bearing retainer which come in contact with the column pipe.
 - c. The Work shall also include the installation of a sanitary well seal.

2. PUMP SHOP TESTING

- A. The pump to be furnished shall be performance tested on water at the pump manufacturer's plant, before shipment. The pump manufacturer shall not ship any pump until after the certified pump performance tests have been submitted to and reviewed by the Owner. The purpose of performance testing shall be to prove that the pumps to be supplied conform to the specification requirements, and that the pump can properly operate throughout the entire pump envelope. Tests shall conform to the Standards of the Hydraulic Institute. Complete testing shall be done for the following:
 - a. Head
 - b. Capacity
 - c. Brake Horsepower
 - d. Efficiency
 - e. Vibration
 - f. RPM
- B. Each pump to be supplied shall be tested for all five (5) parameters listed above. Each test shall be conducted from "no flow at shut-off head" condition to "run-out" condition with a minimum of 3 points (25%, 50%, 75%) between.
- C. The performance test data reports shall be certified by the pump manufacturer, and shall state the pump usage name, pump model number, pump serial number, date of testing, and contain pump curves and data sheets showing:

- a. Total Dynamic Head (TDH) versus flow rate (GPM)
 - b. Brake horsepower versus flow rate (gpm)
 - c. Calculated "Net Positive Suction Head Required" (NPSHR) versus flow rate (GPM).
 - d. Efficiency versus flow rate (gpm)
 - e. Vibration Readings
 - f. RPM
- D. If, in the sole opinion of the Owner, any pump test indicates that the pump performance differs significantly from the Specification requirements and/or the previously submitted pump performance data, the cause of the difference shall be determined and corrected by the manufacturer. The pump shall be retested until it meets the performance requirements specified herein.
- E. All pump motors to be provided under this Section shall be tested according to generally recognized "Standard Commercial Tests".
- F. After reinstallation of permanent pump/motor, the contractor shall have motor and pump balancing and testing done in the field, including vibration testing, which shall be 1 mil or less throughout the operating range.
- G. The motor manufacturer shall certify in writing that the motors were subjected to special balancing to limit the amplitude of vibrations to no more than one (1) mil throughout its operating range.
- H. The motor manufacturer shall not ship any motor until after the motor test information has been submitted to and reviewed by the Owner.
3. DISINFECTION
- A. The well shall be thoroughly cleaned of all foreign substances, including tools, timbers, rope, debris of any kind, cement, oil, grease, joint dope and scum. The casing pipe shall be thoroughly swabbed, using alkalis, if necessary, to remove oil, grease or joint dope. The well shall then be disinfected with a chlorine solution.
- B. The chlorine solution used for disinfecting each well shall be of such volume and strength and shall be so applied that a concentration of at least 50 ppm of chlorine shall be obtained in all parts of the well. Chlorine solution shall be prepared and applied in accordance with the directions of, and to the satisfaction of, the EWMUA Inspector and ENGINEER and shall remain in the well for a period of at least twelve (12) hours.

- C. In the event that the permanent pump is installed after the well has been disinfected, all exterior parts of the test pump coming in contact with the water shall be dusted with a chlorine compound as directed by the ENGINEER.
4. WATER PRODUCTION GUARANTEE
- A. The CONTRACTOR shall guarantee that the pumping equipment shall have a capacity, when completed, of not less than the specified flows at the discharge head specified. The CONTRACTOR shall also **guarantee** that these pumping capacities will continue and will be available at any and all times for a period of **two (2) years after well is put into full operations.**
 - B. The CONTRACTOR agrees that should, at any time within a **period of two (2) years following full operation,** the producing capacity of the pump under conditions of actual service becomes less than its rated capacity, the CONTRACTOR will do such thing or things at his own expense, as may be necessary, to cause the said pump to produce its full rated capacity.
5. START UP FIELD SERVICES
- A. The pump manufacturer / contractor shall provide two (2) days of startup field services for both well pumps. **This will be done at a later time to be determined by EWMUA (after plant construction).**
 - a. Inspect & approve installation, supervise adjustments – 1 Day
 - b. Supervise field test, instruct owner on startup & O&M – 1 Day
6. QUALITY ASSURANCE
- A. Pumps shall be manufactured by an established company with a **minimum of 10 years' experience** in deep well turbine pumps.
 - B. Installation shall be under supervision of a **New Jersey Licensed Master Well Driller.**
 - C. Equipment shall comply with **AWWA and NSF potable water requirements.**
 - D. Protective coatings shall be **NSF certified** for potable water service.
 - E. Concrete pads shall be designed per **ACI standards** for equipment support.
 - F. Electrical equipment (motor) shall be compatible with **VFD operation.**
7. PERMITS AND REGULATORY REQUIREMENTS

- A. Owner will obtain any and all required regulatory permits.
- B. Contractor shall comply with all **federal, state, and local laws, regulations, and permit requirements.**

8. PROJECT SCHEDULE

- A. Wells and pumping systems must be **complete and operational by August 14, 2026.**
- B. **Liquidated damages:** \$500 per calendar day for delays beyond the required completion date, unless delays are deemed beyond Contractor control by the Owner.

9. SITE PROTECTION AND CLEANUP

- A. Maintain site free of debris and waste.
- B. Remove all surplus materials, temporary equipment, and debris at completion.
- C. Excavated materials may be spread and graded within property with Owner approval.

3.03 PRODUCTS

A. Pumps

- 1. Vertical turbine pumps by:
 - Flowserve
 - Goulds
 - Approved equal.
- 2. Specifications are approximate and may be adjusted based on final well testing.

B. PUMP PERFORMANCE

| Parameter | Well No. 9 | Well No. 10 |
|--------------------|------------|-------------|
| Design Capacity | 2,200 gpm | 2,200 gpm |
| Total Dynamic Head | 162 ft | 163 ft |
| Minimum Efficiency | 81% | 81% |
| Pump Speed | 1,800 rpm | 1,800 rpm |

| Parameter | Well No. 9 | Well No. 10 |
|------------------|-------------------|--------------------|
| Motor Power | 125 hp | 125 hp |

C. PUMP ASSEMBLY

1. Components:
 - ~120 feet of 10-inch column pipe
 - ~120 feet of 416 stainless steel line shaft
 - Pump head and discharge assembly
 - 316 Stainless steel impellers
 - Estimated pump setting depth: 120 feet.
 - Installed on a reinforced concrete pad sized to accommodate pump, motor, and piping, designed for equipment load. (See Specification 3.04)

D. COLUMN PIPE

1. ASTM A53 Grade B carbon steel.
2. Max length per section: 10 ft.
3. Friction loss \leq 5 ft per 100 ft.
4. Threaded sleeve couplings for connections.

E. LINE SHAFT

1. 416 Stainless steel ASTM A582 Type.
2. 316 stainless steel couplings with left-hand threads.
3. Protective sleeves at guide bearings.

F. LINE SHAFT BEARINGS

1. Water-lubricated design.
2. Bearing spacing \leq 10 ft.
3. Bronze brackets ASTM B584-836.
4. Rubber bearings Buna-N.

G. PROTECTIVE COATING

1. Plasite 9133 or approved equal.
2. NSF approved for potable water.
3. Sandblasted prep, two coats, 5 mil dry film per coat (total 10–12 mils).
4. Cure \geq 5 days before installation.

H. ABOVE-GRADE PIPING AND VALVES

1. 10-inch cement-lined ductile iron pipe (Class 52).
2. Flanged ends.
3. Provide appurtenances and valves including but not limited to (see drawing):
 - 10" flanged tee; 10" X 2" companion flange; 2 - 2" brass nipples & Ball valve; 2" Air release valve. Air release vent to be copper (type K) with C X C union.
 - Backflow check valve
 - Sensus / ABB flow meter or equal
 - Pressure transmitters
 - 10" Tee, gate valve and 90 degree ell with screen (flanged) for overboard pumping.
 - Butterfly valves (capable of mounting electric actuator) with handwheel (open left)
 - Additional valves as required.
 - Piping supports to be concrete with footings

I. INSTRUMENTATION

1. Two 1-1/4 inch polyethylene monitoring tubes per well.
2. Extend 5 ft above pump intake.
3. Secured to column with stainless steel straps.

4. Accessible via threaded wellhead fittings.

J. MOTOR

1. Premium Efficiency, inverter-duty type, VFD compatible.
2. Shaft grounding ring included.
3. 125 HP

3.04 Concrete Pad Design & Reinforcement – Vertical Turbine Pumps

A. General Description

1. The reinforced concrete pad supports the **vertical turbine pump, motor, column assembly, and above-grade piping.**
2. Designed for **dynamic loads, equipment vibrations, and service loads per ACI 318-19.**
3. Surface is finished smooth, slightly sloped for drainage, and accommodates anchor bolts for pump/motor assembly.

B. Pad Dimensions

| Parameter | Value / Notes |
|------------------|---|
| Overall Length | 6 ft (typical, adjust per pump/motor size) |
| Overall Width | 5 ft (typical, adjust per pump/motor size) |
| Thickness | 30 inches minimum (match with piping) |
| Elevation | Top surface flush with finished grade of pump base, slope 1% for drainage |

Note: Reinforced concrete pad must be sized to accommodate pump, motor, and piping, designed for equipment load.

C. Concrete Specifications

| Parameter | Value |
|------------------|--|
| Concrete Type | 4000 psi, normal weight |
| Exposure | Interior/exterior, reinforced |
| Slump | 4–6 in |
| Finish | Smooth, non-slip, troweled, slight slope (1%) for drainage |

D. Reinforcement Layout

1. Top & Bottom Mats:
 - #5 bars @ 12" o.c. both directions
 - Top mat: 2 inches clear cover from top surface
 - Bottom mat: 2 inches clear cover from bottom surface
2. Edge Reinforcement: #5 continuous bars around perimeter
3. Anchor Bolts:
 - 4–6 per pump base plate (minimum), embedded 12–14 inches into pad; Silicone bottom of exposed threads to prevent corrosion.
 - Stainless Steel bolts (316/416 stainless steel), washers and nuts for pump/motor mounting
4. Concrete Chairs / Spacers: to maintain reinforcement positioning

E. Embedded Items

| Item | Notes |
|-------------------|---------------------------------------|
| Pump anchor bolts | Proper alignment with pump base plate |

F. Construction Notes

1. Excavate to firm, stable subgrade; compact to 95% standard Proctor.
2. Place a minimum 12-inch compacted gravel base under the pad.
3. Install reinforcement mats per plan; verify clear cover with chairs/spacers.
4. Position embedded items and anchor bolts precisely.
5. Place concrete in single lift; vibrate to consolidate.
6. Cure concrete for **minimum 7 days**; protect from freezing, excessive heat, and drying.
7. After curing, verify **level and anchor bolt alignment** prior to installing pump/motor assembly.

8. Reinforced concrete pad sized to support pump/motor assembly and above-grade piping.
9. Designed per ACI 318 for vertical turbine pump loads.
10. Provide steel reinforcement as shown on shop drawings.
11. Finished surface level, smooth, and slope for drainage as indicated.

G. Reference Standards

1. ACI 318-19 – Building Code Requirements for Structural Concrete
2. AWWA A100 – Water Wells (for pump installation support)
3. NJDEP regulations for potable water equipment

END OF SECTION

SPECIFICATION NO. 400551

10" SILENT CHECK VALVE

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 1 – GENERAL

1.01 SUMMARY

- A. Furnish and install a 10-inch silent check valve for raw water service as shown on the Contract Drawings and as specified herein.
- B. Valve shall be spring-assisted, non-slam type designed to prevent reverse flow and minimize water hammer.

1.02 REFERENCES

- A. Valves shall conform to the latest revisions of the following standards:
 - 1. ANSI B16.1 – Cast Iron Pipe Flanges and Flanged Fittings
 - 2. ANSI B16.42 – Ductile Iron Pipe Flanges and Flanged Fittings
 - 3. ANSI B16.10 – Face-to-Face Dimensions
 - 4. ANSI B16.34 – Valves, Flanged, Threaded, and Welding End
 - 5. AWWA C508 – Swing Check Valves for Waterworks Service (performance reference)
 - 6. AWWA C550 – Protective Epoxy Interior Coatings
 - 7. MSS SP-125 – Silent Check Valves
 - 8. ASTM A536 – Ductile Iron Castings

1.03 SUBMITTALS

- A. Product Data:
 - 1. Manufacturer's catalog data and technical specifications
 - 2. Valve dimensions and weights
 - 3. Pressure ratings
 - 4. Materials of construction

B. Shop Drawings:

1. Assembly drawings showing components and flow direction
2. Face-to-face dimensions
3. Flange drilling

C. Certifications:

1. Compliance with ANSI/AWWA requirements
2. Coating certification per AWWA C550
3. Hydrostatic test certification (upon request)

D. Operation and Maintenance Data:

1. Installation instructions
2. Maintenance procedures
3. Parts list and exploded view of all parts

1.04 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of ten (10) years' experience producing silent check valves for water service.
- B. Valves shall be new and unused.
- C. Each valve shall be factory tested prior to shipment.
- D. Suitable for outdoor installation and high-humidity environments

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Valves shall be shipped with flange protectors.
- B. Valves shall be stored off the ground and protected from weather.

PART 2 – PRODUCTS

2.01 SILENT CHECK VALVE

- A. Size: 10-inch

- B. Type: Spring-assisted silent non-slam check valve
- C. Ends: ANSI Class 150 flanged
- D. Service: Raw water
- E. Installation: Horizontal or vertical (flow upward)
- F. Operation: Axial flow, center guided disc
- G. Closure: Stainless steel spring-assisted rapid closure
- H. Flow direction shall be cast into body

2.02 PRESSURE RATING

- A. Pressure Class: ANSI Class 150
- B. Minimum Working Pressure: 150 psi
- C. Hydrostatic Test: 1.5 times rated pressure

2.03 MATERIALS

- A. Body: Ductile Iron ASTM A536 Grade 65-45-12
- B. Disc: Stainless Steel Type 316
- C. Seat: EPDM suitable for raw water
- D. Spring: Stainless Steel Type 316
- E. Guide: Stainless Steel
- F. Fasteners: Stainless Steel

2.04 COATING

- A. Interior and exterior fusion bonded epoxy
- B. Minimum thickness: 10 mils
- C. Coating shall conform to AWWA C550
- D. Coating shall be holiday free and suitable for raw water service

2.05 PERFORMANCE REQUIREMENTS

- A. Silent, non-slam closure

- B. Cracking pressure not greater than 0.5 psi (typical)
- C. Bubble-tight shutoff
- D. Low head loss design
- E. No chatter or vibration

2.06 APPROVED MANUFACTURERS

- A. Subject to compliance with this specification, provide products from one of the following:
 - 1. Val-Matic
 - 2. APCO (DeZURIK)
 - 3. Cla-Val
 - 4. Singer Valve
 - 5. Crispin Valve
 - 6. Or approved equal

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install valves in accordance with manufacturer's instructions.
- B. Verify flow direction prior to installation.
- C. Provide proper flange gaskets and bolting.
- D. Install valve so that disc moves freely without obstruction.

3.02 FIELD QUALITY CONTROL

- A. Inspect valve for damage prior to installation.
- B. Verify proper alignment with piping.
- C. Contractor shall correct misalignment or installation deficiencies.

3.03 CLEANING AND PROTECTION

- A. Clean valve interior prior to placing in service.

B. Protect valve until system startup.

3.04 WARRANTY

A. Valve shall be warranted against defects in material and workmanship for a period of twelve (12) months from date of shipment.

END OF SECTION

SPECIFICATION NO. 400551

ELECTRICALLY ACTUATED BUTTERFLY VALVES

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 4 – GENERAL

4.01 SUMMARY

- A. Furnish and install one (1) 10-inch electrically actuated butterfly valve for raw water service, as shown on the Contract Drawings and specified herein.
- B. Valve shall be **flanged, ANSI Class 150**, and designed to operate at a maximum working pressure of **60 PSI**.
- C. Valve assembly shall include butterfly valve, electric actuator, controls, and all accessories required for a complete and fully operational system.

4.02 REFERENCES

- A. Valve and actuator shall conform to the latest revisions of the following standards:
 - 1. AWWA C504 – Rubber-Seated Butterfly Valves
 - 2. AWWA C550 – Protective Epoxy Interior Coatings
 - 3. ANSI B16.1 – Cast Iron Pipe Flanges
 - 4. ANSI B16.42 – Ductile Iron Pipe Flanges
 - 5. ANSI B16.5 – Pipe Flanges and Flanged Fittings (Class 150)
 - 6. ANSI B16.10 – Face-to-Face Dimensions
 - 7. NEMA MG 1 – Motors and Generators
 - 8. NEMA 250 – Enclosures for Electrical Equipment
 - 9. IEEE 43 – Insulation Resistance Testing
 - 10. ASTM A536 – Ductile Iron Castings

4.03 SUBMITTALS

A. Product Data

1. Valve manufacturer and model number
2. Actuator manufacturer and model number
3. Valve torque requirements at **60 PSI operating conditions**
4. Pressure ratings
5. Materials of construction

B. Shop Drawings

1. Valve and actuator assembly drawing
2. Dimensions and weights
3. Wiring diagrams
4. Control schematic
5. Mounting details

C. Certifications

1. AWWA C504 compliance statement
2. Coating certification per AWWA C550
3. Factory functional test results

D. Operation and Maintenance Manuals

1. Installation instructions
2. Maintenance procedures
3. Spare parts list
4. Actuator wiring and programming instructions

4.04 QUALITY ASSURANCE

- A. Valve manufacturer shall have a minimum of five (5) years of experience producing butterfly valves for water service.
- B. Actuator manufacturer shall specialize in electric valve actuators.

- C. Valve and actuator shall be factory assembled, calibrated, and tested.
- D. Suitable for outdoor installation and high-humidity environments

4.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect **flanged faces** with suitable covers during shipping and storage.
- B. Store equipment off the ground and protected from moisture and contamination.

PART 5 – PRODUCTS

5.01 BUTTERFLY VALVE

- A. Size: 10-inch
- B. Type: Rubber-seated butterfly valve
- C. Service: Raw water
- D. **Pressure Rating:** Minimum 150 psi rated valve; suitable for **150 PSI operating pressure**
- E. **Ends:** ANSI B16.5 **Class 150 flanged**
- F. Shaft: Stainless steel, through-shaft design
- G. Seat: EPDM suitable for raw water service
- H. Disc: Ductile iron with epoxy coating or stainless steel
- I. Body: Ductile iron conforming to ASTM A536 Grade 65-45-12

5.02 COATING

- A. Interior and exterior fusion bonded epoxy
- B. Minimum thickness: 10 mils
- C. Coating shall comply with AWWA C550
- D. Suitable for raw water service

5.03 ELECTRIC ACTUATOR

- A. Type: Electric motor-operated, hand wheel manual operation

- B. Power Supply: 120 VAC unless otherwise specified
- C. Enclosure: NEMA 4X, weatherproof and corrosion resistant
- D. Torque: Sized for valve operation at **80 PSI differential pressure**, including seating and unseating conditions
- E. Duty: Modulating or on-off as indicated on Drawings
- F. Features:
 - 1. Adjustable torque switches
 - 2. Adjustable limit switches
 - 3. Local open/close/stop pushbuttons
 - 4. Local/remote selector switch
 - 5. Mechanical position indicator
 - 6. Manual override handwheel
 - 7. Space heater
 - 8. Open and closed dry contacts for SCADA interface
 - 9. Motor overload protection

5.04 PERFORMANCE REQUIREMENTS

- A. Valve shall provide bubble-tight shutoff in both directions at **100 PSI operating pressure**
- B. Valve shall operate smoothly without chatter or vibration
- C. Actuator shall fully open or close valve within manufacturer's recommended time
- D. Valve and actuator shall be suitable for continuous raw water service

5.05 APPROVED MANUFACTURERS

- A. **Butterfly Valve**
 - 1. Pratt
 - 2. DeZURIK

3. Mueller
 4. Val-Matic
 5. Kennedy Valve
 6. Or approved equal
- B. Electric Actuator
1. AUMA
 2. Rotork
 3. Limitorque
 4. EIM
 5. Or approved equal

PART 6 – EXECUTION

6.01 INSTALLATION

- A. Install valve in accordance with manufacturer's written recommendations.
- B. Provide proper **Class 150 flange gaskets, bolting, and alignment.**
- C. Install actuator in upright position unless otherwise approved.
- D. Verify wiring prior to energizing actuator (by others).

6.02 FIELD QUALITY CONTROL

- A. Verify correct rotation and travel limits
- B. Test full open and close operation
- C. Verify remote control and SCADA signals
- D. Adjust torque and limit switches as required for **40 PSI operation**

6.03 CLEANING AND PROTECTION

- A. Clean valve interior prior to placing into service

B. Protect actuator from moisture and damage until startup

6.04 WARRANTY

A. Valve and actuator shall be warranted for twelve (12) months from date of Installation

END OF SECTION

SPECIFICATION NO. 400551

RAW WATER METER

10" ELECTROMAGNETIC FLOW METER

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 7 – GENERAL

7.01 Description:

Provide and install a **10-inch electromagnetic (mag) flow meter** for measuring flow of raw (untreated) water in a pressurized pipeline. The meter shall be designed for reliable operation in water containing suspended solids and debris, with no moving parts.

Size:

- Nominal Diameter: **10 inches (250 mm)**

Flow Requirements:

- Minimum Continuous Flow Range: **750 gallons per minute - 3,000 gallons per minute (GPM)**
- Meter shall provide accurate measurement over a wide flow range with a minimum turndown ratio of **20:1** or greater

Pressure Rating:

- **ANSI Class 150** (minimum)
- Suitable for continuous operation at system design pressure

End Connections:

- **Flanged ends**, conforming to **ANSI/ASME B16.5 Class 150**
- Face-to-face dimensions per manufacturer standards

Meter Type:

- **Electromagnetic (Magnetic Induction) Flow Meter**

- Full-bore design with no obstruction to flow
- No moving parts, suitable for raw water with suspended solids
- Bidirectional flow measurement capability

Accuracy:

- $\pm 0.5\%$ of rate (minimum), $\pm 0.2\%$ preferred over normal operating range

Materials of Construction:

- **Meter Body:** Epoxy-coated ductile iron or Stainless steel
- **Liner:** Hard rubber, neoprene, or polyurethane suitable for raw water and abrasion resistance
- **Electrodes:** 316 stainless steel minimum; Hastelloy or equivalent due to water chemistry
- **Grounding Rings:** Stainless steel

Electrical / Instrumentation:

- **Transmitter:** Integral or remote-mounted
- **Display:** Local digital display indicating flow rate and totalized flow (Under separate contract).
- **Outputs:**
 - 4–20 mA analog signal (flow rate)
 - Pulse output (totalizer)
 - Optional digital communication (Modbus, RS 485, HART, or equivalent)

Power Supply:

- **120 VAC** or **24 VDC**, as specified
- Low power consumption design preferred

Environmental Requirements:

- Enclosure rated **NEMA 4X** or better
- Suitable for outdoor installation and high-humidity environments
- Operating temperature range per site conditions

Installation Requirements:

- Provide minimum straight pipe lengths:
 - Upstream: **5 diameters (minimum)**
 - Downstream: **3 diameters (minimum)**
- Meter shall be installed full of liquid at all times
- Provide proper grounding in accordance with manufacturer recommendations
- Avoid installation at high points where air can accumulate
- Meter to be connected to a dismantling joint for easy replacement.

Performance Requirements:

- Capable of measuring conductive fluids with conductivity $\geq 5 \mu\text{S}/\text{cm}$
- Minimal pressure loss due to full-bore design
- Stable measurement unaffected by viscosity, density, or temperature changes

Standards Compliance:

- **AWWA C704** (Electromagnetic Flowmeters)
- **NSF/ANSI 61** (if required for water contact)
- **ISO 4064 / OIML R49** (where applicable)
- FCC compliance for electromagnetic compatibility

Accessories:

- Flange gaskets, bolts, and nuts

- Calibration certificate (factory calibrated)
- Grounding rings (if required)
- Manufacturer's installation, operation, and maintenance manuals

Approved Manufacturers (or equal):

- **ABB**
- **Siemens**
- **Endress+Hauser**
- **McCrometer**
- **Sensus**

END OF SECTION

SPECIFICATION NO. 400551

AIR RELEASE VALVES – RAW WATER SERVICE (NJDEP / MUNICIPAL STANDARD)

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 8 – GENERAL

8.01 SUMMARY

- A. Furnish and install **2-inch automatic air release valves** for raw water transmission and distribution systems.
- B. Work includes valve, isolation valve, piping, fittings, vault, and all appurtenances required for a complete and operable installation.

8.02 REFERENCES

- A. **AWWA:**
 - C512 – Air Release, Air/Vacuum, and Combination Air Valves
 - C550 – Protective Coatings
- B. **ASME:**
 - B16.5 – Flanged Fittings
- C. **NSF:**
 - NSF/ANSI 61
- D. **Regulatory:**
 - New Jersey Department of Environmental Protection requirements
 - Local utility standards (e.g., East Windsor MUA)

8.03 DESIGN REQUIREMENTS

- A. Valve assemblies shall be designed for **raw water with suspended solids and biological fouling potential**.
- B. Provide **maintainable-in-place design** (no pipeline removal required).

- C. Air valve installations shall include:
- Isolation valve
 - Blow-off/flushing connection
 - Debris protection
- D. **Redundancy Requirement (EWMUA Standard):**
Where failure of an air valve could impact system operation, provide:
- Dual air release valves, or
 - Combination air/vacuum valve as directed by Engineer

8.04 SUBMITTALS

- A. Product Data:
- Model numbers and manufacturer
 - Air capacity curves at 40 PSI
 - Materials list
- B. Shop Drawings:
- Plan and section of installation
 - Vault details (including drainage)
- C. Certifications:
- AWWA C512 compliance
 - NSF 61 (if applicable)
- D. Test Reports:
- Factory hydrostatic and functional testing
- E. O&M Manuals

8.05 QUALITY ASSURANCE

- A. Manufacturer shall have minimum **10 years municipal experience**.

- B. Products shall have documented use in **raw water applications**.

8.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect flanges and openings with covers.
- B. Store in clean, dry location.

PART 2 – PRODUCTS

9.01 ACCEPTABLE MANUFACTURERS

- A. The following manufacturers are acceptable:
- APCO (DeZURIK) – Model 140C
 - Val-Matic – Model 33A
 - Crispin Valve – Model UL
 - Approved equal
- B. Substitutions must demonstrate **equal or superior performance in raw water service**.

9.02 VALVE DESCRIPTION

- A. Type: Automatic Combination Air Release / Vacuum Valve
- B. Size: 2 inches
- C. Pressure Rating: Class 150 minimum
- D. Operating Pressure: 40 PSI
- E. Features:
- Float-operated mechanism
 - Non-clogging design with large orifice passages
 - Self-cleaning or backflush-capable design preferred

9.03 MATERIALS

- A. Body and Cover:
 - Ductile Iron (ASTM A536) – **mandatory**
- B. Internal Components:
 - Float: Stainless Steel Type 316
 - Lever/Linkage: Stainless Steel
 - Trim: Stainless Steel or engineered composite
- C. Seat:
 - EPDM
- D. Coating:
 - Fusion Bonded Epoxy
 - Minimum 8 mils
 - AWWA C550 compliant
 - Holiday-free and suitable for immersion

9.04 PERFORMANCE REQUIREMENTS

- A. Valve shall:
 - Release air continuously at 40 PSI
 - Prevent water discharge
 - Reseat tightly after air discharge
 - Resist clogging from sediment and debris
- B. Valve shall be suitable for **low-pressure systems (≤ 50 PSI)** without instability.

9.05 ACCESSORIES (MANDATORY)

- A. Isolation Valve:
 - 2-inch resilient wedge gate valve (AWWA C509/C515)
- B. Blow-Off Assembly:

- Minimum ¾-inch flushing valve with hose connection
- C. Debris Protection:
 - Inlet strainer or screened inlet
- D. Piping:
 - Schedule 40 stainless steel or epoxy-coated carbon steel riser

9.06 VAULT REQUIREMENTS (Not Applicable)

- A. Provide precast concrete vault:
 - Minimum 4'-0" diameter (or equivalent rectangular)
 - Traffic-rated frame and cover where applicable
- B. Include:
 - Sump or drain
 - Gravel base for drainage
 - Frost protection as required
- C. Valve shall be accessible without confined space entry where feasible.

9.07 FACTORY TESTING

- A. Hydrostatic test: 1.5 × rated pressure
- B. Leakage test: zero visible leakage
- C. Functional air release test

PART 3 – EXECUTION

10.01 INSTALLATION

- A. Install at pipeline high points and as shown on plans.
- B. Install vertically on riser piping.
- C. Provide minimum 12-inch riser above main.

- D. Install isolation valve between main and air valve assembly.

10.02 FIELD QUALITY CONTROL

- A. Verify:
- Proper alignment
 - Accessibility
 - Secure installation
- B. Test under system pressure for:
- Air release functionality
 - Leak-tight performance

10.03 CLEANING AND DISINFECTION

- A. Flush assembly prior to operation.
- B. Disinfect if connected to potable system per AWWA C651.

10.04 STARTUP AND ACCEPTANCE

- A. Demonstrate proper operation to Owner/Engineer.
- B. Provide all documentation for municipal acceptance.

NJ MUNICIPAL REVIEW NOTES (KEY APPROVAL POINTS)

- Isolation valve = **required, not optional**
- NJDEP reviewers require **maintenance accessibility without shutdown**
- Raw water systems → **clog-resistant or back flushable valves strongly preferred**
- Engineer will require **combination air/vacuum valve instead of air release only**
- Vault drainage is frequently flagged—always show sump detail **(Not Applicable)**

END OF SECTION

SPECIFICATION NO. 400551

2" GATE VALVE - RAW WATER SERVICE (NJDEP / EWMUA STANDARD)

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 11 – GENERAL

11.01 SUMMARY

2-Inch Gate Valve – Class 150 – Raw Water Service

11.02 Scope

Furnish and install a **2-inch gate valve** for use on a **raw water pipeline (10" X 2" flanged tee)**. The valve shall function as an **isolation valve for an air release valve assembly**, allowing maintenance and removal without shutting down the main line.

11.03 Service Conditions

- **Service:** Raw (untreated) water
- **Nominal Size:** 2 inches
- **Pressure Class:** ANSI Class 150 (minimum)
- **Temperature Range:** 33°F to 120°F
- **Installation Location:** Above or below grade, adjacent to air release valve assembly

11.04 Valve Type and Features

- **Type:** Resilient-Seated Gate Valve (preferred)
- **Configuration:** Full port, unobstructed flow
- **Bonnet:** Bolted bonnet design
- **Stem:** Non-rising stem (NRS) for buried service or OS&Y for above-ground installations
- **Sealing:** Bubble-tight shutoff (zero leakage)
- **Ends:** Flanged, drilled to **ASME B16.5 Class 150**

11.05 Materials of Construction

- **Body & Bonnet:** Ductile Iron, ASTM A536, Grade 65-45-12
- **Wedge:** Fully encapsulated ductile iron with EPDM rubber (NSF 61 compliant)
- **Stem:** Stainless Steel, ASTM A276 Type 316
- **Stem Nut:** Bronze
- **Seats:** Resilient (EPDM bonded)
- **Fasteners:** Corrosion-resistant, stainless steel or coated steel
- **Gaskets/O-rings:** EPDM, suitable for raw water service

11.06 Standards and Compliance

- **AWWA:** C509 or C515 (latest revision)
- **Flanges:** ASME B16.5 Class 150
- **Face-to-Face:** ASME B16.10
- **Coating:** AWWA C550 (Fusion Bonded Epoxy)
- **NSF Certification:** NSF/ANSI 61 and 372 (if applicable to potable crossover use)
- **Testing:** Hydrostatic testing per AWWA C509/C515

11.07 Pressure Rating

- **Minimum Working Pressure:** 150 psi
- **Test Pressure:** Per AWWA standard (typically 300 psi hydrostatic shell test)

11.08 Coating and Corrosion Protection

- Interior and exterior surfaces shall be coated with **fusion bonded epoxy (FBE)**
- Minimum coating thickness: **8 mils**
- Coating shall be holiday-free and suitable for immersion service

11.09 Operation

- **Operator:**
 - Buried service: 2" square operating nut
 - Exposed service: Handwheel
- **Direction:** Open counterclockwise (CCW)
- Valve shall be designed for infrequent operation and tight shutoff after extended periods

11.10 Installation Requirements

- Install valve **immediately upstream of the air release valve**
- Provide flange gaskets, bolting, and alignment per applicable standards
- Ensure accessibility for operation and maintenance
- For buried installations, provide valve box and extension stem as required
- Verify orientation allows proper isolation of the air release assembly

11.11 Inspection and Testing

- Manufacturer shall perform hydrostatic and seat tests prior to shipment
- Field inspection for:
 - Coating integrity
 - Proper operation
 - Alignment and leakage after installation
- Submit certified test reports upon request

11.12 Submittals

Contractor shall provide:

- Product data sheets
- Shop drawings (if required)

- NSF certification (if applicable)
- Coating certification
- Test reports

11.13 Acceptable Manufacturers

- Mueller Water Products
- American Flow Control
- Clow Valve Company
- Kennedy Valve
- Or approved equal

END OF SECTION

SECTION 099000

PAINTING AND PROTECTIVE COATINGS

EAST WINDSOR MUA WELL #9 & #10 FACILITY

PART 12 – GENERAL

12.01 DESCRIPTION

- A. This section includes surface preparation, painting, and protective coating of interior and exterior surfaces for piping, equipment, and appurtenances associated with the municipal well facility.
- B. Work includes furnishing all labor, materials, tools, and incidentals necessary to complete the coating systems.
- C. Coating systems shall provide corrosion protection, identification, and long-term durability.

12.02 RELATED WORK

- A. Section 099100 – Protective Coating for Above Ground Ductile Iron Pipe
- B. Section 15000 – Piping Systems
- C. Section 11000 – Pumps and Equipment
- D. Section 16000 – Electrical Equipment

12.03 REFERENCES

The following standards shall apply:

- A. SSPC-SP1 – Solvent Cleaning
- B. SSPC-SP2 – Hand Tool Cleaning
- C. SSPC-SP3 – Power Tool Cleaning
- D. SSPC-SP6 – Commercial Blast Cleaning
- E. SSPC-SP10 – Near-White Blast Cleaning
- F. SSPC-PA 1 – Shop, Field, and Maintenance Painting

- G. SSPC-PA 2 – Measurement of Dry Coating Thickness
- H. ASTM D3359 – Adhesion Testing
- I. ASTM D4541 – Pull-Off Strength of Coatings
- J. NSF/ANSI 61 – Drinking Water Components (where applicable)

12.04 SUBMITTALS

Contractor shall submit the following:

- A. Product data sheets for all coatings
- B. Manufacturer’s application instructions
- C. Color schedule
- D. Surface preparation procedures
- E. Dry film thickness requirements
- F. Material safety data sheets
- G. Warranty documentation

12.05 QUALITY ASSURANCE

- A. Coating materials shall be products of one manufacturer.
- B. Applicator shall be experienced in industrial coating application.
- C. Surfaces shall be inspected prior to coating.
- D. Coatings shall be applied in accordance with manufacturer recommendations.

12.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver coatings in original unopened containers.
- B. Store in dry, protected area between 40°F and 90°F.
- C. Protect from freezing and excessive heat.
- D. Maintain labels intact.

12.07 ENVIRONMENTAL CONDITIONS

Do not apply coatings unless:

- A. Ambient temperature is above 40°F
- B. Surface temperature is at least 5°F above dew point
- C. Relative humidity is less than 85 percent
- D. Surfaces are dry and free of condensation

PART 13 – PRODUCTS

13.01 ACCEPTABLE MANUFACTURERS

Coating materials shall be manufactured by one of the following or approved equal:

- A. Sherwin-Williams Protective & Marine
- B. Tnemec Company
- C. Carboline Company
- D. PPG Protective Coatings

13.02 GENERAL COATING MATERIALS

- A. Coatings shall be industrial grade suitable for water facility service.
- B. Coatings in contact with potable water shall be NSF/ANSI 61 certified.
- C. Primers and finish coats shall be compatible.

13.03 COLOR SCHEDULE

Unless otherwise specified:

- A. Finished Water Piping – Safety Blue *
- B. Raw Water Piping – Safety Green
- C. Chemical Piping – Safety Yellow*

- D. Waste Piping – Safety Brown*
- E. Fire Protection – Safety Red*
- F. Equipment – Light Gray*
- G. Valve Operators – Safety Blue*

*Designates under a separate contract

PART 14 – EXECUTION

14.01 SURFACE PREPARATION

A. Ferrous Metals

1. Remove oil and grease per SSPC-SP1.
2. Blast clean to SSPC-SP6 unless otherwise specified.
3. Provide surface profile recommended by coating manufacturer.

B. Previously Painted Surfaces

1. Remove loose paint and rust.
2. Clean per SSPC-SP2 or SSPC-SP3.
3. Feather edges of sound coating.

14.02 APPLICATION

- E. Apply coatings in accordance with manufacturer instructions.
- F. Apply by spray, brush, or roller as appropriate.
- G. Apply coatings evenly without runs or sags.
- H. Allow proper curing between coats.

14.03 MINIMUM COATING THICKNESS

Unless otherwise specified:

- A. Primer: 3–5 mils

- B. Intermediate: 3–8 mils
- C. Finish: 3–4 mils
- D. Total: 9–15 mils minimum

14.04 INSPECTION

- A. Inspect surface preparation prior to coating.
- B. Verify environmental conditions.
- C. Measure dry film thickness.
- D. Inspect for defects and repair.

14.05 REPAIRS

- A. Clean damaged areas.
- B. Reapply coating system.
- C. Match surrounding thickness.
- D. Overlap existing coating minimum 1 inch.

14.06 PROTECTION

- A. Protect finished surfaces from damage.
- B. Do not place equipment into service until coating is cured.
- C. Repair damaged coatings prior to final acceptance.

14.07 WARRANTY

Provide five (5) year warranty against:

- A. Peeling
- B. Blistering
- C. Cracking

D. Premature corrosion

END OF SECTION

